



Expansion of Hong Kong International Airport into a Three-Runway System

Construction Phase Monthly EM&A Report No.10
(For October 2016)

November 2016

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**This revised submission of the Monthly EM&A Report No. 10 have been
reviewed and certified on 1 December 2016 by
the Environmental Team Leader (ETL) in accordance with
Condition 3.5 of Environmental Permit No. EP-489/2014.**

Certified by:

A handwritten signature in black ink, appearing to read 'Terence Kong', written in a cursive style.

Terence Kong
Environmental Team Leader (ETL)
Mott MacDonald Hong Kong Limited

Date

1 December 2016

Our Ref : 60440482/C/JCHL161201

By Email

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road
Hong Kong International Airport
Lantau, Hong Kong

Attn: Mr. Lawrence Tsui, Senior Manager

1 December 2016

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Revised Monthly EM&A Report No.10 (October 2016)

Reference is made to the Environmental Team's submission of the revised Monthly EM&A Report No.10 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 1 December 2016.

We would like to inform you that we have no adverse comment on the captioned submission. Therefore we write to verify the captioned submission in accordance with the requirement stipulated in Condition 3.5 of EP-489/2014.

Should you have any query, please feel free to contact our Roy Man at 3922 9365 or the undersigned at 3922 9376.

Yours faithfully,
AECOM Asia Co. Ltd.



Jackel Law
Independent Environmental Checker

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Executive Summary

The “Expansion of Hong Kong International Airport into a Three-Runway System” (the Project) serves to meet the future air traffic demands at Hong Kong International Airport (HKIA). On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the Project was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual.

This is the 10th Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 October 2016 to 31 October 2016.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting month were related to advanced works contract, which involved pilot hole drilling using Horizontal Directional Drilling (HDD) method at launching site, stockpiling of excavated materials from HDD operation at stockpiling area, site preparation works and construction of containment pit at Sheung Sha Chau. CLP cable diversion enabling work contract was also carried out, which involved installation of silt curtain, excavation works and removal of armour rock at the western part of the airport. The four in-progress deep cement mixing (DCM) contracts involved site survey, investigation works and laying of geotextile.

EM&A Activities Conducted in the Reporting Period

The monthly EM&A programme was undertaken in accordance with the Updated EM&A Manual of the Project. During the reporting period, the ET conducted 30 sets of construction dust measurements, 23 sets of construction noise measurements, 12 events of water quality measurements, one round of terrestrial ecology monitoring on Sheung Sha Chau Island, two complete sets of small vessel line-transect surveys and five days of land-based theodolite tracking survey effort for Chinese White Dolphin (CWD) monitoring as well as landscape & visual and waste monitoring.

Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the Independent Environmental Checker (IEC). Observations have been recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

On the implementation of the Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan), the daily movements of all SkyPier High Speed Ferries (HSFs) in October 2016 were in the range of 1 to 96 daily movements, which are within the maximum daily cap of 125 daily movements. There was only one HSF movement on 21 October 2016 as Typhoon Signal No. 8 was hoisted on that day. A total of 839 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the SCZ with prevailing speeds

under 15 knots (7.5 to 14.6 knots), which were in compliance with the SkyPier Plan. Four ferry movements with minor deviation from the diverted route are under investigation by ET. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

On the implementation of the Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV), ET had conducted weekly audit of relevant information, including AIS data, vessel tracks and other relevant records to ensure the contractors complied with the requirements of the MTRMP-CAV. Training has been provided for the contractors' senior management staff and concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV and to strengthen the communication between senior management staff and the sub-contractors. Environmental briefing related to the requirements of the MTRMP-CAV was conducted for each newly awarded contractor. 3-month rolling programmes for construction vessel activities were also received from the relevant contractors.

Results of Impact Monitoring

All the monitoring works for construction dust, construction noise, water quality, construction waste, terrestrial ecology and CWD were conducted during the reporting period in accordance with the Updated EM&A Manual.

No exceedance of the Action or Limit Levels in relation to the construction dust, construction noise, construction waste and CWD monitoring was recorded in the reporting month.

The water quality monitoring results for dissolved oxygen (DO), total alkalinity and heavy metals obtained during the reporting period were in compliance with their corresponding Action and Limit Levels. For turbidity and suspended solids (SS), some of the testing results had exceeded the relevant Action Levels but all the results were below the relevant Limit Levels during the reporting period. Investigations were carried out immediately for each of the exceedance cases, and the investigation findings concluded that all the exceedances were not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau Island observed that construction works for containment pit were conducted on the Island and there was no encroachment upon the egret area nor any significant disturbance to the egrets at Sheung Sha Chau by the works.

Summary of Upcoming Key Issues

Key activities anticipated in the next reporting period for the Project will include the following contract works:

Advanced works Contract:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- HDD pilot hole drilling;
- Stockpiling of excavated materials from HDD operation;
- Casing installation.

Reclamation Contracts:

Contract 3201 to 3205 DCM Works

- Laying of geotextile and sand blanket; and
- DCM trial works.

Contract 3206 Main Reclamation Works

- Site preparation; and
- Plant mobilization.

Other Contracts:

Contract 3213 CLP Cable Diversion Enabling Works

- Excavation works; and
- Installation of precast cable trough.

Other site investigation works will continue. The key environmental issues will be associated with construction dust, construction noise, water quality, construction waste management, CWD and terrestrial ecology on Sheung Sha Chau. The implementation of required mitigation measures by the contractor will be monitored by the ET.



Summary Table

The following table summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 October 2016:

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Exceedance of Limit Level [^]		✓	No exceedance of project-related limit level was recorded.	Nil
Exceedance of Action Level [^]		✓	No exceedance of project-related action level was recorded.	Nil
Complaints Received		✓	No construction activities related complaints were received.	Nil
Notification of any summons and status of prosecutions		✓	Neither notifications of summons nor prosecution were received.	Nil
Changes that affect the EM&A	✓		The baseline water quality data has been updated according to the Proposal for Review of Baseline Water Quality There were no changes to the construction works that may affect the EM&A	Nil

Remarks: [^] only exceedance of action/ limit level related to Project works will be highlighted.

1 Introduction

1.1 Background

On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the “Expansion of Hong Kong International Airport into a Three-Runway System” (the Project) was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1. The Manual is available on the Project’s dedicated website (accessible at: <http://env.threerunwaysystem.com/en/index.html>). AECOM Asia Company Limited (AECOM) was employed by AAHK as the Independent Environmental Checker (IEC) for the Project.

The Project covers the expansion of the existing airport into a three-runway system (3RS) with key project components comprising land formation of about 650 ha and all associated facilities and infrastructure including taxiways, aprons, aircraft stands, a passenger concourse, an expanded Terminal 2, all related airside and landside works and associated ancillary and supporting facilities. The existing submarine aviation fuel pipelines and submarine power cables also require diversion as part of the works.

Construction of the Project is to proceed in the general order of diversion of the submarine aviation fuel pipelines, diversion of the submarine power cables, land formation, and construction of infrastructure, followed by construction of superstructures.

The updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7. Contract information are presented in **Appendix A**.

1.2 Scope of this Report

This is the 10th Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 October 2016.

1.3 Project Organisation

The Project’s organization structure remained unchanged during the reporting month. The Project’s organization structure can be referred to Appendix B of the Construction Phase Monthly EM&A Report No.1. Contact details of the key personnel have been updated and is presented in **Table 1.1**.

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager’s Representative (Airport Authority Hong Kong)	Senior Manager, Environment	Lawrence Tsui	2183 2734

Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Keith Chau	2972 1721
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Joanne Tsoi	3922 9423
Advanced Works Contract:			
Contract P560(R) Aviation Fuel Pipeline Diversion Works (Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.)	Project Manager	Shih Wei	2117 0566
	Environmental Officer	Lyn Lau	5172 6543
DCM Works Contracts:			
Contract 3201 DCM (Package 1) (Penta-Ocean-China State-Dong-Ah Joint Venture)	Project Director	Mr. Tsugunari SUZUKI	9178 9689
	Environmental Officer	Mr. Kanny CHO	9019 1962
Contract 3202 DCM (Package 2) (Samsung-BuildKing Joint Venture)	Project Manager	Mr. Ilkwon Nam	9643 3117
	Environmental Officer	Mr. Dickson Mak	9525 8408
Contract 3203 DCM (Package 3) (Sambo E&C Co.,Ltd)	Project Manager	Mr. Park Seong Jae	9683 8693
	Environmental Officer	Mr. Leung Min Pong	9203 5820
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Mr. Yoo Kyung-Sik	9683 8697
	Environmental Officer	Mr. David Man	6421 3238
Contract 3205 DCM (Package 5) (Bachy Soletanche- Sambo Joint Venture)	Project Manager	Mr. Park, Jong Heon	9139 6377
	Environmental Officer	Margaret Chung	9130 3696

Reclamation Contract:			
Contract 3206 (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Lim Kim Chuan	3693 2288
	Environmental Officer	Louie Chan	9270 1390
Other Works Contract:			
Contract 3213 CLP Cable Diversion Enabling Works (Wing Hing Construction Company)	Project Manager	Mr. Kan Yun Tai, Michael	9206 0550
	Environmental Officer	Ms Ivy Tam	2151 2090

1.4 Summary of Construction Works

Key activities of the Project were related to the advanced works contract which involved pilot hole drilling at the HDD launching site located at the west part of the airport, site preparation works and construction of containment pit at Sheung Sha Chau. CLP cable diversion enabling work contract involved installation of silt curtain, excavation works and removal of armour rock. The four DCM contracts involved site survey, investigation works and laying of geotextile.

The active construction site is around 3 km and 900m away from the nearest air and noise sensitive receivers in Tung Chung and the villages in North Lantau. The locations of the works areas are presented in **Figure 1.1** to **Figure 1.2**. Some site investigation works were carried out during the reporting period.

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects is presented **Table 1.2**. The EM&A requirements remained unchanged during the reporting period and details can be referred to Table 1.2 of the Construction Phase Monthly EM&A Report No. 1.

Table 1.2: Summary of status for all environmental aspects under the Updated EM&A Manual

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report (Version 1) and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report (Version 1) and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in the Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4. The baseline water quality data has been updated according to the Proposal for Review of Baseline Water Quality.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	On-going

Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	To be commenced according to the detailed plan on DCM
Early/ Regular DCM Water Quality Monitoring	On-going
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	To be submitted with the relevant construction works
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egret Survey Plan	The revised Egret Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	On-going
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	On-going
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Track and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report (Version 1) and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

Taking into account the construction works in this reporting month, impact monitoring of air quality, noise, water quality, waste management, ecology, CWD and landscape & visual were carried out in the reporting month.

The EM&A programme also involved weekly site inspections and related audits conducted by the ET for checking the implementation of the required environmental mitigation measures recommended in the approved EIA Report. In order to enhance environmental awareness and closely monitor the environmental performance of the contractors, including newly awarded contracts, environmental briefings and regular environmental management meetings were conducted.

The EM&A programme has been following the recommendations presented in the approved EIA Report and the Updated EM&A Manual. A summary of implementation status of the environmental

mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix B**.

2 Air Quality Monitoring

2.1 Monitoring Stations

Air quality monitoring was conducted at two representative monitoring stations in the vicinity of air sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Updated EM&A Manual. **Table 2.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 2.1: Locations of Impact Air Quality Monitoring Stations

Monitoring Station	Location
AR1A	Man Tung Road Park
AR2	Village House at Tin Sum

2.2 Monitoring Requirements and Schedule

In accordance with the Updated EM&A Manual, baseline 1-hour total suspended particulate (TSP) levels at the two air quality monitoring stations were established as presented in the Baseline Monitoring Report (Version 1 dated December 2015). Impact 1-hour TSP monitoring was conducted for three times every 6 days. The Action and Limit Levels of the air quality monitoring are provided in **Table 2.2**.

The scheduled impact 1-hour TSP monitoring at AR2 on 21 October 2016 was cancelled due to adverse weather. The air quality monitoring schedule involved in the reporting period is provided in **Appendix D**.

Table 2.2: Action and Limit Levels for 1-hour TSP

Monitoring Station	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AR1A	306	500
AR2	298	

2.3 Monitoring Equipment

Portable direct reading dust meter was used to carry out the 1-hour TSP monitoring. Details of equipment are given in **Table 2.3**.

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date
Portable direct reading dust meter (Laser dust monitor)	SIBTA LD-3B-002 (Serial No. 974350)	25 Nov 2015

2.4 Monitoring Methodology

2.4.1 Measuring Procedure

The measurement procedures involved in the impact 1-hr TSP monitoring can be summarised as follows:

- a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2 m above the ground.
- b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.
- c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
- d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.4.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration certificates of the portable direct reading dust meter and calibration record of the HVS provided in Appendix B of the Construction Phase Monthly EM&A Report No.8 are still valid. Any updates of calibration certificates will be reported in the Monthly EM&A report if necessary.

2.5 Analysis and Interpretation of Monitoring Results

The monitoring results for 1-hour TSP are summarized in **Table 2.4**. Detailed impact monitoring results are presented in **Appendix E**.

Table 2.4: Summary of 1-hour TSP Monitoring Results

Monitoring Station	1-hr TSP Concentration Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AR1A	18 - 111	306	500
AR2	36 - 129	298	

No exceedance of the Action / Limit Level was recorded at all monitoring stations in the reporting period.

General meteorological conditions throughout the impact monitoring period were recorded. Wind data for each monitoring day including wind speed and wind direction was collected from the Chek Lap Kok Wind Station.

3 Noise Monitoring

3.1 Monitoring Stations

Noise monitoring was conducted at five representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Updated EM&A Manual. **Figure 2.1** shows the locations of the monitoring stations and these are described in **Table 3.1** below. As described in Section 4.3.3 of the Updated EM&A Manual, monitoring at NM2 will commence when the future residential buildings in Tung Chung West Development become occupied.

Table 3.1: Locations of Impact Noise Monitoring Stations

Monitoring Station	Location	Type of measurement
NM1A	Man Tung Road Park	Free field
NM2 ⁽¹⁾	Tung Chung West Development	To be determined
NM3A	Site Office	Facade
NM4	Ching Chung Hau Po Woon Primary School	Free field
NM5	Village House in Tin Sum	Free field
NM6	House No. 1, Sha Lo Wan	Free field

Note: (1) As described in Section 4.3.3 of the Updated EM&A Manual, noise monitoring at NM2 will only commence after occupation of the future Tung Chung West Development.

3.2 Monitoring Requirements and Schedule

In accordance with the Updated EM&A Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report (Version 1 dated December 2015). Impact noise monitoring was conducted once per week in the form of 30-minute measurements of L_{eq} , L_{10} and L_{90} levels recorded at each monitoring station between 0700 and 1900 on normal weekdays. The Action and Limit levels of the noise monitoring are provided in **Table 3.2**. The construction noise monitoring schedule involved in the reporting period is provided in **Appendix D**.

Table 3.2: Action and Limit Levels for Construction Noise

Monitoring Stations	Time Period	Action Level	Limit Level, $L_{eq(30mins)}$ dB(A)
NM1A, NM2, NM3A, NM4, NM5 and NM6	0700-1900 hours on normal weekdays	When one documented complaint is received from any one of the sensitive receivers	75 dB(A) ⁽ⁱ⁾

Note: ⁽ⁱ⁾ reduce to 70dB(A) for school and 65dB(A) during school examination periods.

3.3 Monitoring Equipment

Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was used to check the sound level meters by a known sound pressure level for field measurement. Details of equipment are given in **Table 3.3**.

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date
Integrated Sound Level Meter	B&K 2238 (Serial No. 2800932)	19 Jul 2016
	B&K 2238 (Serial No. 2381580)	8 Sep 2016
	B&K 2238 (Serial No. 2808432)	10 Nov 2015
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	16 May 2016
	B&K 4231 (Serial No. 3004068)	19 Jul 2016

3.4 Monitoring Methodology

3.4.1 Monitoring Procedure

The monitoring procedures involved in the noise impact monitoring can be summarised as follows:

- a. The sound level meter was set on a tripod at least a height of 1.2 m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3 dB(A) was applied to the free field measurements.
- b. Façade measurements were made at the monitoring station NM3A.
- c. Parameters such as frequency weighting, time weighting and measurement time were set.
- d. Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator. If the difference in the calibration level before and after measurement was more than 1 dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- e. During the monitoring period, L_{eq} , L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded on a record sheet.
- f. Noise measurement results were corrected with reference to the baseline monitoring levels.
- g. Observations were recorded when high intrusive noise (e.g. dog barking, helicopter noise) was observed during the monitoring.

3.4.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

- a. The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
- b. The meter and calibrator were sent to the supplier or laboratory accredited under Hong Kong Laboratory Accreditation Scheme (HOKLAS) to check and calibrate at yearly intervals.

Calibration certificates of the sound level meters and acoustic calibrators used in the noise monitoring provided in Appendix B of the Construction Phase Monthly EM&A Report No.8& 9 are still valid. Any updates of calibration certificates will be reported in the Monthly EM&A report if necessary.

3.5 Analysis and Interpretation of Monitoring Results

The construction noise monitoring results are summarized in **Table 3.4** and the detailed monitoring data are provided in **Appendix E**.

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)
	Leq (30 mins)	Leq (30 mins)
NM1A ⁽ⁱ⁾	70 - 72	75
NM3A	57 - 63	75
NM4 ⁽ⁱ⁾	60 - 66	70 ⁽ⁱⁱ⁾
NM5 ⁽ⁱ⁾	58 - 59	75
NM6 ⁽ⁱ⁾	67 - 73	75

Note: (i) +3 dB(A) Façade correction included;
(ii) Reduced to 65 dB(A) during school examination periods.

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were aircraft noise at NM3A and NM5, aircraft noise and helicopter noise at NM6, road traffic noise at NM1A and school activities at NM4 in this reporting month.

No exceedance of the Action/ Limit Level was recorded at all monitoring stations in the reporting period.

4 Water Quality Monitoring

4.1 Monitoring Stations

Water quality monitoring was conducted at a total of 22 water quality monitoring stations, comprising 12 impact stations, seven sensitive receiver stations and three control stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Updated EM&A Manual. **Table 4.1** describes the details of the monitoring stations. **Figure 3.1** shows the locations of the monitoring stations.

Table 4.1: Monitoring Locations and Parameters for Impact Water Quality Monitoring

Monitoring Stations	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control	804247	815620	DO, pH, Temperature, Salinity, Turbidity, SS, Total Alkalinity, Heavy Metals ⁽²⁾
C2	Control	806945	825682	
C3 ⁽³⁾	Control	817803	822109	
IM1	Impact	806458	818351	
IM2	Impact	806193	818852	
IM3	Impact	806019	819411	
IM4	Impact	805039	819570	
IM5	Impact	804924	820564	
IM6	Impact	805828	821060	
IM7	Impact	806835	821349	
IM8	Impact	807838	821695	
IM9	Impact	808811	822094	
IM10	Impact	809838	822240	
IM11	Impact	810545	821501	
IM12	Impact	811519	821162	
SR1 ⁽¹⁾	Future Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812586	820069	DO, pH, Temperature, Salinity, Turbidity, SS
SR2 ⁽³⁾	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	
SR4A	Sha Lo Wan	807810	817189	
SR5A	San Tau Beach SSSI	810696	816593	
SR6	Tai Ho Bay, Near Tai Ho Stream SSSI	814663	817899	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8	Seawater Intake for cooling at Hong Kong International Airport (East)	811593	820417	

Notes:

⁽¹⁾ the seawater intakes of SR1 for the future HKBCF is not yet in operation, the future permanent location for SR1 during impact monitoring is subject to finalisation after the HKBCF seawater is commissioned.

⁽²⁾ According to the Baseline Water Quality Monitoring Report, Chromium and Nickel are the representative heavy metals for early regular DCM monitoring. DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, IM1 to IM12 .

⁽³⁾ according to the baseline water quality monitoring report, C3 station is not adequately representative as a control station of impact/ SR stations. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

4.2 Monitoring Requirements and Schedule

In accordance with the Updated EM&A Manual, baseline water quality levels at the abovementioned representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report.

General water quality monitoring and early regular DCM water quality monitoring were conducted three days per week, at mid-flood and mid-ebb tides, at the 22 water quality monitoring stations during the reporting period. The sea conditions varied from clam to rough, and the weather conditions varied from fine to rainy during the monitoring period.

The scheduled water quality monitoring on 18 October 2016 during ebb and flood tides were cancelled due to adverse weather. The water quality monitoring schedule for the reporting period is provided in **Appendix D**.

4.2.1 Action and Limit Levels for Water Quality Monitoring

The Action and Limit Levels for general water quality monitoring and regular DCM monitoring are presented in **Table 4.2**. The control and impact stations during flood tide and ebb tide for general water quality monitoring and regular DCM monitoring are presented in **Table 4.3**.

Table 4.2: Action and Limit Levels for General Water Quality Monitoring and Regular DCM Monitoring

Parameters	Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring and regular DCM monitoring (excluding SR1& SR8)				
DO in mg/L (Surface, Middle & Bottom)	Surface and Middle 4.5 mg/L		Surface and Middle 4.1 mg/L 5 mg/L for Fish Culture Zone (SR7) only	
	Bottom 3.4 mg/L		Bottom 2.7 mg/L	
Suspended Solids (SS) in mg/L	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
Turbidity in NTU	22.6		36.1	
Total Alkalinity in ppm	95		99	
Representative Heavy Metals for early regular DCM monitoring (Chromium)	0.2		0.2	
Representative Heavy Metals for early regular DCM monitoring (Nickel)	3.2		3.6	
Action and Limit Levels SR1				
SS (mg/l)	To be determined prior to its commissioning		To be determined prior to its commissioning	
Action and Limit Levels SR8				
SS (mg/l)	52		60	

Note: The baseline water quality data has been updated according to the Proposal for Review of Baseline Water Quality

1. For DO measurement, non-compliance occurs when monitoring result is lower than the limits.
2. For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.
3. Depth-averaged results are used unless specified otherwise.
4. Details of selection criteria for the two heavy metals for early regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (<http://env.threerunwaysystem.com/en/ep-submissions.html>)
5. The action and limit levels for the two representative heavy metals chosen will be the same as that for the intensive DCM monitoring.

Table 4.3: The Control and Impact Stations during Flood Tide and Ebb Tide for General Water Quality Monitoring and Regular DCM Monitoring

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2 ^{^1}	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

^{^1} As per findings of Baseline Water Quality Report, the control reference has been changed from C3 to SR2 from 1 Sep 2016 onwards.

4.3 Monitoring Equipment

Table 4.4 summarises the equipment used in the impact water quality monitoring programme.

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date
Water Sampler	Van Dorn Water Sampler	
Positioning Device (measurement of GPS)	Garmin eTrex Vista HCx	
Water Depth Detector (measurement of water depth)	Lowrance Mark 5x	
Current Meter (measurement of current speed and direction)	Sontek HydroSurveyor	
Equipment	Brand and Model	Last Calibration Date
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI 6920 V2 (serial no. 11F100014)	5 Oct 2016
	YSI ProDSS (serial no. 15M100005)	5 Oct 2016
	YSI 6920 (serial no. 000109DF)	5 Oct 2016
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (serial no.10N64701)	11 Oct 2016
	Titrette Digital Burette 50ml Class A (serial no. 10N65665)	23 Sep 2016

4.4 Monitoring Methodology

4.4.1 Measuring Procedure

Water quality monitoring samples were taken at three depths (at 1m below surface, at mid-depth, and at 1m above bottom) for locations with water depth >6m. For locations with water depth between 3m and 6m, water samples were taken at two depths (surface and bottom). For locations

with water depth <3m, only the mid-depth was taken. Duplicate water samples were taken and analysed.

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity and water depth were collected by equipment listed in **Table 4.4**. Water samples for heavy metals and SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4 °C without being frozen), delivered to the laboratory within 24 hours of collection.

4.4.2 Maintenance and Calibration

Calibration of In-situ Instruments

All in-situ monitoring instrument were checked, calibrated and certified by a laboratory accredited under HOKLAS before use. Responses of sensors and electrodes were checked with certified standard solutions before each use.

Wet bulb calibration for a DO meter was carried out before commencement of monitoring and after completion of all measurements each day. Calibration was not conducted at each monitoring location as daily calibration is adequate for the type of DO meter employed. A zero check in distilled water was performed with the turbidity probe at least once per monitoring day. The probe should then be calibrated with a solution of known NTU. In addition, the turbidity probe was calibrated at least twice per month to establish the relationship between turbidity readings (in NTU) and levels of suspended solids (in mg/L). Accuracy check of the digital titrator was performed at least once per monitoring day.

Calibration certificates of the monitoring equipment used in the monitoring are provided in **Appendix C**.

4.4.3 Laboratory Measurement / Analysis

Analysis of SS and heavy metals have been carried out by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at all the monitoring stations for carrying out the laboratory SS and heavy metals determination. The SS and heavy metals determination works were started within 24 hours after collection of the water samples. The analysis of SS and heavy metals have followed the standard methods summarised in **Table 4.5**. The QA/QC procedures for laboratory measurement/ analysis of SS and heavy metals was presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

Table 4.5: Laboratory Measurement/ Analysis of SS and Heavy Metals

Parameters	Instrumentation	Analytical Method	Reporting Limit
Suspended Solid (SS)	Analytical Balance	APHA 2540D	2 mg/L
Heavy Metals			
Chromium (Cr)	ICP-MS	USEPA 6020A	0.2 µg/L
Nickel (Ni)	ICP-MS	USEPA 6020A	0.2 µg/L

4.5 Analysis and Interpretation of Monitoring Results

4.5.1 Summary of Monitoring Results

The water quality monitoring results for DO, total alkalinity and heavy metals obtained during the reporting period were in compliance with their corresponding Action and Limit Levels. For turbidity and SS, some of the testing results had exceeded the relevant Action Levels but all the results were below the relevant Limit Levels during the reporting period. Details of the exceedances are presented in **Section 4.5.2**.

All the water quality monitoring results and graphical presentations are provided in **Appendix F**.

4.5.2 Summary of Findings for Investigation of Exceedances

A total of one case of turbidity and 15 cases of SS testing results exceeding the corresponding Action Level were recorded at six monitoring days during the monitoring period. The Event and Action Plan for impact water quality monitoring of the updated EM&A Manual has been accordingly followed for all such exceedance cases. The monitoring equipment was calibrated before the monitoring and no error was noted with the equipment during monitoring. In order to investigate the exceedance cases, the ET had checked the site conditions on the relevant monitoring days; compared the relevant monitoring results with those of the control stations; and reviewed the contractor's reports on construction activities during the days of monitoring. The findings of exceedance investigation are summarised as follows:

1 October 2016

Turbidity exceedance was recorded at IM9 during flood tide. No silt plume and construction vessel activity were observed at or in the vicinity of IM9 by the monitoring team on 1 October 2016. No marine construction activity was conducted by the Project during the day of monitoring. Therefore, the exceedance of turbidity recorded at IM9 during flood tide was considered not due to the project.

4 October 2016

SS exceedances were recorded at IM6 during ebb and flood tides. No silt plume and construction vessel activity were observed at or in the vicinity of IM6 by the monitoring team on 4 October 2016. No marine construction activity was conducted by the Project during the day of monitoring. Therefore, the exceedances of SS recorded at IM6 during ebb and flood tides were considered not due to the Project.

15 October 2016

SS exceedances were recorded at SR4A during ebb tide and IM12 during flood tide. No silt plume and construction vessel activity were observed at or in the vicinity of SR4A and IM12 by the monitoring team on 15 October 2016. No marine construction activity was conducted by the Project during the day of monitoring. Therefore, the exceedance of SS recorded at SR4A during ebb tide and IM12 during flood tide was considered not due to the Project.

20 October 2016

SS exceedances were recorded at SR3 and SR4A during ebb tide, and at IM11 during flood tide. No silt plume and construction vessel activity were observed at or in the vicinity of SR3, SR4A, and IM11 by the monitoring team on 20 October 2016. No marine construction activity was conducted by the Project during the day of monitoring. Therefore, the exceedances of SS

recorded at SR3 and SR4A during ebb tide, and IM11 during flood tide were considered not due to the Project.

22 October 2016

SS exceedances were recorded at IM1, IM2, SR4A, and SR6 during flood tide. No silt plume and construction vessel activity were observed at or in the vicinity of IM1, IM2, SR4A, and SR6 by the monitoring team on 22 October 2016. No marine construction activity was conducted by the Project during the day of monitoring. Therefore, the exceedances of SS recorded at IM1, IM2, SR4A, and SR6 during flood tide were considered not due to the Project.

25 October 2016

SS exceedances were recorded at SR4A during ebb tide as well as at SR4A, SR5A, and SR6 during flood tide. No silt plume and construction vessel activity were observed at or in the vicinity of SR4A, SR5A, and SR6 by the monitoring team on 25 October 2016. No marine construction activity was conducted by the Project during the day of monitoring. Therefore, the exceedances of SS recorded at SR4A during ebb tide as well as at SR4A, SR5A, and SR6 during flood tide were considered not due to the Project.

Conclusions

Based on the findings of exceedance investigations, it is concluded that none of the exceedances were due to the Project. Hence, no repeat measurement on the next day of exceedance was required, and no mitigation measure or further action was found necessary.

5 Waste Management

5.1 Monitoring Requirements

In accordance with the Updated EM&A Manual, the waste generated from construction activities was audited once per week to determine if wastes are being managed in accordance with the Waste Management Plan (WMP) prepared for the Project, contract-specific WMP, and any statutory and contractual requirements. All aspects of waste management including waste generation, storage, transportation and disposal were assessed during the audits. The Action and Limit levels of the construction waste are provided in **Table 5.1**.

Table 5.1: Action and Limit Levels for Construction Waste

Monitoring Stations	Action Level	Limit Level
Construction Area	When one valid documented complaint is received	Non-compliance of the WMP, contract-specific WMPs, any statutory and contractual requirements

5.2 Waste Management Status

Weekly monitoring on all works contracts were carried out by the ET to check and monitor the implementation of proper waste management practices during the construction phase.

Recommendation was provided during monitoring including provision of drip trays for chemical containers, proper collection, sorting and disposal of inert and non-inert C&D materials. In addition, the relevant contractors were reminded to provide spill kit and chemical waste storage area for the chemical waste. The contractors had taken actions to implement the recommended measures.

Based on the updated information, about 125m³ of excavated materials were produced from the HDD launching site under P560(R) in October 2016. The generated excavated materials were temporarily stored at storage and stockpiling area. The excavated material will be reused in the Project.

3.0 tonnes of general refuse and 0.36 tonnes of chemical waste were disposed of to the West New Territories (WENT) Landfill and Tsing Yi Chemical Waste Treatment Centre respectively in October 2016. No Construction and Demolition (C&D) material was disposed off-site during the reporting month.

No waste was generated from other contracts during the reporting period.

No exceedances of the Action or Limit Levels were recorded in the reporting period.

6 Chinese White Dolphin Monitoring

6.1 CWD Monitoring Requirements

In accordance with the Updated EM&A Manual, Chinese White Dolphin (CWD) monitoring by small vessel line-transect survey supplemented by land-based theodolite tracking should be conducted during construction phase.

The small vessel line-transect survey as proposed in the Updated EM&A Manual should be conducted at a frequency of two full survey per month while land-based theodolite tracking should be conducted at a frequency of one day per month per station during the construction phase. In addition to the land-based theodolite tracking required for impact monitoring as stipulated in the Updated EM&A Manual, supplemental theodolite tracking have also been conducted during the initial implementation period for the SkyPier HSF diversion and speed control in order to assist in monitoring the effectiveness of these measures, i.e. in total twice per month at the Sha Chau station and three times per month at the Lung Kwu Chau station.

The Action Level (AL) and Limit Level (LL) for CWD monitoring were formulated by the action response approach using the running quarterly dolphin encounter rates STG and ANI derived from the baseline monitoring data, as presented in the CWD Baseline Monitoring Report. The derived values of AL and LL for CWD monitoring were summarized in **Table 6.1**.

Table 6.1: Derived Values of Action Level (AL) and Limit Level (LL) for Chinese White Dolphin Monitoring

NEL, NWL, AW, WL and SWL as a Whole	
Action Level	Running quarterly* STG < 1.86 & ANI < 9.35
Limit Level	Two consecutive running quarterly^ (3-month) STG < 1.86 & ANI < 9.35

[Notes for Table 6.1 (referring to the baseline monitoring report):

*Action Level – running quarterly STG & ANI will be calculated from the three preceding survey months. For CWD monitoring for October 2016, data from 1 August to 31 October 2016 will be used to calculate the quarterly encounter rates STG & ANI;

^Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month September 2016 (calculated by data from July to September 2016) and the running quarterly encounter rates of this month (calculated by data from August to October 2016).

AL and/or LL will be exceeded if both STG and ANI fall below the criteria.]

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys were conducted along the transects covering Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL), as proposed in the Updated EM&A Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Exclusion Zone, nevertheless, this transect was established during the EIA of the 3RS Project with the aim to collect project specific baseline information within the HKIA Approach Area to fill the data gap that was not covered by the AFCD programme. This provided

a larger sample size for estimating the densities and patterns of movements in the broader study area of the project.

For the NWL area, there was no significant physical demarcation of the 3RS works area during CWD monitoring survey in the reporting period, therefore most of the works area of the 3RS project was still accessible and the transect lines followed the waypoints and lengths conducted for baseline monitoring. These transect lines were depicted in **Figure 6.1** while the coordinates of all transect lines are shown in **Table 6.2**.

Table 6.2: Coordinates of Transect Lines in NEL, NWL, AW, WL and SWL Survey Areas

Waypoint	Easting	Northing	Waypoint	Easting	Northing
NEL					
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
NWL					
1S	804671	814577	5N	808504	828602
1N	804671	831404	6S	809490	820590
2S	805475	815457	6N	809490	825352
2N	805476	830562	7S	810499	820950
3S	806464	819550	7N	810499	824613
3N	806464	829598	8S	811508	821250
4S	807518	819900	8N	811508	824254
4N	807518	829230	9S	812516	821250
5S	808504	820250	9N	812516	824254
AW					
1W	804730	818220	2W	805051	817156
1E	806519	818271	2E	806913	817076
WL					
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	8W	800800	812450
2E	801750	806450	8E	802900	812450
3W	799600	807450	9W	801500	813550
3E	801500	807450	9E	803120	813550
4W	799400	808450	10W	801880	814500
4E	801430	808450	10E	803700	814500
5W	799500	809450	11W	802860	815500
5E	801300	809450	12S/11E	803750	815500
6W	799800	810450	12N	803750	818500
6E	801400	810450			

Waypoint	Easting	Northing	Waypoint	Easting	Northing
SWL					
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
2S	803489	803280	7S	808553	800329
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462
5S	806473	801250	10S	811446	801335
5N	806473	808458	10N	811446	809436

6.2.2 Land-based Theodolite Tracking

Land-based theodolite tracking stations were set up at two locations, one facing east/south/west on the southern slopes of Sha Chau (SC), and the other facing north/northeast/northwest at Lung Kwu Chau (LKC). The stations (D and E) are depicted in **Figure 6.2** and shown in **Table 6.3** with position coordinates, height of station and approximate distance of consistent theodolite tracking capabilities for CWD.

Table 6.3: Land-based Survey Station Details

Stations	Location	Geographical Coordinates	Station Height (m)	Approximate Tracking Distance (km)
D	Sha Chau (SC)	22° 20' 43.5" N 113° 53' 24.66" E	45.66	2
E	Lung Kwu Chau (LKC)	22° 22' 44.83" N 113° 53' 0.2" E	70.40	3

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys provided data for density and abundance estimation and other assessments using distance-sampling methodologies, specifically, line-transect methods.

The surveys involved small vessel line-transect data collection and have been designed to be similar to, and consistent with, previous surveys for the AFCD for their long-term monitoring of small cetaceans in Hong Kong. The survey was designed to provide systematic, quantitative measurements of density, abundance and habitat use.

As mentioned in Section 6.2.1, the transects covered Northeast Lantau (NEL), Northwest Lantau (NWL) covering the Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) as proposed in the Updated EM&A Manual and are consistent with the AFCD long-term monitoring programme (except AW). There are two types of transect lines:

- Primary transect lines: the parallel and zigzag transect lines as shown in **Figure 6.1**; and
- Secondary transect lines: transect lines connecting between the primary transect lines and crossing islands.

All on-effort data collected under conditions of Beaufort 0-3 and visibility of approximately 1200 m or beyond, on both primary and secondary transect lines, were used for analysis.

A 15-20 m vessel with a flying bridge observation platform about 4 to 5 m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with a constant speed of 7 to 8 knots (i.e. 13 to 15 km per hour), one using 7X handheld binoculars and the other using unaided eyes and recording data.

During on-effort survey periods, the survey team recorded effort data including time, position (waypoints), weather conditions (Beaufort sea state and visibility) and distance travelled in each series with assistance of a handheld GPS device. The GPS device also continuously and automatically logged data including time, position (Latitude and longitude) and vessel speed throughout the entire survey.

When CWDs were seen, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens), then followed until they left the study area or were lost. At that point, the boat returned (off effort) to the next survey line and began to survey on effort again.

Focal follows of dolphins were conducted where practicable (i.e. when individual dolphins or small stable groups of dolphins with at least one member that could be readily identifiable with unaided eyes during observations and weather conditions are favourable). These involved the boat following (at an appropriate distance to minimize disturbance) an identifiable individual dolphin for an extended period of time, and collecting detailed data on its location, behaviour, response to vessels, and associates.

6.3.2 Photo Identification

CWDs can be identified by their unique features like presence of scratches, nick marks, cuts, wounds, deformities of their dorsal fin and distinguished colouration and spotting patterns.

When CWDs were observed, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens). The survey team attempted to photo both sides of every single dolphin in the group as the colouration and spotting pattern on both sides may not be identical. The photos were taken at the highest available resolution and stored on Compact Flash memory cards for transferring into a computer.

All photos taken were initially examined to sort out those containing potentially identifiable individuals. These sorted-out images would then be examined in detail and compared to the CWD photo-identification catalogue established for 3RS during the baseline monitoring stage.

6.3.3 Land-based Theodolite Tracking

Land-based monitoring obtains fine-scale information on the time of day and movement patterns of the CWDs. A digital theodolite (Sokkia/Sokkisha Model DT5 or similar equipment) with 30-power magnification and 5-s precision was used to obtain the vertical and horizontal angle of each dolphin and vessel position. Angles were converted to geographic coordinates (latitude and longitude) and data were recorded using *Pythagoras* software, Version 1.2. This method delivers precise positions of multiple spatially distant targets in a short period of time. The technique is fully non-invasive, and allows for time and cost-effective descriptions of dolphin habitat use patterns at all times of daylight.

Three surveyors (one theodolite operator, one computer operator, and one observer) were involved in each survey. Observers searched for dolphins using unaided eyes and handheld binoculars (7X50). Theodolite tracking sessions were initiated whenever an individual CWD or group of CWDs was located. Where possible, a distinguishable individual was selected, based on colouration, within the group. The focal individual was then continuously tracked via the theodolite, with a position recorded each time the dolphin surfaced. In case an individual could not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3 km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking of CWD, all vessels that moved within 2-3 km of the station were tracked, with effort made to obtain at least two positions for each vessel.

Theodolite tracking included focal follows of CWD groups and vessels. Priority was given to tracking individual or groups of CWD. The survey team also attempted to track all vessels moving within 1 km of the focal CWD.

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within the monitoring month of October 2016, two complete sets of small vessel line-transect surveys were conducted on the 5th, 7th, 19th, 20th, 24th, 25th, 26th and 28th October 2016, covering all transects in NEL, NWL, AW, WL and SWL survey areas twice.

A total of 464.49 km of survey effort was collected from these surveys, with around 83.4% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix E**.

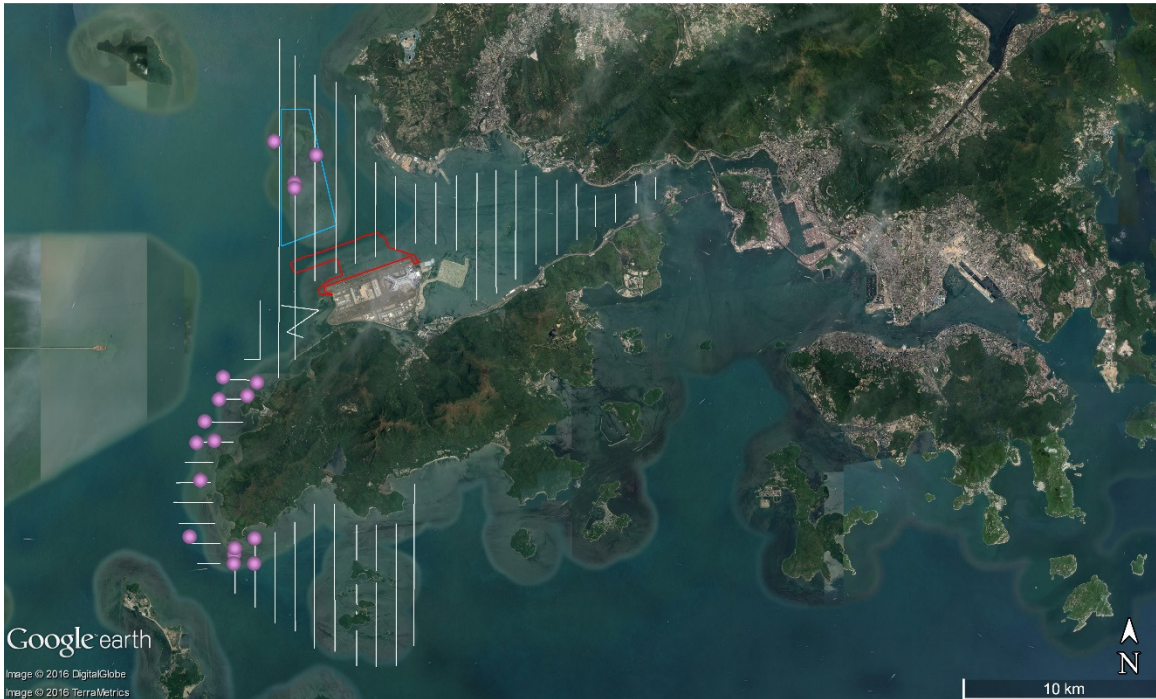
Sighting Distribution

In October 2016, 28 groups of CWDs with 60 individuals were sighted. Amongst the sightings of CWD, 18 groups with 38 individuals were made during on-effort search under favourable weather conditions (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix E**.

Distribution of CWD sightings recorded in October 2016 is illustrated in **Figure 6.3**. The sightings were mainly located between Sha Chau and Lung Kwu Chau in NWL, around Yi O and Tai O in WL, and near Fan Lau in SWL. No sightings of CWDs were recorded in the vicinity of or within the 3RS land-formation footprint.

Figure 6.3: Sightings Distribution of CWD

[Pink circle: Sighting locations of CWD, White line: Vessel survey transects, Blue polygon: Sha Chau and Lung Kwu Chau Marine Park (SCLKCMP), Red polygon: 3RS land-formation footprint]



Note: Only on-effort sightings under Beaufort 3 or below were presented in the figure.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from October 2016. They included the number of dolphin sightings per 100km survey effort (STG) and total number of dolphins per 100km survey effort (ANI) in the whole survey area (i.e. NEL, NWL, AW, WL and SWL). In the calculation of dolphin encounter rates, only survey data collected under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility) were used. The formulae used for calculation of the encounter rates are shown below:

Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{\text{Total No. of On - effort Sightings}}{\text{Total Amount of Survey Effort (km)}} \times 100$$

Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{\text{Total No. of Dolphins from On - effort Sightings}}{\text{Total Amount of Survey Effort (km)}} \times 100$$

(Notes: Only data collected under Beaufort 3 or below condition was used)

In October 2016, a total of 387.22 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 18 on-effort sightings and a total number of 38 dolphins from on-effort sightings were obtained under such condition. Calculation of the encounter rates in October 2016 are shown as follows:

Encounter Rate by Number of Dolphin Sightings (STG) in October 2016

$$STG = \frac{18}{387.22} \times 100 = 4.65$$

Encounter Rate by Number of Dolphins (ANI) in October 2016

$$ANI = \frac{38}{387.22} \times 100 = 9.81$$

For the running quarter of the reporting month (i.e., from August to October 2016), a total of 1275.15 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 49 on-effort sightings and a total number of 166 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown as follows:

Running Quarterly Encounter Rate of Number of Dolphin Sightings (STG)

$$STG = \frac{49}{1275.15} \times 100 = 3.84$$

Running Quarterly Encounter Rate of Number of Dolphins (ANI)

$$ANI = \frac{166}{1275.15} \times 100 = 13.02$$

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of October 2016 and during the the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI did not trigger the Action Level (i.e., remained above the Action Level).

Table 6.4: Comparison of CWD Encounter Rates of the Whole Survey Area with Action Levels

	Encounter Rate (STG)	Encounter Rate (ANI)
October 2016	4.65	9.81
Running Quarter from August to October 2016*	3.84	13.02
Action Level	1.86	9.35

*Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting month and the two preceding survey months, i.e. the data in October 2016, September 2016 and August 2016, containing six sets of transect surveys for all monitoring areas.

Group Size

In October 2016, the average group size of CWDs was 2.1 individuals per group. The majority of the sightings were of small group size (i.e. 1-2 individuals). No large CWD groups with 10+ individuals were sighted in October 2016.

Activities and Association with Fishing Boats

Two sightings of CWDs (one off-effort sighting under beaufort 3 and one on-effort sighting under beaufort 4) were recorded feeding in association with operating purse seiners, one located near Tai O and the other located at Fan Lau.

Mother-calf Pair

One mother-and-calf pair and one mother-and-spotted juvenile pair were sighted in October 2016. Both pairs were encountered in NWL.

6.4.2 Photo Identification

In October 2016, a total number of 23 different CWD individuals were identified for totally 26 times. Amongst these 23 identified individuals, three (WLMM027, WLMM049 and WLMM061) were sighted twice in October. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix E**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of sighting (yyyymmdd)	Sighting Group No.	Area	Individual ID	Date of sighting (yyyymmdd)	Sighting Group No.	Area
NLMM005	28/10/2016	1	NWL	SLMM022	25/10/2016	4	WL
NLMM006	28/10/2016	2	NWL	SLMM052	26/10/2016	7	SWL
NLMM012	28/10/2016	1	NWL	WLMM027	05/10/2016	1	NWL
NLMM013	28/10/2016	2	NWL		24/10/2016	7	WL
NLMM023	05/10/2016	4	NWL	WLMM032	26/10/2016	5	WL
NLMM039	28/10/2016	1	NWL	WLMM035	26/10/2016	5	WL
NLMM040	28/10/2016	1	NWL	WLMM049	24/10/2016	1	WL
NLMM041	28/10/2016	1	NWL		26/10/2016	3	WL
NLMM042	28/10/2016	1	NWL	WLMM050	28/10/2016	1	NWL
SLMM002	26/10/2016	2	WL	WLMM054	05/10/2016	2	NWL
SLMM011	24/10/2016	7	WL	WLMM060	24/10/2016	1	WL
SLMM013	26/10/2016	2	WL	WLMM061	26/10/2016	1	WL
SLMM014	26/10/2016	10	SWL			5	WL

6.4.3 Land-based Theodolite Tracking

Survey Effort

Land-based theodolite tracking surveys at LKC were conducted on 4th, 6th and 27th October 2016 and at SC on 17th and 28th October 2016, with a total of 5 days of land-based theodolite tracking survey effort accomplished in October 2016. In total, 13 CWD groups were tracked during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix E**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in October 2016 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

Table 6.6: Summary of Survey Effort and CWD Group of Land-based Theodolite Tracking

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	3	18:00	13	0.72
Sha Chau	2	12:00	0	0
TOTAL	5	30:00	13	0.43

Figure 6.4: Plots of First Sightings of All CWD Groups obtained from Land-based Stations
 [Green triangle: LKC station; Green square: CWD group off LKC; Blue line: SCLKCMP boundary]



Notes: A CWD group was sighted on 27 October 2016 at a location to the northwest of LKC outside the HKSAR boundary. This sighting was beyond the usual tracking distance due to the good visibility and sea state condition (Beaufort 2) on that day whilst this CWD group was spotted with surfacing for several times. Although this sighting was outside the HKSAR boundary, it was recorded with the purpose of gathering more CWD information.

6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting month, the Ecological Acoustic Recorder (EAR) has been deployed on 5 October 2016 and positioned at south of Sha Chau Island with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 4-6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialized team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than two months, PAM results could not be reported in monthly intervals.

6.6 Site Audit for CWD-related Mitigation Measures

In accordance with the Marine Mammal Watching Plan, visual inspection by dolphin observer shall be implemented for works involving deployment and relocation of silt curtains and at enclosed areas once silt curtains are installed during construction phase. Briefings shall be provided by the trained dolphin observers for frontline site staff and other relevant personnel employed by the contractor to aid opportunistic observations of CWDs within waters surrounded by silt curtains.

During the reporting period, silt curtain was deployed by the contractor of CLP cable diversion enabling works. Training for the dolphin observers was provided by the ET, with the training records kept by the ET. Prior to the complete enclosure of any open water area within a silt

curtain or deployment in form of linear floating silt curtain, observations around waters enclosed by the silt curtain deployment and vicinity area from the installation works were taken place for 30 minutes by the trained dolphin observer to ensure no dolphins are trapped within the silt curtain.

Visual inspection and integrity check for silt curtain were carried out by the contractor and their daily records were audited by ET and IEC during site inspection.

Audits of acoustic decoupling for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier High Speed Ferries route diversion and speed control and construction vessel management are presented in **Section 7.2** and **Section 7.3** respectively.

6.7 Timing of Reporting CWD Monitoring Results

Detailed analysis of CWD monitoring results collected by small vessel line-transect survey will be provided in future quarterly reports. Detailed analysis of CWD monitoring results collected by land-based theodolite tracking and PAM will be provided in future yearly reports after a larger sample size of data has been collected.

6.8 Summary of CWD Monitoring

CWD monitoring was conducted as scheduled. The running quarterly encounter rates STG and ANI in the reporting month did not trigger the Action Level (i.e., remained above the Action Level). No adverse impact from the Project was observed.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

Weekly site inspections of the construction works for the advanced works contract, CLP cable diversion enabling works and DCM contracts were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. The weekly site inspection schedule of the construction works is provided in **Appendix D**. Bi-weekly site inspections were also conducted by the IEC. Observations have been recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

The key observations from site inspection and associated recommendations were related to the provision of drip trays for chemical containers; improvement of dust control measures; better maintenance of drainage channel; as well as proper collection, sorting and disposal of inert and non-inert C&D materials. In addition, recommendations were provided during site inspection on barges, including provision of spill kit and chemical waste storage area for the chemical waste, display of Environmental Permit, provision of spare silt curtain and acoustic decoupling for noisy equipment. The contractors had taken actions to implement the recommended measures.

A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix B**.

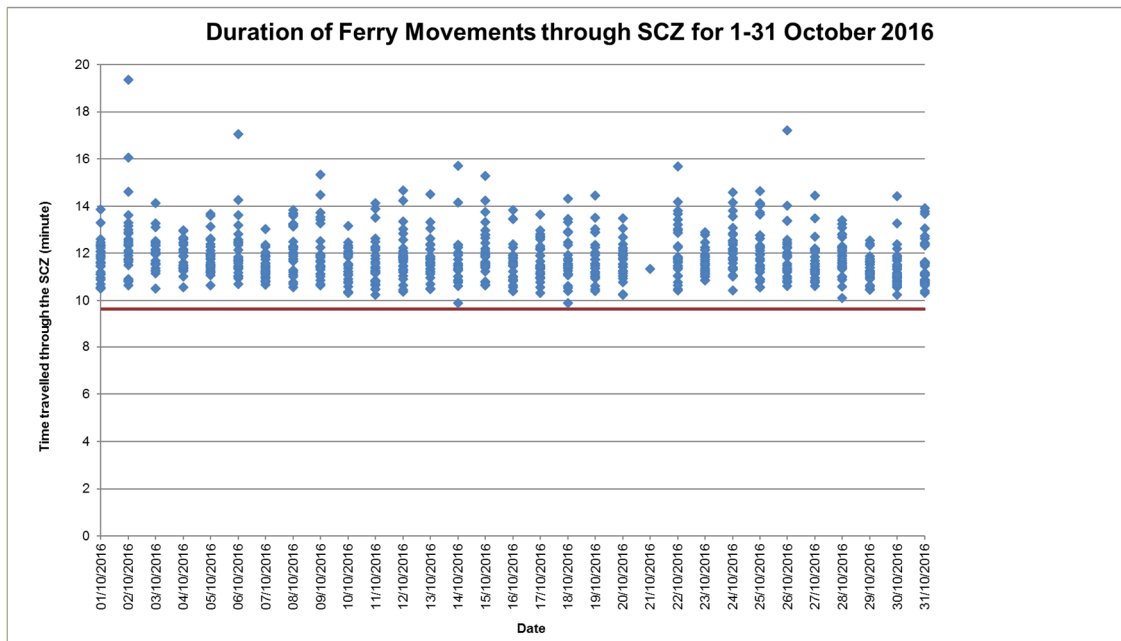
7.2 Audit of Route Diversion and Speed Control of the SkyPier High Speed Ferries

The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) has been submitted to the Advisory Council on the Environment (ACE) for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available on the dedicated website of the Project. In the SkyPier Plan, AAHK has committed to implementing the mitigation measure of requiring high speed ferries (HSFs) of SkyPier travelling between HKIA and Zhuhai / Macau to start diverting the route with associated speed control across the area, i.e. Speed Control Zone (SCZ), with high Chinese White Dolphin (CWD) abundance. The route diversion and speed restriction at the SCZ have been implemented since 28 December 2015.

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in October 2016 (i.e., 1 to 96 daily movements) were within the maximum daily cap of 125 daily movements. There was only one HSF movement on 21 October 2016 as Typhoon Signal No. 8 was hoisted on that day. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 839 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in October 2016 and the data are presented in **Appendix H**. The time spent by the SkyPier HSFs travelling through the SCZ in October 2016 were presented in **Figure 7-1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7-1** shows that all the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

Figure 7-1 Duration of the SkyPier HSFs travelling through the SCZ for 1 – 31 October 2016



Note: Data above the red line indicated that the time spent by the SkyPier HSFs travelling through the SCZ is more than 9.6 minutes, which is in compliance with the SkyPier Plan.

Four ferry movements were recorded with minor deviation from the diverted route on 8, 10, 11 and 15 October 2016. Notices were sent to the ferry operators, who have been requested to provide additional responses for further investigation. Investigation results will be provided in next EM&A report.

Table 7.1: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 October to 31 October 2016
Total number of ferry movements recorded and audited	839
Use diverted route and enter / leave SCZ through Gate Access Points	4 deviations , which are under investigation
Speed control in speed control zone	The prevailing speeds (the average speed taken within the SCZ) of all HSFs were within 15 knots (7.5 knots to 14.6 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in Figure 7-1 .
Daily Cap (including all SkyPier HSFs)	1 to 96 daily movements (within the maximum daily cap - 125 daily movements). There is only one HSF movement on 21 October 2016 due to Typhoon Signal No. 8 on that day.

7.3 Audit of Construction and Associated Vessels

The Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV) has been submitted and approved in December 2015 by EPD under EP Condition 2.9. The approved Plan is available on the dedicated website of the Project.

ET had carried out the following actions during the reporting period:

- 3 skipper trainings had been held for 4 DCM contractors’ senior management staff and concerned skippers of relevant construction vessels to familiarize them with the

predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.

- Besides the skipper training, the ET had also worked with the newly awarded contractors to make them familiar with the requirements of the MTRMP-CAV. Environmental briefing was conducted for each newly awarded contractor in order to enhance their environmental awareness and closely monitor the environmental performance of contractor.
- ET had conducted weekly audit of construction and associated vessel records as provided by the contractors. AIS data, vessel tracks, vessel speed and other relevant records had also been audited by ET to ensure the contractors complied with the requirements of the MTRMP-CAV and submitted sufficient records to the Marine Traffic Control Centre (MTCC) for records.
- From the weekly audit, deviations including speeding in the construction area, entry from non-designated gates, not following the designated route and entering no-entry zones were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the weekly MTCC audit and such deviations were also reviewed during the Environmental Management Meeting in order to help the contractors prevent such deviations from happening again in future.
- A Marine Management Liaison Group (MMLG) has been set up and provided a forum to assist and resolve any marine issues which may be encountered under the 3RS Project. ET had participated in the 3rd MMLG meeting held on 24 October 2016.
- 3-month rolling programmes (one month record and two months forecast) for construction vessel activities were received from the relevant contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

The IEC of the Project had also performed audit on the compliance of the requirements as part of the EM&A programme.

7.4 Ecological Monitoring

In accordance with the Updated EM&A Manual, ecological monitoring shall be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. During the reporting month, the monthly ecological monitoring on Sheung Sha Chau Island observed that the construction works for containment pit were conducted under the Contract P560(R) on the Island and there was no encroachment upon the egret area nor any significant disturbance to the egrets at Sheung Sha Chau by the works.

7.5 Status of Submissions under Environmental Permits

The current status of submissions under the EP up to the reporting period is presented in **Table 7.2**.

Table 7.2: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	

EP Condition	Submission	Status
2.4	Management Organizations	Accepted / approved by EPD
2.5	Construction Works Schedule and Location Plans	
2.7	Marine Park Proposal	
2.8	Marine Ecology Conservation Plan	
2.9	Marine Travel Routes and Management Plan for Construction and Associated Vessels	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	
2.11	Marine Mammal Watching Plan	
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egretty Survey Plan	
2.15	Silt Curtain Deployment Plan	
2.17	Detailed Plan on Deep Cement Mixing	
2.16	Spill Response Plan	
2.19	Waste Management Plan	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.6 Compliance with Other Statutory Environmental Requirements

During the reporting period, environmental related licenses and permits required for the construction activities were checked. No non-compliance with environmental statutory requirements was recorded. The environmental licenses and permits which are valid in the reporting month are presented in **Appendix F**.

7.7 Analysis and Interpretation of Complaints, Notification of Summons and Status of Prosecutions

7.7.1 Complaints

During the reporting period, no construction activities related complaints were received.

7.7.2 Notifications of Summons or Status of Prosecution

During the reporting period, neither notifications of summons nor prosecution were received.

7.7.3 Cumulative Statistics

Cumulative statistics on complaints, notifications of summons and status of prosecutions are summarized in **Appendix G**.

8 Future Key Issues and Other EIA & EM&A Issues

8.1 Construction Programme for the Coming Reporting Period

Key activities anticipated in the next reporting period for the Project will include the following contract works:

Advanced works Contract:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- HDD pilot hole drilling;
- Stockpiling of excavated materials from HDD operation; and
- Casing installation.

Reclamation Contracts:

Contract 3201 to 3205 Deep Cement Mixing Works

- Laying of geotextile and sand blanket; and
- DCM trial works.

Contract 3206 Main Reclamation Works

- Site preparation; and
- Plant mobilization.

Other Contracts:

Contract 3213 CLP Cable Diversion Enabling Works

- Excavation works; and
- Installation of precast cable trough.

8.2 Key Environmental Issues for the Coming Reporting Period

The key environmental issues for the Project in the coming reporting period expected to be associated with the construction activities include:

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Water quality from laying of sand blankets
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

The implementation of required mitigation measures by the contractors will be monitored by the ET.

8.3 Monitoring Schedule for the Coming Reporting Period

A tentative schedule of the planned environmental monitoring work in the next reporting period is provided in **Appendix D**.

9 Conclusion and Recommendation

Key activities of the Project carried out in the reporting month were related to advanced works contract which involved drilling of HDD pilot hole at launching site, stockpiling of excavated materials from HDD operation at stockpiling area, site preparation works and construction of containment pit at Sheung Sha Chau. CLP cable diversion enabling work contract was also carried out, which involved installation of silt curtain, excavation works and removal of armour rock at the western part of the airport. The four in-progress DCM contracts involved site survey, investigation works and laying of geotextile.

All the monitoring works for construction dust, construction noise, water quality, construction waste, terrestrial ecology and CWD were conducted during the reporting period in accordance with the Updated EM&A Manual.

No exceedance of the Action or Limit Levels in relation to the construction dust, construction noise, construction waste and CWD monitoring was recorded in the reporting month.

The water quality monitoring results for DO, total alkalinity and heavy metals obtained during the reporting period were in compliance with their corresponding Action and Limit Levels. For turbidity and SS, some of the testing results had exceeded the relevant Action Levels but all the results were below the relevant Limit Levels during the reporting period. Investigations were carried out immediately for each of the exceedance cases, and the investigation findings concluded that all the exceedances were not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau Island observed that construction works for containment pit were conducted on the Island and there was no encroachment upon the egret area nor any significant disturbance to the egrets at Sheung Sha Chau by the works.

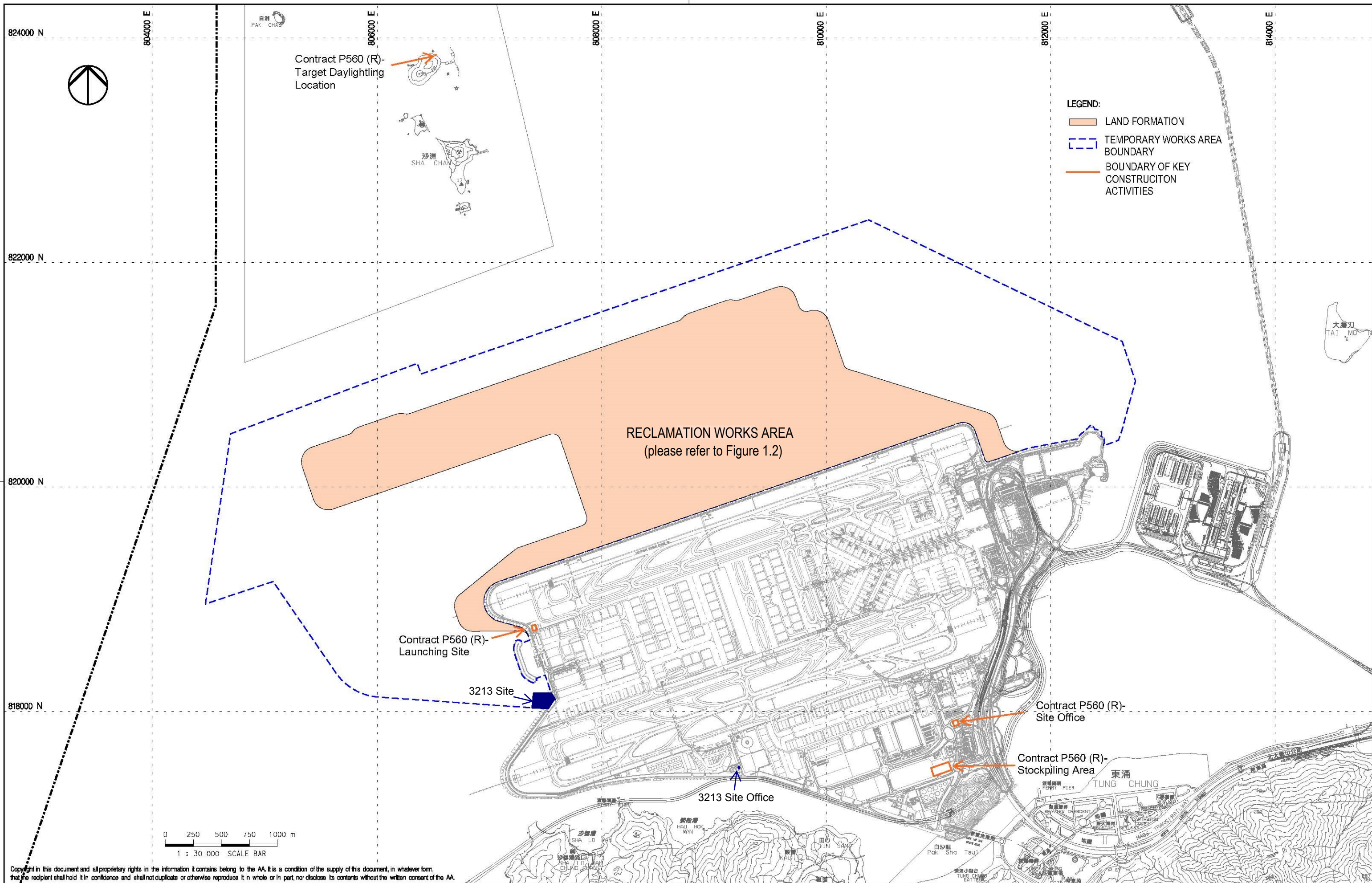
Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Observations have been recorded in the site inspection checklists and recommendations were provided to the contractors together with the appropriate follow-up actions where necessary.

On the implementation of the Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan), the daily movements of all SkyPier High Speed Ferries (HSFs) in October 2016 were in the range of 1 to 96 daily movements, which are within the maximum daily cap of 125 daily movements. There was only one HSF movement on 21 October 2016 as Typhoon Signal No. 8 was hoisted on that day. A total of 839 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the SCZ with prevailing speeds under 15 knots (7.5 to 14.6 knots), which were in compliance with the SkyPier Plan. Four ferry movements with minor deviation from the diverted route are under investigation by ET. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

On the implementation of the Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV), ET had conducted weekly audit of relevant information, including AIS data, vessel tracks and other relevant records to ensure the contractors complied

with the requirements of the MTRMP-CAV. Training has been provided for the contractor's senior management staff and concerned skippers to facilitating them in familiarising with the requirements of the MTRMP-CAV and to strengthen the communication between senior management staff and the sub-contractors. Environmental briefing related to the requirements of the MTRMP-CAV was conducted for each newly awarded contractor. 3-month rolling programmes for construction vessel activities were also received from the relevant contractors. Recommendations on the implementation of the environmental mitigation measures in the approved EIA report & EM&A Manual have been strictly followed.

Figures



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Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC



Title: LOCATIONS OF KEY CONSTRUCTION ACTIVITIES IN THIS REPORTING PERIOD

Consultant's Signatures for Approval		Date
Design	DC	31AUG15
Checkers	DC	31AUG15
Design Supervisor	EC	31AUG15
Authorised Representative	JFP	31AUG15

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	FIGURE 1.1
Scale at A3	1:30000
Rev.	A

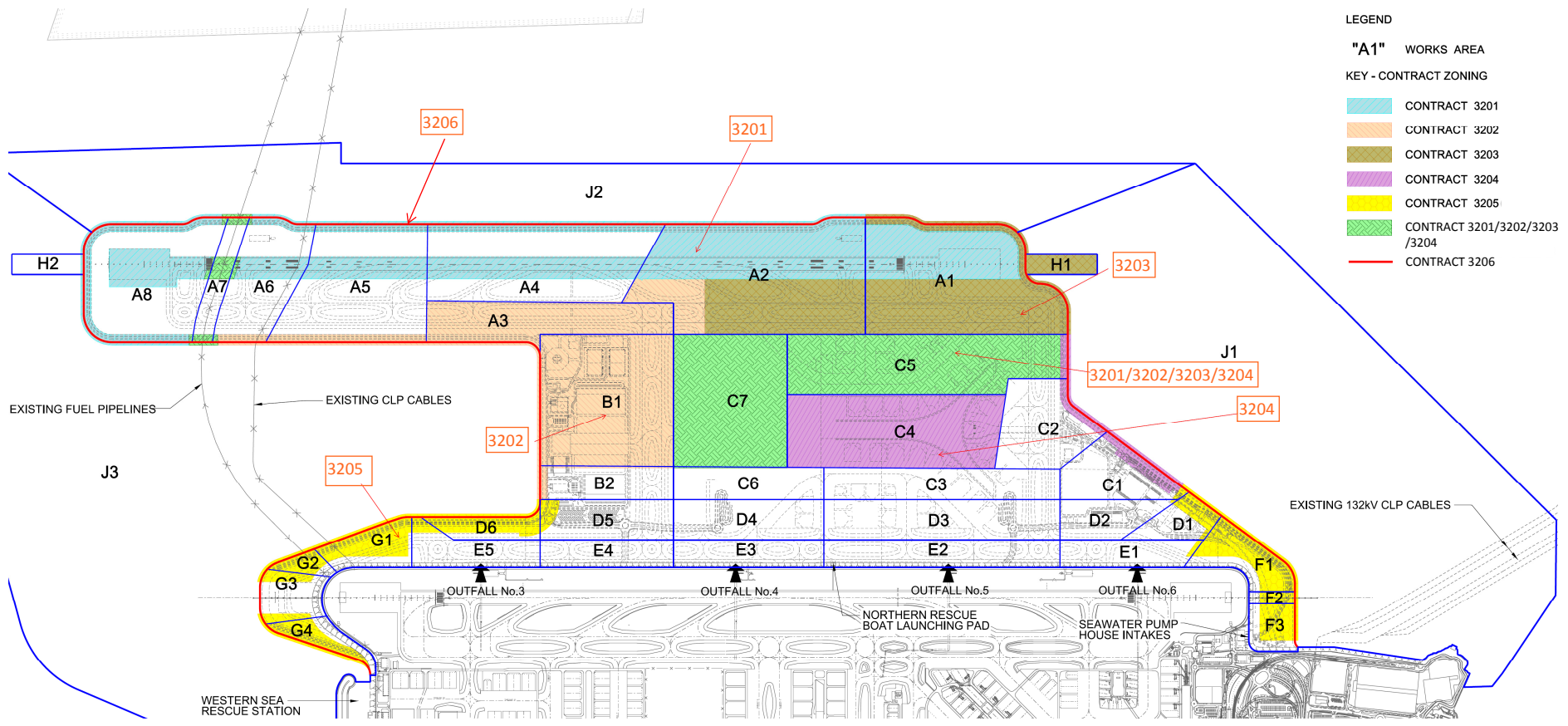


FIGURE 1.2- LOCATIONS OF RECLAMATION WORKS AREA



806000 E.

808000 E.

810000 E.

812000 E.

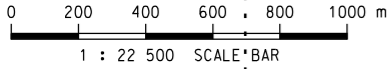
814000 E.

820000 N.

818000 N.

LEGEND:

- - - PROPOSED RECLAMATION AREA
- NOISE MONITORING STATION (UPDATED EM&A MANUAL)
- ▲ AIR QUALITY MONITORING STATION (UPDATED EM&A MANUAL)
- + CHEK LAP KOK WIND STATION



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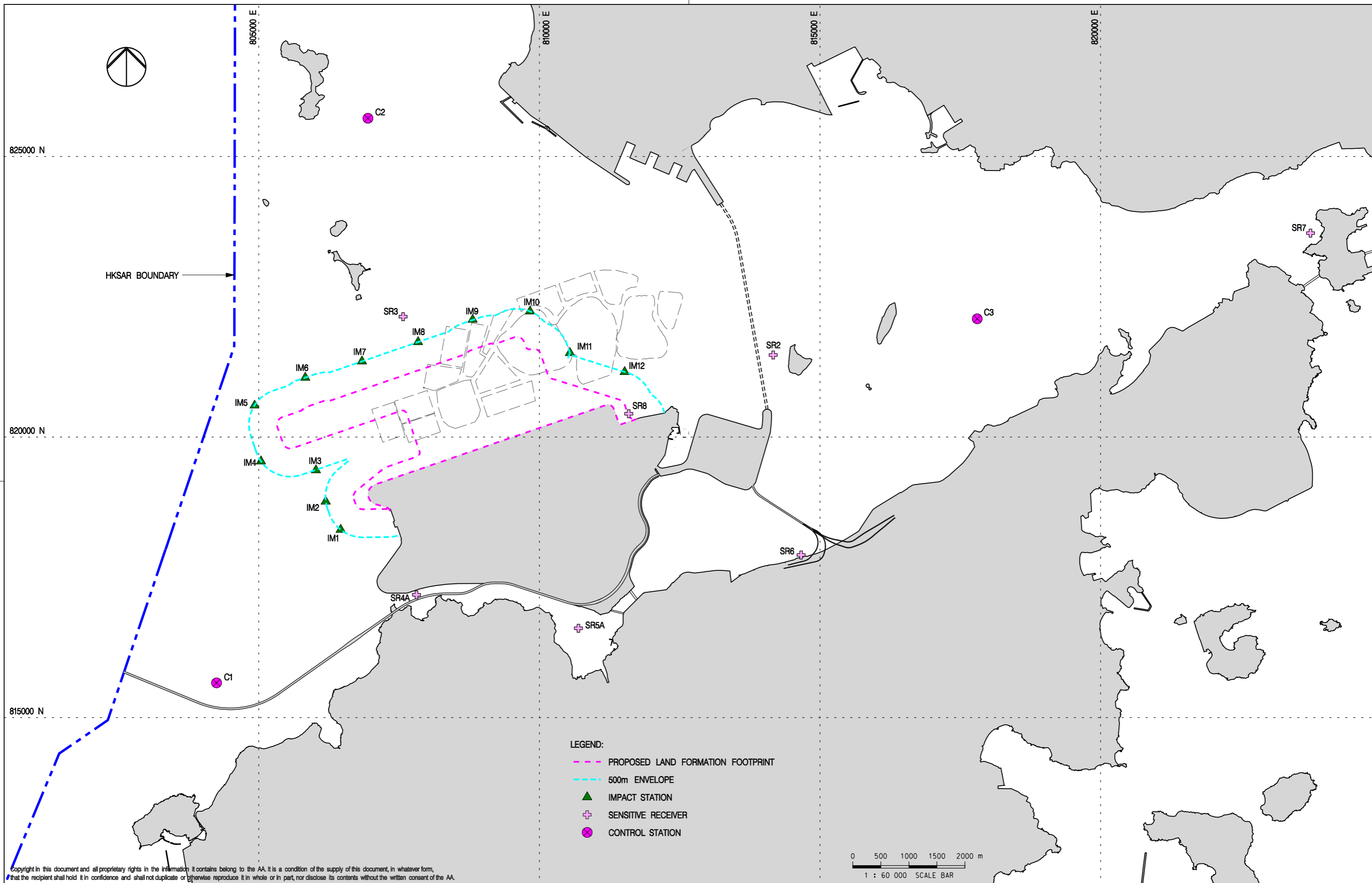
Rev.	Date	Description	Checked
A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO



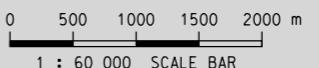
Title
LOCATIONS OF AIR AND NOISE MONITORING STATIONS AND CHEK LAP KOK WIND STATION

Consultant's Signatures for Approval		Date
Design	AM	11FEB16
Checkers	AM / TK	11FEB16
Approver	EC	11FEB16

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	Scale at A3 1 : 22500
FIGURE 2.1	Rev. C



- LEGEND:
- PROPOSED LAND FORMATION FOOTPRINT
 - 500m ENVELOPE
 - ▲ IMPACT STATION
 - ⊕ SENSITIVE RECEIVER
 - ⊗ CONTROL STATION



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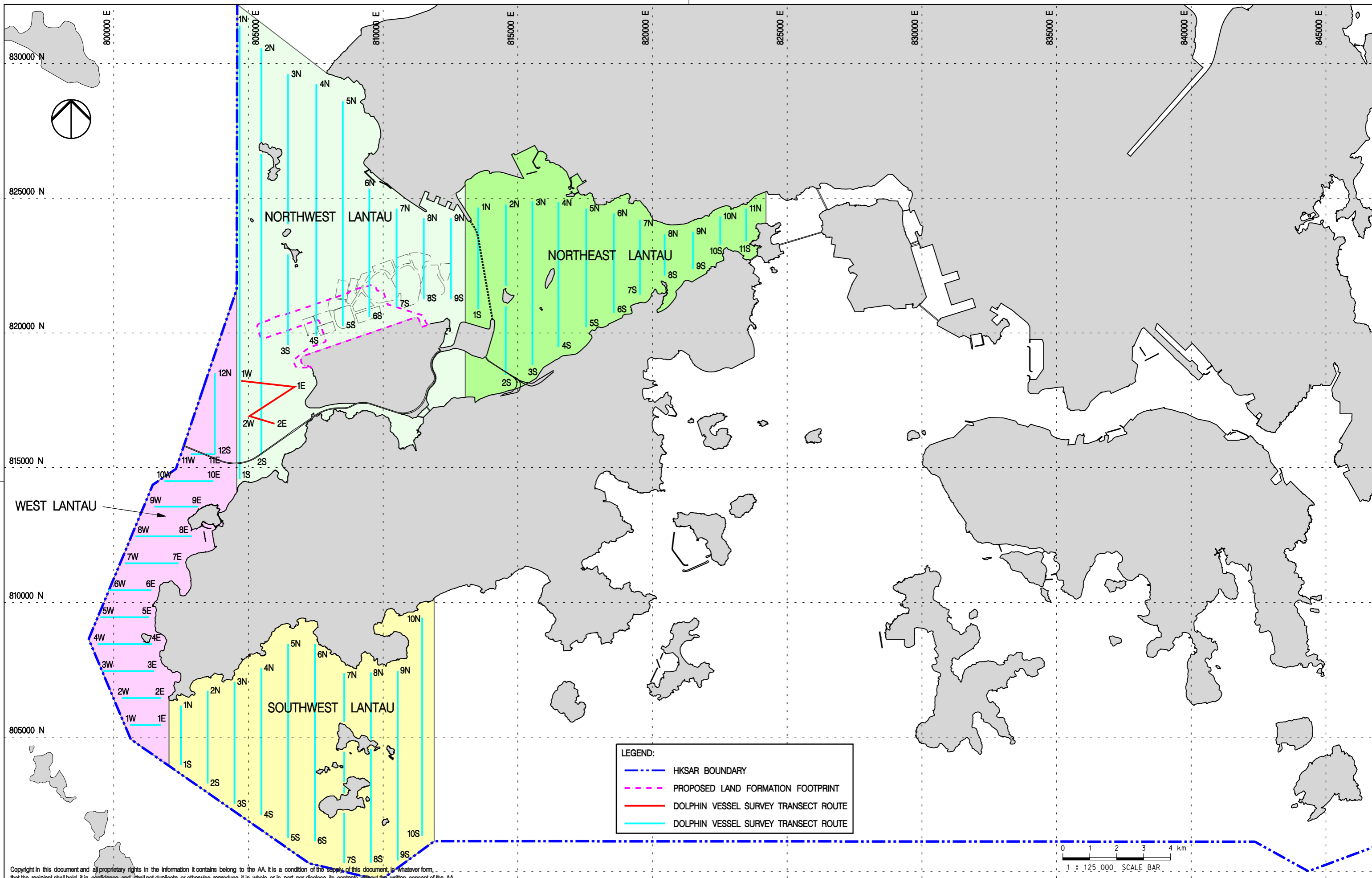
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	DC
B	04MAY16	GENERAL REVISION	RO
C	06JUN16	GENERAL REVISION	LC



Title
WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	06JUN16
Checkers	DC / TK	06JUN16
Approver	EC	06JUN16

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3
Drawing No.	FIGURE 3.1	1 : 60000
Rev.	C	



LEGEND:

- - - HKSAR BOUNDARY
- - - PROPOSED LAND FORMATION FOOTPRINT
- DOLPHIN VESSEL SURVEY TRANSECT ROUTE
- DOLPHIN VESSEL SURVEY TRANSECT ROUTE

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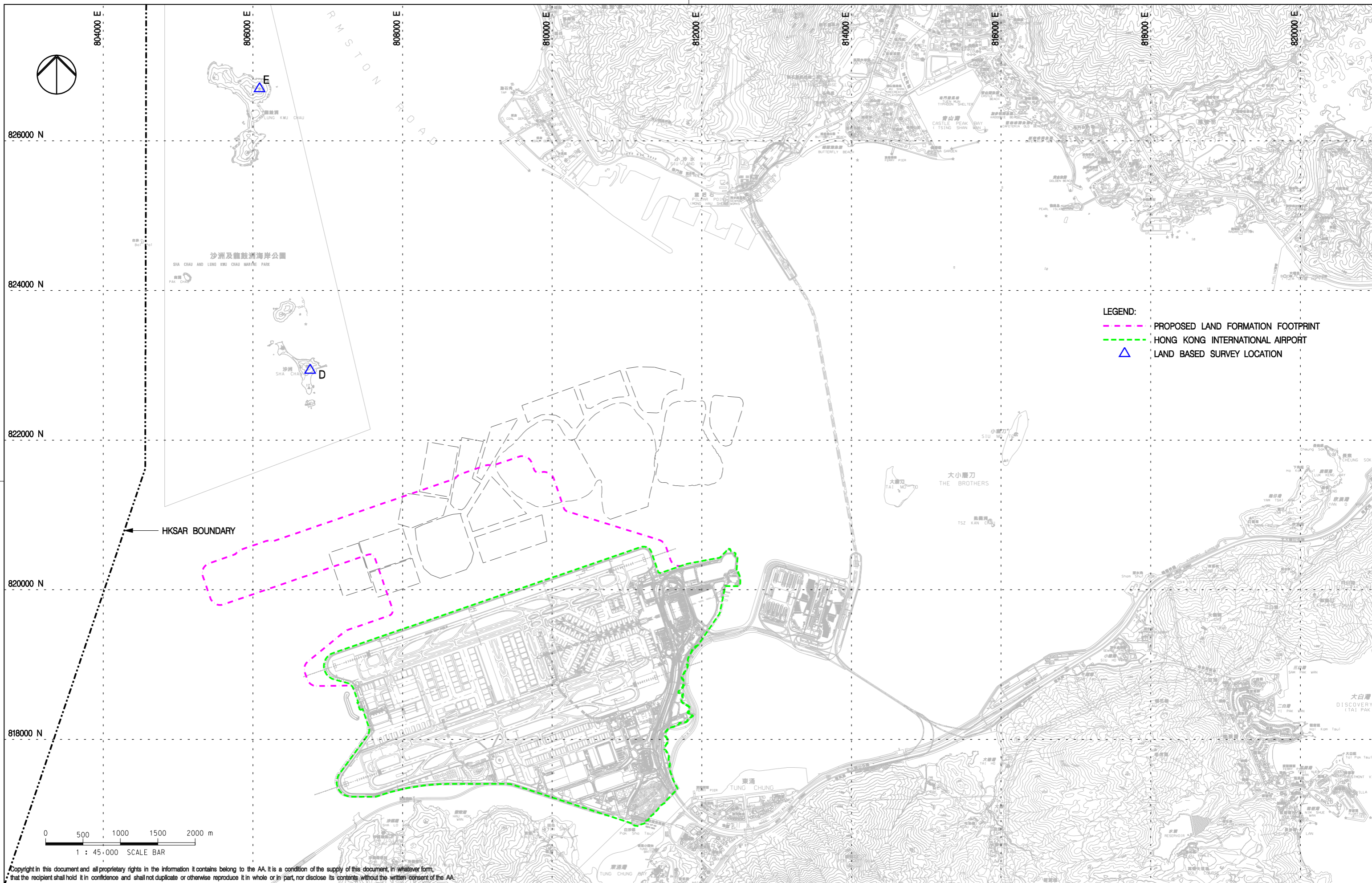
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC



Title
**VESSEL BASED DOLPHIN MONITORING
 TRANSECTS IN BASELINE MONITORING**

Consultant's Signatures for Approval		Date
Design	JC	02DEC15
Checkers	JC / TK	02DEC15
Approver	EC	02DEC15

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	Scale at A3 1 : 125000
FIGURE 6.1	Rev. A



LEGEND:
 - - - - - PROPOSED LAND FORMATION FOOTPRINT
 - - - - - HONG KONG INTERNATIONAL AIRPORT
 ▲ LAND BASED SURVEY LOCATION

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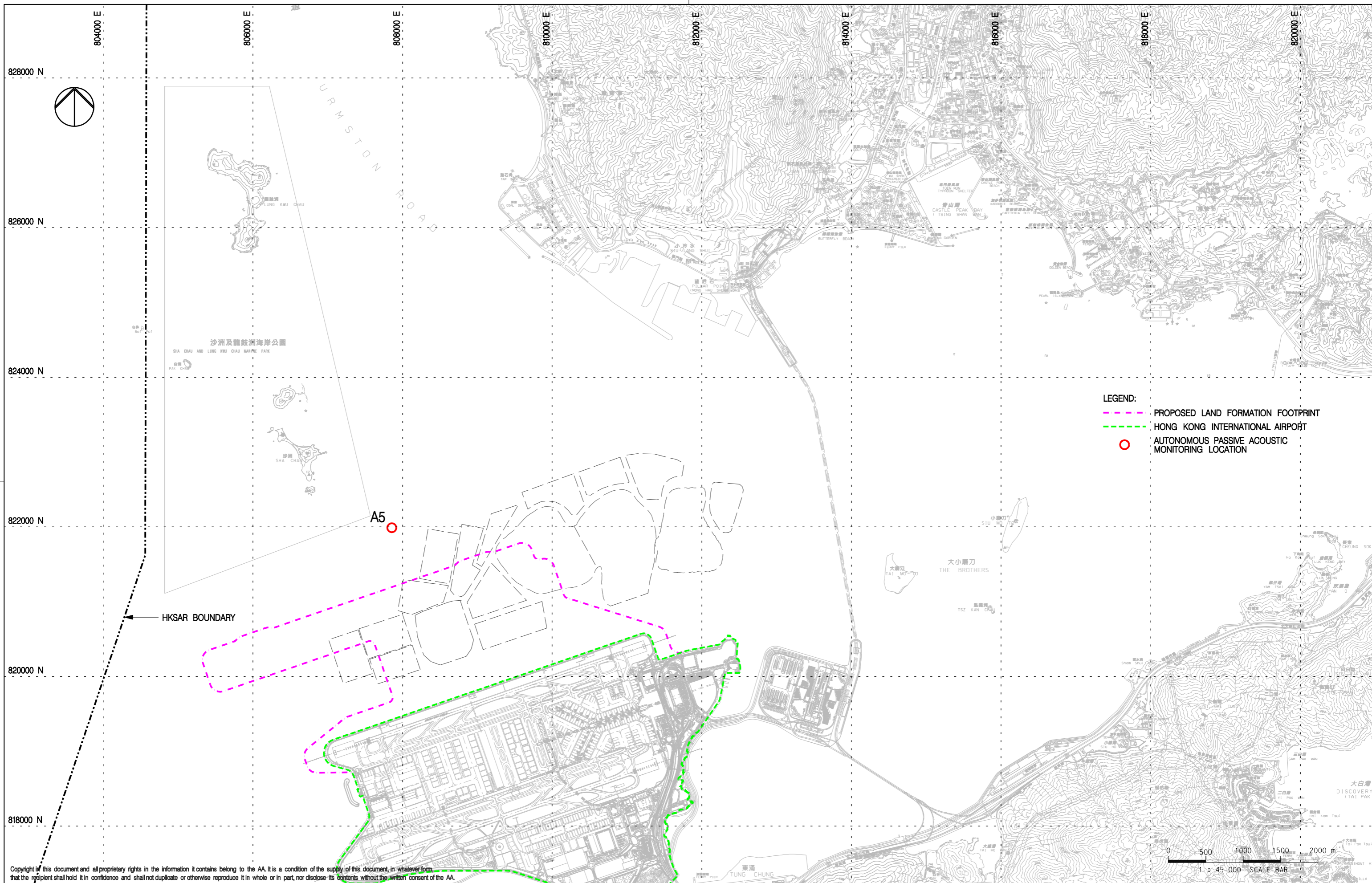
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A	02DEC15	FIRST ISSUE	JC



Title
**LAND BASED DOLPHIN MONITORING
 IN BASELINE AND CONSTRUCTION PHASES**

Consultant's Signatures for Approval		Date
Design	JC	02DEC15
Checkers	JC / TK	02DEC15
Approver	EC	02DEC15

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM
 Drawing No.
FIGURE 6.2
 Scale at A3
 1 : 45000
 Rev. A



- LEGEND:**
- PROPOSED LAND FORMATION FOOTPRINT
 - HONG KONG INTERNATIONAL AIRPORT
 - AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION

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Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC



Title
LOCATIONS FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING IN BASELINE AND CONSTRUCTION PHASES

Consultant's Signatures for Approval		Date
Design	JC	02DEC15
Checkers	JC / TK	02DEC15
Approver	EC	02DEC15

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	FIGURE 6.5
Scale at A3	1 : 45000
Rev.	A

Appendix A. Contract Information

Contract Information

Contract No.	Contract Title	Contractor	Key Construction Activities
P560 (R)	Aviation Fuel Pipeline Diversion Works	Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.	Diversion of the existing submarine aviation fuel pipelines will use a horizontal directional drilling (HDD) method forming two rock drill holes by drilling through bedrock from a launching site located at the west of the airport island to a daylighting point adjacent to the offshore receiving platform at Sha Chau. Two new pipelines will be installed through the drilled tunnels. The total length is approximately 5 km. Drilling works will proceed from the HDD launching site at the airport island.
3201	Deep Cement Mixing (Package 1)	Penta-Ocean-China State-Dong-Ah Joint Venture	<p>The works covered by the Contract 3201, 3202, 3203 and 3204 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following</p> <ul style="list-style-type: none"> • Geophysical surveys; • Supply and placing of geotextile and sand blanket under seawalls; • Supply, maintenance, installation and removal of silt curtain systems; • Preliminary construction trails; • Supply and installation of DCM clusters within the works areas; and • Coring, sampling and testing of DCM treated soils and reporting works.
3202	Deep Cement Mixing (Package 2)	Samsung-BuildKing Joint Venture	
3203	Deep Cement Mixing (Package 3)	Sambo E&C Co.,Ltd	
3204	Deep Cement Mixing (Package 4)	CRBC-SAMBO Joint Venture	
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	

3206	Main Reclamation Works	ZHEC-CCCC-CDC Joint Venture	<p>The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following</p> <ul style="list-style-type: none"> • Site clearance and demolition; • Geotechnical and ground improvement works; • Seawall construction; • Marine and land filling works; and • Civil works.
3213	CLP Cable Diversion Enabling Works	Wing Hing Construction Company	<p>CLP cable diversion enabling works of Sha Chau South, Sheung Sha Chau and Lung Kwu Chau at Hong Kong International Airport Landside. The major construction activities including without limitation the following:</p> <ul style="list-style-type: none"> • Geotechnical instrumentation and monitoring of the Works; • Temporary removal of armour rock and underlayers of existing seawall and subsequent reinstatement to its original condition; • Construction of the concrete cable trough embedded at about 3m below the surface of the existing seawall; and • Supply, installation, maintenance, and subsequent removal of temporary generator sets for temporary power supply with associated fuel supply and pump system located at Sheung Sha Chau, Sha Chau South and Lung Kwu Chau Islands.

Appendix B. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

Appendix B Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]
Air Quality Impact – Construction Phase					
5.2.6.2	2.1	-	Dust Control Measures <ul style="list-style-type: none"> Water spraying for 12 times a day or once every two hours for 24-hour working at all active works area. 	Within construction site / Duration of the construction phase	I
5.2.6.3	2.1	-	<ul style="list-style-type: none"> Covering of at least 80% of the stockpiling area by impervious sheets. Water spraying of all dusty materials immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling. 	Within construction site / Duration of the construction phase	I
5.2.6.4	2.1	-	Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted. These practices include: Good Site Management <ul style="list-style-type: none"> Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning. Disturbed Parts of the Roads <ul style="list-style-type: none"> Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. Exposed Earth <ul style="list-style-type: none"> Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. Loading, Unloading or Transfer of Dusty Materials <ul style="list-style-type: none"> All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet. Debris Handling	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
			<ul style="list-style-type: none"> ▪ Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and ▪ Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. <p>Transport of Dusty Materials</p> <ul style="list-style-type: none"> ▪ Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. <p>Wheel washing</p> <ul style="list-style-type: none"> ▪ Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. <p>Use of vehicles</p> <ul style="list-style-type: none"> ▪ The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site; ▪ Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and ▪ Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. <p>Site hoarding</p> <ul style="list-style-type: none"> ▪ Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. 		
5.2.6.5	2.1	-	<p>Best Practices for Concrete Batching Plant</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include:</p> <p>Cement and other dusty materials</p> <ul style="list-style-type: none"> ▪ The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden air or waste gas generated by the process operations shall be properly extracted and vented to fabric filtering system to meet the required emission limit; ▪ Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high level alarms to warn of over-filling. The high-level alarm indicators shall be interlocked with the material filling line such that in the event of the silo approaching an overfilling condition, an audible alarm will 	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
			<p>operate, and after 1 minute or less the material filling line will be closed;</p> <ul style="list-style-type: none"> ▪ Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit; ▪ Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit; and ▪ Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery. <p>Other raw materials</p> <ul style="list-style-type: none"> ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a manner to prevent or minimize dust emissions; ▪ The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, stock piles and material discharge points; ▪ All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above the unloading point. In no case shall these hoppers be used as the material storage devices; ▪ The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same performance; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals; ▪ Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface; ▪ Conveyors discharged to stockpiles of relevant materials shall be arranged to minimize free fall as far as practicable. All free falling transfer points from conveyors to stockpiles shall be enclosed with chute(s) and water sprayed; ▪ Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure such as storage bin and should not be handled in open area. Where there is sufficient buffer area surrounding the concrete batching plant, ground stockpiling may be used; ▪ The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side; ▪ Aggregates with a nominal size greater than 5 mm should preferably be stored in a totally enclosed structure. If open stockpiling is used, the stockpile shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; and ▪ The opening between the storage bin and weighing scale of the materials shall be fully enclosed. <p>Loading of materials for batching</p>		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
			<ul style="list-style-type: none"> ▪ Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented: <ul style="list-style-type: none"> (a) Pre-mixing the materials in a totally enclosed concrete mixer before loading the materials into the concrete truck is recommended. All dust-laden air generated by the pre-mixing process as well as the loading process shall be totally vented to fabric filtering system to meet the required emission limit; and (b) If truck mixing batching or other types of batching method is used, effective dust control measures acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to EPD that they are capable to collect and vent all dust-laden air generated by the material loading/mixing to dust arrestment plant to meet the required emission limit. ▪ The loading bay shall be totally enclosed during the loading process. <p>Vehicles</p> <ul style="list-style-type: none"> ▪ All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and ▪ All access and route roads within the premises shall be paved and adequately wetted. <p>Housekeeping</p> <ul style="list-style-type: none"> ▪ A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground, support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any dumping of materials at open area shall be prohibited. 		
5.2.6.6	2.1	-	<p>Best Practices for Asphaltic Concrete Plant</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted. These include:</p> <p>Design of Chimney</p> <ul style="list-style-type: none"> ▪ The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater; ▪ The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition; ▪ The flue gas exit temperature shall not be less than the acid dew point; and ▪ Release of the chimney shall be directed vertically upwards and not be restricted or deflected. <p>Cold feed side</p> <ul style="list-style-type: none"> ▪ The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed structure such as storage bin and shall not be handled in open area; ▪ Where there is sufficient buffer area surrounding the plant, ground stockpiling may be used. The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side. If 	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
		-	<p>these aggregates are stored above the feeding hopper, they shall be enclosed at least on top and three sides and be wetted on the surface to prevent wind-whipping;</p> <ul style="list-style-type: none"> ▪ The aggregates with a nominal size greater than 5 mm should preferably be stored in totally enclosed structure. Aggregates stockpile that is above the feeding hopper shall be enclosed at least on top and three sides. If open stockpiling is used, the stockpiles shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; ▪ Belt conveyors shall be enclosed on top and two sides and provided with a metal board at the bottom to eliminate any dust emission due to the wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can be achieve the same performance; ▪ Scrapers shall be provided at the turning points of all belt conveyors inside the chute of the transfer points to remove dust adhered to the belt surface; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals; and ▪ All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures. <p>Hot feed side</p> <ul style="list-style-type: none"> ▪ The inlet and outlet of the rotary dryer shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter. The particulate and gaseous concentration at the exhaust outlet of the dust collector shall not exceed the required limiting values; ▪ The bucket elevator shall be totally enclosed and the air be extracted and ducted to a dust collection system to meet the required particulates limiting value; ▪ All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings; ▪ Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside. They shall be inspected daily for leakages; ▪ All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value; and ▪ Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units). <p>Material transportation</p> <ul style="list-style-type: none"> ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions; ▪ Roadways from the entrance of the plant to the product loading points and/or any other working areas 		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]
			<p>where there are regular movements of vehicles shall be paved or hard surfaced; and</p> <ul style="list-style-type: none"> Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers. <p>Control of emissions from bitumen decanting</p> <ul style="list-style-type: none"> The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note; Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in case the upper limit for bitumen temperature is reached; Proper chimney for the discharge of bitumen fumes shall be provided at high level; The emission of bitumen fumes shall not exceed the required emission limit; and The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles. <p>Liquid fuel</p> <ul style="list-style-type: none"> The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air. <p>Housekeeping</p> <ul style="list-style-type: none"> A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis. 		
5.2.6.7	2.1	-	<p>Best Practices for Rock Crushing Plants</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:</p> <p>Crushers</p> <ul style="list-style-type: none"> The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter; The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping; Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure. <p>Vibratory screens and grizzlies</p>	Within Crushing Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
			<ul style="list-style-type: none"> ▪ All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and ▪ All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas. <p>Belt conveyors</p> <ul style="list-style-type: none"> ▪ Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides; ▪ Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and ▪ Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals. <p>Storage piles and bins</p> <ul style="list-style-type: none"> ▪ Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required. ▪ The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable; ▪ All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or ▪ The stockpiles of aggregates 5 mm in size or less shall be enclosed on 3 sides or suitably located to minimize wind-whipping. Save for fluctuations in stock or production, the average stockpile shall stay within the enclosure walls and in no case the height of the stockpile shall exceed twice the height of the enclosure walls. ▪ Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly. <p>Rock drilling equipment</p> <ul style="list-style-type: none"> • Appropriate dust control equipment such as a dust extraction and collection system shall be used during 		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]
			rock drilling activities.		
Hazard to Human Life – Construction Phase					
Table 6.40	3.2	-	<ul style="list-style-type: none"> Precautionary measures should be established to request barges to move away during typhoons. 	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> An appropriate marine traffic management system should be established to minimize risk of ship collision. 	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> Location of all existing hydrant networks should be clearly identified prior to any construction works. 	Construction Site / Construction Period	N/A
Noise Impact – Construction Phase					
7.5.6	4.3	-	<p>Good Site Practice Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:</p> <ul style="list-style-type: none"> only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; mobile plant should be sited as far away from NSRs as possible; and material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities. 	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	<p>Adoption of QPME</p> <ul style="list-style-type: none"> QPME should be adopted as far as applicable. 	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	<p>Use of Movable Noise Barriers</p> <ul style="list-style-type: none"> Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs. 	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	<p>Use of Noise Enclosure/ Acoustic Shed</p> <ul style="list-style-type: none"> Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator. 	Within the Project site / During construction phase / Prior to	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
commencement of operation					
Water Quality Impact – Construction Phase					
8.8.1.2 and 8.8.1.3	5.1	2.26	<p>Marine Construction Activities</p> <p><u>General Measures to be Applied to All Works Areas</u></p> <ul style="list-style-type: none"> ▪ Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; ▪ Use of Lean Material Overboard (LMOB) systems shall be prohibited; ▪ Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; ▪ Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; ▪ Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; ▪ All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; ▪ The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and ▪ For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted. <p><u>Specific Measures to be Applied to All Works Areas</u></p> <ul style="list-style-type: none"> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document; ▪ An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities; ▪ Closed grab dredger shall be used to excavate marine sediment; ▪ Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and ▪ The Silt Curtain Deployment Plan shall be implemented. 	Within construction site / Duration of the construction phase	1

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
<p><u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u></p> <ul style="list-style-type: none"> Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains; Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and The silt curtains and silt screens should be regularly checked and maintained. <p><u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u></p> <ul style="list-style-type: none"> Double layer 'Type II' or 'Type III' silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides; Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities; Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and The silt curtains and silt screens should be regularly checked and maintained. <p><u>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</u></p> <ul style="list-style-type: none"> Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping and Sea Ordinance (DASO) permit conditions; and Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure. 					
8.8.1.4	5.1	-	<p>Modification of the Existing Seawall</p> <ul style="list-style-type: none"> Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works. 	At the existing northern seawall / Duration of the construction phase	I
8.8.1.5	5.1	-	<p>Construction of New Stormwater Outfalls and Modifications to Existing Outfalls</p> <ul style="list-style-type: none"> During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations. 	Within construction site / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
8.8.1.6 8.8.1.7	5.1	2.27	<p>Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons</p> <p>Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment.</p> <p><u>For construction of the eastern approach lights at the CMPs</u></p> <ul style="list-style-type: none"> ▪ Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; ▪ Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; ▪ The excavated materials shall be removed using a closed grab within the steel casings; ▪ No discharge of the cement mixed materials into the marine environment will be allowed; and ▪ Excavated materials shall be treated and reused on-site. 	Within construction site / Duration of the construction phase	N/A
8.8.1.8	5.1	-	<p>Construction Site Runoff and Drainage</p> <p>The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:</p> <ul style="list-style-type: none"> ▪ Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform); ▪ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction; ▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly; ▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities; ▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for 	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
			<p>proper disposal off-site. No direct discharge of contaminated groundwater is permitted;</p> <ul style="list-style-type: none"> All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge; 		
		-	<ul style="list-style-type: none"> Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the construction materials, soil, silt or debris from washing away into the drainage system; Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and to prevent stormwater runoff being directed into foul sewers; and Precautionary measures should be taken at any time of the year when rainstorms are likely. Actions to be taken when a rainstorm is imminent or forecasted are summarized in Appendix A2 of ProPECC Note PN 1/94. This includes actions to be taken during and/or after rainstorms. Particular attention should be paid to the control of silty surface runoff during storm events. 		
8.8.1.9	5.1	-	<p>Sewage Effluent from Construction Workforce</p> <ul style="list-style-type: none"> Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance. 	Within construction site / During construction phase	I
8.8.1.10 8.8.1.11	5.1		<p>General Construction Activities</p> <ul style="list-style-type: none"> Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event. 	Within construction site / During construction phase	I
8.8.1.12 8.8.1.13	5.1	2.28	<p>Drilling Activities for the Submarine Aviation Fuel Pipelines</p> <p>To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:</p> <ul style="list-style-type: none"> A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; No bulk storage of chemicals shall be permitted; and 	Within construction site / During construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
<ul style="list-style-type: none"> ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas. <p>At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:</p> <ul style="list-style-type: none"> ▪ During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and ▪ Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 					
Waste Management Implication – Construction Phase					
10.5.1.1	7.1	-	<p>Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended:</p> <ul style="list-style-type: none"> ▪ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials; ▪ Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government’s PFRF as fill materials for the proposed land formation works; ▪ Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work; ▪ Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and ▪ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development. 	Project Site Area / During design and construction phase	I
10.5.1.1	7.1	-	<p>The following good site practices should be performed during the construction activities include:</p> <ul style="list-style-type: none"> ▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; ▪ Training of site personnel in proper waste management and chemical waste handling procedures; 	Project Site Area / Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
			<ul style="list-style-type: none"> ▪ Provision of sufficient waste disposal points and regular collection for disposal; ▪ Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; ▪ Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; ▪ All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; ▪ C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; ▪ The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and ▪ To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. 		
10.5.1.3	7.1	-	<p>The following practices should be performed to achieve waste reduction include:</p> <ul style="list-style-type: none"> ▪ Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; ▪ Adoption of repetitive design to allow reuse of formworks as far as practicable; ▪ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; ▪ Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force; ▪ Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable; ▪ Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and ▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. 	Project Site Area / Construction Phase	I
10.5.1.5	7.1		<ul style="list-style-type: none"> ▪ Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials. 	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	<ul style="list-style-type: none"> ▪ Any recyclable materials should be segregated from the non-inert C&D materials for collection by 	Project Site Area /	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]
			reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Construction Phase	
10.5.1.6	7.1	-	<ul style="list-style-type: none"> A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping. 	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	<ul style="list-style-type: none"> The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices. 	Construction Phase	I
10.5.1.16	7.1	-	<p>The following mitigation measures are recommended during excavation and treatment of the sediments:</p> <ul style="list-style-type: none"> On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions; The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions; All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; Treated and untreated sediment should be clearly separated and stored separately; and Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge. 	Project Site Area / Construction Phase	N/A
10.5.1.18	7.1	-	<p>The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal:</p> <ul style="list-style-type: none"> Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material; Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by EPD; and Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation. 	Project Site Area / Construction Phase	N/A
10.5.1.19	7.1	-	<p>Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented:</p> <ul style="list-style-type: none"> Good quality containers compatible with the chemical wastes should be used; Incompatible chemicals should be stored separately; Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc; and 	Project Site Area / Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]
			<ul style="list-style-type: none"> The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. 		
10.5.1.20	7.1	-	<ul style="list-style-type: none"> General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material. 	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	<ul style="list-style-type: none"> The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse. 	Project Site Area / Construction Phase	N/A
Land Contamination – Construction Phase					
11.10.1.2 to 11.10.1.3	8.1	2.32	<p>For areas inaccessible during site reconnaissance survey</p> <ul style="list-style-type: none"> Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas. Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas. After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room. Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively. 	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	N/A
11.8.1.2	8.1	-	<p>If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any):</p> <ul style="list-style-type: none"> To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; Stockpiling of contaminated excavated materials on site should be avoided as far as possible; The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or 	Project Site Area / Construction Phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
			release of contaminated wastewater; <ul style="list-style-type: none"> Truck bodies and tailgates should be sealed to prevent any discharge; Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and Maintain records of waste generation and disposal quantities and disposal arrangements. 		
Terrestrial Ecological Impact – Construction Phase					
12.10.1.1	9.2	2.14	Pre-construction Egretty Survey <ul style="list-style-type: none"> Conduct ecological survey for Sha Chau egretty to update the latest boundary of the egretty. 	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	I
12.7.2.3 and 12.7.2.6	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egretty <ul style="list-style-type: none"> The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretty. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretty; In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and The containment pit at the daylighting location shall be covered or camouflaged. 	During construction phase at Sheung Sha Chau Island	I
12.7.2.5	9.1	2.30	Preservation of Nesting Vegetation <ul style="list-style-type: none"> The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved. 	During construction phase at Sheung Sha Chau Island	I
12.7.2.4 and 12.7.2.6	9.1	2.30	Timing the Pipe Connection Works outside Ardeid’s Breeding Season <ul style="list-style-type: none"> All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids’ breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons. 	During construction phase at Sheung Sha Chau Island	I
12.10.1.1	9.3	-	Ecological Monitoring <ul style="list-style-type: none"> During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. 	at Sheung Sha Chau Island	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]
Marine Ecological Impact – Pre-construction Phase					
13.11.4.1	10.2.2	-	<ul style="list-style-type: none"> Pre-construction phase Coral Dive Survey. 	HKIAAA artificial seawall	I
Marine Ecological Impact – Construction Phase					
13.11.1.3 to 13.11.1.6	-	-	<p>Minimisation of Land Formation Area</p> <ul style="list-style-type: none"> Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population. 	Land formation footprint / during detailed design phase to completion of construction	N/A
13.11.1.7 to 13.11.1.10	-	2.31	<p>Use of Construction Methods with Minimal Risk/Disturbance</p> <ul style="list-style-type: none"> Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment; Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; Avoid bored piling during CWD peak calving season (Mar to Jun); Prohibition of underwater percussive piling; and Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources. 	During construction phase at marine works area	I
13.11.2.1 to 13.11.2.7	-	-	<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources. 	All works area during the construction phase	I
13.11.1.12	-	-	<p>Strict Enforcement of No-Dumping Policy</p> <ul style="list-style-type: none"> A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would 	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]
			<p>potentially be harmful to dolphins and/or their habitat in the work area;</p> <ul style="list-style-type: none"> ▪ Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented. 		
13.11.1.13	-	-	<p>Good Construction Site Practices</p> <ul style="list-style-type: none"> ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 	All works area during the construction phase	I
13.11.5.4 to 13.11.5.13	10.3.1	-	<p>SkyPier High Speed Ferries' Speed Restrictions and Route Diversions</p> <ul style="list-style-type: none"> ▪ SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in Drawing No. MCL/P132/EIA/13-023 of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and ▪ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times. <p>Other mitigation measures</p> <ul style="list-style-type: none"> ▪ The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and ▪ The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed. 	Area between the footprint and SCLKC Marine Park during construction phase	I
13.11.5.14 to 13.11.5.18	10.3.1	2.31	<p>Dolphin Exclusion Zone</p> <ul style="list-style-type: none"> ▪ Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas; ▪ A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and ▪ A DEZ would also be implemented during bored piling work but as a precautionary measure only. 	Marine waters around land formation works area during construction phase	N/A
13.11.5.19	10.4	2.31	<p>Acoustic Decoupling of Construction Equipment</p> <ul style="list-style-type: none"> ▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and 	Around coastal works area during construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]
			<ul style="list-style-type: none"> Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works. 		
13.11.5.20	10.6.1	2.29	<p>Spill Response Plan</p> <ul style="list-style-type: none"> An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage. 	Construction phase	I
13.11.5.21 to 13.11.5.23	10.6.1	-	<p>Construction Vessel Speed Limits and Skipper Training</p> <ul style="list-style-type: none"> A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities; and Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing. 	All areas north and west of Lantau Island during construction phase	I
Fisheries Impact – Construction Phase					
14.9.1.2 to 14.9.1.5	-	-	<p>Minimisation of Land Formation Area</p> <ul style="list-style-type: none"> Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources. 	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	<p>Use of Construction Methods with Minimal Risk/Disturbance</p> <ul style="list-style-type: none"> Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment; Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 	During construction phase at marine works area	N/A
14.9.1.11	-	-	<p>Strict Enforcement of No-Dumping Policy</p> <ul style="list-style-type: none"> A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works; 	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ?^
			<ul style="list-style-type: none"> Fines for infractions should be implemented; and Unscheduled, on-site audits shall be implemented. 		
14.9.1.12	-		<p>Good Construction Site Practices</p> <ul style="list-style-type: none"> Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; Keep the number of working or stationary vessels present on-site to the minimum anytime; and Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 	All works area during the construction phase	I
14.9.1.13 to 14.9.1.18	-		<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 	All works area during the construction phase	N/A
Landscape and Visual Impact – Construction Phase					
Table 15.6	12.3	-	CM1 - The construction area and contractor’s temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM2 - Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	CM3 - Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	CM4 - Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]
Table 15.6	12.3	-	CM5 - Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	completion of works. All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	N/A
Table 15.6	12.3	-	CM6 - Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	CM7 - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	N/A
Table 15.6	12.3	-	CM8 - All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor’s works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM9 - Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	CM10 - Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works;	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented ? [^]	
Cultural Heritage Impact – Construction Phase					Upon handover and completion of works.	
	-		Not applicable.			
Health Impact – Aircraft Emissions						
	-		Not applicable.			
Health Impact – Aircraft Noise						
	-		Not applicable.			

Notes:

I= implemented where applicable; N/A= not applicable to the construction works implemented during the reporting month.

[^] Checked by ET during site inspection

Appendix C. Calibration Certificates



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Report of Equipment Performance Check/Calibration

Test Report No. : AF100044
Date of Issue : 12 Oct, 2016
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas Wong

PART B – SAMPLE INFORMATION

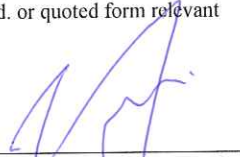
Description of Samples : Titrette bottle-top burette, 50ml
Brand Name : BRAND
Model Number : 1224B90
Serial Number : 10N64701
Equipment Number : --
Date of Received : 06 Oct, 2016
Date of Calibration : 11 Oct, 2016
Date of Next Calibration^(a) : 11 Jan, 2017

PART C – CALIBRATION REQUESTED

<u>Parameter</u>	<u>Reference Method</u>
Volume	In-house Method

^(a) The "Date of Next Calibration" is recommended according to best practice principals as practiced by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.

APPROVED SIGNATORY :


YIU Sok-fong, Marble
Laboratory Manager



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Report of Equipment Performance Check/Calibration

Test Report No. : AF100044
 Date of Issue : 12 Oct, 2016
 Page No. : 2 of 2

PART D – RESULT^(bc)

Volume

Trial	Nominal volume (mL) (at interval)				
	3 (1-4)	3 (16-19)	3 (23-26)	3 (34-37)	3 (42-45)
1	2.9827	2.9816	2.9854	2.9768	2.9817
2	2.9828	2.9778	2.9843	2.9729	2.9802
3	2.9861	2.9821	2.9843	2.9698	2.9866
4	2.9757	2.9826	2.9881	2.9730	2.9790
5	2.9816	2.9775	2.9822	2.9714	2.9746
6	2.9875	2.9844	2.9823	2.9797	2.9757
7	2.9896	2.9859	2.9879	2.9758	2.9886
8	2.9825	2.9791	2.9889	2.9784	2.9817
9	2.9811	2.9833	2.9806	2.9799	2.9859
10	2.9887	2.9848	2.9862	2.9787	2.9820
Average	2.9838	2.9819	2.9850	2.9756	2.9816
Standard deviation	0.0042	0.0029	0.0028	0.0036	0.0045
Calculate volume (mL)	2.9940	2.9920	2.9952	2.9858	2.9917
Error (%)	-0.2008	-0.2651	-0.1610	-0.4748	-0.2754
RSD (%)	0.1401	0.0979	0.0933	0.1221	0.1516

Acceptance Criteria^(d)

Accuracy (%Error)	< ±1%	< ±1%	< ±1%	< ±1%	< ±1%
Precision (%RSD)	< 1%	< 1%	< 1%	< 1%	< 1%

~ END OF REPORT ~

^(b) The results relate only to the tested sample as received

^(c) the performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

^(d) The “acceptance criteria” is applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.



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Report of Equipment Performance Check/Calibration

Test Report No. : AF090103
Date of Issue : 27 Sep, 2016
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas Wong

PART B – SAMPLE INFORMATION

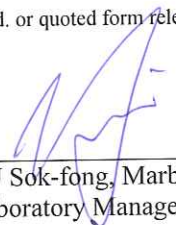
Description of Samples : Titrette bottletop burette, 50ml
Brand Name : BRAND
Model Number : 1224B90
Serial Number : 10N65665
Equipment Number : --
Date of Received : 19 Sep, 2016
Date of Calibration : 23 Sep, 2016
Date of Next Calibration^(a) : 23 Dec, 2016

PART C – CALIBRATION REQUESTED

<u>Parameter</u>	<u>Reference Method</u>
Volume	In-house Method

^(a) The "Date of Next Calibration" is recommended according to best practice principals as practiced by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.

APPROVED SIGNATORY : _____


YIU Sok-fong, Marble
Laboratory Manager



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Report of Equipment Performance Check/Calibration

Test Report No. : AF090103
 Date of Issue : 27 Sep, 2016
 Page No. : 2 of 2

PART D – RESULT^(bc)

Volume

Trial	Nominal volume (mL) (at interval)				
	3 (1-4)	3 (16-19)	3 (23-26)	3 (34-37)	3 (42-45)
1	2.9823	2.9777	2.9744	2.9804	2.9881
2	2.9863	2.9831	2.9739	2.9900	2.9829
3	2.9837	2.9848	2.9896	2.9845	2.9820
4	2.9767	2.9828	2.9836	2.9833	2.9768
5	2.9852	2.9855	2.9828	2.9850	2.9814
6	2.9835	2.9881	2.9852	2.9860	2.9887
7	2.9817	2.9835	2.9842	2.9850	2.9715
8	2.9819	2.9712	2.9894	2.9710	2.9741
9	2.9848	2.9912	2.9688	2.9747	2.9815
10	2.9796	2.9838	2.9872	2.9817	2.9800
Average	2.9826	2.9832	2.9819	2.9822	2.9807
Standard deviation	0.0028	0.0055	0.0071	0.0056	0.0055
Calculate volume (mL)	2.9933	2.9939	2.9926	2.9929	2.9914
Error (%)	-0.2231	-0.2030	-0.2452	-0.2368	-0.2856
RSD (%)	0.0948	0.1832	0.2377	0.1872	0.1832

Acceptance Criteria^(d)

Accuracy (%Error)	< ±1%	< ±1%	< ±1%	< ±1%	< ±1%
Precision (%RSD)	< 1%	< 1%	< 1%	< 1%	< 1%

~ END OF REPORT ~

^(b) The results relate only to the tested sample as received

^(c) the performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

^(d) The "acceptance criteria" is applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.



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Report of Equipment Performance Check/Calibration

Test Report No. : AF100043-2
Date of Issue : 12 Oct, 2016
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment : YSI 6920 multiparameter water quality meter
Manufacturer : YSI (a xylem brand)
Serial Number : 000109DF
Client's Reference Number : --
Date of Received : 05 Oct, 2016
Date of Calibration : 05 Oct, 2016
Date of Next Calibration^(a) : 05 Jan, 2017

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H ⁺ B
Dissolved Oxygen	APHA 21e 4500-O G
Conductivity at 25°C	APHA 21e 2510B
Salinity	APHA 21e 2520B
Turbidity	APHA 21e 2130 B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D – CALIBRATION RESULTS^(b,c)

pH at 25°C

Target (pH unit)	Displayed Reading ^(d) (pH Unit)	Tolerance ^(e) (pH Unit)	Results
4.00	3.93	-0.07	Satisfactory
7.42	7.40	-0.01	Satisfactory
10.01	9.96	-0.05	Satisfactory

Tolerance of pH should be less than ± 0.10 (pH unit)

Temperature

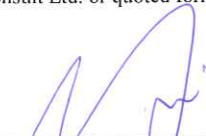
Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
16.8	17.2	0.4	Satisfactory
25.8	26.0	0.2	Satisfactory
34.3	34.6	0.3	Satisfactory

Tolerance limit of temperature should be less than ± 2.0 (°C)

~ CONTINUED ON NEXT PAGE ~

- ^(a) The "Date of Next Calibration" is recommended according to best practice principals as practiced by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.
- ^(b) The results relate only to the calibrated equipment as received
- ^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- ^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- ^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.

APPROVED SIGNATORY :


YIU Sok-fong, Marble
Laboratory Manager



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Report of Equipment Performance Check/Calibration

Test Report No. : AF100043-2
Date of Issue : 12 Oct, 2016
Page No. : 2 of 2

PART D – RESULT (Con't)

Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
1.91	1.85	-0.06	Satisfactory
4.66	4.61	-0.05	Satisfactory
7.07	7.14	0.07	Satisfactory
8.01	7.96	-0.05	Satisfactory

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

Conductivity at 25°C

Expected Reading ($\mu\text{S/cm}$)	Displayed Reading ($\mu\text{S/cm}$)	Tolerance (%)	Results
146.9	141.8	-3.5	Satisfactory
1412	1398	-1.0	Satisfactory
12890	12760	-1.0	Satisfactory
58670	58332	-0.6	Satisfactory
111900	111232	-0.6	Satisfactory

Tolerance limit of conductivity should be less than ± 10.0 (%)

Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.07	0.7	Satisfactory
20	20.11	0.5	Satisfactory
30	30.24	0.8	Satisfactory

Tolerance limit of salinity should be less than ± 10.0 (%)

Turbidity

Expected Reading (NTU)	Displayed Reading ⁽¹⁾ (NTU)	Tolerance ⁽²⁾ (%)	Results
0	0	--	Satisfactory
3.55	3.61	1.7	Satisfactory
21.6	21.4	-0.9	Satisfactory
77.2	77.5	0.4	Satisfactory
887	896	1.0	Satisfactory

Tolerance limit of turbidity should be less than ± 10.0 (%)

~ END OF REPORT ~

⁽¹⁾ "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

⁽²⁾ The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.



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Report of Equipment Performance Check/Calibration

Test Report No. : AF100043-3
Date of Issue : 12 Oct, 2016
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment : YSI 6920 V2 Multi-Parameter Water Quality Sonde
Manufacturer : YSI (a xylem brand)
Serial Number : 11F100014
Client's Reference Number : --
Date of Received : 05 Oct, 2016
Date of Calibration : 05 Oct, 2016
Date of Next Calibration^(a) : 05 Jan, 2017

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21c 4500-H ⁺ B
Dissolved Oxygen	APHA 21e 4500-O G
Conductivity at 25°C	APHA 21e 2510B
Salinity	APHA 21e 2520B
Turbidity	APHA 21e 2130 B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D – CALIBRATION RESULTS^(b,c)

pH at 25°C

Target (pH unit)	Displayed Reading ^(d) (pH Unit)	Tolerance ^(e) (pH Unit)	Results
4.00	3.97	-0.03	Satisfactory
7.42	7.39	-0.03	Satisfactory
10.01	9.98	-0.03	Satisfactory

Tolerance of pH should be less than ±0.10 (pH unit)

Temperature

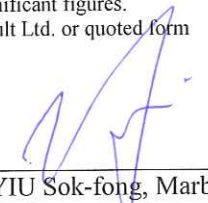
Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
16.8	16.5	-0.3	Satisfactory
25.8	25.4	-0.4	Satisfactory
34.3	34.1	-0.2	Satisfactory

Tolerance limit of temperature should be less than ±2.0 (°C)

~ CONTINUED ON NEXT PAGE ~

- (a) The "Date of Next Calibration" is recommended according to best practice principals as practiced by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.
- (b) The results relate only to the calibrated equipment as received
- (c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- (d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- (e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.

APPROVED SIGNATORY :


YIU Sok-fong, Marble
Laboratory Manager



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Report of Equipment Performance Check/Calibration

Test Report No. : AF100043-3

Date of Issue : 12 Oct, 2016

Page No. : 2 of 2

PART D – RESULT (Con't)

Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
1.91	1.87	-0.04	Satisfactory
4.66	4.61	-0.05	Satisfactory
7.07	7.09	0.02	Satisfactory
8.01	7.97	-0.04	Satisfactory

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

Conductivity at 25°C

Expected Reading ($\mu\text{S}/\text{cm}$)	Displayed Reading ($\mu\text{S}/\text{cm}$)	Tolerance (%)	Results
146.9	144.8	-1.4	Satisfactory
1412	1438	1.8	Satisfactory
12890	12967	0.6	Satisfactory
58670	58932	0.4	Satisfactory
111900	112866	0.9	Satisfactory

Tolerance limit of conductivity should be less than ± 10.0 (%)

Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.89	-1.1	Satisfactory
20	19.82	-0.9	Satisfactory
30	29.68	-1.1	Satisfactory

Tolerance limit of salinity should be less than ± 10.0 (%)

Turbidity

Expected Reading (NTU)	Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0	--	Satisfactory
3.55	3.69	3.9	Satisfactory
21.6	21.3	-1.4	Satisfactory
77.2	76.8	-0.5	Satisfactory
887	872	-1.7	Satisfactory

Tolerance limit of turbidity should be less than ± 10.0 (%)

~ END OF REPORT ~

^(f) "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

^(g) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.



專業化驗有限公司

QUALITY PRO TEST-CONSULT LIMITED

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Report of Equipment Performance Check/Calibration

Test Report No. : AF100043-1
Date of Issue : 12 Oct, 2016
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment : YSI ProDSS (digital sampling system) handheld multiparameter meter with sensor probe
Manufacturer : YSI (a xylem brand)
Serial Number : 15M100005
Client's Reference Number : --
Date of Received : 05 Oct, 2016
Date of Calibration : 05 Oct, 2016
Date of Next Calibration^(a) : 05 Jan, 2017

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

<u>Parameter</u>	<u>Reference Method</u>
pH at 25°C	APHA 21e 4500-H ⁺ B
Dissolved Oxygen	APHA 21e 4500-O G
Conductivity at 25°C	APHA 21e 2510B
Salinity	APHA 21e 2520B
Turbidity	APHA 21e 2130 B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D – CALIBRATION RESULTS^(b,c)

pH at 25°C

Target (pH unit)	Displayed Reading ^(d) (pH Unit)	Tolerance ^(e) (pH Unit)	Results
4.00	3.97	-0.03	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	9.94	-0.07	Satisfactory

Tolerance of pH should be less than ± 0.10 (pH unit)

Temperature

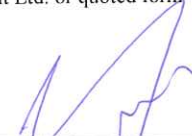
Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
16.8	16.7	-0.1	Satisfactory
25.8	25.4	-0.4	Satisfactory
34.3	34.1	-0.2	Satisfactory

Tolerance limit of temperature should be less than ± 2.0 (°C)

~ CONTINUED ON NEXT PAGE ~

- ^(a) The "Date of Next Calibration" is recommended according to best practice principals as practiced by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.
- ^(b) The results relate only to the calibrated equipment as received
- ^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- ^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- ^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

APPROVED SIGNATORY :


YIU Sok-fong, Marble
Laboratory Manager



專業化驗有限公司

QUALITY PRO TEST-CONSULT LIMITED

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PART D – RESULT (Con't)

Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
1.91	1.95	0.04	Satisfactory
4.66	4.73	0.07	Satisfactory
7.07	7.12	0.05	Satisfactory
8.01	8.06	0.05	Satisfactory

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

Conductivity at 25°C

Expected Reading ($\mu\text{S}/\text{cm}$)	Displayed Reading ($\mu\text{S}/\text{cm}$)	Tolerance (%)	Results
146.9	150.1	2.2	Satisfactory
1412	1453	2.9	Satisfactory
12890	12932	0.3	Satisfactory
58670	58996	0.6	Satisfactory
111900	112483	0.5	Satisfactory

Tolerance limit of conductivity should be less than ± 10.0 (%)

Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.94	-0.6	Satisfactory
20	20.03	0.2	Satisfactory
30	29.96	-0.1	Satisfactory

Tolerance limit of salinity should be less than ± 10.0 (%)

Turbidity

Expected Reading (NTU)	Displayed Reading ⁽¹⁾ (NTU)	Tolerance ⁽²⁾ (%)	Results
0	0	--	Satisfactory
3.55	3.50	-1.4	Satisfactory
21.6	21.4	-0.9	Satisfactory
77.2	77.5	0.4	Satisfactory
887	894	0.8	Satisfactory

Tolerance limit of turbidity should be less than ± 10.0 (%)

~ END OF REPORT ~

⁽¹⁾ "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

⁽²⁾ The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.

Appendix D. Monitoring Schedule

Monitoring Schedule of This Reporting Period

OCTOBER 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 WQ General & Regular DCM mid-ebb: 13:16 mid-flood: 07:01
2	3 Site Inspection NM1A/AR1A NM4 NM3A	4 CWD Land-based Survey WQ General & Regular DCM mid-ebb: 14:49 mid-flood: 08:52	5 Site Inspection NM5/AR2 CWD Vessel Survey	6 Site Inspection NM6 CWD Land-based Survey WQ General & Regular DCM mid-ebb: 10:30 mid-flood: 17:24	7 AR1A CWD Vessel Survey	8 WQ General & Regular DCM mid-ebb: 17:44 mid-flood: 12:40
9	10	11 Site Inspection NM5/AR2 WQ General & Regular DCM mid-ebb: 08:32 mid-flood: 16:18	12 Site Inspection	13 Site Inspection NM1A/AR1A NM4 NM3A NM6 WQ General & Regular DCM mid-ebb: 10:30 mid-flood: 17:24	14	15 WQ General & Regular DCM mid-ebb: 12:04 mid-flood: 18:22
16	17 Site Inspection NM5/AR2 CWD Land-based Survey	18 WQ General & Regular DCM ^mid-ebb: 14:21 ^mid-flood: 08:29	19 Site Inspection NM1A/AR1A NM4 NM3A CWD Vessel Survey	20 NM6 CWD Vessel Survey WQ General & Regular DCM mid-ebb: 16:02 mid-flood: 10:30	21 ^AR2	22 WQ General & Regular DCM mid-ebb: 18:05 mid-flood: 12:51
23	24 Site Inspection NM6 CWD Vessel Survey	25 NM1A/AR1A NM4 NM3A CWD Vessel Survey WQ General & Regular DCM mid-ebb: 09:10 mid-flood: 16:25	26 CWD Vessel Survey	27 NM5/AR2 CWD Land-based Survey WQ General & Regular DCM mid-ebb: 10:57 mid-flood: 17:25	28 Site Inspection CWD Vessel Survey CWD Land-based Survey Ecological Monitoring	29 WQ General & Regular DCM mid-ebb: 12:16 mid-flood: 18:12
30	31 Site Inspection NM1A/AR1A NM4 NM3A	Notes: Air quality and Noise monitoring Station CWD - Chinese White Dolphin WQ - Water Quality DCM - Deep Cement Mixing * Rescheduled due to adverse weather ^ Cancelled due to adverse weather				

Tentative Monitoring Schedule of Next Reporting Period

NOVEMBER 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 WQ General & Regular DCM mid- ebb: 13:55 mid- flood: 08:11	2 Site Inspection NM5/AR2	3 Site Inspection NM6 WQ General & Regular DCM mid- ebb: 15:02 mid- flood: 09:26	4 Site Inspection AR1A CWD Vessel Survey	5 WQ General & Regular DCM mid- ebb: 16:23 mid- flood: 11:05
6	7 Site Inspection CWD Land-based Survey	8 NM5/AR2 CWD Land-based Survey WQ General & Regular DCM mid- ebb: 20:43 mid- flood: 14:43	9 Site Inspection	10 Site Inspection NM1A/AR1A NM4 NM3A NM6 WQ General & Regular DCM mid- ebb: 08:49 mid- flood: 16:02	11 Site Inspection CWD Vessel Survey	12 WQ General & Regular DCM mid- ebb: 10:48 mid- flood: 17:08
13	14 Site Inspection NM5/AR2 CWD Vessel Survey	15 NM6 CWD Land-based Survey WQ General & Regular DCM mid- ebb: 13:19 mid- flood: 07:36	16 Site Inspection NM1A/AR1A NM4 NM3A CWD Vessel Survey Ecological Monitoring	17 Site Inspection CWD Vessel Survey CWD Land-based Survey WQ General & Regular DCM mid- ebb: 15:00 mid- flood: 09:31	18 Site Inspection AR2 CWD Vessel Survey	19 WQ General & Regular DCM mid- ebb: 16:40 mid- flood: 11:24
20	21 Site Inspection NM6 CWD Vessel Survey	22 NM1A/AR1A NM4 NM3A CWD Vessel Survey WQ General & Regular DCM mid- ebb: 06:53 mid- flood: 14:54	23 Site Inspection CWD Land-based Survey	24 Site Inspection NM5/AR2 WQ General & Regular DCM mid- ebb: 09:31 mid- flood: 16:08	25 Site Inspection	26 WQ General & Regular DCM mid- ebb: 11:09 mid- flood: 17:04
27	28 Site Inspection NM1A/AR1A NM4 NM3A	29 WQ General & Regular DCM mid- ebb: 13:02 mid- flood: 07:32	30 Site Inspection NM5/AR2			
<p>Notes:</p> <p> NM1A/AR1A - Man Tung Road Park NM3A - Site Office NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan </p> <p> Air quality and Noise monitoring Station CWD - Chinese White Dolphin WQ - Water Quality DCM - Deep Cement Mixing </p> <p> * Rescheduled due to adverse weather ^ Cancelled due to adverse weather </p>						

Appendix E. Monitoring Results

Air Quality Monitoring Results

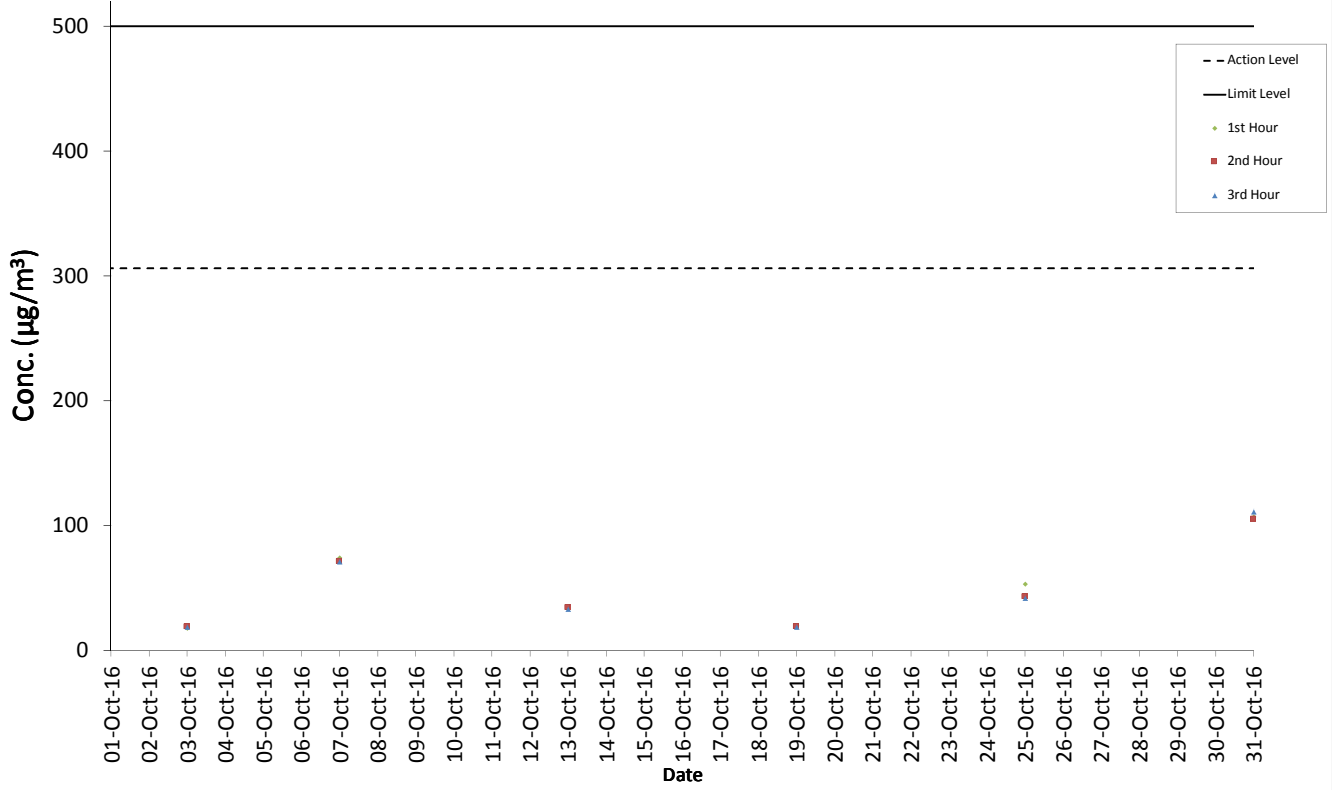
1-hour TSP Results**Station: AR1A- Man Tung Road Park**

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
03-Oct-16	13:37	Cloudy	4.7	85	18	306	500
03-Oct-16	14:37	Cloudy	4.2	78	19	306	500
03-Oct-16	15:37	Cloudy	5.5	85	19	306	500
07-Oct-16	08:55	Sunny	2.3	334	74	306	500
07-Oct-16	09:55	Sunny	2.8	316	71	306	500
07-Oct-16	10:55	Sunny	2.9	320	71	306	500
13-Oct-16	8:55	Cloudy	4.7	38	35	306	500
13-Oct-16	9:55	Cloudy	5.1	34	34	306	500
13-Oct-16	10:55	Cloudy	3.8	40	33	306	500
19-Oct-16	08:45	Cloudy	7.5	85	20	306	500
19-Oct-16	09:45	Cloudy	7.9	81	19	306	500
19-Oct-16	10:45	Cloudy	8.3	108	19	306	500
25-Oct-16	08:58	Fine	1.8	195	53	306	500
25-Oct-16	09:58	Fine	3.6	192	43	306	500
25-Oct-16	10:58	Fine	3.3	193	42	306	500
31-Oct-16	08:55	Fine	4.5	41	107	306	500
31-Oct-16	09:55	Fine	1.4	21	105	306	500
31-Oct-16	10:55	Fine	2.7	38	111	306	500

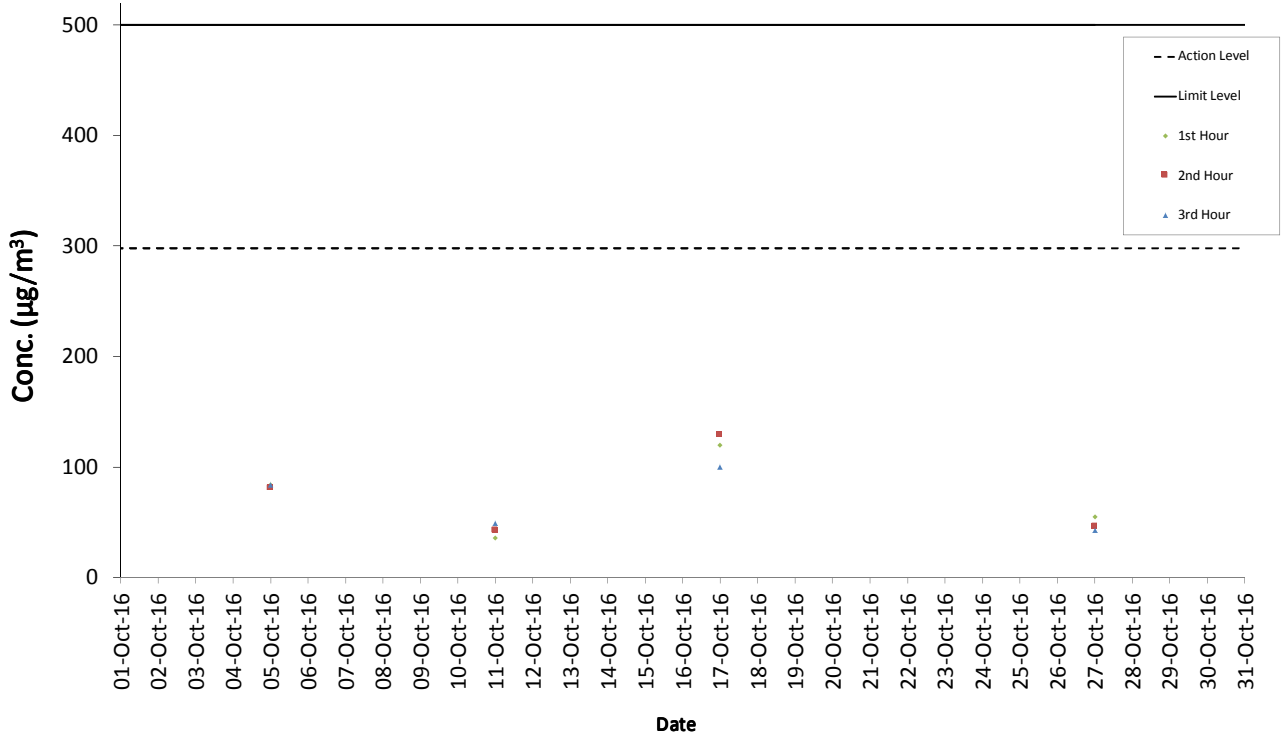
1-hour TSP Results**Station: AR2- Village House, Tin Sum**

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
05-Oct-16	8:55	Fine	2.3	43	84	298	500
05-Oct-16	9:55	Fine	2.0	29	81	298	500
05-Oct-16	10:55	Fine	2.1	46	84	298	500
11-Oct-16	09:00	Cloudy	5.2	54	36	298	500
11-Oct-16	10:00	Cloudy	2.4	15	43	298	500
11-Oct-16	11:00	Cloudy	2.7	18	49	298	500
17-Oct-16	08:55	Cloudy	5.7	35	120	298	500
17-Oct-16	09:55	Cloudy	4.9	41	129	298	500
17-Oct-16	10:55	Cloudy	4.8	52	100	298	500
27-Oct-16	08:55	Fine	3.5	57	55	298	500
27-Oct-16	09:55	Fine	4.4	50	46	298	500
27-Oct-16	10:55	Fine	4.4	47	43	298	500

AR1A 1-Hour TSP



AR2 1-Hour TSP



Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
03-Oct-16	Cloudy	13:41	71.5	55.0	72
03-Oct-16	Cloudy	13:46	73.0	56.0	
03-Oct-16	Cloudy	13:51	74.0	56.0	
03-Oct-16	Cloudy	13:56	70.0	53.5	
03-Oct-16	Cloudy	14:01	72.5	54.0	
03-Oct-16	Cloudy	14:06	71.5	52.0	70
13-Oct-16	Cloudy	9:20	72.5	60.5	
13-Oct-16	Cloudy	09:25	70.0	60.0	
13-Oct-16	Cloudy	09:30	70.0	59.5	
13-Oct-16	Cloudy	09:35	71.5	60.0	
13-Oct-16	Cloudy	09:40	68.5	58.5	71
13-Oct-16	Cloudy	09:45	67.5	58.0	
19-Oct-16	Cloudy	10:43	71.5	54.5	
19-Oct-16	Cloudy	10:48	71.5	54.5	
19-Oct-16	Cloudy	10:53	70.5	55.0	
19-Oct-16	Cloudy	10:58	68.5	54.0	72
19-Oct-16	Cloudy	11:03	69.0	54.0	
19-Oct-16	Cloudy	11:08	69.0	54.0	
25-Oct-16	Fine	10:35	71.5	61.5	
25-Oct-16	Fine	10:40	72.0	62.0	
25-Oct-16	Fine	10:45	71.5	60.5	71
25-Oct-16	Fine	10:50	71.5	61.5	
25-Oct-16	Fine	10:55	70.5	60.5	
25-Oct-16	Fine	11:00	73.0	62.5	
31-Oct-16	Fine	09:42	71.5	53.0	
31-Oct-16	Fine	09:47	71.0	54.5	72
31-Oct-16	Fine	09:52	71.0	54.5	
31-Oct-16	Fine	09:57	70.0	54.0	
31-Oct-16	Fine	10:02	70.0	54.5	
31-Oct-16	Fine	10:07	70.5	54.0	

Remarks:

+3dB (A) correction was applied to free-field measurement.

Noise Measurement Results

Station: NM3A- Site Office

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
03-Oct-16	Cloudy	13:18	66.5	60.5	61
03-Oct-16	Cloudy	13:23	69.0	60.5	
03-Oct-16	Cloudy	13:28	67.0	60.5	
03-Oct-16	Cloudy	13:33	67.5	60.5	
03-Oct-16	Cloudy	13:38	68.0	60.5	
03-Oct-16	Cloudy	13:43	68.0	60.5	63
13-Oct-16	Sunny	13:14	69.5	61.0	
13-Oct-16	Sunny	13:19	68.0	61.0	
13-Oct-16	Sunny	13:24	68.0	61.0	
13-Oct-16	Sunny	13:29	68.5	61.0	
13-Oct-16	Sunny	13:34	69.5	61.0	61
13-Oct-16	Sunny	13:39	69.5	61.5	
19-Oct-16	Cloudy	13:13	68.0	59.5	
19-Oct-16	Cloudy	13:18	69.0	59.5	
19-Oct-16	Cloudy	13:23	68.0	59.5	
19-Oct-16	Cloudy	13:28	68.0	60.0	63
19-Oct-16	Cloudy	13:33	67.5	60.0	
19-Oct-16	Cloudy	13:38	69.5	61.0	
25-Oct-16	Sunny	09:19	66.0	60.5	
25-Oct-16	Sunny	09:24	70.0	61.0	
25-Oct-16	Sunny	09:29	69.0	60.5	57
25-Oct-16	Sunny	09:34	69.0	61.0	
25-Oct-16	Sunny	09:39	70.5	60.5	
25-Oct-16	Sunny	09:44	69.0	60.5	
31-Oct-16	Cloudy	08:44	69.0	55.0	
31-Oct-16	Cloudy	08:49	66.0	55.5	61
31-Oct-16	Cloudy	08:54	68.0	58.5	
31-Oct-16	Cloudy	08:59	67.0	59.5	
31-Oct-16	Cloudy	09:04	69.0	59.0	
31-Oct-16	Cloudy	09:09	67.5	59.5	

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Won Primary School

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
03-Oct-16	Cloudy	11:26	64.0	59.0	66
03-Oct-16	Cloudy	11:31	65.0	59.5	
03-Oct-16	Cloudy	11:36	66.5	60.5	
03-Oct-16	Cloudy	11:41	62.5	59.5	
03-Oct-16	Cloudy	11:46	64.5	60.5	
03-Oct-16	Cloudy	11:51	64.5	60.0	
13-Oct-16	Sunny	15:48	67.2	64.5	60
13-Oct-16	Sunny	15:53	67.0	61.5	
13-Oct-16	Sunny	15:58	63.5	60.0	
13-Oct-16	Sunny	16:03	63.5	60.0	
13-Oct-16	Sunny	16:08	65.0	60.5	
13-Oct-16	Sunny	16:13	65.0	60.0	
19-Oct-16	Cloudy	13:04	66.5	62.5	64
19-Oct-16	Cloudy	13:09	67.5	62.5	
19-Oct-16	Cloudy	13:14	69.0	63.5	
19-Oct-16	Cloudy	13:19	68.5	63.0	
19-Oct-16	Cloudy	13:24	65.0	60.0	
19-Oct-16	Cloudy	13:29	66.0	60.5	
25-Oct-16	Fine	13:02	66.0	60.0	64
25-Oct-16	Fine	13:07	62.0	59.0	
25-Oct-16	Fine	13:12	63.5	59.0	
25-Oct-16	Fine	13:17	62.5	58.5	
25-Oct-16	Fine	13:22	62.0	58.0	
25-Oct-16	Fine	13:27	62.0	58.5	
31-Oct-16	Fine	13:35	65.0	59.0	65
31-Oct-16	Fine	13:40	64.5	59.0	
31-Oct-16	Fine	13:45	63.0	59.5	
31-Oct-16	Fine	13:50	62.5	59.5	
31-Oct-16	Fine	13:55	62.0	58.5	
31-Oct-16	Fine	14:00	61.5	58.0	

Remarks:

+3dB (A) correction was applied to free-field measurement.

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
05-Oct-16	Fine	09:20	58.0	48.5	58
05-Oct-16	Fine	09:25	56.0	47.0	
05-Oct-16	Fine	09:30	58.5	47.5	
05-Oct-16	Fine	09:35	59.5	48.0	
05-Oct-16	Fine	09:40	60.0	48.0	
05-Oct-16	Fine	09:45	56.0	48.5	
11-Oct-16	Cloudy	09:35	61.0	53.0	59
11-Oct-16	Cloudy	09:40	61.0	53.0	
11-Oct-16	Cloudy	09:45	62.0	54.5	
11-Oct-16	Cloudy	09:50	63.5	52.5	
11-Oct-16	Cloudy	09:55	62.5	52.0	
11-Oct-16	Cloudy	10:00	61.0	52.5	
17-Oct-16	Cloudy	09:00	59.0	51.0	58
17-Oct-16	Cloudy	09:05	61.0	51.5	
17-Oct-16	Cloudy	09:10	58.0	51.0	
17-Oct-16	Cloudy	09:15	57.5	50.5	
17-Oct-16	Cloudy	09:20	58.0	51.0	
17-Oct-16	Cloudy	09:25	58.5	51.0	
27-Oct-16	Fine	09:35	59.0	50.0	59
27-Oct-16	Fine	09:40	55.5	50.0	
27-Oct-16	Fine	09:45	64.0	49.0	
27-Oct-16	Fine	09:50	58.0	48.0	
27-Oct-16	Fine	09:55	55.5	48.0	
27-Oct-16	Fine	10:00	55.0	48.0	

Remarks:

+3dB (A) correction was applied to free-field measurement.

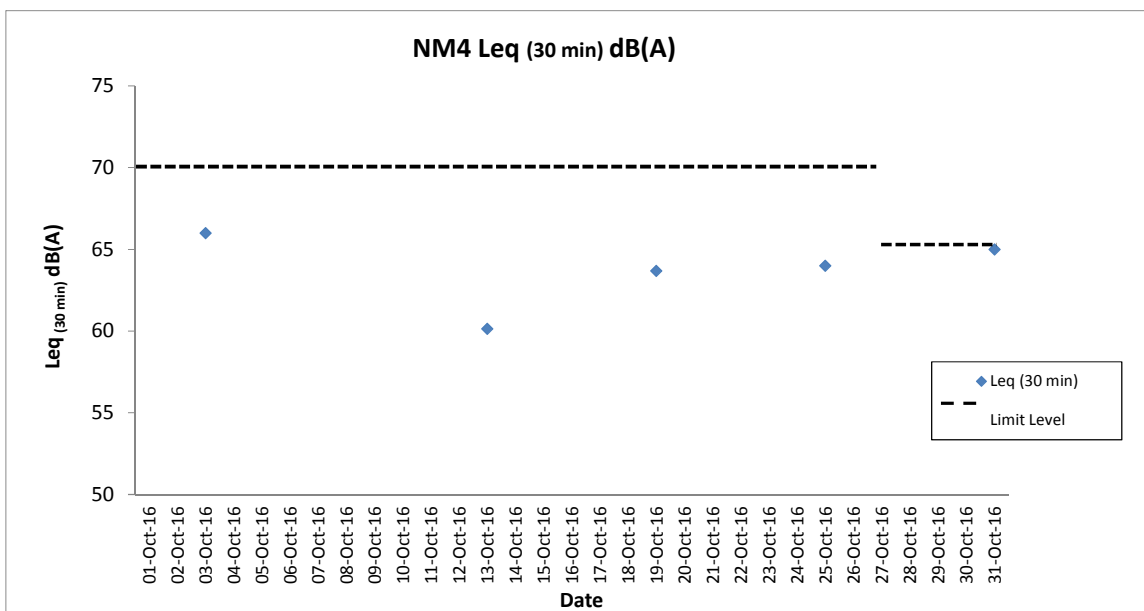
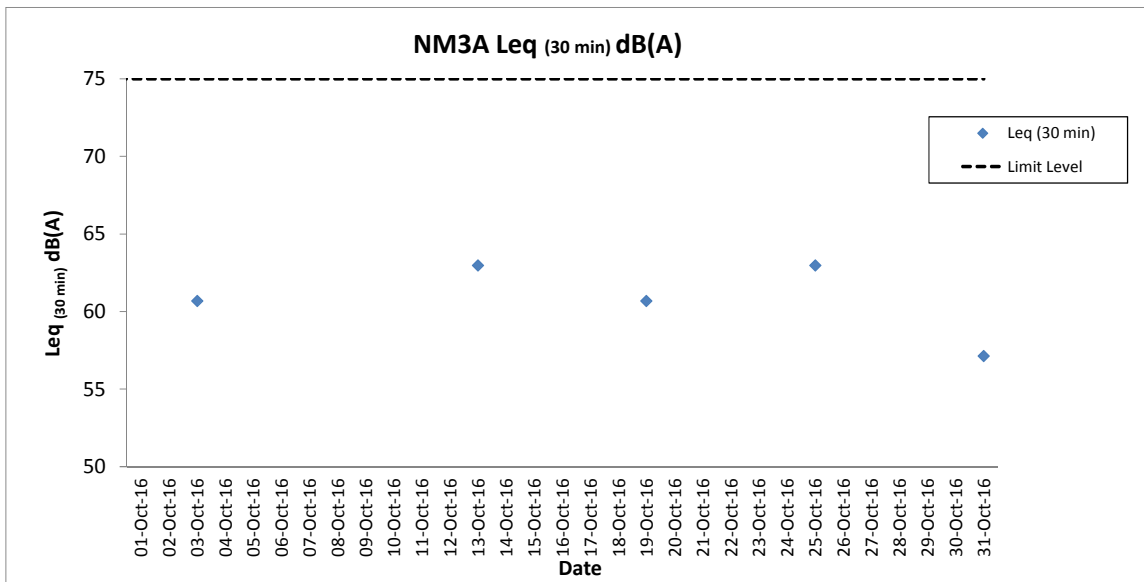
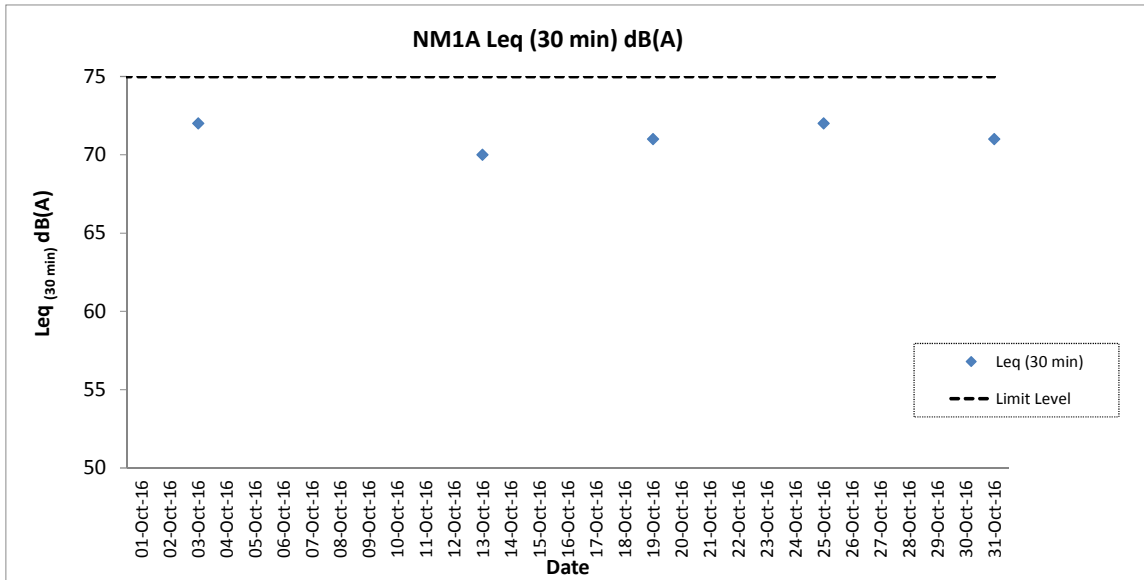
Noise Measurement Results

Station: NM6- House No.1 Sha Lo Wan

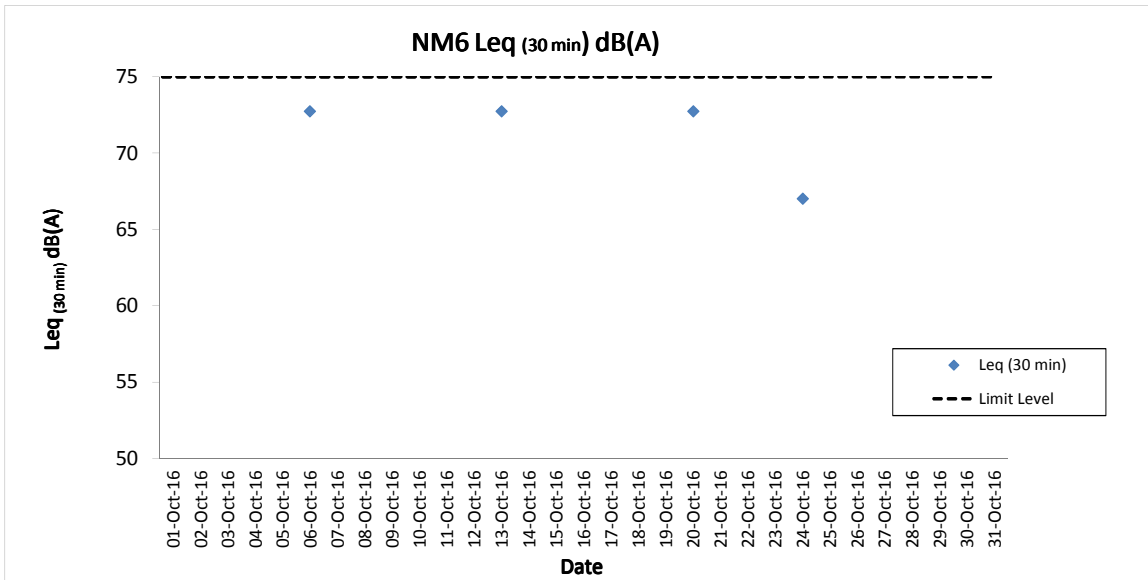
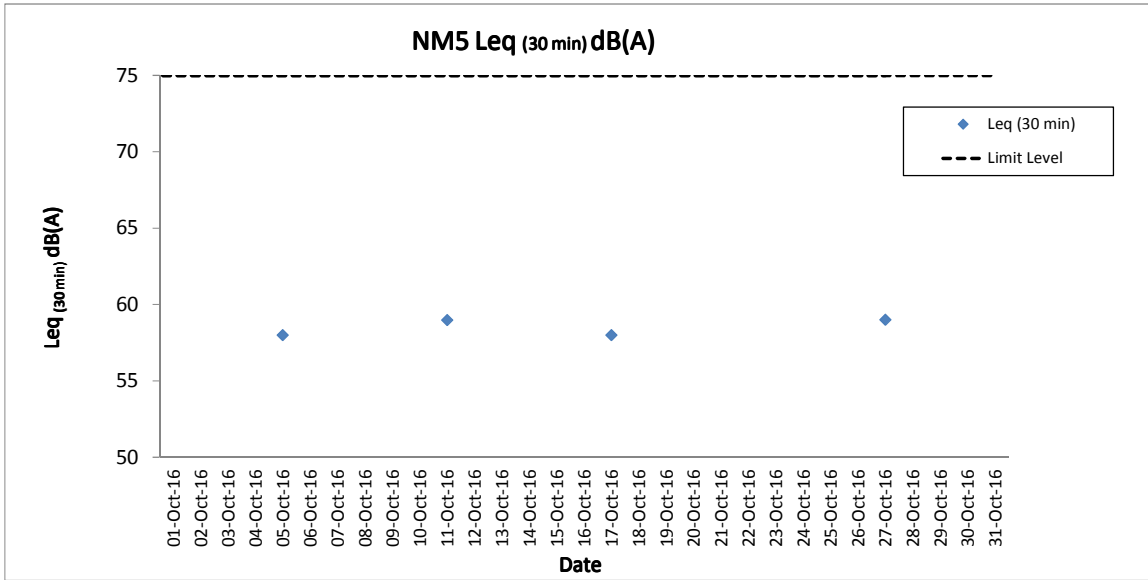
Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
06-Oct-16	Sunny	09:41	75.0	62.5	73
06-Oct-16	Sunny	09:46	75.5	62.5	
06-Oct-16	Sunny	09:51	75.5	62.0	
06-Oct-16	Sunny	09:56	73.0	60.5	
06-Oct-16	Sunny	10:01	73.5	63.0	
06-Oct-16	Sunny	10:06	73.5	65.0	
13-Oct-16	Sunny	9:40	76.0	61.0	73
13-Oct-16	Sunny	09:45	75.5	59.0	
13-Oct-16	Sunny	09:50	76.0	60.5	
13-Oct-16	Sunny	09:55	73.5	57.5	
13-Oct-16	Sunny	10:00	74.5	60.0	
13-Oct-16	Sunny	10:05	75.0	65.0	
20-Oct-16	Cloudy	09:39	77.5	60.0	73
20-Oct-16	Cloudy	09:44	76.0	58.5	
20-Oct-16	Cloudy	09:49	76.0	57.0	
20-Oct-16	Cloudy	09:54	71.0	56.0	
20-Oct-16	Cloudy	09:59	76.5	57.0	
20-Oct-16	Cloudy	10:04	76.5	57.5	
24-Oct-16	Cloudy	09:45	65.5	59.0	67
24-Oct-16	Cloudy	09:50	66.0	58.0	
24-Oct-16	Cloudy	09:55	67.0	58.5	
24-Oct-16	Cloudy	10:00	67.0	57.5	
24-Oct-16	Cloudy	10:05	69.0	56.0	
24-Oct-16	Cloudy	10:10	68.0	55.0	

Remarks:

+3dB (A) correction was applied to free-field measurement.



Note: The examination period for NM4 was between 27 October 2016 and 2 November 2016



Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 01 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Calm	06:35	9.0	Surface	1.0	0.4	84	27.5	27.7	8.0	8.0	29.6	29.5	93.3	92.7	6.2	6.0	4.1	10.6	5	15	80	88	815610	804264	<0.2	<0.2	0.9	0.8				
						1.0	0.4	86	27.9	8.0	8.0	29.4	29.5	92.1	92.7	6.1	6.0	4.7	10.6	6	15	80	88	815610	804264	<0.2	<0.2	1.0	0.8					
						4.5	0.5	61	28.0	8.1	8.1	31.3	31.3	89.6	89.5	5.9	6.0	9.8	10.6	15	15	85	88	815610	804264	<0.2	<0.2	0.7	0.8					
					4.5	0.5	64	28.1	8.1	8.1	31.2	31.3	89.3	89.5	5.9	6.0	10.3	10.6	16	15	92	88	815610	804264	<0.2	<0.2	0.7	0.8						
					8.0	0.4	71	28.3	8.1	8.1	32.3	32.5	88.5	88.9	5.8	5.8	17.1	10.6	23	15	96	88	815610	804264	<0.2	<0.2	0.7	0.8						
					8.0	0.4	75	27.9	8.1	8.1	32.6	32.5	89.3	88.9	5.8	5.8	17.3	10.6	23	15	95	88	815610	804264	<0.2	<0.2	0.7	0.8						
C2	Cloudy	Moderate	07:55	12.4	Surface	1.0	0.4	182	25.8	25.8	7.9	7.9	26.7	26.7	91.4	91.4	6.4	6.4	10.5	18.0	13	16	83	89	825681	806961	<0.2	<0.2	1.9	1.8				
						1.0	0.4	191	25.8	7.9	7.9	26.7	26.7	91.4	91.4	6.4	6.4	10.6	18.0	13	16	84	89	825681	806961	<0.2	<0.2	2.0	1.8					
						6.2	0.2	204	25.6	7.9	7.9	27.0	27.0	90.8	90.8	6.4	6.4	14.8	18.0	12	16	90	89	825681	806961	<0.2	<0.2	1.8	1.8					
					6.2	0.2	210	25.6	7.9	7.9	27.0	27.0	90.8	90.8	6.4	6.4	14.7	18.0	13	16	91	89	825681	806961	<0.2	<0.2	1.9	1.8						
					11.4	0.4	256	25.5	7.9	7.9	28.1	28.1	90.9	90.9	6.4	6.4	28.5	18.0	24	16	92	89	825681	806961	<0.2	<0.2	1.6	1.8						
					11.4	0.4	256	25.5	7.9	7.9	28.1	28.1	90.9	90.9	6.4	6.4	28.6	18.0	22	16	92	89	825681	806961	<0.2	<0.2	1.6	1.8						
C3	Rainy	Moderate	06:01	11.6	Surface	1.0	0.5	248	25.8	25.8	7.9	7.9	30.0	30.0	85.9	85.9	5.9	5.9	5.5	9.8	8	13	88	90	822118	817792	<0.2	<0.2	1.0	0.8				
						1.0	0.5	263	25.8	7.9	7.9	30.0	30.0	85.9	85.9	5.9	5.9	5.9	9.8	7	13	87	90	822118	817792	<0.2	<0.2	0.9	0.8					
						5.8	0.4	261	25.8	7.9	7.9	30.2	30.2	85.9	85.9	5.9	5.9	9.4	9.8	12	13	91	90	822118	817792	<0.2	<0.2	0.7	0.8					
					5.8	0.5	263	25.8	7.9	7.9	30.2	30.2	85.9	85.9	5.9	5.9	9.5	9.8	14	13	90	90	822118	817792	<0.2	<0.2	0.7	0.8						
					10.6	0.5	239	25.8	7.8	7.8	30.4	30.4	87.6	87.7	6.0	6.0	14.4	9.8	19	13	92	90	822118	817792	<0.2	<0.2	0.7	0.8						
					10.6	0.5	255	25.8	7.8	7.8	30.4	30.4	87.7	87.7	6.0	6.0	14.1	9.8	19	13	92	90	822118	817792	<0.2	<0.2	0.7	0.8						
IM1	Fine	Calm	06:59	8.0	Surface	1.0	0.4	174	27.8	27.8	8.0	8.0	29.3	29.3	93.5	93.3	6.2	6.1	6.4	12.6	12	16	74	81	818342	806475	<0.2	<0.2	1.1	1.0				
						1.0	0.4	184	27.8	8.0	8.0	29.3	29.3	93.1	93.3	6.2	6.1	6.8	12.6	12	16	84	81	818342	806475	<0.2	<0.2	1.1	1.0					
						4.0	0.5	222	27.8	8.0	8.0	29.7	29.8	90.9	90.8	6.0	6.0	11.0	12.6	13	16	80	81	818342	806475	<0.2	<0.2	1.1	1.0					
					4.0	0.6	230	27.8	8.0	8.0	29.8	29.8	90.7	90.8	6.0	6.0	12.4	12.6	11	16	80	81	818342	806475	<0.2	<0.2	0.9	1.0						
					7.0	0.4	136	27.8	8.0	8.0	30.2	30.2	90.0	90.0	6.0	6.0	19.7	12.6	24	16	83	81	818342	806475	<0.2	<0.2	0.8	1.0						
					7.0	0.5	148	27.9	8.0	8.0	30.1	30.2	90.0	90.0	6.0	6.0	19.5	12.6	25	16	83	81	818342	806475	<0.2	<0.2	0.8	1.0						
IM2	Fine	Calm	07:07	8.2	Surface	1.0	0.3	222	27.8	27.8	8.0	8.0	29.7	29.7	92.9	92.7	6.2	6.0	4.7	10.8	5	11	73	77	818841	806186	<0.2	<0.2	1.0	1.0				
						1.0	0.3	228	27.8	8.0	8.0	29.7	29.7	92.4	92.7	6.1	6.0	5.4	10.8	4	11	73	77	818841	806186	<0.2	<0.2	1.0	1.0					
						4.1	0.5	160	27.9	8.0	8.0	30.3	30.3	89.7	89.7	5.9	5.9	11.6	10.8	9	11	75	77	818841	806186	<0.2	<0.2	0.9	1.0					
					4.1	0.5	170	27.9	8.0	8.0	30.3	30.3	89.6	89.7	5.9	5.9	12.0	10.8	9	11	77	77	818841	806186	<0.2	<0.2	0.9	1.0						
					7.2	0.4	117	27.9	8.0	8.0	30.4	30.4	89.2	89.3	5.9	5.9	15.0	10.8	18	11	80	77	818841	806186	<0.2	<0.2	1.0	1.0						
					7.2	0.4	127	27.9	8.0	8.0	30.4	30.4	89.4	89.3	5.9	5.9	16.1	10.8	18	11	81	77	818841	806186	<0.2	<0.2	1.0	1.0						
IM3	Fine	Calm	07:17	8.7	Surface	1.0	0.3	262	27.8	27.9	8.0	8.0	29.9	29.9	92.5	91.9	6.1	6.0	7.2	16.0	7	17	73	78	819399	806038	<0.2	<0.2	0.9	0.9				
						1.0	0.4	274	28.0	8.0	8.0	29.9	29.9	91.3	91.9	6.0	6.0	7.7	16.0	7	17	73	78	819399	806038	<0.2	<0.2	1.0	0.9					
						4.4	0.3	209	28.0	8.0	8.0	30.4	30.4	89.1	89.1	5.9	5.9	16.5	16.0	16	17	87	78	819399	806038	<0.2	<0.2	0.8	0.9					
					4.4	0.3	224	28.0	8.0	8.0	30.4	30.4	89.1	89.1	5.9	5.9	15.8	16.0	17	17	76	78	819399	806038	<0.2	<0.2	0.8	0.9						
					7.7	0.4	154	27.6	8.0	8.0	30.7	30.6	89.3	89.1	5.9	5.9	25.0	16.0	29	17	80	78	819399	806038	<0.2	<0.2	0.9	0.9						
					7.7	0.4	155	28.0	8.0	8.0	30.4	30.6	88.8	89.1	5.9	5.9	23.5	16.0	28	17	81	78	819399	806038	<0.2	<0.2	0.8	0.9						
IM4	Fine	Rough	07:29	8.5	Surface	1.0	0.5	276	27.9	27.9	8.0	8.0	29.9	29.9	90.6	90.3	6.0	5.9	9.0	12.6	11	14	73	77	819587	805048	<0.2	<0.2	1.1	0.9				
						1.0	0.5	281	27.9	8.0	8.0	29.9	29.9	90.0	90.3	6.0	6.0	9.5	12.6	11	14	73	77	819587	805048	<0.2	<0.2	1.0	0.9					
						4.3	0.4	252	28.1	8.1	8.1	31.6	31.7	88.0	88.0	5.8	5.8	11.7	12.6	15	14	76	77	819587	805048	<0.2	<0.2	0.8	0.9					
					4.3	0.4	262	28.0	8.1	8.1	31.7	31.7	88.0	88.0	5.8	5.8	12.4	12.6	16	14	77	77	819587	805048	<0.2	<0.2	0.7	0.9						
					7.5	0.4	226	28.1	8.1	8.1	31.8	31.8	87.6	87.6	5.7	5.7	16.7	12.6	16	14	81	77	819587	805048	<0.2	<0.2	1.0	0.9						
					7.5	0.4	232	28.1	8.1	8.1	31.8	31.8	87.6	87.6	5.7	5.7	16.0	12.6	16	14	82	77	819587	805048	<0.2	<0.2	0.9	0.9						
IM5	Fine	Rough	07:40	7.4	Surface	1.0	0.4	265	28.0	28.1	8.0	8.0	29.9	29.9	91.5	91.3	6.1	6.0	8.2	10.4	10	12	73	76	820570	804904	<0.2	<0.2	0.9	0.8				
						1.0	0.5	278	28.1	8.0	8.0	29.8	29.9	91.0	91.3	6.0	6.0	8.0	10.4	10	12	73	76	820570	804904	<0.2	<0.2	0.9	0.8					
						3.7	0.5	279	28.0	8.0	8.0	30.6	30.6	89.0	89.0	5.9	5.9	9.4	10.4	11	12	75	76	820570	804904	<0.2	<0.2	0.8	0.8					
					3.7	0.5	283	28.0	8.0	8.0	30.6	30.6	89.0	89.0	5.9	5.9	9.7	10.4	11	12	76	76	820570	804904	<0.2	<0.2	0.8	0.8						
					6.4	0.4	244	27.8	8.1	8.1	31.5	31.4	88.3	88.2	5.8	5.8	13.8																	

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 01 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)						
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA			
IM9	Cloudy	Moderate	07:08	7.6	Surface	1.0	0.3	238	25.4	25.4	8.0	8.0	29.0	29.0	92.7	92.7	6.5	6.5	14.6	14.6	14	14	82	82	822104	808810	<0.2	<0.2	1.2	1.2					
						1.0	0.3	252	25.4	8.0	8.0	29.0	29.0	92.7	92.7	6.5	6.5	14.7	14.7	13	13	85	85												
					Middle	3.8	0.4	281	25.4	8.0	8.0	29.0	29.0	91.9	92.0	6.4	6.4	22.5	22.5	23.1	23.1	14	14	90					90						
						3.8	0.4	298	25.4	8.0	8.0	29.0	29.0	92.0	92.0	6.4	6.4	22.7	22.7	23.1	23.1	13	13	89					89						
					Bottom	6.6	0.4	262	25.4	8.0	8.0	29.0	29.0	91.7	91.7	6.4	6.4	32.0	32.0	6.4	6.4	32.0	32.0	30					30	92	92				
						6.6	0.4	262	25.4	8.0	8.0	29.0	29.0	91.7	91.7	6.4	6.4	32.1	32.1	6.4	6.4	32.1	32.1	33					33	93	93				
IM10	Cloudy	Moderate	07:00	7.2	Surface	1.0	0.6	285	25.6	25.6	7.9	7.9	27.7	27.7	92.1	92.1	6.4	6.4	5.9	5.9	7	7	84	84	822240	809841	<0.2	<0.2	1.5	1.5					
						1.0	0.6	300	25.6	7.9	7.9	27.7	27.7	92.1	92.1	6.4	6.4	5.9	5.9	8	8	85	85												
					Middle	3.6	0.6	284	25.5	7.9	7.9	28.0	28.0	91.0	91.0	6.4	6.4	8.5	8.5	8.3	8.3	8	8	90					90						
						3.6	0.6	287	25.5	7.9	7.9	28.0	28.0	91.0	91.0	6.4	6.4	8.6	8.6	8.3	8.3	8	8	89					89						
					Bottom	6.2	0.5	299	25.6	7.9	7.9	28.2	28.2	91.4	91.4	6.4	6.4	10.4	10.4	6.4	6.4	10.4	10.4	8					8	92	92				
						6.2	0.5	320	25.6	7.9	7.9	28.2	28.2	91.4	91.4	6.4	6.4	10.4	10.4	6.4	6.4	10.4	10.4	7					7	91	91				
IM11	Cloudy	Moderate	06:52	7.4	Surface	1.0	0.6	280	25.7	25.7	7.9	7.9	28.2	28.2	92.5	91.6	6.3	6.3	8.6	8.6	9	9	86	86	821505	810562	<0.2	<0.2	1.2	1.2					
						1.0	0.6	286	25.7	7.9	7.9	28.2	28.2	90.7	91.6	6.3	6.3	8.3	8.3	9	9	85	85												
					Middle	3.7	0.5	277	25.7	7.9	7.9	28.2	28.2	90.8	90.8	6.3	6.3	9.3	9.3	9.3	9.3	10	10	90					90						
						3.7	0.5	277	25.7	7.9	7.9	28.2	28.2	90.8	90.8	6.3	6.3	9.3	9.3	9.3	9.3	9	9	90					90						
					Bottom	6.4	0.4	276	25.6	7.9	7.9	28.2	28.2	91.3	91.3	6.4	6.4	10.1	10.1	6.4	6.4	10.1	10.1	9					9	91	91				
						6.4	0.5	288	25.6	7.9	7.9	28.2	28.2	91.3	91.3	6.4	6.4	10.1	10.1	6.4	6.4	10.1	10.1	10					10	92	92				
IM12	Cloudy	Moderate	06:45	9.6	Surface	1.0	0.7	266	25.7	25.7	7.9	7.9	28.0	28.0	89.8	89.8	6.3	6.3	9.4	9.4	8	8	84	84	821158	811509	<0.2	<0.2	1.2	1.2					
						1.0	0.7	281	25.7	7.9	7.9	28.0	28.0	89.7	89.8	6.3	6.3	9.6	9.6	6.3	6.3	8	8	84					84						
					Middle	4.8	0.6	276	25.6	7.9	7.9	28.1	28.1	89.4	89.4	6.2	6.2	14.1	14.1	13.3	13.3	11	11	89					89						
						4.8	0.6	281	25.6	7.9	7.9	28.1	28.1	89.4	89.4	6.2	6.2	14.1	14.1	13.3	13.3	11	11	90					90						
					Bottom	8.6	0.4	260	25.6	7.9	7.9	28.1	28.1	90.5	90.5	6.3	6.3	16.3	16.3	6.3	6.3	16.3	16.3	11					11	92	92				
						8.6	0.4	261	25.6	7.9	7.9	28.1	28.1	90.5	90.5	6.3	6.3	16.3	16.3	6.3	6.3	16.3	16.3	11					11	93	93				
SR2	Cloudy	Moderate	06:23	5.0	Surface	1.0	0.5	301	25.7	25.7	7.8	7.8	28.0	28.0	89.5	89.5	6.2	6.2	12.4	12.4	16	16	85	85	821456	814176	<0.2	<0.2	1.2	1.2					
						1.0	0.5	310	25.7	7.8	7.8	28.0	28.0	89.5	89.5	6.2	6.2	12.4	12.4	6.2	6.2	12.4	12.4	16					16						
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-	-	-
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-	-	-
					Bottom	4.0	0.2	272	25.7	7.8	7.8	28.3	28.3	90.8	90.9	6.3	6.3	12.1	12.1	6.3	6.3	12.1	12.1	16					16	91	91				
						4.0	0.2	290	25.7	7.8	7.8	28.3	28.3	90.9	90.9	6.3	6.3	12.1	12.1	6.3	6.3	12.1	12.1	16					16	90	90				
SR3	Cloudy	Moderate	07:23	9.5	Surface	1.0	0.4	195	25.4	25.4	8.0	8.0	29.6	29.6	94.0	94.0	6.5	6.5	10.2	10.2	6	6	-	-	822156	807586	-	-	-	-					
						1.0	0.4	213	25.4	8.0	8.0	29.6	29.6	94.0	94.0	6.5	6.5	10.2	10.2	6.5	6.5	7	7	-					-						
					Middle	4.8	0.3	233	25.3	8.0	8.0	29.7	29.7	93.2	93.2	6.5	6.5	14.7	14.7	6.5	6.5	10	10	-					-						
						4.8	0.3	234	25.3	8.0	8.0	29.7	29.7	93.2	93.2	6.5	6.5	14.7	14.7	6.5	6.5	10	10	-					-						
					Bottom	8.5	0.3	201	25.4	8.0	8.0	29.8	29.8	93.0	93.0	6.5	6.5	30.3	30.3	6.5	6.5	30.3	30.3	14					14	-	-				
						8.5	0.3	218	25.4	8.0	8.0	29.8	29.8	93.0	93.0	6.5	6.5	30.3	30.3	6.5	6.5	30.3	30.3	14					14	-	-				
SR4A	Fine	Calm	06:12	9.1	Surface	1.0	0.3	227	27.7	27.7	8.0	8.0	29.2	29.2	92.3	92.3	6.2	6.2	10.5	10.5	12	12	-	-	817196	807826	-	-	-	-					
						1.0	0.3	234	27.7	8.0	8.0	29.1	29.2	92.2	92.3	6.2	6.2	10.5	10.5	6.2	6.2	10.5	10.5	13					13						
					Middle	4.6	0.2	216	27.6	8.0	8.0	29.3	29.4	92.1	92.3	6.2	6.2	11.4	11.4	6.2	6.2	14.9	14.9	14					14	-	-				
						4.6	0.3	233	27.4	8.0	8.0	29.5	29.4	92.4	92.4	6.2	6.2	12.3	12.3	6.2	6.2	14.9	14.9	15					15						
					Bottom	8.1	0.2	179	27.8	8.0	8.0	29.2	29.4	91.4	91.7	6.1	6.1	21.7	21.7	6.2	6.2	21.7	21.7	24					24	-	-				
						8.1	0.2	196	27.4	8.0	8.0	29.5	29.4	91.9	91.7	6.2	6.2	22.9	22.9	6.2	6.2	22.9	22.9	26					26	-	-				
SR5A	Fine	Calm	05:52	4.6	Surface	1.0	0.2	297	27.8	27.8	8.0	8.0	27.4	27.4	87.8	87.8	5.9	5.9	5.3	5.3	8	8	-	-	816585	810696	-	-	-	-					
						1.0	0.2	324	27.8	8.0	8.0	27.4	27.4	87.8	87.8	5.9	5.9	5.5	5.5	5.9	5.9	8	8												
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-	-	
						2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-		
					Bottom	3.6	0.2	282	27.8	7.9	7.9	27.5	27.7	86.3	86.6	5.8	5.8	10.0	10.0	5.9	5.9	10.0	10.0	9					9	-	-				
						3.6	0.2	309	27.4	7.9	7.9	27.8	27.4	86.9	86.9	5.9	5.9	11.0	11.0	5.9	5.9	11.0	11.0	9					9	-	-				
SR6	Fine	Calm	05:25	5.0	Surface	1.0	0.1	203	27.8	27.8	8.0	8.0	27.8	27.8	90.1	90.1	6.1	6.1	5.4	5.4	8	8	-	-	817902	814656	-	-	-	-					
						1.0	0.1	219	27.8	8.0	8.0	27.8	27.8	90.1	90.1	6.1	6.1	5.9	5.9	6.1	6.1	5.9	5.9	8					8						
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-		
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-			
					Bottom	4.0	0.1	211	28.0	8.0	8.0	28.3	28.3	85.8	85.6	5.7	5.7	8.2	8.2	5.7	5.7	8.2	8.2	8					8	-	-				
						4.0	0.1	214	28.0	8.0	8.0	28.3	28.3	85.4	85.6	5.7	5.7	9.4	9.4	5.7	5.7	9.4	9.4	7					7	-	-				
SR7	Rainy																																		

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 01 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Rough	12:43	8.7	Surface	1.0	0.6	224	27.9	28.0	8.1	8.1	30.0	30.0	95.9	95.2	6.4	6.1	4.0	15.3	3	7	81	88	815621	804264	<0.2	<0.2	0.7	0.9		
						1.0	0.7	244	28.0	8.1	8.1	30.0	30.0	94.5	95.2	6.3	6.1	4.1	15.3	3	7	82	88	815621	804264	<0.2	<0.2	0.8	0.9			
					Middle	4.4	0.6	214	28.1	8.1	8.1	31.0	31.0	89.4	89.3	5.9	5.9	15.8	15.3	4	7	86	88	815621	804264	<0.2	<0.2	0.8	0.9			
						4.4	0.7	222	28.0	8.1	8.1	31.0	31.0	89.1	89.3	5.9	5.9	16.2	15.3	5	7	90	88	815621	804264	<0.2	<0.2	0.9	0.9			
					Bottom	7.7	0.5	223	27.8	8.1	8.1	32.1	32.1	89.9	90.2	5.9	5.9	25.6	15.3	15	7	93	88	815621	804264	<0.2	<0.2	1.0	0.9			
						7.7	0.5	233	27.8	8.1	8.1	32.1	32.1	90.5	90.2	5.9	5.9	25.9	15.3	14	7	94	88	815621	804264	<0.2	<0.2	1.4	0.9			
C2	Cloudy	Moderate	11:36	12.6	Surface	1.0	0.4	169	25.8	25.8	7.9	7.9	27.1	27.1	90.5	90.5	6.3	6.3	8.6	11.6	10	13	83	88	825695	806960	<0.2	<0.2	1.6	1.5		
						1.0	0.4	176	25.8	7.9	7.9	27.1	27.1	90.4	90.5	6.3	6.3	8.6	11.6	8	13	82	88	825695	806960	<0.2	<0.2	1.7	1.5			
					Middle	6.3	0.7	171	25.6	7.9	7.9	27.5	27.5	89.5	89.5	6.3	6.3	13.7	11.6	12	13	90	88	825695	806960	<0.2	<0.2	1.6	1.5			
						6.3	0.7	178	25.6	7.9	7.9	27.5	27.5	89.5	89.5	6.3	6.3	13.7	11.6	11	13	91	88	825695	806960	<0.2	<0.2	1.6	1.5			
					Bottom	11.6	0.4	160	25.8	7.9	7.9	28.9	28.9	90.8	90.9	6.3	6.3	12.6	11.6	18	13	92	88	825695	806960	<0.2	<0.2	1.1	1.5			
						11.6	0.4	161	25.8	7.9	7.9	28.9	28.9	90.9	90.9	6.3	6.3	12.5	11.6	16	13	92	88	825695	806960	<0.2	<0.2	1.1	1.5			
C3	Cloudy	Moderate	13:16	13.5	Surface	1.0	0.5	112	25.9	25.9	8.0	8.0	29.8	29.8	88.3	88.3	6.1	6.0	6.8	8.8	7	9	87	90	822094	817811	<0.2	<0.2	1.0	1.0		
						1.0	0.5	114	25.9	8.0	8.0	29.8	29.8	88.3	88.3	6.1	6.0	6.8	8.8	7	9	88	90	822094	817811	<0.2	<0.2	1.2	1.0			
					Middle	6.8	0.3	84	25.8	8.0	8.0	30.7	30.7	85.7	85.7	5.9	5.9	11.9	8.8	8	9	90	90	822094	817811	<0.2	<0.2	0.9	1.0			
						6.8	0.4	84	25.8	8.0	8.0	30.7	30.7	85.7	85.7	5.9	5.9	11.9	8.8	9	9	90	90	822094	817811	<0.2	<0.2	1.0	1.0			
					Bottom	12.5	0.3	73	25.8	7.9	7.9	31.0	31.0	87.2	87.2	6.0	6.0	7.7	8.8	11	9	91	90	822094	817811	<0.2	<0.2	0.9	1.0			
						12.5	0.3	76	25.8	7.9	7.9	31.0	31.0	87.2	87.2	6.0	6.0	7.7	8.8	13	9	92	90	822094	817811	<0.2	<0.2	0.9	1.0			
IM1	Fine	Rough	12:22	7.5	Surface	1.0	0.5	188	28.1	28.1	8.0	8.0	28.8	28.8	94.7	94.6	6.3	6.2	3.8	4.1	3	4	74	79	818334	806462	<0.2	<0.2	1.1	1.0		
						1.0	0.5	196	28.1	8.0	8.0	28.7	28.8	94.5	94.6	6.3	6.2	3.5	4.1	4	4	75	79	818334	806462	<0.2	<0.2	1.1	1.0			
					Middle	3.8	0.5	181	28.1	8.0	8.0	29.8	29.9	93.2	93.0	6.2	6.1	3.8	4.1	4	4	79	79	818334	806462	<0.2	<0.2	0.9	1.0			
						3.8	0.5	190	28.1	8.0	8.0	29.9	29.9	92.7	93.0	6.1	6.1	4.1	4.1	4	4	80	79	818334	806462	<0.2	<0.2	0.8	1.0			
					Bottom	6.5	0.3	177	28.1	8.0	8.0	30.3	30.4	92.1	92.4	6.1	6.1	4.6	4.1	4	4	82	79	818334	806462	<0.2	<0.2	1.2	1.0			
						6.5	0.3	193	28.1	8.0	8.0	30.4	30.4	92.7	92.4	6.1	6.1	4.5	4.1	4	4	82	79	818334	806462	<0.2	<0.2	1.0	1.0			
IM2	Fine	Rough	12:16	8.5	Surface	1.0	0.7	212	28.3	28.1	8.0	8.0	28.3	28.4	92.7	92.8	6.2	6.1	5.0	13.2	4	6	73	79	818870	806186	<0.2	<0.2	1.1	0.8		
						1.0	0.8	218	27.9	8.0	8.0	28.5	28.4	92.8	92.8	6.2	6.1	5.4	13.2	4	6	74	79	818870	806186	<0.2	<0.2	1.1	0.8			
					Middle	4.3	0.5	195	28.2	8.0	8.0	30.5	30.5	90.1	89.9	5.9	5.9	9.0	13.2	6	6	79	79	818870	806186	<0.2	<0.2	0.7	0.8			
						4.3	0.6	195	28.2	8.0	8.0	30.5	30.5	89.6	89.9	5.9	5.9	10.0	13.2	6	6	80	79	818870	806186	<0.2	<0.2	0.7	0.8			
					Bottom	7.5	0.5	176	28.1	8.0	8.0	31.1	31.1	88.5	88.7	5.8	5.8	25.9	13.2	8	6	85	79	818870	806186	<0.2	<0.2	0.7	0.8			
						7.5	0.5	188	28.1	8.0	8.0	31.1	31.1	88.9	88.7	5.8	5.8	24.1	13.2	8	6	83	79	818870	806186	<0.2	<0.2	0.7	0.8			
IM3	Fine	Rough	12:08	8.5	Surface	1.0	0.7	210	28.1	28.2	8.1	8.1	30.4	30.4	94.1	93.9	6.2	6.1	4.0	7.0	6	7	73	79	819422	806018	<0.2	<0.2	0.7	0.7		
						1.0	0.7	216	28.2	8.1	8.1	30.4	30.4	93.7	93.9	6.2	6.1	4.0	7.0	4	7	75	79	819422	806018	<0.2	<0.2	0.8	0.7			
					Middle	4.3	0.7	208	28.1	8.0	8.0	30.8	30.8	90.4	90.3	6.0	5.9	6.4	7.0	6	7	79	79	819422	806018	<0.2	<0.2	0.7	0.7			
						4.3	0.7	219	28.1	8.0	8.0	30.8	30.8	90.2	90.3	5.9	5.9	6.7	7.0	8	7	79	79	819422	806018	<0.2	<0.2	0.6	0.7			
					Bottom	7.5	0.6	193	28.0	8.0	8.0	31.3	31.3	89.3	89.5	5.9	5.9	10.4	7.0	10	7	83	79	819422	806018	<0.2	<0.2	0.6	0.7			
						7.5	0.6	200	28.0	8.0	8.0	31.2	31.3	89.6	89.5	5.9	5.9	10.5	7.0	9	7	83	79	819422	806018	<0.2	<0.2	0.6	0.7			
IM4	Fine	Rough	12:01	8.2	Surface	1.0	0.7	206	28.1	28.1	8.0	8.0	30.0	30.0	90.2	89.8	6.0	5.9	8.6	11.9	10	16	73	77	819572	805033	<0.2	<0.2	0.9	0.7		
						1.0	0.8	223	28.1	8.0	8.0	30.0	30.0	89.3	89.8	5.9	5.9	9.6	11.9	10	16	73	77	819572	805033	<0.2	<0.2	0.8	0.7			
					Middle	4.1	0.6	198	28.1	8.1	8.1	31.2	31.4	87.6	87.9	5.8	5.8	12.6	11.9	17	16	76	77	819572	805033	<0.2	<0.2	0.7	0.7			
						4.1	0.7	202	27.8	8.1	8.1	31.5	31.4	88.1	87.9	5.8	5.8	12.8	11.9	18	16	76	77	819572	805033	<0.2	<0.2	0.7	0.7			
					Bottom	7.2	0.5	197	28.2	8.1	8.1	31.8	31.9	87.3	87.6	5.7	5.7	13.7	11.9	19	16	80	77	819572	805033	<0.2	<0.2	0.5	0.7			
						7.2	0.5	201	27.8	8.1	8.1	32.0	31.9	87.8	87.6	5.8	5.8	14.1	11.9	19	16	81	77	819572	805033	<0.2	<0.2	0.6	0.7			
IM5	Fine	Rough	11:53	7.0	Surface	1.0	0.9	198	28.0	28.0	8.0	8.0	29.9	30.0	90.2	90.0	6.0	5.9	10.0	13.5	14	16	73	77	820557	804921	<0.2	<0.2	0.8	0.9		
						1.0	0.9	211	28.0	8.0	8.0	30.0	30.0	89.8	89.0	5.9	5.9	11.4	13.5	14	16	73	77	820557	804921	<0.2	<0.2	0.7	0.9			
					Middle	3.5	0.6	205	27.9	8.0	8.0	30.6	30.6	88.7	88.7	5.9	5.9	13.8	13.5	17	16	77	77	820557	804921	<0.2	<0.2	0.9	0.9			
						3.5	0.6	220	27.9	8.0	8.0	30.6	30.6	88.6	88.7	5.9	5.9	14.3	13.5	16	16	78	77	820557	804921	<0.2	<0.2	0.9	0.9			
					Bottom	6.0	0.4	217	28.0																							

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 04 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Calm	08:14	9.1	Surface	1.0	0.7	41	28.7	28.7	8.1	8.1	31.8	31.9	100.5	100.6	6.5	6.5	11.7	11.7	10	73	86	815606	804250	<0.2	<0.2	1.0	0.8					
						1.0	0.7	44	28.6	28.7	8.1	8.1	31.9	31.9	100.6	100.6	6.5	6.5	11.7	11.7	10	78	86	815606	804250	<0.2	<0.2	0.9	0.8					
						4.6	0.8	42	28.6	28.7	8.1	8.1	31.9	31.9	99.9	99.8	6.5	6.5	14.4	14.5	22	85	86	815606	804250	<0.2	<0.2	0.7	0.8					
					Middle	4.6	0.9	42	28.7	28.7	8.1	8.1	31.9	31.9	99.7	99.8	6.5	6.5	14.5	14.5	21	92	86	815606	804250	<0.2	<0.2	0.7	0.8					
						8.1	0.8	48	28.7	28.6	8.1	8.1	32.4	32.5	98.9	99.0	6.4	6.4	20.0	20.0	32	96	86	815606	804250	<0.2	<0.2	0.6	0.6					
						8.1	0.9	52	28.5	28.6	8.1	8.1	32.6	32.5	99.1	99.0	6.4	6.4	20.4	20.4	30	92	86	815606	804250	<0.2	<0.2	0.6	0.6					
C2	Cloudy	Moderate	09:34	12.1	Surface	1.0	0.5	112	26.1	26.1	7.9	7.9	27.5	27.5	87.7	87.7	6.1	6.1	5.4	11	11	83	88	825676	806961	<0.2	<0.2	2.3	2.1					
						1.0	0.5	118	26.1	26.0	7.9	7.9	27.5	28.2	87.6	86.3	6.0	6.0	5.5	11	11	82	88	825676	806961	<0.2	<0.2	2.1	2.1					
						6.1	0.6	193	26.0	26.0	7.9	7.9	28.2	28.2	86.3	86.3	6.0	6.0	11.1	11.1	9	89	88	825676	806961	<0.2	<0.2	2.1	2.1					
					Middle	6.1	0.6	200	26.0	26.0	7.9	7.9	28.2	28.2	86.3	86.3	6.0	6.0	11.1	11.1	11	90	88	825676	806961	<0.2	<0.2	2.1	2.1					
						11.1	0.5	245	26.0	26.0	7.9	7.9	29.0	29.0	87.9	88.0	6.1	6.1	23.3	23.3	13	93	88	825676	806961	<0.2	<0.2	2.0	2.0					
						11.1	0.5	248	26.0	26.0	7.9	7.9	29.0	29.0	88.0	88.0	6.1	6.1	23.3	23.3	15	92	88	825676	806961	<0.2	<0.2	2.0	2.0					
C3	Cloudy	Moderate	07:44	12.1	Surface	1.0	0.7	269	26.0	26.0	7.9	7.9	32.1	32.1	86.2	86.2	5.8	5.8	4.0	5	5	88	90	822095	817819	<0.2	<0.2	1.2	1.2					
						1.0	0.7	295	26.0	26.0	7.9	7.9	32.1	32.1	86.1	86.2	5.8	5.8	4.0	5	5	87	90	822095	817819	<0.2	<0.2	1.3	1.1					
						6.1	0.7	271	25.9	25.9	7.9	7.9	32.5	32.5	85.3	85.3	5.8	5.8	5.8	6	8	90	90	822095	817819	<0.2	<0.2	1.1	1.1					
					Middle	6.1	0.7	296	25.9	25.9	7.9	7.9	32.5	32.5	85.3	85.3	5.8	5.8	5.8	8	8	90	90	822095	817819	<0.2	<0.2	1.1	1.1					
						11.1	0.5	259	25.9	25.9	7.9	7.9	32.9	32.9	87.0	87.0	5.9	5.9	9.7	11	11	93	90	822095	817819	<0.2	<0.2	1.2	1.2					
						11.1	0.5	274	25.9	25.9	7.9	7.9	32.9	32.9	87.0	87.0	5.9	5.9	9.8	10	10	92	90	822095	817819	<0.2	<0.2	1.1	1.1					
IM1	Fine	Calm	08:36	8.1	Surface	1.0	0.8	58	28.5	28.7	8.1	8.1	30.3	30.2	98.7	98.4	6.5	6.4	8.1	11	11	72	80	818344	806446	<0.2	<0.2	1.2	1.1					
						1.0	0.8	63	28.9	28.6	8.1	8.1	30.1	30.9	98.0	96.4	6.4	6.3	8.0	9	9	74	79	818344	806446	<0.2	<0.2	1.0	1.4					
						4.1	0.7	94	28.6	28.6	8.1	8.1	30.8	30.9	96.4	96.4	6.3	6.3	12.7	21	21	79	85	818344	806446	<0.2	<0.2	1.1	1.1					
					Middle	4.1	0.7	97	28.5	28.6	8.1	8.1	30.9	30.9	96.4	96.4	6.3	6.3	12.9	22	22	85	85	818344	806446	<0.2	<0.2	1.1	1.0					
						7.1	0.5	161	28.5	28.5	8.1	8.1	31.0	31.0	95.1	95.2	6.2	6.2	23.3	37	37	85	85	818344	806446	<0.2	<0.2	1.0	1.0					
						7.1	0.5	174	28.5	28.5	8.1	8.1	31.0	31.0	95.2	95.2	6.2	6.2	23.5	40	40	87	87	818344	806446	<0.2	<0.2	0.9	0.9					
IM2	Fine	Calm	08:41	8.2	Surface	1.0	0.8	76	28.9	28.9	8.1	8.1	30.6	30.7	100.1	100.1	6.5	6.4	6.2	8	8	73	79	818846	806191	<0.2	<0.2	1.0	1.0					
						1.0	0.8	77	28.9	28.5	8.1	8.1	30.7	31.2	100.1	97.4	6.5	6.4	6.3	8	8	75	79	818846	806191	<0.2	<0.2	1.0	1.0					
						4.1	0.6	76	28.3	28.5	8.1	8.1	31.3	31.2	97.4	97.1	6.4	6.3	13.0	8	8	79	82	818846	806191	<0.2	<0.2	1.2	1.0					
					Middle	4.1	0.7	81	28.7	28.3	8.1	8.1	31.1	31.4	96.8	99.3	6.3	6.5	13.2	8	8	82	83	818846	806191	<0.2	<0.2	1.0	0.9					
						7.2	0.5	112	28.5	28.3	8.1	8.1	31.2	31.4	98.5	99.3	6.4	6.5	13.6	28	28	83	83	818846	806191	<0.2	<0.2	0.9	0.9					
						7.2	0.5	116	28.1	28.3	8.1	8.1	31.5	31.4	100.0	99.3	6.6	6.5	12.5	29	29	84	84	818846	806191	<0.2	<0.2	1.1	1.1					
IM3	Fine	Calm	08:49	8.5	Surface	1.0	0.7	93	28.8	28.8	8.1	8.1	30.7	30.7	99.9	99.9	6.5	6.4	7.4	6	6	75	77	819397	806038	<0.2	<0.2	0.9	1.0					
						1.0	0.8	100	28.8	28.7	8.1	8.1	30.7	30.9	99.8	97.4	6.5	6.3	7.6	8	8	76	74	819397	806038	<0.2	<0.2	1.2	1.0					
						4.3	0.6	68	28.7	28.7	8.1	8.1	30.9	30.9	97.4	97.3	6.3	6.3	12.1	22	22	74	76	819397	806038	<0.2	<0.2	1.0	1.0					
					Middle	4.3	0.6	68	28.7	28.7	8.1	8.1	30.9	30.9	97.2	97.3	6.3	6.3	12.5	24	24	76	79	819397	806038	<0.2	<0.2	1.0	1.0					
						7.5	0.4	97	28.5	28.5	8.1	8.1	31.3	31.3	94.8	94.9	6.2	6.2	22.6	35	35	79	79	819397	806038	<0.2	<0.2	0.9	0.9					
						7.5	0.5	104	28.4	28.5	8.1	8.1	31.3	31.3	95.0	94.9	6.2	6.2	22.7	32	32	81	81	819397	806038	<0.2	<0.2	0.9	0.9					
IM4	Fine	Calm	08:57	8.4	Surface	1.0	0.7	70	29.0	29.0	8.1	8.1	30.8	30.8	97.9	97.9	6.4	6.3	8.2	8	7	73	78	819584	805024	<0.2	<0.2	1.7	1.4					
						1.0	0.7	71	29.0	28.6	8.1	8.1	30.8	31.3	97.9	95.9	6.3	6.2	8.5	7	7	75	76	819584	805024	<0.2	<0.2	1.4	1.0					
						4.2	0.7	57	28.6	28.6	8.1	8.1	31.3	31.3	95.8	95.9	6.2	6.2	11.8	23	23	76	78	819584	805024	<0.2	<0.2	1.0	0.9					
					Middle	4.2	0.8	59	28.5	28.4	8.1	8.1	31.3	31.5	95.9	97.3	6.3	6.4	11.8	24	24	78	78	819584	805024	<0.2	<0.2	0.9	1.3					
						7.4	0.6	55	28.6	28.4	8.1	8.1	31.4	31.5	96.8	97.3	6.3	6.4	12.4	9	9	84	84	819584	805024	<0.2	<0.2	1.3	1.1					
						7.4	0.6	55	28.2	28.4	8.1	8.1	31.6	31.5	97.8	97.3	6.4	6.4	11.6	9	9	83	83	819584	805024	<0.2	<0.2	1.1	1.1					
IM5	Fine	Calm	09:04	7.2	Surface	1.0	0.8	110	28.9	28.9	8.1	8.1	30.0	30.0	96.3	96.2	6.3	6.3	9.3	7	7	76	78	820578	804905	<0.2	<0.2	1.3	1.1					
						1.0	0.8	117	28.9	28.6	8.1	8.1	30.0	31.1	96.1	95.5	6.2	6.2	9.6	5	5	78	77	820578	804905	<0.2	<0.2	1.2	1.2					
						3.6	0.9	52	28.6	28.6	8.1	8.1	31.1	31.1	95.4	95.5	6.2	6.2	14.6	11	11	77	79	820578	804905	<0.2	<0.2	0.9	0.9					
					Middle	3.6	0.9	55	28.5	28.4	8.1	8.1	31.1	31.2	95.5	98.2	6.2	6.5	14.8	10	10	79	79	820578	804905	<0.2	<0.2	0.9	0.9					
						6.2	0.6	120	28.5	28.4	8.1	8.1	31.1	31.2	97.8	98.2	6.4	6.4	16.9	27	27	79	79											

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 04 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Moderate	08:51	7.5	Surface	1.0	0.4	247	26.2	26.2	7.9	7.9	28.9	29.0	91.0	91.0	6.2	6.2	5.2	6.2	6	8	83	88	822105	808805	<0.2	<0.2	1.8	1.9			
						1.0	0.4	253	26.2	26.2	7.9	7.9	29.0	29.0	91.0	91.0	6.2	6.2	5.3	6.2	5	8	83	88	822105	808805	<0.2	<0.2	1.9	1.9			
					Middle	3.8	0.5	278	26.0	26.0	7.9	7.9	29.1	29.1	90.3	90.3	6.2	6.2	9.1	12.9	7	10	90	88	822105	808805	<0.2	<0.2	2.0	2.0			
						3.8	0.5	296	26.0	26.0	7.9	7.9	29.1	29.1	90.3	90.3	6.2	6.2	9.3	12.9	6	10	89	88	822105	808805	<0.2	<0.2	2.0	2.0			
					Bottom	6.5	0.5	290	25.9	25.9	8.0	8.0	30.5	30.5	90.7	90.7	6.2	6.2	24.3	6.2	11	10	92	88	822105	808805	<0.2	<0.2	1.7	1.8			
						6.5	0.6	301	25.9	25.9	8.0	8.0	30.5	30.5	90.7	90.7	6.2	6.2	24.3	6.2	12	10	91	88	822105	808805	<0.2	<0.2	1.8	1.8			
IM10	Cloudy	Moderate	08:43	7.3	Surface	1.0	0.7	299	26.0	26.0	8.0	8.0	29.9	29.9	91.0	91.0	6.2	6.2	7.5	6.2	10	12	84	89	822242	809857	<0.2	<0.2	1.6	1.7			
						1.0	0.7	325	26.0	26.0	8.0	8.0	29.9	29.9	91.0	91.0	6.2	6.2	7.5	6.2	8	12	86	89	822242	809857	<0.2	<0.2	1.6	1.7			
					Middle	3.7	0.6	303	25.9	25.9	7.9	7.9	30.1	30.1	90.9	90.9	6.2	6.2	9.8	10.0	13	10	91	89	822242	809857	<0.2	<0.2	1.9	1.7			
						3.7	0.6	319	25.9	25.9	7.9	7.9	30.1	30.1	90.9	90.9	6.2	6.2	9.9	10.0	11	10	90	89	822242	809857	<0.2	<0.2	1.7	1.7			
					Bottom	6.3	0.5	299	25.9	25.9	7.9	7.9	30.2	30.2	92.2	92.2	6.3	6.3	12.6	6.3	15	10	92	89	822242	809857	<0.2	<0.2	1.7	1.4			
						6.3	0.5	317	25.9	25.9	7.9	7.9	30.2	30.2	92.2	92.2	6.3	6.3	12.6	6.3	15	10	92	89	822242	809857	<0.2	<0.2	1.7	1.4			
IM11	Cloudy	Moderate	08:35	7.6	Surface	1.0	0.7	271	26.2	26.2	8.0	8.0	30.1	30.1	91.7	91.7	6.3	6.3	6.8	6.3	6	10	85	89	821515	810547	<0.2	<0.2	1.8	1.6			
						1.0	0.7	274	26.2	26.2	8.0	8.0	30.1	30.1	91.6	91.6	6.3	6.3	6.8	6.3	7	10	84	89	821515	810547	<0.2	<0.2	1.5	1.6			
					Middle	3.8	0.7	267	26.1	26.1	7.9	7.9	30.2	30.2	91.3	91.3	6.2	6.2	8.0	8.5	8	10	90	89	821515	810547	<0.2	<0.2	1.5	1.6			
						3.8	0.7	286	26.1	26.1	7.9	7.9	30.2	30.2	91.3	91.3	6.2	6.2	8.0	8.5	9	10	91	89	821515	810547	<0.2	<0.2	1.6	1.6			
					Bottom	6.6	0.7	277	26.0	26.0	7.9	7.9	30.4	30.4	93.0	93.1	6.4	6.4	10.8	6.4	13	10	92	89	821515	810547	<0.2	<0.2	1.5	1.4			
						6.6	0.7	294	26.0	26.0	7.9	7.9	30.4	30.4	93.1	93.1	6.4	6.4	10.8	6.4	15	10	93	89	821515	810547	<0.2	<0.2	1.4	1.4			
IM12	Cloudy	Moderate	08:28	8.2	Surface	1.0	0.9	275	26.1	26.1	7.9	7.9	29.9	29.9	90.6	90.7	6.2	6.2	7.7	6.2	10	12	86	89	821179	811524	<0.2	<0.2	1.3	1.4			
						1.0	0.9	287	26.1	26.1	7.9	7.9	29.9	29.9	90.7	90.7	6.2	6.2	7.7	6.2	10	12	85	89	821179	811524	<0.2	<0.2	1.4	1.4			
					Middle	4.1	0.8	274	26.0	26.0	7.9	7.9	29.9	29.9	90.5	90.5	6.2	6.2	9.1	10.3	11	12	94	89	821179	811524	<0.2	<0.2	1.3	1.2			
						4.1	0.9	298	26.0	26.0	7.9	7.9	29.9	29.9	90.5	90.5	6.2	6.2	9.1	10.3	11	12	89	89	821179	811524	<0.2	<0.2	1.2	1.2			
					Bottom	7.2	0.6	269	25.9	25.9	7.9	7.9	30.2	30.2	90.9	91.0	6.2	6.2	14.0	6.2	13	12	90	89	821179	811524	<0.2	<0.2	1.7	1.4			
						7.2	0.7	286	25.9	25.9	7.9	7.9	30.2	30.2	91.0	91.0	6.2	6.2	14.1	6.2	15	12	91	89	821179	811524	<0.2	<0.2	1.4	1.4			
SR2	Cloudy	Moderate	08:07	5.4	Surface	1.0	0.2	271	26.1	26.1	7.9	7.9	30.1	30.1	90.3	90.3	6.2	6.2	12.5	6.2	16	18	87	89	821482	814147	<0.2	<0.2	1.6	1.5			
						1.0	0.2	276	26.1	26.1	7.9	7.9	30.1	30.1	90.3	90.3	6.2	6.2	12.5	6.2	14	18	87	89	821482	814147	<0.2	<0.2	1.5	1.5			
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	-	16.7	-	18	-	89	821482	814147	-	<0.2	-	-
						2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	-	16.7	-	18	-	89	821482	814147	-	<0.2	-	-
					Bottom	4.4	0.2	153	26.0	26.0	7.9	7.9	30.4	30.4	89.6	89.6	6.1	6.1	20.8	6.1	21	18	91	89	821482	814147	<0.2	<0.2	1.4	1.5			
						4.4	0.2	159	26.0	26.0	7.9	7.9	30.4	30.4	89.6	89.6	6.1	6.1	20.9	6.1	19	18	90	89	821482	814147	<0.2	<0.2	1.5	1.5			
SR3	Cloudy	Moderate	09:04	9.3	Surface	1.0	0.4	240	26.7	26.7	8.0	8.0	29.4	29.4	96.5	96.5	6.6	6.6	3.3	6.6	4	6	-	-	822132	807551	-	-	-	-			
						1.0	0.4	263	26.7	26.7	8.0	8.0	29.4	29.4	96.5	96.5	6.6	6.6	3.3	6.6	5	6	-	6	-	-	822132	807551	-	-	-	-	
					Middle	4.7	0.5	271	26.3	26.3	8.0	8.0	29.6	29.6	96.3	96.3	6.6	6.6	6.1	6.6	6	6	-	6	-	-	822132	807551	-	-	-	-	
						4.7	0.6	289	26.3	26.3	8.0	8.0	29.6	29.6	96.3	96.3	6.6	6.6	6.1	6.6	5	6	-	6	-	-	822132	807551	-	-	-	-	
					Bottom	8.3	0.3	181	25.9	25.9	8.0	8.0	31.9	31.9	97.1	97.2	6.6	6.6	19.6	6.6	8	6	-	6	-	-	822132	807551	-	-	-	-	
						8.3	0.3	196	25.9	25.9	8.0	8.0	31.9	31.9	97.3	97.3	6.6	6.6	19.6	6.6	7	6	-	6	-	-	822132	807551	-	-	-	-	
SR4A	Fine	Calm	07:52	8.9	Surface	1.0	0.4	242	28.2	28.4	8.0	8.0	29.9	29.8	94.5	94.2	6.3	6.2	6.5	6.2	8	9	-	-	817177	807792	-	-	-	-			
						1.0	0.4	258	28.6	28.4	8.0	8.0	29.6	29.8	93.9	93.6	6.2	6.2	6.3	6.2	9	9	-	9	-	-	817177	807792	-	-	-	-	
					Middle	4.5	0.4	244	28.2	28.4	8.0	8.0	29.9	29.8	93.9	93.6	6.2	6.2	7.4	6.2	9	9	-	9	-	-	817177	807792	-	-	-	-	
						4.5	0.4	249	28.6	28.4	8.0	8.0	29.6	29.8	93.3	93.3	6.1	6.1	7.3	6.2	9	9	-	9	-	-	817177	807792	-	-	-	-	
					Bottom	7.9	0.3	248	28.2	28.4	8.0	8.0	29.9	29.8	94.0	93.8	6.2	6.2	8.7	6.2	8	9	-	9	-	-	817177	807792	-	-	-	-	
						7.9	0.4	269	28.5	28.4	8.0	8.0	29.7	29.8	93.6	93.8	6.2	6.2	8.3	6.2	10	9	-	9	-	-	817177	807792	-	-	-	-	
SR5A	Fine	Calm	07:42	4.5	Surface	1.0	0.4	283	28.4	28.5	8.0	8.0	29.0	29.0	88.7	88.7	5.9	5.9	5.8	5.9	6	8	-	-	816585	810684	-	-	-	-			
						1.0	0.4	309	28.5	28.5	8.0	8.0	28.9	29.0	88.7	88.7	5.9	5.9	5.6	5.9	7	8	-	8	-	-	816585	810684	-	-	-	-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	-	-	5.9	-	8	-	-	816585	810684	-	-	-	-
						2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	-	-	5.9	-	8	-	-	816585	810684	-	-	-	-
					Bottom	3.5	0.3																										

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 04 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Calm	14:17	8.1	Surface	1.0	0.7	219	29.2	29.2	8.1	8.1	31.4	31.5	108.1	108.2	7.0	6.9	3.4	4.1	5	7	85	87	815627	804248	<0.2	<0.2	1.1	0.8		
						1.0	0.7	239	29.1	8.1	8.1	31.5	31.5	108.2	108.2	7.0	6.9	3.4	4.1	6	7	83	7	86	85	87	804248	<0.2	<0.2	0.9	0.8	
					Middle	4.1	0.7	213	28.6	28.8	8.1	8.1	31.9	31.8	104.8	104.4	6.8	6.6	4.2	4.1	7	6	86	6	85	90	815627	804248	<0.2	<0.2	0.7	0.8
						4.1	0.8	231	29.0	28.8	8.1	8.1	31.6	31.8	104.0	104.4	6.7	6.6	4.0	4.1	6	7	85	6	85	90	815627	804248	<0.2	<0.2	0.7	0.8
					Bottom	7.1	0.6	212	28.8	28.8	8.1	8.1	32.3	32.4	102.4	102.5	6.6	6.6	4.7	6.6	4.7	6.6	8	7	90	92	815627	804248	<0.2	<0.2	0.6	0.7
						7.1	0.7	223	28.7	28.8	8.1	8.1	32.4	32.4	102.6	102.5	6.6	6.6	4.8	6.6	4.8	6.6	7	7	92	92	815627	804248	<0.2	<0.2	0.6	0.7
C2	Cloudy	Moderate	13:11	12.4	Surface	1.0	0.7	183	26.2	26.2	7.9	7.9	27.6	27.6	88.1	88.1	6.1	6.1	8.0	17.2	6	16	83	89	825681	806952	<0.2	<0.2	2.1	1.9		
						1.0	0.7	195	26.2	26.2	7.9	7.9	27.6	27.6	88.1	88.1	6.1	6.1	8.1	17.2	5	16	85	16	90	91	825681	806952	<0.2	<0.2	2.0	1.9
					Middle	6.2	0.7	177	26.0	26.0	7.9	7.9	28.2	28.2	87.1	87.2	6.0	6.0	23.0	17.2	16	16	90	15	91	92	825681	806952	<0.2	<0.2	2.0	1.7
						6.2	0.7	190	26.0	26.0	7.9	7.9	28.2	28.2	87.2	87.2	6.0	6.0	22.9	17.2	15	16	91	15	92	92	825681	806952	<0.2	<0.2	1.7	1.9
					Bottom	11.4	0.4	161	26.0	26.0	7.9	7.9	29.3	29.3	88.9	89.0	6.1	6.1	20.7	17.2	27	16	92	27	92	92	825681	806952	<0.2	<0.2	1.8	1.9
						11.4	0.5	170	26.0	26.0	7.9	7.9	29.3	29.3	89.0	89.0	6.1	6.1	20.6	17.2	26	16	92	26	92	92	825681	806952	<0.2	<0.2	1.8	1.9
C3	Cloudy	Moderate	15:03	12.5	Surface	1.0	0.6	145	26.2	26.2	8.0	8.0	30.0	30.0	90.0	90.0	6.1	6.0	2.9	3.6	6	6	87	91	822127	817804	<0.2	<0.2	1.3	1.2		
						1.0	0.6	154	26.2	26.2	8.0	8.0	30.0	30.0	90.0	90.0	6.1	6.0	2.9	3.6	5	6	90	7	90	90	822127	817804	<0.2	<0.2	1.3	1.2
					Middle	6.3	0.4	135	26.0	26.0	8.0	8.0	31.2	31.2	86.0	86.1	5.9	5.9	3.8	3.6	7	6	90	7	90	93	822127	817804	<0.2	<0.2	1.2	1.0
						6.3	0.4	137	26.0	26.0	8.0	8.0	31.2	31.2	86.1	86.1	5.9	5.9	3.8	3.6	7	6	90	7	90	93	822127	817804	<0.2	<0.2	1.0	1.0
					Bottom	11.5	0.5	79	26.0	26.0	8.0	8.0	31.7	31.7	88.7	88.8	6.0	6.0	3.9	6.0	5	6	93	5	93	93	822127	817804	<0.2	<0.2	1.0	1.1
						11.5	0.5	80	26.0	26.0	8.0	8.0	31.7	31.7	88.8	88.8	6.0	6.0	4.0	6.0	7	6	93	7	93	93	822127	817804	<0.2	<0.2	1.1	1.1
IM1	Fine	Calm	13:55	7.3	Surface	1.0	0.5	181	28.7	28.8	8.1	8.1	30.2	30.2	99.8	99.8	6.5	6.5	6.8	8.4	9	11	73	78	818364	806458	<0.2	<0.2	1.2	0.9		
						1.0	0.5	189	28.8	28.8	8.1	8.1	30.2	30.2	99.7	99.8	6.5	6.5	6.7	8.4	8	11	74	11	77	79	818364	806458	<0.2	<0.2	1.1	0.8
					Middle	3.7	0.5	178	28.3	28.5	8.1	8.1	30.7	30.6	99.8	99.5	6.5	6.5	8.3	8.4	12	11	77	11	79	81	818364	806458	<0.2	<0.2	0.8	0.9
						3.7	0.5	184	28.7	28.5	8.1	8.1	30.4	30.6	99.1	99.5	6.5	6.5	8.1	8.4	13	11	79	11	79	81	818364	806458	<0.2	<0.2	0.9	0.8
					Bottom	6.3	0.4	186	28.7	28.5	8.1	8.1	32.1	32.2	99.7	100.0	6.5	6.5	10.1	6.5	6.5	6.5	13	11	81	82	818364	806458	<0.2	<0.2	0.8	0.8
						6.3	0.4	190	28.3	28.5	8.1	8.1	32.3	32.2	100.3	100.0	6.5	6.5	10.2	6.5	6.5	6.5	12	11	82	82	818364	806458	<0.2	<0.2	0.8	0.8
IM2	Fine	Calm	13:49	8.5	Surface	1.0	0.4	186	28.9	28.9	8.1	8.1	30.3	30.4	102.9	102.9	6.7	6.7	4.9	5.7	7	8	72	79	818833	806212	<0.2	<0.2	1.0	1.0		
						1.0	0.4	200	28.9	28.9	8.1	8.1	30.4	30.4	102.9	102.9	6.7	6.7	5.0	5.7	7	8	75	8	79	81	818833	806212	<0.2	<0.2	1.0	1.0
					Middle	4.3	0.5	177	28.9	28.9	8.1	8.1	30.4	30.4	102.6	102.6	6.7	6.7	5.2	5.7	8	8	79	8	81	83	818833	806212	<0.2	<0.2	1.1	0.8
						4.3	0.5	182	28.9	28.9	8.1	8.1	30.4	30.4	102.6	102.6	6.7	6.7	5.3	5.7	9	8	81	8	83	85	818833	806212	<0.2	<0.2	1.0	0.8
					Bottom	7.5	0.3	188	28.7	28.5	8.1	8.1	32.1	32.3	101.4	101.7	6.6	6.6	6.9	6.6	6.9	6.6	8	8	83	85	818833	806212	<0.2	<0.2	0.8	0.8
						7.5	0.4	188	28.3	28.5	8.1	8.1	32.4	32.3	102.0	101.7	6.6	6.6	6.9	6.6	6.9	6.6	9	8	85	85	818833	806212	<0.2	<0.2	0.8	0.8
IM3	Fine	Calm	13:42	8.1	Surface	1.0	0.5	201	29.2	29.2	8.1	8.1	30.6	30.7	104.6	104.6	6.8	6.7	4.5	7.4	7	9	72	77	819417	806024	<0.2	<0.2	1.2	1.0		
						1.0	0.5	208	29.2	29.2	8.1	8.1	30.7	30.7	104.5	104.6	6.8	6.7	4.6	7.4	6	9	72	9	76	79	819417	806024	<0.2	<0.2	1.1	1.0
					Middle	4.1	0.6	176	29.0	29.0	8.1	8.1	31.0	31.0	100.5	100.5	6.5	6.5	7.3	7.4	6	9	76	8	79	81	819417	806024	<0.2	<0.2	1.0	0.8
						4.1	0.6	182	28.9	29.0	8.1	8.1	31.0	31.0	100.4	100.5	6.5	6.5	7.5	7.4	8	9	79	8	81	83	819417	806024	<0.2	<0.2	1.0	0.8
					Bottom	7.1	0.5	176	28.2	28.4	8.1	8.1	32.0	31.9	99.3	99.4	6.5	6.5	10.2	6.5	6.5	6.5	12	9	81	83	819417	806024	<0.2	<0.2	0.8	0.8
						7.1	0.5	177	28.6	28.4	8.1	8.1	31.8	31.9	99.5	99.4	6.5	6.5	10.2	6.5	6.5	6.5	14	9	83	83	819417	806024	<0.2	<0.2	0.8	0.8
IM4	Fine	Calm	13:34	7.8	Surface	1.0	0.4	206	29.3	29.3	8.1	8.1	30.5	30.5	101.4	101.4	6.6	6.4	5.5	9.6	8	12	73	77	819587	805055	<0.2	<0.2	0.9	0.8		
						1.0	0.5	209	29.3	29.3	8.1	8.1	30.5	30.5	101.3	101.4	6.5	6.4	5.6	9.6	8	12	73	12	76	78	819587	805055	<0.2	<0.2	1.0	0.8
					Middle	3.9	0.5	184	28.4	28.4	8.1	8.1	31.8	31.8	96.9	96.9	6.3	6.3	11.1	6.4	13	12	76	12	78	81	819587	805055	<0.2	<0.2	0.8	0.7
						3.9	0.5	196	28.4	28.4	8.1	8.1	31.8	31.8	96.8	96.8	6.3	6.3	11.4	6.4	13	12	78	12	78	81	819587	805055	<0.2	<0.2	0.7	0.7
					Bottom	6.8	0.5	163	28.4	28.5	8.1	8.1	32.0	32.0	97.7	98.0	6.3	6.4	12.5	6.4	15	12	82	12	82	82	819587	805055	<0.2	<0.2	0.7	0.7
						6.8	0.5	172	28.5	28.5	8.1	8.1	31.9	32.0	98.3	98.0	6.4	6.4	11.7	6.4	15	12	81	12	81	82	819587	805055	<0.2	<0.2	0.7	0.7
IM5	Fine	Calm	13:26	6.8	Surface	1.0	0.4	182	28.5	28.5	8.1	8.1	31.1	31.1	95.8	95.8	6.3	6.3	13.6	12.6	9	17	73	77	820573	804908	<0.2	<0.2	1.1	1.0		
						1.0	0.4	194	28.5	28																						

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 04 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Moderate	14:01	7.7	Surface	1.0	0.5	134	26.6	26.6	8.0	8.0	29.5	29.5	100.7	100.7	6.9	6.8	4.7	16.2	5	11	84	89	822075	808821	<0.2	<0.2	1.5	1.3			
						1.0	0.5	146	26.6	8.0	8.0	29.5	29.5	100.7	100.7	6.9	6.8	4.9	16.2	4	11	83	89	822075	808821	<0.2	<0.2	1.4	1.3				
					Middle	3.9	0.4	140	26.1	26.1	8.1	8.1	31.1	31.1	98.6	98.6	6.7	6.5	11.1	16.2	6	11	90	89	822075	808821	<0.2	<0.2	1.2	1.3			
						3.9	0.5	146	26.1	26.1	8.1	8.1	31.1	31.1	98.6	98.6	6.7	6.5	11.2	16.2	6	11	90	89	822075	808821	<0.2	<0.2	1.3	1.3			
					Bottom	6.7	0.4	133	25.9	25.9	8.1	8.1	31.3	31.3	95.1	95.2	6.5	6.5	32.8	16.2	22	11	92	89	822075	808821	<0.2	<0.2	1.2	1.3			
						6.7	0.4	141	25.9	25.9	8.1	8.1	31.3	31.3	95.2	95.2	6.5	6.5	32.5	16.2	22	11	92	89	822075	808821	<0.2	<0.2	1.4	1.3			
IM10	Cloudy	Moderate	14:08	7.8	Surface	1.0	0.9	129	26.7	26.7	8.0	8.0	29.0	29.1	100.6	100.6	6.9	6.9	2.0	9.0	4	9	86	90	822259	809846	<0.2	<0.2	1.6	1.5			
						1.0	0.9	136	26.7	26.7	8.0	8.0	29.1	29.1	100.6	100.6	6.9	6.9	2.0	9.0	4	9	85	90	822259	809846	<0.2	<0.2	1.6	1.5			
					Middle	3.9	0.7	114	26.6	26.6	8.0	8.0	29.3	29.3	100.2	100.2	6.8	6.6	3.0	9.0	8	9	91	90	822259	809846	<0.2	<0.2	1.7	1.5			
						3.9	0.7	119	26.6	26.6	8.0	8.0	29.2	29.3	100.2	100.2	6.8	6.6	3.0	9.0	6	9	90	90	822259	809846	<0.2	<0.2	1.7	1.5			
					Bottom	6.8	0.5	96	26.0	26.0	8.0	8.0	31.6	31.6	97.4	97.5	6.6	6.6	22.0	9.0	18	9	93	90	822259	809846	<0.2	<0.2	1.4	1.5			
						6.8	0.5	97	26.0	26.0	8.0	8.0	31.6	31.6	97.5	97.5	6.6	6.6	21.9	9.0	16	9	93	90	822259	809846	<0.2	<0.2	1.4	1.5			
IM11	Cloudy	Moderate	14:15	8.0	Surface	1.0	0.8	123	26.3	26.3	8.0	8.0	29.5	29.5	94.4	94.4	6.5	6.5	5.6	10.4	5	9	87	90	821509	810525	<0.2	<0.2	1.5	1.5			
						1.0	0.9	125	26.3	26.3	8.0	8.0	29.5	29.5	94.4	94.4	6.5	6.5	5.6	10.4	6	9	85	90	821509	810525	<0.2	<0.2	1.5	1.5			
					Middle	4.0	0.7	109	26.1	26.1	8.0	8.0	29.9	29.9	94.2	94.2	6.5	6.5	9.0	10.4	8	9	91	90	821509	810525	<0.2	<0.2	1.6	1.5			
						4.0	0.7	113	26.0	26.1	8.0	8.0	29.9	29.9	94.2	94.2	6.5	6.5	9.2	10.4	7	9	89	90	821509	810525	<0.2	<0.2	1.6	1.5			
					Bottom	7.0	0.4	109	25.9	25.9	8.0	8.0	31.5	31.5	95.9	96.0	6.5	6.5	16.4	10.4	14	9	93	90	821509	810525	<0.2	<0.2	1.3	1.5			
						7.0	0.5	118	25.9	25.9	8.0	8.0	31.5	31.5	96.0	96.0	6.5	6.5	16.5	10.4	14	9	92	90	821509	810525	<0.2	<0.2	1.2	1.5			
IM12	Cloudy	Moderate	14:22	8.5	Surface	1.0	0.9	127	26.5	26.5	8.0	8.0	29.5	29.5	94.5	94.5	6.4	6.4	3.7	5.7	5	7	86	89	821169	811503	<0.2	<0.2	1.6	1.5			
						1.0	0.9	132	26.5	26.5	8.0	8.0	29.5	29.5	94.4	94.5	6.4	6.4	3.8	5.7	6	7	85	89	821169	811503	<0.2	<0.2	1.6	1.5			
					Middle	4.3	0.9	111	26.2	26.2	8.0	8.0	30.1	30.1	92.7	92.7	6.3	6.4	5.8	5.7	6	7	90	89	821169	811503	<0.2	<0.2	1.6	1.5			
						4.3	0.9	111	26.2	26.2	8.0	8.0	30.1	30.1	92.6	92.7	6.3	6.4	5.9	5.7	8	7	89	89	821169	811503	<0.2	<0.2	1.5	1.5			
					Bottom	7.5	0.7	92	26.0	26.0	8.0	8.0	30.3	30.3	93.9	94.0	6.4	6.4	7.4	5.7	8	7	93	89	821169	811503	<0.2	<0.2	1.4	1.5			
						7.5	0.7	99	26.0	26.0	8.0	8.0	30.3	30.3	94.0	94.0	6.4	6.4	7.5	5.7	10	7	92	89	821169	811503	<0.2	<0.2	1.5	1.5			
SR2	Cloudy	Moderate	14:43	4.9	Surface	1.0	0.5	131	26.4	26.4	8.0	8.0	29.6	29.6	92.5	92.4	6.3	6.3	5.6	7.8	7	8	86	89	821450	814178	<0.2	<0.2	1.5	1.5			
						1.0	0.6	141	26.4	26.4	8.0	8.0	29.6	29.6	92.3	92.4	6.3	6.3	5.7	7.8	6	8	86	89	821450	814178	<0.2	<0.2	1.5	1.5			
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	89	821450	814178	<0.2	<0.2	-	-
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	89	821450	814178	<0.2	<0.2	-
					Bottom	3.9	0.5	144	26.0	26.0	8.0	8.0	30.5	30.5	90.7	90.8	6.2	6.2	10.0	6.2	6.2	6.2	9	8	91	89	821450	814178	<0.2	<0.2	1.4	1.5	
						3.9	0.5	155	26.0	26.0	7.9	8.0	30.5	30.5	90.8	90.8	6.2	6.2	10.0	6.2	6.2	6.2	10	8	92	89	821450	814178	<0.2	<0.2	1.5	1.5	
SR3	Cloudy	Moderate	13:46	9.2	Surface	1.0	0.3	201	26.6	26.6	8.0	8.0	27.7	27.8	102.0	102.1	7.0	7.0	3.3	8.9	6	7	-	-	822140	807569	-	-	-	-			
						1.0	0.3	208	26.6	26.6	8.0	8.0	27.8	27.8	102.1	102.1	7.0	7.0	3.4	8.9	4	7	-	-	822140	807569	-	-	-	-			
					Middle	4.6	0.4	206	26.7	26.7	8.0	8.0	29.7	29.7	103.8	103.8	7.1	7.1	5.6	8.9	10	7	-	-	-	-	822140	807569	-	-	-	-	
						4.6	0.4	208	26.6	26.6	8.0	8.0	29.7	29.7	103.7	103.7	7.0	7.0	5.7	8.9	8	7	-	-	-	-	822140	807569	-	-	-	-	
					Bottom	8.2	0.2	166	26.0	26.0	8.0	8.0	30.6	30.6	100.3	100.4	6.9	6.9	17.8	6.9	6.9	6.9	8	7	-	-	822140	807569	-	-	-	-	
						8.2	0.3	174	26.0	26.0	8.0	8.0	30.5	30.5	100.4	100.4	6.9	6.9	17.7	6.9	6.9	6.9	8	7	-	-	822140	807569	-	-	-	-	
SR4A	Fine	Calm	14:38	7.8	Surface	1.0	0.3	108	29.1	29.2	8.1	8.1	30.4	30.4	102.5	102.4	6.6	6.6	7.3	8.9	7	9	-	-	817183	807823	-	-	-	-			
						1.0	0.3	115	29.2	29.2	8.1	8.1	30.3	30.4	102.3	102.4	6.6	6.6	7.0	8.9	7	9	-	-	817183	807823	-	-	-	-			
					Middle	3.9	0.4	91	28.9	28.7	8.1	8.1	30.6	30.8	100.4	100.7	6.5	6.5	9.2	8.9	8	9	-	-	-	-	817183	807823	-	-	-	-	
						3.9	0.4	93	28.5	28.7	8.1	8.1	30.9	30.8	101.0	100.7	6.6	6.6	9.2	8.9	9	9	-	-	-	-	817183	807823	-	-	-	-	
					Bottom	6.8	0.3	116	28.7	28.7	8.1	8.1	30.8	30.9	100.7	100.8	6.6	6.6	10.6	8.9	11	9	-	-	-	-	817183	807823	-	-	-	-	
						6.8	0.3	123	28.6	28.7	8.1	8.1	30.9	30.9	100.9	100.8	6.6	6.6	10.3	8.9	10	9	-	-	-	-	817183	807823	-	-	-	-	
SR5A	Fine	Calm	14:55	4.4	Surface	1.0	0.1	191	29.2	29.2	8.0	8.0	29.1	29.1	95.9	95.9	6.3	6.3	9.3	10.2	6	11	-	-	816587	810688	-	-	-	-			
						1.0	0.1	193	29.1	29.2	8.0	8.0	29.1	29.1	95.8	95.8	6.3	6.3	9.6	10.2	6	11	-	-	816587	810688	-	-	-	-			
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	816587	810688	-	-	-	-
						2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	816587	810688	-	-	-

**Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring**

Water Quality Monitoring Results on 06 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Cloudy	Calm	09:44	8.4	Surface	1.0	0.6	46	29.1	28.9	8.0	8.0	30.3	30.5	96.9	97.2	6.3	6.3	11.7	17.3	6	15	80	86	815612	804248	<0.2	<0.2	1.0	0.8				
						1.0	0.6	49	28.7	8.0	8.0	30.6	31.7	97.5	95.2	6.4	6.1	11.3	17.7	6	8	81	86	<0.2	<0.2	1.0	0.9							
						4.2	0.6	49	28.9	8.0	8.0	31.5	31.7	94.8	95.2	6.1	6.2	18.5	17.7	8	10	86	87	<0.2	<0.2	0.9	0.9							
					Middle	4.2	0.7	49	28.5	28.7	8.0	8.0	31.9	31.7	95.5	95.2	6.2	6.1	17.7	17.7	10	10	87	87	<0.2	<0.2	0.9	0.9						
						7.4	0.6	50	29.0	29.0	8.0	8.0	31.6	31.6	94.7	94.8	6.1	6.1	21.9	21.9	30	30	92	92	<0.2	<0.2	0.6	0.6						
						7.4	0.6	54	28.9	29.0	8.0	8.0	31.6	31.6	94.8	94.8	6.1	6.1	22.6	22.6	32	32	92	92	<0.2	<0.2	0.6	0.6						
C2	Cloudy	Moderate	11:04	11.8	Surface	1.0	0.3	147	26.4	26.4	7.7	7.7	27.6	27.6	89.5	89.5	6.2	6.2	3.8	10.0	4	5	80	85	825666	806947	<0.2	<0.2	2.1	1.9				
						1.0	0.4	152	26.4	26.2	7.7	7.7	27.6	28.2	89.4	88.2	6.2	6.1	3.9	10.0	3	4	83	85	<0.2	<0.2	2.1	1.8						
						5.9	0.5	176	26.2	26.2	7.7	7.7	28.2	28.2	88.2	88.2	6.1	6.1	7.6	7.7	4	4	85	85	<0.2	<0.2	2.0	2.0						
					Middle	5.9	0.5	189	26.2	26.2	7.7	7.7	28.2	28.2	88.2	88.2	6.1	6.1	7.7	7.7	4	4	85	85	<0.2	<0.2	2.0	2.0						
						10.8	0.4	219	26.2	26.2	7.7	7.7	29.0	29.0	88.2	88.2	6.1	6.1	18.3	18.3	8	8	87	87	<0.2	<0.2	1.8	1.8						
						10.8	0.4	226	26.2	26.2	7.7	7.7	29.0	29.0	88.2	88.2	6.1	6.1	18.4	18.4	6	6	90	90	<0.2	<0.2	1.8	1.8						
C3	Cloudy	Moderate	09:09	12.2	Surface	1.0	0.5	266	26.2	26.2	7.8	7.8	29.2	29.2	89.3	89.3	6.1	6.1	2.7	4.4	4	4	73	82	822128	817802	<0.2	<0.2	1.2	1.3				
						1.0	0.5	291	26.2	26.1	7.8	7.7	29.2	29.8	89.2	87.4	6.1	6.0	2.7	4.4	4	4	75	80	<0.2	<0.2	1.2	1.3						
						6.1	0.6	263	26.1	26.1	7.7	7.7	29.8	29.8	87.4	87.4	6.0	6.0	2.6	4.4	4	4	80	83	<0.2	<0.2	1.3	1.3						
					Middle	6.1	0.7	283	26.1	26.1	7.7	7.7	29.8	29.8	87.4	87.4	6.0	6.0	2.6	4.4	5	4	83	83	<0.2	<0.2	1.3	1.3						
						11.2	0.4	267	26.1	26.1	7.7	7.7	30.6	30.6	87.2	87.2	5.9	6.0	7.9	7.9	5	4	90	90	<0.2	<0.2	1.3	1.3						
						11.2	0.4	275	26.1	26.1	7.7	7.7	30.6	30.6	87.2	87.2	6.0	6.0	7.6	7.6	4	4	92	92	<0.2	<0.2	1.3	1.3						
IM1	Cloudy	Calm	10:09	7.6	Surface	1.0	0.6	122	29.4	29.4	8.0	8.0	29.0	29.0	95.7	95.7	6.2	6.2	10.3	16.2	4	15	73	80	818359	806465	<0.2	<0.2	1.5	1.4				
						1.0	0.6	125	29.4	28.9	8.0	8.0	29.0	30.4	95.6	95.1	6.2	6.2	10.7	16.2	5	15	75	81	<0.2	<0.2	1.2	1.2						
						3.8	0.5	141	29.0	28.9	8.0	8.0	30.3	30.4	94.9	95.1	6.2	6.2	15.3	16.2	6	7	79	81	<0.2	<0.2	1.2	1.2						
					Middle	3.8	0.6	151	28.8	28.9	8.0	8.0	30.4	30.4	95.2	95.1	6.2	6.2	14.6	16.2	7	7	81	81	<0.2	<0.2	1.2	1.2						
						6.6	0.5	172	28.9	28.7	8.0	8.0	30.4	30.6	93.9	94.3	6.1	6.2	22.6	23.7	33	32	87	84	<0.2	<0.2	1.5	1.6						
						6.6	0.5	185	28.5	28.7	8.0	8.0	30.8	30.6	94.6	94.3	6.2	6.2	23.7	23.7	32	32	84	84	<0.2	<0.2	1.5	1.6						
IM2	Cloudy	Calm	10:14	7.9	Surface	1.0	0.6	120	29.2	29.3	8.0	8.0	29.0	29.0	96.7	96.6	6.3	6.3	8.5	15.5	5	12	73	79	818859	806178	<0.2	<0.2	1.9	1.4				
						1.0	0.6	129	29.3	28.8	8.0	8.0	28.9	30.5	96.4	95.3	6.3	6.2	8.7	15.5	4	12	70	78	<0.2	<0.2	1.6	1.4						
						4.0	0.6	86	29.0	28.8	8.0	8.0	30.3	30.5	94.9	95.3	6.2	6.3	16.3	16.7	6	6	81	81	<0.2	<0.2	1.2	1.4						
					Middle	4.0	0.6	87	28.5	28.8	8.0	8.0	30.6	30.5	95.6	95.3	6.3	6.3	16.7	16.7	6	6	81	81	<0.2	<0.2	1.4	1.4						
						6.9	0.4	173	29.0	29.0	8.0	8.0	30.4	30.5	95.5	95.6	6.2	6.2	21.5	21.5	24	24	87	87	<0.2	<0.2	1.0	1.0						
						6.9	0.4	186	29.0	29.0	8.0	8.0	30.5	30.5	95.6	95.6	6.2	6.2	21.4	21.4	25	25	85	85	<0.2	<0.2	1.0	1.1						
IM3	Cloudy	Calm	10:21	7.4	Surface	1.0	0.4	219	29.2	29.0	8.0	8.0	28.8	29.0	97.0	97.4	6.3	6.3	4.7	8.3	5	10	74	79	819393	806021	<0.2	<0.2	1.2	1.3				
						1.0	0.5	231	28.8	29.2	8.0	8.0	29.1	29.2	97.7	96.1	6.4	6.3	4.8	8.3	4	10	73	82	<0.2	<0.2	0.9	1.3						
						3.7	0.6	125	29.2	29.2	8.0	8.0	29.2	29.2	96.1	96.1	6.3	6.3	6.9	7.1	6	6	82	80	<0.2	<0.2	1.3	1.4						
					Middle	3.7	0.6	136	29.1	29.2	8.0	8.0	29.2	29.2	96.1	96.1	6.3	6.3	7.1	7.1	6	6	80	82	<0.2	<0.2	1.4	1.4						
						6.4	0.4	133	29.0	29.0	8.0	8.0	30.6	30.6	95.8	96.0	6.2	6.2	13.6	13.6	20	20	82	82	<0.2	<0.2	1.6	1.6						
						6.4	0.5	146	29.0	29.0	8.0	8.0	30.5	30.6	96.2	96.0	6.3	6.3	12.4	12.4	20	20	84	84	<0.2	<0.2	1.5	1.5						
IM4	Cloudy	Calm	10:31	7.3	Surface	1.0	0.5	174	29.2	29.3	8.0	8.0	29.0	29.0	97.9	97.7	6.4	6.4	6.8	12.6	6	9	74	79	819577	805024	<0.2	<0.2	0.9	1.3				
						1.0	0.5	187	29.3	28.8	8.0	8.0	28.9	30.3	97.5	96.9	6.4	6.3	7.6	11.0	5	9	75	79	<0.2	<0.2	1.2	1.3						
						3.7	0.5	117	28.5	28.8	8.0	8.0	30.5	30.3	97.2	96.9	6.4	6.3	10.8	11.0	5	9	78	79	<0.2	<0.2	1.3	1.3						
					Middle	3.7	0.6	126	29.0	28.8	8.0	8.0	30.1	30.3	96.5	96.9	6.3	6.3	11.0	11.0	5	9	79	79	<0.2	<0.2	1.3	1.3						
						6.3	0.5	140	28.9	28.9	8.0	8.0	30.2	30.3	96.0	96.3	6.3	6.3	19.1	19.1	15	15	84	84	<0.2	<0.2	1.6	1.6						
						6.3	0.5	150	28.8	28.9	8.0	8.0	30.3	30.3	96.6	96.3	6.3	6.3	20.1	20.1	17	17	86	86	<0.2	<0.2	1.6	1.6						
IM5	Cloudy	Calm	10:38	6.8	Surface	1.0	0.5	207	28.8	29.0	8.0	8.0	28.9	28.8	96.0	95.7	6.3	6.2	10.3	16.2	6	16	73	82	820555	804939	<0.2	<0.2	1.6	1.4				
						1.0	0.6	213	29.1	28.8	8.0	8.0	28.7	30.2	95.3	94.0	6.2	6.1	10.8	16.4	7	16	78	81	<0.2	<0.2	1.7	1.5						
						3.4	0.6	88	28.5	28.8	8.0	8.0	30.3	30.2	94.3	94.0	6.2	6.1	16.4	16.0	7	6	81	83	<0.2	<0.2	1.5	1.4						
					Middle	3.4	0.6	92	29.0	28.8	8.0	8.0	30.0	30.2	93.6	94.0	6.1	6.1	16.0	16.0	6	6	83	83	<0.2	<0.2	1.4	1.4						
						5.8	0.5	109	29.0	28.9	8.0	8.0	30.1	30.2	93.9	94.1	6.1	6.2	21.6	21.6	34	34	87	87	<0.2	<0.2	1.3	1.3						
						5.8	0.5	112	28.8	28.9	8.0	8.0	30.2	30.2	94.3	94.1	6.2	6.2	22.1	22.1	34	34	87	87	<0.2	<0.2	1.0	1.0						
IM6	Cloudy	Calm	10:45	6.7	Surface	1.0	0.5	160	29.0	29.2	8.0	8.0	28.0	27.9	96.1	95.8	6.3	6.2	5.1	10.8	5	7	78	82										

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 06 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA		
IM9	Cloudy	Moderate	10:18	7.5	Surface	1.0	0.3	289	26.4	26.4	7.8	7.8	28.9	28.9	93.4	93.5	6.4	6.4	5.7	6.4	6	7	74	79	822107	808822	<0.2	<0.2	1.8	1.7				
						1.0	0.3	310	26.4	26.4	7.8	7.8	28.9	28.9	93.5	93.5	6.4	6.4	5.7	6.4	5	7	76	79	822107	808822	<0.2	<0.2	1.7	1.7				
					Middle	3.8	0.4	306	26.4	26.4	7.8	7.8	28.9	28.9	93.0	93.0	6.4	6.4	6.9	6.4	6	7	77	79	822107	808822	<0.2	<0.2	1.6	1.7				
						3.8	0.4	308	26.4	26.4	7.8	7.8	28.9	28.9	93.0	93.0	6.4	6.4	6.9	6.4	5	7	78	79	822107	808822	<0.2	<0.2	1.7	1.7				
					Bottom	6.5	0.3	310	26.3	26.3	7.7	7.7	28.9	28.9	92.5	92.6	6.3	6.4	11.3	6.4	10	6.4	11.3	6.4	10	7	83	79	822107	808822	<0.2	<0.2	1.6	1.6
						6.5	0.3	335	26.3	26.3	7.7	7.7	28.9	28.9	92.6	92.6	6.3	6.4	11.3	6.4	9	6.4	11.3	6.4	9	7	84	79	822107	808822	<0.2	<0.2	1.6	1.6
IM10	Cloudy	Moderate	10:10	7.4	Surface	1.0	0.6	290	26.4	26.4	7.8	7.8	29.2	29.2	95.8	95.8	6.5	6.5	6.6	6.5	9	9	70	77	822222	809854	<0.2	<0.2	1.3	1.4				
						1.0	0.6	312	26.4	26.4	7.8	7.8	29.2	29.2	95.7	95.8	6.5	6.5	6.7	6.5	10	6.5	10	9	73	77	822222	809854	<0.2	<0.2	1.3	1.4		
					Middle	3.7	0.6	292	26.2	26.2	7.8	7.8	29.3	29.3	93.8	93.8	6.4	6.4	10.1	6.4	8	6.4	8	9	74	77	822222	809854	<0.2	<0.2	1.4	1.4		
						3.7	0.6	310	26.2	26.2	7.8	7.8	29.3	29.3	93.8	93.8	6.4	6.4	10.1	6.4	9	6.4	9	9	76	77	822222	809854	<0.2	<0.2	1.4	1.4		
					Bottom	6.4	0.4	282	26.2	26.2	7.8	7.8	29.4	29.4	93.6	93.6	6.4	6.4	20.3	6.4	10	6.4	20.3	6.4	10	9	84	77	822222	809854	<0.2	<0.2	1.4	1.4
						6.4	0.5	308	26.2	26.2	7.8	7.8	29.4	29.4	93.6	93.6	6.4	6.4	20.4	6.4	8	6.4	20.4	6.4	8	9	85	77	822222	809854	<0.2	<0.2	1.4	1.4
IM11	Cloudy	Moderate	10:02	7.4	Surface	1.0	0.5	248	26.3	26.3	7.8	7.8	29.5	29.5	94.5	94.5	6.5	6.5	11.6	6.5	13	14	73	80	821484	810553	<0.2	<0.2	1.2	1.3				
						1.0	0.5	249	26.3	26.3	7.8	7.8	29.5	29.5	94.4	94.5	6.5	6.5	11.6	6.5	13	6.5	13	14	75	80	821484	810553	<0.2	<0.2	1.1	1.3		
					Middle	3.7	0.6	263	26.3	26.3	7.8	7.8	29.5	29.5	93.6	93.6	6.4	6.4	14.0	6.4	14	6.4	14	14	80	80	821484	810553	<0.2	<0.2	1.3	1.3		
						3.7	0.6	272	26.3	26.3	7.8	7.8	29.5	29.5	93.5	93.6	6.4	6.4	14.2	6.4	12	6.4	12	14	82	80	821484	810553	<0.2	<0.2	1.4	1.3		
					Bottom	6.4	0.5	250	26.2	26.2	7.8	7.8	29.5	29.5	92.9	93.0	6.4	6.4	20.5	6.4	16	6.4	20.5	6.4	16	14	85	80	821484	810553	<0.2	<0.2	1.3	1.4
						6.4	0.5	265	26.2	26.2	7.8	7.8	29.5	29.5	93.0	93.0	6.4	6.4	20.6	6.4	14	6.4	20.6	6.4	14	14	83	80	821484	810553	<0.2	<0.2	1.4	1.4
IM12	Cloudy	Moderate	09:55	8.3	Surface	1.0	0.7	289	26.4	26.4	7.8	7.8	29.3	29.3	94.4	94.4	6.4	6.4	6.7	6.4	7	8	73	80	821173	811516	<0.2	<0.2	1.6	1.5				
						1.0	0.8	302	26.4	26.4	7.8	7.8	29.3	29.3	94.4	94.4	6.4	6.4	6.8	6.4	7	6.4	7	8	75	80	821173	811516	<0.2	<0.2	1.6	1.5		
					Middle	4.2	0.7	272	26.4	26.4	7.8	7.8	29.5	29.5	93.6	93.6	6.4	6.4	9.5	6.4	10	6.4	10	8	78	80	821173	811516	<0.2	<0.2	1.6	1.4		
						4.2	0.8	279	26.4	26.4	7.8	7.8	29.5	29.5	93.5	93.6	6.4	6.4	9.7	6.4	8	6.4	8	8	77	80	821173	811516	<0.2	<0.2	1.4	1.4		
					Bottom	7.3	0.6	276	26.3	26.3	7.8	7.8	29.6	29.6	91.7	91.7	6.3	6.3	18.1	6.3	9	6.3	18.1	6.3	9	8	92	80	821173	811516	<0.2	<0.2	1.4	1.3
						7.3	0.6	301	26.3	26.3	7.8	7.8	29.6	29.6	91.7	91.7	6.3	6.3	18.1	6.3	8	6.3	18.1	6.3	8	8	87	80	821173	811516	<0.2	<0.2	1.3	1.3
SR2	Cloudy	Moderate	09:31	5.2	Surface	1.0	0.2	239	26.4	26.4	7.8	7.8	29.3	29.3	93.9	93.9	6.4	6.4	8.3	6.4	9	6.4	78	81	821458	814176	<0.2	<0.2	1.4	1.5				
						1.0	0.2	242	26.4	26.4	7.8	7.8	29.3	29.3	93.9	93.9	6.4	6.4	8.5	6.4	8	6.4	8	6.4	80	81	821458	814176	<0.2	<0.2	1.4	1.4		
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	4.2	0.2	121	26.3	26.3	7.8	7.8	29.5	29.5	92.9	93.0	6.4	6.4	14.2	6.4	8	6.4	8	6.4	8	6.4	82	81	821458	814176	<0.2	<0.2	1.6	1.5
						4.2	0.2	127	26.3	26.3	7.8	7.8	29.5	29.5	93.0	93.0	6.4	6.4	14.2	6.4	8	6.4	14.2	6.4	8	6.4	84	81	821458	814176	<0.2	<0.2	1.5	1.5
SR3	Cloudy	Moderate	10:33	9.4	Surface	1.0	0.4	215	26.5	26.5	7.7	7.7	27.6	27.6	91.6	91.6	6.3	6.3	3.0	6.3	2	6.3	-	-	822132	807551	-	-	-	-				
						1.0	0.4	220	26.5	26.5	7.7	7.7	27.6	27.6	91.6	91.6	6.3	6.3	3.1	6.3	3	6.3	3	6.3	-	-	822132	807551	-	-	-	-		
					Middle	4.7	0.3	250	26.4	26.4	7.7	7.7	27.8	27.8	90.3	90.3	6.2	6.2	4.0	6.2	3	6.2	3	6.2	3	6.2	-	-	822132	807551	-	-	-	-
						4.7	0.4	253	26.3	26.3	7.7	7.7	27.8	27.8	90.2	90.3	6.2	6.2	4.0	6.2	3	6.2	3	6.2	3	6.2	-	-	822132	807551	-	-	-	-
					Bottom	8.4	0.3	185	26.2	26.2	7.7	7.7	28.4	28.4	90.1	90.2	6.2	6.2	12.0	6.2	3	6.2	3	6.2	3	6.2	-	-	822132	807551	-	-	-	-
						8.4	0.3	200	26.2	26.2	7.7	7.7	28.4	28.4	90.2	90.2	6.2	6.2	12.0	6.2	3	6.2	3	6.2	3	6.2	-	-	822132	807551	-	-	-	-
SR4A	Cloudy	Calm	09:22	8.6	Surface	1.0	0.5	244	29.1	28.9	8.0	8.0	30.2	30.4	97.6	97.9	6.3	6.3	9.2	6.3	5	6.3	-	-	817177	807802	-	-	-	-				
						1.0	0.5	254	28.7	28.9	8.0	8.0	30.5	30.4	98.2	97.9	6.4	6.4	9.5	6.4	7	6.4	7	6.4	-	-	817177	807802	-	-	-	-		
					Middle	4.3	0.5	246	29.0	29.0	8.0	8.0	31.4	31.4	95.4	95.4	6.2	6.2	18.1	6.2	9	6.2	9	6.2	-	-	817177	807802	-	-	-	-		
						4.3	0.5	266	28.9	29.0	8.0	8.0	31.4	31.4	95.4	95.4	6.2	6.2	18.9	6.2	10	6.2	10	6.2	-	-	817177	807802	-	-	-	-		
					Bottom	7.6	0.4	243	29.0	29.0	8.0	8.0	31.6	31.6	94.8	94.9	6.1	6.1	23.4	6.1	23	6.1	23	6.1	-	-	817177	807802	-	-	-	-		
						7.6	0.4	260	29.0	29.0	8.0	8.0	31.6	31.6	94.9	94.9	6.1	6.1	22.5	6.1	22	6.1	22	6.1	-	-	817177	807802	-	-	-	-		
SR5A	Cloudy	Calm	09:05	4.6	Surface	1.0	0.3	308	29.1	29.2	8.0	8.0	29.3	29.3	91.6	91.6	6.0	6.0	8.5	6.0	11	6.0	-	-	816603	810686	-	-	-	-				
						1.0	0.3	310	29.2	29.2	8.0	8.0	29.3	29.3	91.6																			

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 06 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Calm	16:04	8.1	Surface	1.0	0.3	201	29.3	29.3	8.1	8.1	31.1	31.1	105.8	105.7	6.8	6.7	3.4	6.7	5	5	83	88	815622	804253	<0.2	<0.2	0.8	0.6
						1.0	0.4	213	29.3	8.1	8.1	31.1	31.1	105.6	105.7	6.8	6.7	3.5	6.7	6	5	83	88	<0.2	<0.2	0.7	0.6			
					Middle	4.1	0.4	191	29.0	28.8	8.1	8.1	31.7	31.9	102.0	101.9	6.6	6.4	4.8	5.5	4	5	86	88	<0.2	<0.2	0.6	0.6		
						4.1	0.4	203	28.6	28.7	8.1	8.1	32.0	31.9	101.8	101.9	6.6	6.4	5.3	6.4	4	5	88	94	<0.2	<0.2	0.6	0.5		
					Bottom	7.1	0.4	220	28.5	28.7	8.1	8.1	33.0	32.9	99.7	99.9	6.4	6.4	8.4	6.4	5	6	94	93	<0.2	<0.2	0.5	0.5		
						7.1	0.4	241	28.9	28.7	8.1	8.1	32.7	32.9	100.0	99.9	6.4	6.4	7.5	6.4	6	6	93	93	<0.2	<0.2	0.5	0.5		
C2	Cloudy	Moderate	14:16	11.9	Surface	1.0	0.3	181	26.6	26.6	7.7	7.7	27.9	27.9	90.2	90.2	6.2	6.2	2.1	6.2	3	3	79	85	825667	806947	<0.2	<0.2	1.9	1.8
						1.0	0.4	191	26.6	26.6	7.7	7.7	27.9	27.9	90.2	90.2	6.2	6.2	2.1	6.2	3	3	80	80	<0.2	<0.2	1.9	1.8		
					Middle	6.0	0.3	159	26.4	26.4	7.7	7.7	28.2	28.2	89.2	89.2	6.1	6.2	2.3	6.2	4	3	80	83	<0.2	<0.2	1.9	1.7		
						6.0	0.3	173	26.4	26.2	7.7	7.7	28.2	29.3	89.2	86.7	6.1	5.9	2.3	5.9	3	4	83	94	<0.2	<0.2	1.7	1.7		
					Bottom	10.9	0.2	190	26.2	26.2	7.7	7.7	29.3	29.3	86.7	86.7	5.9	5.9	14.0	5.9	4	3	94	92	<0.2	<0.2	1.7	1.9		
						10.9	0.2	197	26.2	26.2	7.7	7.7	29.3	29.3	86.7	86.7	5.9	5.9	14.2	5.9	3	3	92	92	<0.2	<0.2	1.7	1.9		
C3	Cloudy	Moderate	16:12	12.4	Surface	1.0	0.3	86	27.0	27.0	7.8	7.8	30.7	30.7	93.1	93.0	6.2	6.1	1.8	6.1	2	3	84	84	822090	817790	<0.2	<0.2	1.2	1.0
						1.0	0.4	89	27.0	27.0	7.8	7.8	30.7	30.7	92.8	93.0	6.2	6.0	1.8	6.0	4	3	83	85	<0.2	<0.2	1.1	1.0		
					Middle	6.2	0.3	109	26.2	26.2	7.8	7.8	32.0	32.0	86.7	86.7	5.9	5.9	2.4	6.0	3	3	84	83	<0.2	<0.2	1.0	1.0		
						6.2	0.3	114	26.2	26.1	7.8	7.8	32.0	32.2	86.7	88.0	5.9	6.0	2.5	6.0	4	3	85	83	<0.2	<0.2	1.0	0.8		
					Bottom	11.4	0.2	117	26.1	26.1	7.8	7.8	32.2	32.2	87.9	88.0	5.9	6.0	2.6	6.0	3	3	83	85	<0.2	<0.2	0.8	0.8		
						11.4	0.3	125	26.1	26.1	7.8	7.8	32.2	32.2	88.1	88.0	6.0	6.0	2.6	6.0	3	3	85	85	<0.2	<0.2	0.8	0.8		
IM1	Cloudy	Calm	15:30	7.1	Surface	1.0	0.3	186	29.4	29.4	7.9	7.9	27.7	27.7	96.6	96.7	6.3	6.3	3.5	6.3	4	5	77	85	818341	806456	<0.2	<0.2	1.6	1.6
						1.0	0.3	187	29.3	29.3	7.9	7.9	27.7	27.7	96.7	96.7	6.3	6.3	3.8	6.3	5	5	79	86	<0.2	<0.2	1.7	1.7		
					Middle	3.6	0.3	164	29.3	29.3	8.0	8.0	27.8	27.9	96.1	96.0	6.3	6.3	6.8	6.5	5	5	85	86	<0.2	<0.2	1.6	1.6		
						3.6	0.3	168	29.2	29.3	8.0	8.0	27.9	29.9	95.9	96.0	6.3	6.3	7.2	6.5	6	5	86	91	<0.2	<0.2	1.7	1.6		
					Bottom	6.1	0.3	180	28.9	29.0	8.0	8.0	30.4	30.4	95.8	96.0	6.2	6.3	8.7	6.3	6	6	91	92	<0.2	<0.2	1.6	1.6		
						6.1	0.3	193	29.0	29.0	8.0	8.0	30.4	30.4	96.2	96.0	6.3	6.3	8.8	6.3	4	6	92	92	<0.2	<0.2	1.6	1.6		
IM2	Cloudy	Calm	15:22	7.3	Surface	1.0	0.4	178	29.3	29.3	8.0	8.0	27.7	27.7	97.4	97.4	6.4	6.4	4.0	6.4	4	5	80	85	818871	806211	<0.2	<0.2	1.6	1.7
						1.0	0.4	190	29.3	29.3	8.0	8.0	27.7	27.7	97.4	97.4	6.4	6.4	4.2	6.4	4	5	78	87	<0.2	<0.2	1.7	1.8		
					Middle	3.7	0.3	155	29.2	29.2	8.0	8.0	28.8	28.8	96.1	96.1	6.3	6.3	6.4	6.4	5	5	85	87	<0.2	<0.2	1.7	1.8		
						3.7	0.4	169	29.1	29.2	8.0	8.0	28.8	30.3	96.0	96.1	6.3	6.2	6.7	6.2	4	5	87	90	<0.2	<0.2	1.8	1.6		
					Bottom	6.3	0.3	178	29.0	29.0	8.0	8.0	30.3	30.3	96.0	96.1	6.2	6.2	6.4	6.2	7	8	90	92	<0.2	<0.2	1.6	1.6		
						6.3	0.3	187	29.0	29.0	8.0	8.0	30.3	30.3	96.1	96.1	6.2	6.2	6.2	6.2	8	8	92	92	<0.2	<0.2	1.6	1.6		
IM3	Cloudy	Calm	15:10	7.0	Surface	1.0	0.3	173	29.3	29.3	7.9	7.9	27.8	27.8	97.1	97.1	6.4	6.4	3.4	6.4	4	5	77	84	819420	806008	<0.2	<0.2	1.5	1.6
						1.0	0.3	184	29.3	29.3	7.9	7.9	27.8	27.8	97.1	97.1	6.4	6.4	3.8	6.4	4	5	80	86	<0.2	<0.2	1.5	1.7		
					Middle	3.5	0.3	164	29.2	29.2	8.0	8.0	28.2	28.2	96.0	96.0	6.3	6.3	6.2	6.5	4	4	84	88	<0.2	<0.2	1.8	1.7		
						3.5	0.3	179	29.2	29.2	8.0	8.0	28.2	30.4	96.0	95.6	6.3	6.2	6.4	6.2	4	5	86	88	<0.2	<0.2	1.7	1.7		
					Bottom	6.0	0.3	169	29.0	29.0	8.0	8.0	30.4	30.4	95.5	95.6	6.2	6.2	9.6	6.2	7	5	88	90	<0.2	<0.2	1.7	1.6		
						6.0	0.3	171	28.9	29.0	8.0	8.0	30.4	30.4	95.6	95.6	6.2	6.2	9.5	6.2	5	5	90	90	<0.2	<0.2	1.7	1.6		
IM4	Cloudy	Calm	14:56	7.1	Surface	1.0	0.3	174	29.3	29.3	7.9	8.0	27.7	27.8	97.3	97.4	6.4	6.4	4.0	6.4	3	5	78	84	819581	805030	<0.2	<0.2	1.8	1.7
						1.0	0.4	183	29.3	29.3	8.0	8.0	27.8	27.8	97.4	97.4	6.4	6.4	4.3	6.4	5	5	79	86	<0.2	<0.2	1.6	1.7		
					Middle	3.6	0.3	168	29.2	29.2	8.0	8.0	28.8	28.8	96.4	96.2	6.3	6.3	7.5	7.4	4	5	84	87	<0.2	<0.2	1.6	1.8		
						3.6	0.3	183	29.2	29.2	8.0	8.0	28.7	30.6	95.9	96.4	6.3	6.3	7.8	7.4	6	5	86	87	<0.2	<0.2	1.7	1.8		
					Bottom	6.1	0.3	177	28.6	28.8	8.0	8.0	30.6	30.5	96.4	96.5	6.3	6.3	10.9	6.3	5	5	87	89	<0.2	<0.2	1.8	1.7		
						6.1	0.3	193	28.9	28.8	8.0	8.0	30.3	30.5	96.5	96.5	6.3	6.3	9.9	6.3	5	5	89	89	<0.2	<0.2	1.7	1.7		
IM5	Cloudy	Calm	14:34	6.3	Surface	1.0	0.4	150	29.4	29.2	8.0	8.0	27.7	27.8	97.2	97.5	6.4	6.4	4.5	6.4	3	3	80	85	820578	804938	<0.2	<0.2	1.8	1.8
						1.0	0.5	163	29.0	29.2	8.0	8.0	27.9	28.7	97.8	96.1	6.4	6.3	4.7	6.4	4	3	78	87	<0.2	<0.2	1.9	1.8		
					Middle	3.2	0.4	157	29.3	29.3	8.0	8.0	28.7	28.7	96.3	96.1	6.3	6.3	7.0	7.4	3	3	86	90	<0.2	<0.2	1.7	1.7		
						3.2	0.4	171	29.3	29.3	8.0	8.0	28.6	30.5	95.8	96.0	6.3	6.2	7.8	6.3	3	3	87	90	<0.2	<0.2	1.8	1.7		
					Bottom	5.3	0.3	162	29.0	29.0	8.0	8.0	30.5	30.5	95.7	96.0	6.2	6.3	10.9	6.2	3	3	90	90	<0.2	<0.2	1.7	1.7		
						5.3	0.4	167	29.0	29.0	8.0	8.0	30.4	30.5	96.3	96.3	6.3	6.3	9.5	6.3	3	3	90	90	<0.2	<0.2	1.7	1.7		
IM6	Cloudy	Calm	14:23	6.5	Surface	1.0	0.4	158	29.4	29.4	8.0	8.0	28.1	28.1	97.7	97.8	6.4	6.4	2.8	6.4	5	5	80	85	821048	805831	<0.2	<0.2	1.7	1.7
						1.0	0.4	173	29.4	29.4	8.0	8.0	28.1																	

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 06 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)									
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA						
IM9	Cloudy	Moderate	15:03	7.3	Surface	1.0	0.5	137	26.4	26.4	7.8	7.8	28.9	28.9	94.8	94.8	6.5	6.5	4.9	6.5	6	7	82	82	82	82	822089	808806	<0.2	<0.2	1.8	1.7						
						1.0	0.5	148	26.4	26.4	7.8	7.8	28.9	28.9	94.8	94.8	6.5	6.5	4.9	6.5	6	7	82	82	82	82					1.8	1.7						
					Middle	3.7	0.5	122	26.3	26.3	7.8	7.8	29.2	29.2	94.1	94.1	6.4	6.4	6.7	6.4	7.0	7	9	8	84	84					84	84	<0.2	<0.2	1.7	1.5		
						3.7	0.5	133	26.3	26.3	7.8	7.8	29.2	29.2	94.1	94.1	6.4	6.4	6.8	6.4	7.0	7	8	8	84	84					84	84	<0.2	<0.2	1.5	1.5		
					Bottom	6.3	0.4	92	26.2	26.2	7.8	7.8	29.7	29.7	93.5	93.5	6.4	6.4	9.4	6.4	6.4	6.4	6	9	6	8					85	85	85	85	<0.2	<0.2	1.5	1.6
						6.3	0.4	94	26.2	26.2	7.8	7.8	29.7	29.7	93.5	93.5	6.4	6.4	9.3	6.4	6.4	6.4	9	9	6	8					86	86	86	86	<0.2	<0.2	1.6	1.6
IM10	Cloudy	Moderate	15:10	7.4	Surface	1.0	0.6	106	26.5	26.5	7.8	7.8	29.9	29.9	95.1	95.1	6.5	6.4	6.1	6.4	7	7	77	76	77	76	822226	809848	<0.2	<0.2	1.4	1.4						
						1.0	0.6	109	26.5	26.5	7.8	7.8	29.9	29.9	95.0	95.0	6.5	6.4	6.1	6.4	7	7	76	76	76	76					<0.2	<0.2	1.3	1.3				
					Middle	3.7	0.6	102	26.3	26.3	7.8	7.8	30.0	30.0	92.8	92.9	6.3	6.3	8.7	6.3	9.6	9	8	8	79	79					79	79	<0.2	<0.2	1.4	1.4		
						3.7	0.7	109	26.3	26.3	7.8	7.8	30.0	30.0	93.0	92.9	6.3	6.3	9.0	6.3	9.6	9	8	8	82	82					82	82	<0.2	<0.2	1.3	1.3		
					Bottom	6.4	0.5	97	26.3	26.3	7.8	7.8	30.0	30.0	95.5	95.6	6.5	6.5	13.7	6.5	6.5	6.5	11	11	11	11					85	85	85	85	<0.2	<0.2	1.3	1.3
						6.4	0.5	100	26.3	26.3	7.8	7.8	30.0	30.0	95.7	95.6	6.5	6.5	14.0	6.5	6.5	6.5	11	11	11	11					83	83	83	83	<0.2	<0.2	1.3	1.6
IM11	Cloudy	Moderate	15:18	7.6	Surface	1.0	0.6	140	26.8	26.8	7.8	7.8	29.8	29.8	99.9	99.9	6.8	6.7	4.3	6.7	6	6	75	75	75	75	821510	810544	<0.2	<0.2	1.4	1.4						
						1.0	0.7	142	26.8	26.8	7.8	7.8	29.8	29.8	99.8	99.9	6.8	6.7	4.4	6.7	6	6	75	75	75	75					<0.2	<0.2	1.4	1.4				
					Middle	3.8	0.6	159	26.8	26.8	7.8	7.8	30.0	30.0	98.1	98.1	6.6	6.6	4.2	6.6	4.9	5	5	5	79	79					79	79	<0.2	<0.2	1.4	1.4		
						3.8	0.6	166	26.8	26.8	7.8	7.8	30.0	30.0	98.1	98.1	6.6	6.6	4.2	6.6	4.9	5	5	5	80	80					80	80	<0.2	<0.2	1.3	1.3		
					Bottom	6.6	0.6	139	26.3	26.3	7.8	7.8	30.2	30.2	95.5	95.6	6.5	6.5	6.2	6.5	6.5	6.5	5	5	5	5					85	85	85	85	<0.2	<0.2	1.4	1.3
						6.6	0.6	150	26.3	26.3	7.8	7.8	30.2	30.2	95.7	95.6	6.5	6.5	6.3	6.5	6.5	6.5	5	5	5	5					85	85	85	85	<0.2	<0.2	1.3	1.3
IM12	Cloudy	Moderate	15:26	8.2	Surface	1.0	0.7	110	26.5	26.5	7.8	7.8	30.0	30.0	93.7	93.7	6.4	6.4	6.2	6.4	7	7	70	73	70	73	821157	811515	<0.2	<0.2	1.7	1.4						
						1.0	0.8	113	26.4	26.4	7.8	7.8	30.0	30.0	93.6	93.7	6.4	6.4	6.3	6.4	7	7	73	73	73	73					<0.2	<0.2	1.5	1.5				
					Middle	4.1	0.7	107	26.3	26.3	7.8	7.8	30.1	30.1	91.9	91.9	6.3	6.3	8.2	6.3	8.3	6	7	6	6	75					75	75	75	<0.2	<0.2	1.4	1.2	
						4.1	0.7	108	26.3	26.3	7.8	7.8	30.1	30.1	91.9	91.9	6.3	6.3	8.5	6.3	8.3	6	7	6	6	75					75	75	75	<0.2	<0.2	1.2	1.2	
					Bottom	7.2	0.5	98	26.3	26.3	7.8	7.8	30.1	30.1	92.2	92.3	6.3	6.3	10.2	6.3	6.3	6.3	8	8	8	8					81	81	81	81	<0.2	<0.2	1.3	1.2
						7.2	0.5	101	26.3	26.3	7.8	7.8	30.1	30.1	92.3	92.3	6.3	6.3	10.4	6.3	6.3	6.3	7	7	7	7					82	82	82	82	<0.2	<0.2	1.2	1.2
SR2	Cloudy	Moderate	15:48	4.6	Surface	1.0	0.5	89	26.5	26.5	7.8	7.8	30.2	30.2	95.4	95.4	6.5	6.5	3.9	6.5	5	6	77	80	77	80	821481	814180	<0.2	<0.2	1.2	1.4						
						1.0	0.6	92	26.5	26.5	7.8	7.8	30.2	30.2	95.3	95.4	6.5	6.5	4.0	6.5	4	6	4	4	80	80					80	80	<0.2	<0.2	1.4	1.4		
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	4	4	-					-	-	-	<0.2	<0.2	-	-	
						2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	4	4	-					-	-	-	<0.2	<0.2	-	-	
					Bottom	3.6	0.3	111	26.3	26.3	7.8	7.8	30.5	30.5	91.5	91.6	6.2	6.2	8.5	6.2	6.2	6.2	4	4	4	4					84	84	84	84	<0.2	<0.2	1.2	1.4
						3.6	0.4	119	26.3	26.3	7.8	7.8	30.5	30.5	91.6	91.6	6.2	6.2	8.5	6.2	6.2	6.2	4	4	4	4					85	85	85	85	<0.2	<0.2	1.4	1.4
SR3	Cloudy	Moderate	14:49	9.3	Surface	1.0	0.4	156	26.6	26.6	7.8	7.8	28.1	28.1	96.0	96.0	6.6	6.6	2.5	6.6	4	7	-	-	-	-	822142	807578	-	-	-	-						
						1.0	0.4	169	26.6	26.6	7.7	7.8	28.1	28.1	96.0	96.0	6.6	6.6	2.6	6.6	5	7	-	-	-	-					<0.2	<0.2	-	-				
					Middle	4.7	0.4	167	26.4	26.4	7.8	7.8	29.1	29.1	96.3	96.3	6.6	6.6	6.3	6.6	9.7	4	7	4	4	-					-	-	-	<0.2	<0.2	-	-	
						4.7	0.4	170	26.4	26.4	7.8	7.8	29.1	29.1	96.3	96.3	6.6	6.6	6.4	6.6	9.7	4	7	5	4	-					-	-	-	<0.2	<0.2	-	-	
					Bottom	8.3	0.3	130	26.2	26.2	7.8	7.8	30.9	30.9	95.3	95.5	6.5	6.5	19.8	6.5	6.5	6.5	11	11	11	11					-	-	-	-	<0.2	<0.2	-	-
						8.3	0.3	139	26.2	26.2	7.8	7.8	30.9	30.9	95.6	95.5	6.5	6.5	20.6	6.5	6.5	6.5	13	13	13	13					-	-	-	-	<0.2	<0.2	-	-
SR4A	Cloudy	Calm	16:34	8.0	Surface	1.0	0.4	101	29.6	29.6	8.0	8.0	30.0	30.1	106.6	106.4	6.9	6.8	5.5	6.8	6	9	-	-	-	-	817201	807808	-	-	-	-						
						1.0	0.4	103	29.5	29.6	8.0	8.0	30.1	30.1	106.2	106.4	6.9	6.8	5.5	6.8	6	9	6	9	-	-					-	-	<0.2	<0.2	-	-		
					Middle	4.0	0.4	98	29.3	29.3	8.0	8.0	30.1	30.1	103.3	103.1	6.7	6.7	7.3	6.7	8.4	11	11	11	11	-					-	-	-	<0.2	<0.2	-	-	
						4.0	0.4	100	29.3	29.3	8.0	8.0	30.1	30.1	102.8	103.1	6.7	6.7	8.2	6.7	8.4	11	11	11	11	-					-	-	-	<0.2	<0.2	-	-	
					Bottom	7.0	0.4	107	29.3	29.3	8.0	8.0	29.9	29.9	99.1	98.7	6.4	6.4	11.3	6.4	6.4	6.4	13	13	13	13					-	-	-	-	<0.2	<0.2	-	-
						7.0	0.4	111	29.3	29.3	8.0	8.0	29.9	29.9	98.2	98.7	6.4	6.4	12.4	6.4	6.4	6.4	13	13	13	13					-	-	-	-	<0.2	<0.2	-	-
SR5A	Cloudy	Calm	16:44	4.1	Surface	1.0	0.1	128	28.8	28.8	8.0	8.0	29.4	29.4	97.2	97.5	6.4	6.4	3.6	6.4	4	4	-	-	-	-	816584	810712	-	-	-	-						
						1.0	0.1	133	28.8	28.8	8.0	8.0	29.3	29.4	97.8	97.5	6.4																					

**Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring**

Water Quality Monitoring Results on 08 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Calm	12:00	8.4	Surface	1.0	0.3	102	28.9	28.7	8.0	8.0	30.4	30.6	100.2	100.5	6.5	6.6	2.8	6	6	77	84	84	815600	804255	<0.2	<0.2	1.0	0.9		
						1.0	0.4	110	28.5	8.0	8.0	30.7	30.6	100.8	99.9	6.6	6.6	2.9	5	5	79	82	84	84	815600	804255	<0.2	<0.2	1.0	0.8		
						4.2	0.6	62	28.5	8.0	8.0	30.7	30.6	100.2	99.9	6.6	6.5	3.4	6	6	82	84	84	84	815600	804255	<0.2	<0.2	1.0	0.8		
					Middle	4.2	0.6	66	29.0	8.0	8.0	30.4	30.6	99.5	99.9	6.5	6.5	3.2	7	7	84	84	84	84	815600	804255	<0.2	<0.2	1.0	0.8		
						7.4	0.3	98	29.0	8.0	8.0	30.8	30.9	99.1	99.3	6.4	6.5	4.4	8	8	90	92	92	92	815600	804255	<0.2	<0.2	1.0	0.9		
						7.4	0.4	100	28.8	8.0	8.0	30.9	30.9	99.5	99.3	6.5	6.5	4.5	6	6	92	92	92	92	815600	804255	<0.2	<0.2	1.0	0.9		
C2	Cloudy	Rough	13:28	12.1	Surface	1.0	0.4	160	26.3	26.3	7.8	7.8	27.3	27.3	91.1	91.1	6.3	6.2	2.4	6	6	82	88	88	825698	806949	<0.2	<0.2	1.8	1.4		
						1.0	0.4	162	26.3	7.8	7.8	27.3	30.6	91.0	89.5	6.3	6.1	2.3	4	4	83	91	90	90	825698	806949	<0.2	<0.2	1.9	1.3		
						6.1	0.2	188	26.4	7.8	7.8	30.6	30.6	89.5	89.5	6.1	6.1	4.2	5	5	91	90	90	90	825698	806949	<0.2	<0.2	1.3	1.1		
					Middle	6.1	0.3	201	26.4	7.8	7.8	30.6	30.6	89.5	89.5	6.1	6.1	4.2	6	6	90	92	92	92	825698	806949	<0.2	<0.2	1.1	1.1		
						11.1	0.5	302	26.3	7.8	7.8	30.8	30.8	90.3	90.3	6.1	6.1	9.6	10	10	92	92	92	92	825698	806949	<0.2	<0.2	1.1	1.1		
						11.1	0.5	303	26.3	7.8	7.8	30.8	30.8	90.3	90.3	6.1	6.1	9.6	8	8	92	92	92	92	825698	806949	<0.2	<0.2	1.4	1.4		
C3	Cloudy	Calm	11:44	12.0	Surface	1.0	0.4	209	26.2	26.2	7.8	7.8	31.4	31.4	92.4	92.4	6.3	6.3	2.2	6	6	89	90	90	822093	817810	<0.2	<0.2	1.2	1.2		
						1.0	0.4	210	26.2	7.8	7.8	31.4	31.4	92.4	91.7	6.3	6.2	2.2	5	5	87	91	90	90	822093	817810	<0.2	<0.2	1.0	1.2		
						6.0	0.4	234	26.2	7.7	7.7	31.4	31.4	91.7	91.7	6.2	6.2	2.3	4	4	91	90	90	90	822093	817810	<0.2	<0.2	1.1	1.2		
					Middle	6.0	0.4	251	26.2	7.7	7.7	31.4	31.4	91.7	91.7	6.2	6.2	2.2	5	5	90	90	90	90	822093	817810	<0.2	<0.2	1.2	1.2		
						11.0	0.2	244	26.2	7.7	7.7	31.8	31.8	91.3	91.4	6.2	6.2	2.5	6	6	93	92	92	92	822093	817810	<0.2	<0.2	1.1	1.1		
						11.0	0.3	246	26.2	7.7	7.7	31.8	31.8	91.4	91.4	6.2	6.2	2.5	5	5	92	92	92	92	822093	817810	<0.2	<0.2	1.3	1.3		
IM1	Fine	Calm	12:26	7.3	Surface	1.0	0.6	144	29.0	28.8	8.1	8.1	30.8	31.0	98.5	98.8	6.4	6.4	4.7	8	8	75	82	82	818360	806464	<0.2	<0.2	1.1	1.1		
						1.0	0.6	156	28.5	8.1	8.1	31.1	30.9	99.1	98.2	6.5	6.4	4.8	6	6	77	80	80	80	818360	806464	<0.2	<0.2	1.1	1.1		
						3.7	0.5	143	29.0	8.1	8.1	30.8	30.9	98.2	98.2	6.4	6.4	5.9	7	7	80	80	80	80	818360	806464	<0.2	<0.2	1.2	1.1		
					Middle	3.7	0.5	144	29.0	8.1	8.1	30.9	30.9	98.2	98.2	6.4	6.4	6.1	6	6	80	80	80	80	818360	806464	<0.2	<0.2	1.1	1.1		
						6.3	0.4	133	29.0	8.1	8.1	31.2	31.2	98.2	98.2	6.4	6.4	7.8	7	7	88	88	88	88	818360	806464	<0.2	<0.2	1.0	1.0		
						6.3	0.4	141	28.9	8.1	8.1	31.2	31.2	98.2	98.2	6.4	6.4	7.6	7	7	90	90	90	90	818360	806464	<0.2	<0.2	1.0	1.0		
IM2	Fine	Rough	12:33	7.8	Surface	1.0	0.4	244	29.0	29.0	8.0	8.0	30.0	30.1	98.4	98.4	6.4	6.3	3.5	6	6	73	80	80	818854	806211	<0.2	<0.2	1.1	1.1		
						1.0	0.4	254	29.0	8.0	8.0	30.1	30.6	98.3	96.5	6.4	6.3	3.7	5	5	74	77	77	77	818854	806211	<0.2	<0.2	1.1	1.1		
						3.9	0.5	156	28.5	8.0	8.0	30.7	30.6	96.8	96.5	6.3	6.2	6.4	6	6	80	80	80	80	818854	806211	<0.2	<0.2	1.0	1.1		
					Middle	3.9	0.5	167	29.0	8.0	8.0	30.4	30.6	96.1	96.5	6.2	6.2	6.3	6	6	80	80	80	80	818854	806211	<0.2	<0.2	1.1	1.1		
						6.8	0.4	116	28.9	8.0	8.0	32.1	32.1	97.9	97.9	6.3	6.3	7.9	6	6	87	87	87	87	818854	806211	<0.2	<0.2	1.0	1.0		
						6.8	0.4	120	29.0	8.0	8.0	32.0	32.1	97.9	97.9	6.3	6.3	7.7	7	7	90	90	90	90	818854	806211	<0.2	<0.2	1.1	1.1		
IM3	Fine	Rough	12:41	7.3	Surface	1.0	0.5	258	28.8	29.0	8.0	8.0	29.0	28.9	97.2	96.9	6.4	6.3	2.5	4	4	77	83	83	819408	806031	<0.2	<0.2	1.7	1.4		
						1.0	0.5	270	29.2	8.0	8.0	28.8	28.9	96.6	96.9	6.3	6.3	2.3	2	2	78	80	80	80	819408	806031	<0.2	<0.2	1.4	1.3		
						3.7	0.5	155	29.1	8.0	8.0	30.2	30.3	96.8	96.9	6.3	6.3	3.2	2	2	80	83	83	83	819408	806031	<0.2	<0.2	1.3	1.3		
					Middle	3.7	0.5	157	28.9	8.0	8.0	30.4	30.3	97.0	96.9	6.3	6.3	3.2	2	2	83	83	83	83	819408	806031	<0.2	<0.2	1.3	1.3		
						6.3	0.5	145	29.1	8.0	8.0	30.4	30.4	98.0	98.1	6.4	6.4	2.8	6	6	88	88	88	88	819408	806031	<0.2	<0.2	1.2	1.2		
						6.3	0.5	150	29.0	8.0	8.0	30.4	30.4	98.1	98.1	6.4	6.4	2.8	7	7	90	90	90	90	819408	806031	<0.2	<0.2	1.2	1.2		
IM4	Fine	Rough	12:51	7.1	Surface	1.0	0.4	246	29.1	29.0	8.0	8.0	28.9	29.0	95.2	95.5	6.2	6.2	3.5	4	4	76	82	82	819574	805058	<0.2	<0.2	1.4	1.4		
						1.0	0.4	252	28.8	8.0	8.0	29.1	29.0	95.7	93.3	6.3	6.1	3.6	4	4	78	82	82	82	819574	805058	<0.2	<0.2	1.4	1.3		
						3.6	0.4	158	29.0	8.0	8.0	29.5	29.5	93.5	93.3	6.1	6.1	6.9	6	6	82	82	82	82	819574	805058	<0.2	<0.2	1.3	1.6		
					Middle	3.6	0.4	160	29.2	8.0	8.0	29.5	29.5	93.1	93.3	6.1	6.1	7.1	8	8	82	82	82	82	819574	805058	<0.2	<0.2	1.6	1.6		
						6.1	0.5	118	29.1	8.0	8.0	30.1	30.2	93.8	94.0	6.1	6.1	7.3	7	7	85	85	85	85	819574	805058	<0.2	<0.2	1.2	1.2		
						6.1	0.5	125	28.9	8.0	8.0	30.2	30.2	94.1	94.0	6.1	6.1	7.4	6	6	88	88	88	88	819574	805058	<0.2	<0.2	1.2	1.2		
IM5	Fine	Rough	13:00	7.0	Surface	1.0	0.5	278	29.2	29.0	8.0	8.0	28.7	28.8	94.5	94.8	6.2	6.2	3.5	2	2	72	81	81	820560	804905	<0.2	<0.2	1.4	1.5		
						1.0	0.5	299	28.8	8.0	8.0	28.9	29.0	95.0	93.8	6.3	6.2	3.6	2	2	75	79	79	79	820560	804905	<0.2	<0.2	1.3	1.5		
						3.5	0.5	288	28.7	8.0	8.0	29.1	29.0	94.1	93.8	6.2	6.1	4.7	4	4	81	81	81	81	820560	804905	<0.2	<0.2	1.5	1.5		
					Middle	3.5	0.5	289	29.2	8.0	8.0	28.8	29.0	93.4	93.8	6.1	6.1	4.6	4	4	81	81	81	81	820560	804905	<0.2	<0.2	1.5	1.		

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 08 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Moderate	12:47	7.5	Surface	1.0	0.3	198	26.4	26.4	7.8	7.8	29.7	29.8	95.8	95.8	6.5	6.5	2.4	2.4	2	3	83	83	88	822086	808799	<0.2	<0.2	1.4	1.5		
						1.0	0.4	198	26.4	26.4	7.8	7.8	29.8	29.8	95.8	95.8	6.5	6.5	2.4	2.4	3	3	83	83	88	822086	808799	<0.2	<0.2	1.2	1.4		
					Middle	3.8	0.3	224	26.4	26.4	7.8	7.8	30.4	30.4	95.1	95.1	6.5	6.5	3.2	3.4	4	4	89	90	88	822086	808799	<0.2	<0.2	1.1	1.4		
						3.8	0.4	231	26.4	26.4	7.8	7.8	30.4	30.4	95.0	95.1	6.5	6.5	3.3	3.4	2	2	90	90	88	822086	808799	<0.2	<0.2	1.1	1.4		
					Bottom	6.5	0.3	243	26.4	26.4	7.8	7.8	31.0	31.0	95.0	95.0	6.4	6.4	4.5	6.4	5	4	93	92	88	822086	808799	<0.2	<0.2	1.4	1.6		
						6.5	0.3	245	26.4	26.4	7.8	7.8	31.0	31.0	95.0	95.0	6.4	6.4	4.5	6.4	4	4	92	92	88	822086	808799	<0.2	<0.2	1.4	1.6		
IM10	Cloudy	Moderate	12:39	7.3	Surface	1.0	0.4	217	26.5	26.5	7.8	7.8	30.6	30.6	93.9	93.9	6.4	6.4	3.5	3.5	3	3	85	83	89	822245	809853	<0.2	<0.2	1.2	1.1		
						1.0	0.4	229	26.5	26.5	7.8	7.8	30.6	30.6	93.9	93.9	6.4	6.4	3.6	6.4	3	4	83	89	89	822245	809853	<0.2	<0.2	1.1	1.3		
					Middle	3.7	0.4	247	26.4	26.4	7.8	7.8	30.6	30.6	93.1	93.1	6.3	6.3	6.6	8.3	4	2	89	90	89	822245	809853	<0.2	<0.2	1.0	1.2		
						3.7	0.4	257	26.4	26.4	7.8	7.8	30.6	30.6	93.1	93.1	6.3	6.3	6.6	8.3	2	6	90	92	89	822245	809853	<0.2	<0.2	1.0	1.2		
					Bottom	6.3	0.4	279	26.3	26.3	7.8	7.8	31.6	31.6	92.1	92.1	6.2	6.2	14.8	6.2	6	7	92	92	89	822245	809853	<0.2	<0.2	1.1	1.2		
						6.3	0.5	288	26.3	26.3	7.8	7.8	31.6	31.6	92.1	92.1	6.2	6.2	14.8	6.2	7	7	92	92	89	822245	809853	<0.2	<0.2	1.1	1.2		
IM11	Cloudy	Moderate	12:32	7.4	Surface	1.0	0.4	257	26.4	26.4	7.8	7.8	30.5	30.5	98.5	98.5	6.7	6.7	2.5	2.5	6	4	83	85	89	821499	810550	<0.2	<0.2	1.3	1.2		
						1.0	0.4	266	26.4	26.4	7.8	7.8	30.5	30.5	98.5	98.5	6.7	6.7	2.5	6.7	4	6	85	90	89	821499	810550	<0.2	<0.2	1.2	1.5		
					Middle	3.7	0.4	267	26.4	26.4	7.8	7.8	30.5	30.5	98.5	98.5	6.7	6.7	2.3	2.5	6	8	90	90	89	821499	810550	<0.2	<0.2	1.2	1.5		
						3.7	0.4	273	26.4	26.4	7.8	7.8	30.5	30.5	98.5	98.5	6.7	6.7	2.3	2.5	8	7	90	92	89	821499	810550	<0.2	<0.2	1.1	1.1		
					Bottom	6.4	0.3	226	26.4	26.4	7.7	7.7	30.7	30.7	100.0	100.1	6.8	6.8	2.6	6.8	7	7	92	92	89	821499	810550	<0.2	<0.2	1.0	1.1		
						6.4	0.3	227	26.4	26.4	7.7	7.7	30.7	30.7	100.1	100.1	6.8	6.8	2.6	6.8	7	7	92	92	89	821499	810550	<0.2	<0.2	1.1	1.1		
IM12	Cloudy	Moderate	12:25	8.1	Surface	1.0	0.4	273	26.4	26.4	7.8	7.8	30.3	30.3	98.8	98.8	6.7	6.7	3.8	3.8	7	5	85	85	89	821145	811508	<0.2	<0.2	1.2	1.2		
						1.0	0.5	294	26.4	26.4	7.8	7.8	30.3	30.3	98.8	98.8	6.7	6.7	3.9	6.7	5	7	85	90	89	821145	811508	<0.2	<0.2	1.2	1.2		
					Middle	4.1	0.4	263	26.3	26.3	7.8	7.8	30.3	30.3	97.2	97.2	6.6	6.6	8.9	9.0	7	7	90	89	89	821145	811508	<0.2	<0.2	1.5	1.2		
						4.1	0.4	266	26.3	26.3	7.8	7.8	30.3	30.3	97.2	97.2	6.6	6.6	8.9	9.0	7	7	89	92	89	821145	811508	<0.2	<0.2	1.2	1.2		
					Bottom	7.1	0.3	192	26.3	26.3	7.8	7.8	31.6	31.6	98.1	98.2	6.6	6.6	14.4	6.6	16	14	92	93	89	821145	811508	<0.2	<0.2	1.2	1.2		
						7.1	0.3	198	26.3	26.3	7.8	7.8	31.6	31.6	98.2	98.2	6.6	6.6	14.3	6.6	14	14	93	93	89	821145	811508	<0.2	<0.2	1.2	1.2		
SR2	Cloudy	Moderate	12:05	4.7	Surface	1.0	0.2	237	26.4	26.4	7.8	7.8	30.3	30.3	100.2	100.2	6.8	6.8	2.4	2.4	10	8	87	85	88	821457	814153	<0.2	<0.2	1.2	1.1		
						1.0	0.2	247	26.4	26.4	7.8	7.8	30.3	30.3	100.1	100.2	6.8	6.8	2.4	6.8	8	16	85	91	88	821457	814153	<0.2	<0.2	1.1	1.3		
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	3.7	0.2	174	26.4	26.4	7.8	7.8	30.4	30.4	99.6	99.6	6.8	6.8	3.9	6.8	22	24	91	90	88	821457	814153	<0.2	<0.2	1.1	1.3		
						3.7	0.2	187	26.4	26.4	7.8	7.8	30.4	30.4	99.6	99.6	6.8	6.8	3.9	6.8	24	24	90	90	88	821457	814153	<0.2	<0.2	1.1	1.3		
SR3	Cloudy	Rough	13:00	7.6	Surface	1.0	0.4	206	26.2	26.2	7.8	7.8	28.7	28.7	94.3	94.3	6.5	6.5	2.1	2.2	4	6	-	-	-	822153	807554	-	-	-	-		
						1.0	0.5	206	26.2	26.2	7.8	7.8	28.7	28.7	94.3	94.3	6.5	6.5	2.2	6.5	6	4	-	-	-	-	-	-	-	-	-	-	
					Middle	3.8	0.4	200	26.3	26.3	7.8	7.8	29.3	29.3	94.6	94.7	6.5	6.5	2.7	6.5	4	6	-	-	-	-	-	-	-	-	-	-	-
						3.8	0.4	206	26.3	26.3	7.8	7.8	29.3	29.3	94.7	94.7	6.5	6.5	2.7	6.5	6	8	-	-	-	-	-	-	-	-	-	-	
					Bottom	6.6	0.3	178	26.4	26.4	7.7	7.7	30.1	30.1	96.3	96.3	6.6	6.6	2.9	6.6	8	8	-	-	-	-	-	-	-	-	-	-	
						6.6	0.3	180	26.4	26.4	7.7	7.7	30.1	30.1	96.3	96.3	6.6	6.6	2.9	6.6	8	8	-	-	-	-	-	-	-	-	-		
SR4A	Fine	Calm	11:39	8.8	Surface	1.0	0.3	159	29.0	29.0	8.0	8.0	30.8	30.8	94.4	94.4	6.1	6.1	11.0	11.2	12	11	-	-	-	817196	807791	-	-	-	-		
						1.0	0.3	173	29.0	29.0	8.0	8.0	30.8	30.8	94.4	94.4	6.1	6.1	11.2	6.1	11	14	-	-	-	-	-	-	-				
					Middle	4.4	0.3	179	29.0	29.0	8.0	8.0	30.9	30.9	94.5	94.5	6.1	6.1	12.3	6.1	10	10	-	-	-	-	-	-	-	-			
						4.4	0.3	188	29.0	29.0	8.0	8.0	30.9	30.9	94.5	94.5	6.1	6.1	12.1	6.1	19	19	-	-	-	-	-	-	-				
					Bottom	7.8	0.3	219	29.0	29.0	8.0	8.0	31.1	31.1	95.3	95.3	6.2	6.2	12.4	6.2	21	21	-	-	-	-	-	-	-				
						7.8	0.3	233	29.0	29.0	8.0	8.0	31.0	31.1	95.3	95.3	6.2	6.2	12.2	6.2	21	21	-	-	-	-	-	-					
SR5A	Fine	Calm	11:23	4.3	Surface	1.0	0.1	278	29.0	29.0	8.0	8.0	30.1	30.2	93.4	93.4	6.1	6.1	6.5	6.5	11	9	-	-	-	816600	810697	-	-	-	-		
						1.0	0.2	299	29.0	29.0	8.0	8.0	30.2	30.2	93.4	93.4	6.1	6.1	6.6	6.1	9	11	-	-	-	-	-						
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Bottom	3.3	0.1	278	29.2	29.0	8.0	8.0	30.1	30.2	93.4	93.7	6.1	6.1	7.2	6.1	13	12	-	-	-	-	-	-	-				

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 08 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA		
C1	Fine	Rough	17:47	8.2	Surface	1.0	0.5	228	28.4	28.7	8.1	8.1	30.7	30.6	102.6	102.3	6.7	6.6	4.4	6.6	9	12	80	87	815619	804265	<0.2	<0.2	1.0	0.9				
						1.0	0.5	229	28.9	8.1	8.1	30.5	30.6	101.9	101.0	6.6	6.5	4.3	7.2	10	8	81	87	80	87	815619	804265	<0.2	<0.2	1.1	0.9			
					Middle	4.1	0.6	207	28.9	28.8	8.1	8.1	31.4	31.2	101.0	101.0	6.5	6.6	6.0	6.1	6.0	6.1	8	9	86	87	815619	804265	<0.2	<0.2	1.0	0.9		
						4.1	0.6	215	28.7	28.8	8.1	8.1	31.0	31.2	101.0	101.0	6.6	6.5	6.1	6.1	6.0	6.1	8	9	86	87	815619	804265	<0.2	<0.2	1.0	0.9		
					Bottom	7.2	0.4	207	28.7	28.6	8.1	8.1	32.4	32.5	99.7	100.4	6.4	6.5	11.3	10.9	6.4	6.5	11.3	10.9	18	20	93	94	815619	804265	<0.2	<0.2	0.5	0.5
						7.2	0.4	207	28.5	28.6	8.1	8.1	32.6	32.5	101.0	100.4	6.5	6.5	10.9	10.9	6.5	6.5	10.9	10.9	20	20	94	94	815619	804265	<0.2	<0.2	0.5	0.5
C2	Cloudy	Rough	16:32	12.0	Surface	1.0	1.2	167	26.3	26.3	7.8	7.8	27.7	27.7	92.4	92.4	6.4	6.3	2.6	6.3	8	10	81	88	825701	806936	<0.2	<0.2	1.1	1.2				
						1.0	1.2	176	26.3	26.3	7.8	7.8	27.7	27.7	92.3	92.4	6.4	6.3	2.6	6.3	8	10	82	89	825701	806936	<0.2	<0.2	0.9	1.2				
					Middle	6.0	0.7	172	26.4	26.4	7.8	7.8	29.8	29.8	90.3	90.3	6.2	6.2	5.3	5.4	6.2	6.2	7	9	89	90	825701	806936	<0.2	<0.2	1.7	1.6		
						6.0	0.8	183	26.4	26.4	7.8	7.8	29.8	29.8	90.2	90.3	6.2	6.2	5.4	5.4	6.2	6.2	7	9	89	90	825701	806936	<0.2	<0.2	1.6	1.6		
					Bottom	11.0	0.3	148	26.3	26.3	7.8	7.8	30.0	30.0	89.1	89.1	6.1	6.1	18.3	18.2	6.1	6.1	18.3	18.2	12	14	93	92	825701	806936	<0.2	<0.2	1.0	1.0
						11.0	0.3	158	26.3	26.3	7.8	7.8	30.0	30.0	89.1	89.1	6.1	6.1	18.2	18.2	6.1	6.1	18.2	18.2	14	14	92	92	825701	806936	<0.2	<0.2	1.0	1.0
C3	Cloudy	Moderate	18:14	12.1	Surface	1.0	0.3	199	26.3	26.3	7.8	7.8	31.0	31.0	89.6	89.5	6.1	5.9	2.1	5.9	4	6	87	88	822125	817789	<0.2	<0.2	0.9	0.8				
						1.0	0.3	208	26.3	26.3	7.8	7.8	31.0	31.0	89.3	89.5	6.1	5.9	2.2	5.9	6	6	88	88	822125	817789	<0.2	<0.2	1.0	0.8				
					Middle	6.1	0.2	116	26.1	26.1	7.8	7.8	32.3	32.3	84.5	84.5	5.7	5.7	3.6	3.6	5.7	5.7	5	7	91	90	822125	817789	<0.2	<0.2	0.7	0.7		
						6.1	0.2	123	26.1	26.1	7.8	7.8	32.3	32.3	84.5	84.5	5.7	5.7	3.6	3.6	5.7	5.7	7	7	90	90	822125	817789	<0.2	<0.2	0.7	0.7		
					Bottom	11.1	0.3	91	26.1	26.1	7.8	7.8	32.3	32.3	86.1	86.1	5.8	5.8	4.7	4.7	5.8	5.8	4.7	4.7	6	6	93	93	822125	817789	<0.2	<0.2	0.6	0.6
						11.1	0.3	98	26.1	26.1	7.8	7.8	32.3	32.3	86.1	86.1	5.8	5.8	4.7	4.7	5.8	5.8	4.7	4.7	6	6	93	93	822125	817789	<0.2	<0.2	0.6	0.6
IM1	Fine	Rough	17:19	7.0	Surface	1.0	0.5	188	29.0	29.0	8.1	8.1	30.7	30.7	105.0	105.1	6.8	6.8	3.6	6.8	7	9	76	77	818363	806453	<0.2	<0.2	1.0	0.9				
						1.0	0.6	204	29.0	29.0	8.1	8.1	30.7	30.7	105.1	105.1	6.8	6.8	3.7	6.8	9	9	77	77	818363	806453	<0.2	<0.2	1.0	0.9				
					Middle	3.5	0.5	191	29.0	29.0	8.1	8.1	30.7	30.8	103.5	103.5	6.7	6.7	5.5	5.6	6.7	6.7	14	16	81	83	818363	806453	<0.2	<0.2	0.8	0.8		
						3.5	0.6	191	28.9	29.0	8.1	8.1	30.8	30.8	103.5	103.5	6.7	6.7	5.6	5.6	6.7	6.7	16	16	83	83	818363	806453	<0.2	<0.2	0.8	0.8		
					Bottom	6.0	0.4	191	28.8	28.8	8.1	8.1	31.0	31.0	99.9	99.9	6.5	6.5	18.1	17.8	6.5	6.5	18.1	17.8	22	24	87	92	818363	806453	<0.2	<0.2	0.8	0.8
						6.0	0.5	194	28.8	28.8	8.1	8.1	30.9	31.0	99.9	99.9	6.5	6.5	17.8	17.8	6.5	6.5	17.8	17.8	24	24	92	92	818363	806453	<0.2	<0.2	0.8	0.8
IM2	Fine	Rough	17:12	7.3	Surface	1.0	0.6	207	29.0	29.0	8.1	8.1	30.6	30.6	103.8	103.8	6.7	6.6	3.1	6.6	5	6	75	76	818850	806181	<0.2	<0.2	0.9	0.9				
						1.0	0.6	220	29.0	29.0	8.1	8.1	30.6	30.6	103.8	103.8	6.7	6.6	3.2	6.6	6	6	76	76	818850	806181	<0.2	<0.2	0.9	0.9				
					Middle	3.7	0.5	192	29.0	29.0	8.1	8.1	30.6	30.6	100.9	100.9	6.5	6.5	4.2	4.3	6.5	6.5	10	8	79	80	818850	806181	<0.2	<0.2	0.8	0.9		
						3.7	0.6	205	29.0	29.0	8.1	8.1	30.6	30.6	100.8	100.8	6.5	6.5	4.3	4.3	6.5	6.5	8	8	80	80	818850	806181	<0.2	<0.2	0.9	0.9		
					Bottom	6.3	0.4	189	28.8	28.9	8.0	8.0	31.3	31.3	101.5	101.5	6.6	6.6	6.0	5.9	6.6	6.6	6.0	5.9	9	10	90	91	818850	806181	<0.2	<0.2	0.8	1.0
						6.3	0.4	207	28.9	28.9	8.0	8.0	31.2	31.3	101.5	101.5	6.6	6.6	5.9	5.9	6.6	6.6	10	10	91	91	91	91	818850	806181	<0.2	<0.2	1.0	1.0
IM3	Fine	Rough	17:05	6.9	Surface	1.0	0.6	223	28.9	29.0	8.1	8.1	30.6	30.6	102.2	102.1	6.6	6.6	3.0	6.6	7	7	79	79	819398	806032	<0.2	<0.2	0.9	0.9				
						1.0	0.6	243	29.1	29.1	8.1	8.1	30.5	30.5	101.9	101.9	6.6	6.6	3.0	6.6	7	7	79	79	819398	806032	<0.2	<0.2	0.9	0.9				
					Middle	3.5	0.5	196	29.1	29.1	8.1	8.1	30.5	30.5	100.3	100.3	6.5	6.5	3.1	3.1	6.5	6.5	7	7	83	86	819398	806032	<0.2	<0.2	1.0	0.8		
						3.5	0.5	203	29.1	29.1	8.1	8.1	30.5	30.5	100.3	100.3	6.5	6.5	3.1	3.1	6.5	6.5	7	7	86	86	819398	806032	<0.2	<0.2	0.8	0.8		
					Bottom	5.9	0.4	195	29.1	29.1	8.0	8.0	30.7	30.7	98.3	98.4	6.4	6.4	4.7	4.7	6.4	6.4	4.7	4.7	6	6	88	90	819398	806032	<0.2	<0.2	0.9	0.9
						5.9	0.4	201	29.1	29.1	8.0	8.0	30.7	30.7	98.4	98.4	6.4	6.4	4.7	4.7	6.4	6.4	4.7	4.7	6	6	88	90	819398	806032	<0.2	<0.2	0.9	0.9
IM4	Fine	Rough	16:56	7.3	Surface	1.0	0.6	203	29.3	29.3	8.0	8.0	29.4	29.4	99.3	99.3	6.5	6.4	2.8	6.4	5	6	78	80	819550	805021	<0.2	<0.2	1.1	1.0				
						1.0	0.6	220	29.3	29.3	8.0	8.0	29.4	29.4	99.3	99.3	6.5	6.4	2.9	6.4	6	6	80	80	819550	805021	<0.2	<0.2	1.1	1.0				
					Middle	3.7	0.6	182	29.2	29.1	8.0	8.0	30.0	30.1	95.9	96.0	6.2	6.2	6.8	7.1	6.2	6.2	8	7	85	85	819550	805021	<0.2	<0.2	1.2	1.1		
						3.7	0.7	193	29.0	29.1	8.0	8.0	30.1	30.1	96.1	96.0	6.3	6.3	7.1	7.1	6.3	6.3	7	7	85	85	819550	805021	<0.2	<0.2	1.1	1.1		
					Bottom	6.3	0.5	191	28.5	28.8	8.0	8.0	31.7	31.6	95.2	94.9	6.2	6.2	15.7	15.0	6.2	6.2	15.7	15.0	9	11	88	90	819550	805021	<0.2	<0.2	0.8	0.9
						6.3	0.5	204	29.0	28.8	8.0	8.0	31.4	31.6	94.6	94.9	6.1	6.2	15.0	15.0	6.1	6.2	15.0	15.0	11	11	90	90	819550	805021	<0.2	<0.2	0.9	

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 08 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Cloudy	Rough	17:11	7.0	Surface	1.0	0.5	172	26.4	26.4	7.9	7.9	30.2	30.2	104.3	104.3	7.1	7.0	3.5	7.0	3	6	85	89	822111	808811	<0.2	<0.2	1.0	0.9		
						1.0	0.5	182	26.4	26.4	7.9	7.9	30.2	30.2	104.3	104.3	7.1	7.0	3.5	7.0	4	6	84	89	822111	808811	<0.2	<0.2	0.9	0.9		
					Middle	3.5	0.4	156	26.4	26.4	7.9	7.9	30.2	30.2	102.1	102.1	6.9	6.9	4.0	11.5	6	6	90	89	822111	808811	<0.2	<0.2	0.9	0.9		
						3.5	0.4	169	26.4	26.4	7.9	7.9	30.2	30.2	102.1	102.1	6.9	6.9	4.0	11.5	7	6	89	89	822111	808811	<0.2	<0.2	0.9	0.9		
					Bottom	6.0	0.3	146	26.4	26.4	7.8	7.8	30.3	30.3	100.9	100.9	6.9	6.9	27.4	6.9	8	6	93	89	822111	808811	<0.2	<0.2	0.8	0.8		
						6.0	0.4	148	26.4	26.4	7.8	7.8	30.3	30.3	100.9	100.9	6.9	6.9	26.8	6.9	9	6	93	89	822111	808811	<0.2	<0.2	0.8	0.8		
IM10	Cloudy	Rough	17:18	7.1	Surface	1.0	0.5	136	26.4	26.4	7.9	7.9	30.6	30.6	99.8	99.8	6.8	6.8	5.3	7.9	9	9	86	89	822227	809828	<0.2	<0.2	0.9	1.0		
						1.0	0.6	137	26.4	26.4	7.9	7.9	30.6	30.6	99.7	99.8	6.8	6.8	5.4	7.9	7	9	83	89	822227	809828	<0.2	<0.2	0.9	1.0		
					Middle	3.6	0.4	110	26.3	26.3	7.8	7.8	30.8	30.8	98.2	98.2	6.7	6.7	7.5	7.9	11	9	89	89	822227	809828	<0.2	<0.2	1.0	1.0		
						3.6	0.5	117	26.3	26.3	7.8	7.8	30.8	30.8	98.2	98.2	6.7	6.7	7.4	7.9	9	9	90	89	822227	809828	<0.2	<0.2	1.0	1.0		
					Bottom	6.1	0.3	114	26.3	26.3	7.8	7.8	31.0	31.0	97.7	97.7	6.6	6.6	11.0	6.6	10	6	92	89	822227	809828	<0.2	<0.2	0.9	1.0		
						6.1	0.3	117	26.3	26.3	7.8	7.8	31.0	31.0	97.7	97.7	6.6	6.6	11.0	6.6	10	6	91	89	822227	809828	<0.2	<0.2	0.9	1.0		
IM11	Cloudy	Rough	17:25	7.5	Surface	1.0	0.5	114	26.3	26.3	7.8	7.8	30.8	30.8	97.2	97.2	6.6	6.6	7.3	9.9	9	12	85	89	821514	810541	<0.2	<0.2	0.7	0.9		
						1.0	0.6	115	26.3	26.3	7.8	7.8	30.8	30.8	97.1	97.2	6.6	6.6	7.3	9.9	10	12	86	89	821514	810541	<0.2	<0.2	0.8	0.9		
					Middle	3.7	0.5	103	26.3	26.3	7.8	7.8	30.9	30.9	95.6	95.6	6.5	6.5	8.7	9.9	10	12	90	89	821514	810541	<0.2	<0.2	1.0	0.9		
						3.7	0.5	110	26.3	26.3	7.8	7.8	30.9	30.9	95.6	95.6	6.5	6.5	8.9	9.9	11	12	89	89	821514	810541	<0.2	<0.2	1.0	0.9		
					Bottom	6.5	0.4	91	26.3	26.3	7.8	7.8	31.1	31.1	96.8	96.8	6.6	6.6	13.4	6.6	15	6	92	89	821514	810541	<0.2	<0.2	0.9	1.0		
						6.5	0.4	99	26.3	26.3	7.8	7.8	31.1	31.1	96.8	96.8	6.6	6.6	13.7	6.6	14	6	92	89	821514	810541	<0.2	<0.2	1.0	1.0		
IM12	Cloudy	Rough	17:32	7.8	Surface	1.0	0.5	100	26.4	26.4	7.8	7.8	30.9	30.9	96.1	96.1	6.5	6.5	6.6	10.2	10	12	83	89	821176	811519	<0.2	<0.2	1.0	0.9		
						1.0	0.5	106	26.4	26.4	7.8	7.8	30.9	30.9	96.0	96.1	6.5	6.5	6.7	10.2	10	12	86	89	821176	811519	<0.2	<0.2	0.9	0.9		
					Middle	3.9	0.5	112	26.3	26.3	7.8	7.8	31.2	31.2	94.6	94.6	6.4	6.4	10.0	6.6	10	12	91	89	821176	811519	<0.2	<0.2	0.9	0.9		
						3.9	0.6	117	26.3	26.3	7.8	7.8	31.2	31.2	94.6	94.6	6.4	6.4	10.1	6.6	9	12	89	89	821176	811519	<0.2	<0.2	0.9	0.9		
					Bottom	6.8	0.4	135	26.3	26.3	7.8	7.8	31.3	31.3	97.4	97.5	6.6	6.6	13.4	6.6	16	6	93	89	821176	811519	<0.2	<0.2	0.8	0.8		
						6.8	0.4	140	26.3	26.3	7.8	7.8	31.3	31.3	97.5	97.5	6.6	6.6	14.2	6.6	14	6	92	89	821176	811519	<0.2	<0.2	0.8	0.8		
SR2	Cloudy	Moderate	17:52	5.0	Surface	1.0	0.3	76	26.4	26.4	7.8	7.8	31.1	31.1	93.4	93.4	6.3	6.3	6.9	13.3	10	11	85	88	821470	814181	<0.2	<0.2	0.9	1.0		
						1.0	0.3	79	26.4	26.4	7.8	7.8	31.1	31.1	93.3	93.4	6.3	6.3	7.0	13.3	8	11	85	88	821470	814181	<0.2	<0.2	1.0	1.0		
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.3	11	-	88	821470	814181	<0.2	<0.2	-	-
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.3	11	-	88	821470	814181	<0.2	<0.2	-	-
					Bottom	4.0	0.2	77	26.2	26.2	7.7	7.7	31.5	31.5	95.3	95.3	6.5	6.5	19.6	6.5	13	6	91	88	821470	814181	<0.2	<0.2	1.0	1.0		
						4.0	0.2	82	26.2	26.2	7.7	7.7	31.5	31.5	95.3	95.3	6.5	6.5	19.6	6.5	12	6	90	88	821470	814181	<0.2	<0.2	1.0	1.0		
SR3	Cloudy	Rough	16:59	9.1	Surface	1.0	0.8	179	26.4	26.4	7.8	7.8	28.4	28.4	98.2	98.2	6.7	6.7	2.5	5.5	4	9	-	-	822157	807570	-	-	-	-		
						1.0	0.8	188	26.4	26.4	7.8	7.8	28.4	28.4	98.2	98.2	6.7	6.7	2.5	5.5	5	9	-	9	-	-	822157	807570	-	-	-	-
					Middle	4.6	0.5	184	26.5	26.5	7.8	7.8	28.7	28.7	97.7	97.7	6.7	6.7	3.5	5.5	9	9	-	9	-	-	822157	807570	-	-	-	-
						4.6	0.6	189	26.5	26.5	7.8	7.8	28.7	28.7	97.7	97.7	6.7	6.7	3.6	5.5	8	9	-	9	-	-	822157	807570	-	-	-	-
					Bottom	8.1	0.3	193	26.4	26.4	7.7	7.7	29.6	29.6	97.4	97.4	6.6	6.6	10.4	6.6	13	6	-	9	-	-	822157	807570	-	-	-	-
						8.1	0.3	203	26.4	26.4	7.7	7.7	29.6	29.6	97.4	97.4	6.6	6.6	10.4	6.6	12	6	-	9	-	-	822157	807570	-	-	-	-
SR4A	Fine	Calm	18:08	8.3	Surface	1.0	0.3	136	29.0	29.0	8.0	8.0	30.7	30.7	97.4	97.4	6.3	6.3	6.1	7.4	10	11	-	-	817206	807824	-	-	-	-		
						1.0	0.3	139	29.0	29.0	8.0	8.0	30.7	30.7	97.4	97.4	6.3	6.3	6.2	7.4	8	11	-	11	-	-	817206	807824	-	-	-	-
					Middle	4.2	0.3	114	29.0	29.0	8.0	8.0	30.7	30.7	97.6	97.6	6.3	6.3	7.3	6.6	12	11	-	11	-	-	817206	807824	-	-	-	-
						4.2	0.3	116	29.0	29.0	8.0	8.0	30.7	30.7	97.6	97.6	6.3	6.3	7.4	6.6	12	11	-	11	-	-	817206	807824	-	-	-	-
					Bottom	7.3	0.3	97	28.9	28.9	8.0	8.0	30.8	30.9	99.4	99.5	6.4	6.5	8.6	6.5	12	6	-	11	-	-	817206	807824	-	-	-	-
						7.3	0.3	103	28.9	28.9	8.0	8.0	30.9	30.9	99.5	99.5	6.5	6.5	8.6	6.5	14	6	-	11	-	-	817206	807824	-	-	-	-
SR5A	Fine	Calm	18:25	4.0	Surface	1.0	0.1	184	29.3	29.3	8.0	8.0	29.9	30.0	99.8	99.9	6.5	6.5	6.0	6.0	8	8	-	-	816582	810689	-	-	-	-		
						1.0	0.1	200	29.2	29.2	8.0	8.0	30.0	30.0	99.9	99.9	6.5	6.5	6.1	6.0	7	8	-	8	-	-	816582	810689	-	-	-	-
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.0	8	-	-	816582	810689	-	-	-	-
						2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.0	8	-	-	816582	810689	-	-	-	-
					Bottom	3.0	0.2	243	29.2	29																						

**Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring**

Water Quality Monitoring Results on 11 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Calm	15:46	7.8	Surface	1.0	0.6	95	27.6	27.6	8.2	8.2	32.4	32.4	110.5	110.5	7.3	7.3	2.6	2.6	8	8	69	69	815607	804229	<0.2	<0.2	0.4	0.4		
						1.0	0.6	104	27.6	27.6	8.2	8.2	32.3	32.4	110.4	110.4	7.3	7.3	2.4	2.4	8	8	68	68			<0.2	<0.2	0.4	0.4		
						3.9	0.7	82	27.6	27.6	8.2	8.2	32.3	32.3	109.0	109.0	7.2	7.2	2.7	2.7	10	10	75	75			<0.2	<0.2	0.5	0.5		
					Middle	3.9	0.7	85	27.6	27.6	8.2	8.2	32.3	32.3	109.0	109.0	7.2	7.2	2.8	2.8	11	11	77	77					<0.2	<0.2	0.4	0.4
						6.8	0.8	74	27.7	27.7	8.2	8.2	32.3	32.3	108.7	108.7	7.1	7.1	2.6	2.6	8	8	87	87					<0.2	<0.2	0.4	0.4
						6.8	0.8	74	27.6	27.7	8.2	8.2	32.3	32.3	108.9	108.8	7.2	7.2	2.7	2.7	8	8	84	84					<0.2	<0.2	0.4	0.4
C2	Cloudy	Moderate	14:44	11.9	Surface	1.0	0.5	217	25.3	25.3	7.9	7.9	29.8	29.8	100.0	100.0	6.9	6.9	0.9	0.9	7	7	81	81	825685	806961	<0.2	<0.2	1.0	1.0		
						1.0	0.6	225	25.3	25.3	7.9	7.9	29.8	29.8	100.0	100.0	6.9	6.9	0.9	0.9	6	6	85	85			<0.2	<0.2	1.2	1.2		
						6.0	0.4	140	25.4	25.4	7.9	7.9	30.3	30.3	98.9	98.9	6.8	6.8	2.6	2.6	7	7	90	90			<0.2	<0.2	0.9	0.9		
					Middle	6.0	0.5	142	25.4	25.4	7.9	7.9	30.3	30.3	98.8	98.8	6.8	6.8	2.7	2.7	8	8	91	91					<0.2	<0.2	0.8	0.8
						10.9	0.4	201	25.6	25.6	7.9	7.9	30.7	30.7	97.5	97.5	6.7	6.7	8.0	8.0	6	6	92	92					<0.2	<0.2	0.7	0.7
						10.9	0.4	220	25.6	25.6	7.9	7.9	30.7	30.7	97.5	97.5	6.7	6.7	8.0	8.0	6	6	92	92					<0.2	<0.2	0.6	0.6
C3	Cloudy	Moderate	16:28	11.8	Surface	1.0	0.5	289	25.4	25.4	7.9	7.9	32.4	32.4	101.5	101.4	6.9	6.8	0.6	0.6	6	6	88	88	822097	817817	<0.2	<0.2	0.5	0.5		
						1.0	0.6	309	25.4	25.4	7.9	7.9	32.4	32.4	101.2	101.4	6.9	6.9	0.6	0.6	5	5	86	86			<0.2	<0.2	0.6	0.6		
						5.9	0.6	262	25.5	25.5	7.9	7.9	32.7	32.7	97.0	97.1	6.6	6.6	0.9	0.9	8	8	90	90			<0.2	<0.2	0.3	0.3		
					Middle	5.9	0.6	263	25.5	25.5	7.9	7.9	32.7	32.7	97.1	97.1	6.6	6.6	1.0	1.0	8	8	91	91					<0.2	<0.2	0.4	0.4
						10.8	0.7	261	25.5	25.5	7.9	7.9	32.9	33.0	98.3	98.3	6.7	6.7	1.6	1.6	10	10	93	93					<0.2	<0.2	0.4	0.4
						10.8	0.7	283	25.5	25.5	7.9	7.9	33.0	33.0	98.3	98.3	6.7	6.7	1.6	1.6	8	8	92	92					<0.2	<0.2	0.4	0.4
IM1	Fine	Calm	15:24	6.7	Surface	1.0	0.4	88	27.8	27.8	8.1	8.1	32.4	32.4	98.4	98.4	6.5	6.4	4.4	4.4	6	6	70	70	818340	806458	<0.2	<0.2	0.3	0.3		
						1.0	0.5	89	27.7	27.8	8.1	8.1	32.4	32.4	98.3	98.3	6.4	6.4	4.5	4.5	8	8	71	71			<0.2	<0.2	0.4	0.4		
						3.4	0.3	132	27.8	27.8	8.1	8.1	32.4	32.4	96.7	96.7	6.3	6.3	5.6	5.6	8	8	76	76			<0.2	<0.2	0.3	0.3		
					Middle	3.4	0.4	134	27.7	27.7	8.1	8.1	32.4	32.4	96.6	96.6	6.3	6.3	5.8	5.8	6	6	78	78					<0.2	<0.2	0.4	0.4
						5.7	0.3	192	27.7	27.7	8.1	8.1	32.5	32.5	96.9	96.9	6.4	6.4	8.0	8.0	11	11	85	85					<0.2	<0.2	0.4	0.4
						5.7	0.3	209	27.7	27.7	8.1	8.1	32.4	32.5	96.9	96.9	6.4	6.4	7.4	7.4	12	12	85	85					<0.2	<0.2	0.5	0.5
IM2	Fine	Calm	15:18	7.9	Surface	1.0	0.5	86	27.7	27.7	8.2	8.2	31.8	31.8	114.6	114.5	7.5	7.5	3.2	3.2	5	5	66	66	818853	806197	<0.2	<0.2	0.5	0.5		
						1.0	0.5	88	27.7	27.7	8.2	8.2	31.8	31.8	114.4	114.4	7.5	7.5	3.2	3.2	5	5	68	68			<0.2	<0.2	0.5	0.5		
						4.0	0.6	81	27.8	27.8	8.2	8.2	31.8	31.8	112.8	112.8	7.4	7.4	3.7	3.7	6	6	73	73			<0.2	<0.2	0.4	0.4		
					Middle	4.0	0.6	85	27.8	27.8	8.2	8.2	31.8	31.8	112.7	112.7	7.4	7.4	3.9	3.9	7	7	75	75					<0.2	<0.2	0.4	0.4
						6.9	0.4	136	27.7	27.7	8.2	8.2	31.9	31.9	112.5	112.5	7.4	7.4	8.5	8.5	7	7	84	84					<0.2	<0.2	0.4	0.4
						6.9	0.5	137	27.7	27.7	8.2	8.2	31.9	31.9	112.5	112.5	7.4	7.4	8.5	8.5	7	7	85	85					<0.2	<0.2	0.5	0.5
IM3	Fine	Calm	15:09	7.4	Surface	1.0	0.5	89	27.9	27.9	8.2	8.2	31.8	31.8	108.9	108.9	7.2	7.2	4.1	4.1	7	7	70	70	819413	806018	<0.2	<0.2	0.4	0.4		
						1.0	0.5	95	27.9	27.9	8.2	8.2	31.8	31.8	108.8	108.8	7.1	7.1	4.2	4.2	8	8	70	70			<0.2	<0.2	0.5	0.5		
						3.7	0.4	110	27.8	27.8	8.2	8.2	31.8	31.8	108.3	108.3	7.1	7.1	4.3	4.3	8	8	75	75			<0.2	<0.2	0.4	0.4		
					Middle	3.7	0.5	114	27.5	27.7	8.2	8.2	32.0	31.9	108.8	108.6	7.2	7.2	4.4	4.4	8	8	76	76					<0.2	<0.2	0.5	0.5
						6.4	0.5	135	27.4	27.4	8.2	8.2	32.1	31.9	110.3	109.3	7.3	7.3	5.0	5.0	7	7	84	84					<0.2	<0.2	0.5	0.5
						6.4	0.5	140	27.8	27.6	8.2	8.2	31.8	32.0	109.8	110.1	7.2	7.2	4.8	4.8	7	7	84	84					<0.2	<0.2	0.5	0.5
IM4	Fine	Calm	15:01	7.2	Surface	1.0	0.4	121	27.7	27.8	8.2	8.2	31.8	31.8	113.9	113.9	7.5	7.5	4.2	4.2	9	9	70	70	819564	805032	<0.2	<0.2	0.5	0.5		
						1.0	0.4	128	27.8	27.8	8.2	8.2	31.7	31.8	113.8	113.9	7.5	7.5	4.2	4.2	9	9	71	71			<0.2	<0.2	0.6	0.6		
						3.6	0.4	116	27.8	27.8	8.2	8.2	31.7	31.8	112.7	112.8	7.4	7.4	5.1	5.1	8	8	79	79			<0.2	<0.2	0.4	0.4		
					Middle	3.6	0.4	124	27.7	27.7	8.2	8.2	31.8	31.8	112.9	112.9	7.4	7.4	5.3	5.3	9	9	81	81					<0.2	<0.2	0.4	0.4
						6.2	0.4	162	27.8	27.8	8.2	8.2	31.6	31.6	112.0	112.0	7.4	7.4	6.8	6.8	10	10	85	85					<0.2	<0.2	0.3	0.3
						6.2	0.4	162	27.8	27.8	8.2	8.2	31.6	31.6	112.0	112.0	7.4	7.4	7.0	7.0	9	9	86	86					<0.2	<0.2	0.4	0.4
IM5	Fine	Calm	14:54	6.3	Surface	1.0	0.4	81	27.9	27.9	8.2	8.2	31.6	31.6	108.5	108.5	7.1	7.1	11.7	11.7	12	12	68	68	820565	804908	<0.2	<0.2	0.4	0.4		
						1.0	0.4	87	27.9	27.9	8.2	8.2	31.6	31.6	108.4	108.4	7.1	7.1	11.9	11.9	13	13	70	70			<0.2	<0.2	0.5	0.5		
						3.2	0.4	83	27.5	27.5	8.2	8.2	31.9	31.8	108.9	108.6	7.2	7.2	12.9	12.9	12	12	77	77			<0.2	<0.2	0.4	0.4		
					Middle	3.2	0.4	90	27.9	27.9	8.2	8.2	31.6	31.8	108.3	108.6	7.1	7.1	12.9	12.9	13	13	78	78					<0.2	<0.2	0.4	0.4
						5.3	0.2	148	27.9	27.9	8.2	8.2	31.6	31.7	108.7	109.0																

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 11 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA					
IM9	Cloudy	Moderate	15:20	7.1	Surface	1.0	0.5	295	25.4	25.4	8.0	8.0	31.9	31.9	109.5	109.5	7.5	7.5	1.6	7.5	10	9	85	84	89	822103	808817	<0.2	<0.2	0.5	0.5						
						1.0	0.5	310	25.4	8.0	8.0	31.9	31.9	109.5	109.5	7.5	7.5	1.7	7.5	9	9	84	84	89	822103	808817	<0.2	<0.2	0.5	0.5							
					Middle	3.6	0.5	261	25.4	25.4	7.9	7.9	31.9	31.9	109.4	109.4	7.5	7.5	0.9	7.5	1.4	7.5	10	8	90	90	89	822103	808817	<0.2	<0.2	0.4	0.4				
						3.6	0.5	270	25.4	25.4	7.9	7.9	31.9	31.9	109.4	109.4	7.5	7.5	0.9	7.5	1.4	7.5	10	8	90	90	89	822103	808817	<0.2	<0.2	0.4	0.4				
					Bottom	6.1	0.5	165	25.4	25.4	7.9	7.9	32.0	32.0	108.9	108.9	7.4	7.4	1.6	7.4	7.4	7.4	1.6	7.4	10	9	92	92	89	822103	808817	<0.2	<0.2	0.5	0.5		
						6.1	0.5	172	25.4	25.4	7.9	7.9	32.0	32.0	108.8	108.8	7.4	7.4	1.6	7.4	7.4	7.4	1.6	7.4	9	6	92	92	89	822103	808817	<0.2	<0.2	0.5	0.5		
IM10	Cloudy	Moderate	15:27	7.2	Surface	1.0	0.8	298	25.5	25.5	8.0	8.0	32.1	32.1	111.5	111.5	7.6	7.6	1.6	7.6	5	7	83	84	89	822250	809838	<0.2	<0.2	0.4	0.5						
						1.0	0.8	299	25.5	25.5	8.0	8.0	32.1	32.1	111.5	111.5	7.6	7.6	1.5	7.6	7.6	7.6	7	7	84	84	89	822250	809838	<0.2	<0.2	0.5	0.5				
					Middle	3.6	0.5	291	25.4	25.4	7.9	7.9	32.2	32.2	109.8	109.8	7.5	7.5	2.2	7.5	3.2	7.5	7	6	90	91	89	822250	809838	<0.2	<0.2	0.5	0.5				
						3.6	0.6	313	25.4	25.4	7.9	7.9	32.2	32.2	109.8	109.8	7.5	7.5	2.2	7.5	3.2	7.5	7	6	90	91	89	822250	809838	<0.2	<0.2	0.5	0.5				
					Bottom	6.2	0.4	209	25.2	25.2	7.9	7.9	32.2	32.2	108.2	108.2	7.4	7.4	5.9	7.4	7.4	7.4	5.9	7.4	6	6	93	94	89	822250	809838	<0.2	<0.2	0.4	0.4		
						6.2	0.5	218	25.2	25.2	7.9	7.9	32.2	32.2	108.2	108.2	7.4	7.4	5.9	7.4	7.4	7.4	5.9	7.4	6	6	93	94	89	822250	809838	<0.2	<0.2	0.4	0.4		
IM11	Cloudy	Moderate	15:33	7.9	Surface	1.0	0.5	283	25.2	25.2	8.0	8.0	32.2	32.2	113.2	113.2	7.8	7.8	1.3	7.8	8	8	84	83	89	821513	810526	<0.2	<0.2	0.4	0.4						
						1.0	0.6	310	25.2	25.2	8.0	8.0	32.2	32.2	113.1	113.1	7.8	7.8	1.3	7.8	8	8	83	83	89	821513	810526	<0.2	<0.2	0.4	0.4						
					Middle	4.0	0.8	285	25.2	25.2	8.0	8.0	32.3	32.3	108.6	108.3	7.4	7.4	2.3	7.4	2.6	7.4	7	8	90	89	89	821513	810526	<0.2	<0.2	0.6	0.6				
						4.0	0.8	296	25.2	25.2	8.0	8.0	32.3	32.3	107.9	108.3	7.4	7.4	2.6	7.4	2.6	7.4	7	8	89	89	89	821513	810526	<0.2	<0.2	0.6	0.6				
					Bottom	6.9	0.6	284	25.2	25.2	7.9	7.9	32.5	32.5	107.3	107.3	7.4	7.4	4.0	7.4	7.4	7.4	4.0	7.4	10	8	94	92	89	821513	810526	<0.2	<0.2	0.4	0.5		
						6.9	0.7	289	25.2	25.2	7.9	7.9	32.5	32.5	107.3	107.3	7.4	7.4	4.0	7.4	7.4	7.4	4.0	7.4	8	8	92	92	89	821513	810526	<0.2	<0.2	0.5	0.5		
IM12	Cloudy	Moderate	15:44	8.5	Surface	1.0	0.5	287	25.2	25.2	8.0	8.0	32.4	32.4	113.9	113.9	7.8	7.8	1.7	7.8	7	7	83	84	89	821170	811534	<0.2	<0.2	0.6	0.6						
						1.0	0.5	296	25.2	25.2	8.0	8.0	32.4	32.4	113.8	113.9	7.8	7.8	1.7	7.8	7.8	7.8	7	7	84	84	89	821170	811534	<0.2	<0.2	0.6	0.6				
					Middle	4.3	0.8	284	25.2	25.2	8.0	8.0	32.5	32.5	108.4	108.0	7.4	7.4	4.0	7.4	4.7	7.4	8	9	89	90	89	821170	811534	<0.2	<0.2	0.5	0.5				
						4.3	0.8	312	25.2	25.2	8.0	8.0	32.5	32.5	107.6	108.0	7.4	7.4	4.4	7.4	4.7	7.4	8	9	90	89	89	821170	811534	<0.2	<0.2	0.5	0.5				
					Bottom	7.5	0.9	265	25.2	25.2	7.9	7.9	32.8	32.8	108.2	108.4	7.4	7.4	8.2	7.4	7.4	7.4	8.2	7.4	12	11	92	93	89	821170	811534	<0.2	<0.2	0.4	0.4		
						7.5	0.9	276	25.2	25.2	7.9	7.9	32.7	32.7	108.5	108.4	7.4	7.4	8.2	7.4	7.4	7.4	8.2	7.4	11	11	93	93	89	821170	811534	<0.2	<0.2	0.4	0.4		
SR2	Cloudy	Moderate	16:02	4.4	Surface	1.0	0.2	187	25.6	25.6	7.9	7.9	32.6	32.6	100.5	100.5	6.8	6.8	4.2	6.8	6	6	85	87	89	821470	814147	<0.2	<0.2	0.4	0.5						
						1.0	0.2	196	25.6	25.6	7.9	7.9	32.6	32.6	100.5	100.5	6.8	6.8	4.2	6.8	6.8	6.8	6	6	87	87	89	821470	814147	<0.2	<0.2	0.5	0.5				
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89	821470	814147	<0.2	<0.2	-	-		
						2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89	821470	814147	<0.2	<0.2	-	-	
					Bottom	3.4	0.2	195	25.6	25.6	7.8	7.8	32.7	32.7	100.4	100.4	6.8	6.8	12.9	6.8	6.8	6.8	12.8	6.8	7	8	91	92	89	821470	814147	<0.2	<0.2	0.4	0.5		
						3.4	0.2	198	25.6	25.6	7.8	7.8	32.7	32.7	100.4	100.4	6.8	6.8	12.8	6.8	6.8	6.8	12.8	6.8	8	8	92	92	89	821470	814147	<0.2	<0.2	0.5	0.5		
SR3	Cloudy	Moderate	15:09	8.6	Surface	1.0	0.5	80	25.4	25.4	7.9	7.9	31.0	31.0	110.0	110.0	7.6	7.6	0.4	7.6	7	8	-	-	-	-	89	822136	807558	-	-	-	-				
						1.0	0.6	81	25.4	25.4	7.9	7.9	31.0	31.0	110.0	110.0	7.6	7.6	0.4	7.6	7.6	7.6	7	8	-	-	-	-	89	822136	807558	-	-	-	-		
					Middle	4.3	0.5	114	25.4	25.4	7.9	7.9	31.1	31.1	109.4	109.4	7.5	7.5	0.4	7.5	0.8	7.5	8	9	-	-	-	-	89	822136	807558	-	-	-	-		
						4.3	0.5	124	25.4	25.4	7.9	7.9	31.0	31.1	109.4	109.4	7.5	7.5	0.4	7.5	0.8	7.5	8	9	-	-	-	-	89	822136	807558	-	-	-	-		
					Bottom	7.6	0.4	109	25.4	25.4	7.9	7.9	31.4	31.4	108.1	108.1	7.4	7.4	1.4	7.4	7.4	7.4	1.4	7.4	10	10	-	-	-	-	89	822136	807558	-	-	-	-
						7.6	0.5	117	25.4	25.4	7.9	7.9	31.4	31.4	108.1	108.1	7.4	7.4	1.5	7.4	7.4	7.4	1.5	7.4	12	12	-	-	-	-	89	822136	807558	-	-	-	-
SR4A	Fine	Calm	16:08	8.2	Surface	1.0	0.2	146	28.0	28.0	8.1	8.1	30.6	30.7	106.4	106.4	7.0	7.0	4.6	7.0	10	9	-	-	-	-	89	817190	807813	-	-	-	-				
						1.0	0.3	153	27.9	27.9	8.1	8.1	30.7	30.7	106.3	106.4	7.0	7.0	4.7	7.0	5.8	7.0	9	10	-	-	-	-	89	817190	807813	-	-	-	-		
					Middle	4.1	0.3	90	27.9	27.9	8.1	8.1	30.9	31.0	104.5	104.5	6.9	6.9	6.0	6.9	7.1	6.9	11	11	-	-	-	-	89	817190	807813	-	-	-	-		
						4.1	0.3	94	27.8	27.8	8.1	8.1	31.0	31.0	104.5	104.5	6.9	6.9	6.1	6.9	7.1	6.9	11	11	-	-	-	-	89	817190	807813	-	-	-	-		
					Bottom	7.2	0.6	71	27.8	27.8	8.1	8.1	31.2	31.2	106.9	107.0	7.1	7.1	6.5	7.1	7.1	7.1	6.6	7.1	10	11	-	-	-	-	89	817190	807813	-	-	-	-
						7.2	0																														

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 11 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Calm	07:56	8.4	Surface	1.0	0.8	229	27.5	27.5	8.2	8.2	32.7	32.7	101.8	101.8	6.7	6.7	4.4	6.7	4.4	9	9	70	70	815631	804244	0.0	0.6	0.4	0.4	
						1.0	0.8	250	27.5	8.2	8.2	32.7	32.7	101.8	101.8	6.7	6.7	4.4	9	9	69	69	0.0	0.4								
					Middle	4.2	0.7	203	27.5	8.2	8.2	32.6	32.6	101.6	101.6	6.7	6.7	4.7	7	7	77	77	0.0	0.4								
						4.2	0.8	207	27.5	8.2	8.2	32.6	32.6	101.6	101.6	6.7	6.7	4.7	9	9	79	79	0.0	0.4								
					Bottom	7.4	0.7	211	27.5	8.1	8.1	32.6	32.6	101.7	101.8	6.7	6.7	4.4	11	11	87	87	0.0	0.4								
						7.4	0.7	221	27.5	8.1	8.1	32.6	32.6	101.8	101.8	6.7	6.7	4.5	9	9	90	90	0.0	0.4								
C2	Cloudy	Moderate	09:21	12.6	Surface	1.0	0.5	178	25.3	25.3	7.9	7.9	30.9	30.9	102.3	102.3	7.1	7.1	1.8	7.1	1.8	8	8	82	82	825692	806928	0.0	1.1	0.9	0.9	
						1.0	0.5	187	25.3	7.9	7.9	30.9	30.9	102.3	102.3	7.1	7.1	1.9	8	8	83	83	0.0	0.9								
					Middle	6.3	0.7	200	25.3	7.9	7.9	31.1	31.1	102.2	102.2	7.0	7.0	5.8	7	7	90	90	0.0	1.1								
						6.3	0.7	215	25.3	7.9	7.9	31.1	31.1	102.1	102.1	7.0	7.0	5.9	8	8	90	90	0.0	1.0								
					Bottom	11.6	0.6	210	25.5	7.9	7.9	31.8	31.8	101.6	101.6	7.0	7.0	17.6	9	9	92	92	<0.2	0.8								
						11.6	0.6	210	25.5	7.9	7.9	31.8	31.8	101.6	101.6	7.0	7.0	17.5	9	9	92	92	<0.2	0.7								
C3	Rainy	Moderate	07:24	12.5	Surface	1.0	0.6	165	25.6	25.6	7.8	7.8	33.9	33.9	95.4	95.4	6.4	6.4	1.1	6.4	1.1	5	5	89	89	822114	817803	<0.2	0.6	0.3	0.3	
						1.0	0.6	173	25.6	7.8	7.8	33.9	33.9	95.4	95.4	6.4	6.4	1.2	4	4	87	87	<0.2	0.3								
					Middle	6.3	0.6	188	25.6	7.8	7.8	33.9	33.9	95.6	95.7	6.5	6.5	1.1	4	4	91	91	<0.2	0.4								
						6.3	0.6	195	25.6	7.8	7.8	33.9	33.9	95.7	95.7	6.5	6.5	1.1	5	5	90	90	<0.2	0.4								
					Bottom	11.5	0.7	163	25.6	7.8	7.8	33.9	33.9	96.8	96.9	6.5	6.5	1.3	6	6	93	93	<0.2	0.4								
						11.5	0.7	169	25.6	7.8	7.8	33.9	33.9	96.9	96.9	6.5	6.5	1.3	8	8	93	93	<0.2	0.4								
IM1	Fine	Calm	08:22	7.1	Surface	1.0	0.6	218	27.5	27.5	8.2	8.2	32.5	32.5	102.4	102.4	6.8	6.8	3.7	6.8	3.7	7	7	73	73	818369	806469	<0.2	0.4	0.4	0.4	
						1.0	0.6	222	27.5	8.2	8.2	32.5	32.5	102.4	102.4	6.8	6.8	4.0	9	9	75	75	<0.2	0.4								
					Middle	3.6	0.6	225	27.5	8.2	8.2	32.4	32.5	102.8	102.8	6.8	6.8	6.1	12	12	80	80	<0.2	0.4								
						3.6	0.6	241	27.5	8.2	8.2	32.5	32.5	102.8	102.8	6.8	6.8	6.2	13	13	82	82	<0.2	0.3								
					Bottom	6.1	0.7	202	27.5	8.2	8.2	32.5	32.5	104.8	104.8	6.9	6.9	9.1	14	14	88	88	<0.2	0.4								
						6.1	0.8	204	27.5	8.2	8.2	32.4	32.5	104.8	104.8	6.9	6.9	9.1	13	13	89	89	<0.2	0.4								
IM2	Fine	Calm	08:28	7.8	Surface	1.0	0.3	182	27.4	27.4	8.2	8.2	32.0	32.0	108.9	108.9	7.2	7.2	2.4	7.2	2.4	4	4	68	68	818858	806175	<0.2	0.5	0.5	0.5	
						1.0	0.3	193	27.4	8.2	8.2	32.0	32.0	108.8	108.8	7.2	7.2	2.5	5	5	70	70	<0.2	0.5								
					Middle	3.9	0.5	185	27.5	8.2	8.2	32.2	32.2	107.2	107.2	7.1	7.1	2.7	6	6	75	75	<0.2	0.4								
						3.9	0.5	191	27.4	8.2	8.2	32.2	32.2	107.1	107.1	7.1	7.1	2.7	5	5	78	78	<0.2	0.4								
					Bottom	6.8	0.3	197	27.5	8.2	8.2	32.3	32.3	108.0	108.0	7.1	7.1	3.3	6	6	87	87	<0.2	0.4								
						6.8	0.3	209	27.5	8.2	8.2	32.3	32.3	108.0	108.0	7.1	7.1	3.1	7	7	90	90	<0.2	0.4								
IM3	Fine	Calm	08:46	7.3	Surface	1.0	0.4	186	27.5	27.5	8.2	8.2	31.9	31.9	110.0	109.9	7.3	7.3	3.0	7.3	3.0	6	6	71	71	819395	806034	<0.2	0.5	0.5	0.5	
						1.0	0.4	199	27.5	8.2	8.2	31.9	31.9	109.8	109.8	7.3	7.3	2.8	6	6	71	71	<0.2	0.5								
					Middle	3.7	0.6	208	27.5	8.2	8.2	32.1	32.1	107.8	107.8	7.1	7.1	4.7	5	5	78	78	<0.2	0.5								
						3.7	0.7	228	27.5	8.2	8.2	32.1	32.1	107.8	107.8	7.1	7.1	4.6	4	4	79	79	<0.2	0.4								
					Bottom	6.3	0.5	179	27.5	8.2	8.2	32.2	32.2	108.9	109.0	7.2	7.2	5.4	9	9	87	87	<0.2	0.4								
						6.3	0.5	181	27.5	8.2	8.2	32.2	32.2	109.0	109.0	7.2	7.2	5.4	9	9	89	89	<0.2	0.4								
IM4	Fine	Calm	08:53	7.5	Surface	1.0	0.4	169	27.4	27.4	8.2	8.2	32.0	32.0	111.5	111.4	7.4	7.4	4.4	7.4	4.4	9	9	72	72	819570	805021	<0.2	0.5	0.6	0.5	
						1.0	0.4	182	27.4	8.2	8.2	31.9	32.0	111.3	111.4	7.4	7.4	4.3	8	8	75	75	<0.2	0.6								
					Middle	3.8	0.5	230	27.5	8.2	8.2	32.0	32.0	110.3	110.3	7.3	7.3	5.4	10	10	82	82	<0.2	0.5								
						3.8	0.5	234	27.4	8.2	8.2	32.0	32.0	110.3	110.3	7.3	7.3	5.4	10	10	83	83	<0.2	0.4								
					Bottom	6.5	0.5	186	27.5	8.2	8.2	32.0	32.0	110.1	110.1	7.3	7.3	6.2	15	15	90	90	<0.2	0.4								
						6.5	0.5	188	27.5	8.2	8.2	32.0	32.0	110.1	110.1	7.3	7.3	6.3	15	15	92	92	<0.2	0.5								
IM5	Fine	Calm	09:01	6.4	Surface	1.0	0.3	171	27.6	27.6	8.2	8.2	31.9	31.9	109.7	109.7	7.2	7.2	7.5	7.2	7.5	12	12	70	70	820549	804943	<0.2	0.5	0.5	0.5	
						1.0	0.3	184	27.6	8.2	8.2	31.9	31.9	109.6	109.6	7.2	7.2	7.6	14	14	72	72	<0.2	0.5								
					Middle	3.2	0.5	209	27.6	8.2	8.2	31.9	31.9	109.3	109.3	7.2	7.2	10.3	14	14	79	79	<0.2	0.6								
						3.2	0.6	222	27.6	8.2	8.2	31.9	31.9	109.3	109.3	7.2	7.2	10.5	14	14	82	82	<0.2	0.6								
					Bottom	5.4	0.5	173	27.6	8.2	8.2	31.9	31.9	109.1	109.1	7.2	7.2	12.1	16	16	89	89	<0.2	0.5								
						5.4	0.5	189	27.6	8.2	8.2	31.8	31.9	109.1	109.1	7.2	7.2	12.8	15	15	91	91	<0.2	0.5								
IM6	Fine	Calm	09:09	6.4	Surface	1.0	0.6	168	27.6	27.6	8.2	8.2	31.8	31.8	110.8	110.8	7.3	7.3	4.3	7.3	4.3	11	11	73	73	821061	805819	<0.2	0.5	0.6	0.6	
						1.0	0.7	171	27.6	8.2	8.2	31.8	31.8	110.8	110.8	7.3	7.3	4.5	12	12	76	76	<0.2	0.6								
					Middle	3.2	0.6	218	27.6	8.2	8.2	31.8	31.8	109.7	109.7	7.2	7.2	5.2	14	14	85	85	<0.2	0.6								
						3.2	0.7	222	27.6	8.2	8.2	31.8	31.8	109.6	109.6	7.2	7.2	5.3	15	15	85	85	<0.2	0.5								
					Bottom	5.4	0.6	193	27.6	8.2	8.2	31.9	31.9	109.5	109.5	7.2	7.2	5.9	17	17	90	90	<0.2	0.6								
						5.4	0.6	199	27.6	8.2	8.2	31.9	31.9	109.5	109.5	7.2	7.2	6.0	15	15	90	90	<0.2	0.5								
IM7	Fine	Calm	09:18	7.4	Surface	1.0	0.3	160	27.9	27.9	8.2	8.2	31.8	31.8	107.0	107.0	7.0	7.0	9.7	7.0	9.7	17	17	69	69	821368	806828	<0.2	0			

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 11 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	08:36	7.5	Surface	1.0	0.4	144	25.1	25.1	8.0	8.0	32.4	32.4	111.5	111.5	7.7	7.7	1.5	1.5	5	5	83	83	822095	808810	<0.2	<0.2	0.6	0.6		
						1.0	0.5	146	25.1	25.1	8.0	8.0	32.4	32.4	111.4	111.4	7.7	7.7	1.6	1.6	6	6	85	85	89	89	<0.2	<0.2	0.6	0.6		
					Middle	3.8	0.4	124	25.1	25.1	8.0	8.0	32.5	32.5	110.3	110.4	7.6	7.6	1.7	1.7	9	9	89	89	91	91	<0.2	<0.2	0.6	0.6		
						3.8	0.4	124	25.1	25.1	8.0	8.0	32.5	32.5	110.4	110.4	7.6	7.6	1.8	1.8	9	9	91	91	92	92	<0.2	<0.2	0.6	0.6		
					Bottom	6.5	0.5	158	25.0	25.0	8.0	8.0	33.0	33.0	108.2	108.2	7.4	7.4	2.9	2.9	10	10	92	92	93	93	<0.2	<0.2	0.6	0.6		
						6.5	0.6	160	25.0	25.0	8.0	8.0	33.0	33.0	108.2	108.2	7.4	7.4	2.8	2.8	10	10	93	93	93	93	<0.2	<0.2	0.6	0.6		
IM10	Cloudy	Moderate	08:26	7.6	Surface	1.0	0.5	122	25.3	25.3	7.9	7.9	33.2	33.2	109.5	109.5	7.5	7.5	1.4	1.4	4	4	86	86	822238	809837	<0.2	<0.2	0.4	0.4		
						1.0	0.5	129	25.3	25.3	7.9	7.9	33.2	33.2	109.5	109.5	7.5	7.5	1.5	1.5	5	5	85	85	90	90	<0.2	<0.2	0.5	0.5		
					Middle	3.8	0.4	109	25.2	25.2	7.9	7.9	33.3	33.4	107.2	107.2	7.3	7.3	2.6	2.6	4	4	90	90	91	91	<0.2	<0.2	0.5	0.5		
						3.8	0.4	109	25.2	25.2	7.9	7.9	33.4	33.4	107.2	107.2	7.3	7.3	2.7	2.7	5	5	91	91	92	92	<0.2	<0.2	0.4	0.4		
					Bottom	6.6	0.6	147	25.1	25.1	7.9	7.9	33.6	33.6	106.5	106.6	7.3	7.3	3.9	3.9	20	20	93	93	92	92	<0.2	<0.2	0.4	0.4		
						6.6	0.6	148	25.1	25.1	7.9	7.9	33.6	33.6	106.6	106.6	7.3	7.3	3.9	3.9	21	21	92	92	92	92	<0.2	<0.2	0.4	0.4		
IM11	Cloudy	Moderate	08:18	8.2	Surface	1.0	0.7	101	25.2	25.2	7.9	7.9	33.1	33.1	107.4	107.4	7.3	7.3	2.6	2.6	5	5	85	85	821493	810561	<0.2	<0.2	0.6	0.6		
						1.0	0.7	106	25.2	25.2	7.9	7.9	33.1	33.1	107.3	107.3	7.3	7.3	2.7	2.7	4	4	85	85	90	90	<0.2	<0.2	0.5	0.5		
					Middle	4.1	0.6	89	25.2	25.2	7.9	7.9	33.3	33.3	106.3	106.3	7.2	7.2	5.0	5.0	9	9	90	90	90	90	<0.2	<0.2	0.5	0.5		
						4.1	0.6	94	25.2	25.2	7.9	7.9	33.3	33.3	106.3	106.3	7.2	7.2	5.0	5.0	10	10	90	90	92	92	<0.2	<0.2	0.4	0.4		
					Bottom	7.2	0.7	121	25.2	25.2	7.9	7.9	33.9	33.9	105.8	105.8	7.2	7.2	10.5	10.5	12	12	92	92	92	92	<0.2	<0.2	0.4	0.4		
						7.2	0.7	128	25.2	25.2	7.9	7.9	33.9	33.9	105.8	105.8	7.2	7.2	10.5	10.5	13	13	92	92	92	92	<0.2	<0.2	0.4	0.4		
IM12	Cloudy	Moderate	08:10	9.1	Surface	1.0	0.7	88	25.3	25.3	7.9	7.9	32.9	32.9	105.7	105.7	7.2	7.2	2.0	2.0	5	5	86	86	821175	811536	<0.2	<0.2	0.6	0.6		
						1.0	0.7	90	25.3	25.3	7.9	7.9	32.9	32.9	105.6	105.6	7.2	7.2	2.0	2.0	4	4	85	85	89	89	<0.2	<0.2	0.5	0.5		
					Middle	4.6	0.6	93	25.3	25.3	7.9	7.9	33.0	33.0	103.9	103.9	7.1	7.1	3.6	3.6	9	9	89	89	91	91	<0.2	<0.2	0.4	0.4		
						4.6	0.6	98	25.3	25.3	7.9	7.9	33.0	33.0	103.8	103.8	7.1	7.1	3.7	3.7	7	7	89	89	93	93	<0.2	<0.2	0.5	0.5		
					Bottom	8.1	0.7	109	25.3	25.3	7.9	7.9	33.5	33.6	102.0	102.0	6.9	6.9	7.8	7.8	10	10	93	93	93	93	<0.2	<0.2	0.6	0.6		
						8.1	0.7	114	25.3	25.3	7.9	7.9	33.6	33.6	102.0	102.0	6.9	6.9	7.8	7.8	11	11	93	93	93	93	<0.2	<0.2	0.6	0.6		
SR2	Cloudy	Moderate	07:48	5.2	Surface	1.0	0.4	64	25.4	25.4	7.8	7.8	33.4	33.4	95.7	95.7	6.5	6.5	2.6	2.6	5	5	87	87	821468	814153	<0.2	<0.2	0.6	0.6		
						1.0	0.5	65	25.4	25.4	7.8	7.8	33.4	33.4	95.6	95.6	6.5	6.5	2.6	2.6	5	5	84	84	90	90	<0.2	<0.2	0.6	0.6		
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	4.2	0.7	73	25.6	25.6	7.8	7.8	33.8	33.8	94.5	94.8	6.4	6.4	4.8	4.8	5	5	90	90	90	90	<0.2	<0.2	0.6	0.6		
						4.2	0.7	78	25.6	25.6	7.8	7.8	33.8	33.8	95.0	94.8	6.4	6.4	4.8	4.8	5	5	90	90	90	90	<0.2	<0.2	0.6	0.6		
SR3	Cloudy	Moderate	08:50	9.5	Surface	1.0	0.3	186	25.2	25.2	8.0	8.0	32.2	32.2	110.6	110.6	7.6	7.6	2.8	2.8	7	7	-	-	822161	807552	-	-	-	-		
						1.0	0.4	203	25.2	25.2	8.0	8.0	32.2	32.2	110.5	110.5	7.6	7.6	2.8	2.8	6	6	-	-	-	-	-	-	-	-		
					Middle	4.8	0.3	177	25.2	25.2	8.0	8.0	32.2	32.2	109.1	109.1	7.5	7.5	3.0	3.0	8	8	-	-	-	-	-	-	-	-	-	
						4.8	0.3	182	25.2	25.2	8.0	8.0	32.2	32.2	109.1	109.1	7.5	7.5	3.0	3.0	9	9	-	-	-	-	-	-	-	-	-	
					Bottom	8.5	0.6	188	25.1	25.1	8.0	8.0	32.4	32.4	108.3	108.3	7.4	7.4	3.5	3.5	10	10	-	-	-	-	-	-	-	-	-	
						8.5	0.6	190	25.1	25.1	8.0	8.0	32.4	32.4	108.3	108.3	7.4	7.4	3.6	3.6	9	9	-	-	-	-	-	-	-	-	-	
SR4A	Fine	Calm	07:36	8.3	Surface	1.0	0.2	173	27.6	27.6	8.1	8.1	32.5	32.5	101.1	101.1	6.6	6.6	4.1	4.1	7	7	-	-	817196	807801	-	-	-	-		
						1.0	0.2	182	27.6	27.6	8.1	8.1	32.5	32.5	101.0	101.1	6.6	6.6	3.9	3.9	8	8	-	-	-	-	-	-	-			
					Middle	4.2	0.3	117	27.7	27.7	8.1	8.1	32.8	32.8	101.1	101.1	6.6	6.6	4.1	4.1	8	8	-	-	-	-	-	-	-	-		
						4.2	0.3	119	27.7	27.7	8.1	8.1	32.8	32.8	101.1	101.1	6.6	6.6	4.1	4.1	8	8	-	-	-	-	-	-	-	-		
					Bottom	7.3	0.3	137	27.7	27.7	8.1	8.1	33.1	33.1	101.9	102.0	6.7	6.7	4.4	4.4	9	9	-	-	-	-	-	-	-	-		
						7.3	0.3	140	27.7	27.7	8.1	8.1	33.1	33.1	102.0	102.0	6.7	6.7	4.5	4.5	9	9	-	-	-	-	-	-	-	-		
SR5A	Fine	Calm	07:18	3.9	Surface	1.0	0.2	136	28.1	28.1	8.1	8.1	30.9	30.9	105.5	105.5	6.9	6.9	2.8	2.8	7	7	-	-	816600	810681	-	-	-	-		
						1.0	0.2	148	28.1	28.1	8.1	8.1	30.8	30.8	105.4	105.4	6.9	6.9	2.6	2.6	7	7	-	-	-	-	-	-				
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Bottom	2.9	0.2	156	28.0	28.0	8.1	8.1	30.9	30.9	106.1	106.3	7.0	7.0	3.3	3.3	11	11	-	-	-	-	-	-	-			
						2.9	0.2	156	28.0	28.0	8.1	8.1	30.9	30.9	106.5	106.5	7.0	7.0	3.4	3.4	10	10	-	-	-	-	-	-	-			
SR6	Fine	Calm	06:51	4.1	Surface	1.0	0.3	133	27.6	27.6	8.0	8.0	30.1	30.1	113.0	113.0																

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 13 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Calm	16:56	8.6	Surface	1.0	0.3	217	27.5	27.6	8.1	8.1	32.7	32.7	99.5	99.4	6.5	6.5	8.6	10.1	14	14	81	84	84	815639	804245	<0.2	<0.2	0.3	0.8	
						1.0	0.3	231	27.6	27.6	8.1	8.1	32.6	32.7	99.3	99.4	6.5	6.5	8.6	10.1	12	14	81	84	84	815639	804245	<0.2	<0.2	0.3	0.8	
						4.3	0.2	221	27.2	27.4	8.1	8.1	32.8	32.7	99.4	99.1	6.6	6.5	9.6	10.1	14	14	83	84	84	815639	804245	<0.2	<0.2	1.1	0.8	
					4.3	0.3	235	27.6	27.6	8.1	8.1	32.5	32.7	98.8	99.1	6.5	6.5	9.6	10.1	12	14	83	84	84	815639	804245	<0.2	<0.2	1.1	0.8		
					7.6	0.2	221	27.6	27.6	8.1	8.1	32.4	32.4	98.7	98.8	6.5	6.5	12.5	10.1	15	14	87	84	84	815639	804245	<0.2	<0.2	1.1	0.8		
					7.6	0.3	227	27.6	27.6	8.1	8.1	32.4	32.4	98.8	98.8	6.5	6.5	11.4	10.1	15	14	88	84	84	815639	804245	<0.2	<0.2	1.0	0.8		
C2	Cloudy	Moderate	15:40	10.9	Surface	1.0	0.3	262	25.2	25.2	7.9	7.9	32.0	32.0	103.9	103.9	7.1	7.0	3.6	6.9	7	10	83	89	89	825667	806956	<0.2	<0.2	0.6	0.6	
						1.0	0.3	274	25.2	25.1	7.9	7.9	32.0	32.5	103.8	100.5	7.1	7.0	3.6	6.9	8	10	83	90	90	825667	806956	<0.2	<0.2	0.6	0.6	
						5.5	0.4	260	25.1	25.1	7.9	7.9	32.5	32.5	100.5	100.5	6.9	6.8	5.2	6.9	9	10	91	90	90	825667	806956	<0.2	<0.2	0.6	0.6	
					9.9	0.3	249	25.1	25.1	7.9	7.9	33.1	33.1	99.0	99.0	6.8	6.8	12.0	6.8	10	12	92	94	94	825667	806956	<0.2	<0.2	0.4	0.4		
					9.9	0.3	270	25.1	25.1	7.9	7.9	33.1	33.1	99.0	99.0	6.8	6.8	12.0	6.8	12	7	94	94	94	825667	806956	<0.2	<0.2	0.4	0.4		
					11.2	0.4	189	25.2	25.2	7.9	7.9	31.6	31.6	96.2	96.2	6.6	6.6	2.4	6.6	6	7	88	87	87	825667	806956	<0.2	<0.2	0.5	0.4		
C3	Cloudy	Moderate	17:44	12.2	Surface	1.0	0.6	189	25.2	25.2	7.9	7.9	31.6	31.6	96.2	96.2	6.6	6.6	2.4	3.1	6	7	88	91	91	822112	817806	<0.2	<0.2	0.4	0.4	
						1.0	0.7	189	25.2	25.2	7.9	7.9	31.6	31.7	96.2	95.7	6.6	6.6	2.4	3.1	6	7	87	91	91	822112	817806	<0.2	<0.2	0.4	0.4	
						6.1	0.5	184	25.2	25.2	7.9	7.9	31.7	31.7	95.7	95.7	6.6	6.6	3.2	3.1	5	7	91	91	91	822112	817806	<0.2	<0.2	0.4	0.4	
					6.1	0.5	193	25.2	25.1	7.9	7.9	31.7	31.7	95.7	95.7	6.6	6.6	3.2	3.1	5	7	91	91	91	822112	817806	<0.2	<0.2	0.4	0.4		
					11.2	0.4	183	25.1	25.1	7.9	7.9	31.8	31.8	96.8	96.9	6.7	6.7	3.7	6.7	7	7	93	94	94	822112	817806	<0.2	<0.2	0.4	0.4		
					11.2	0.5	184	25.1	25.1	7.9	7.9	31.8	31.8	96.9	96.9	6.7	6.7	3.7	6.7	7	7	94	94	94	822112	817806	<0.2	<0.2	0.4	0.4		
IM1	Fine	Calm	16:34	7.8	Surface	1.0	0.4	202	27.6	27.6	8.1	8.1	32.3	32.3	98.4	98.4	6.5	6.5	4.5	6.0	7	7	79	82	82	818355	806469	<0.2	<0.2	0.3	0.4	
						1.0	0.4	218	27.6	27.6	8.1	8.1	32.3	32.3	98.4	98.0	6.5	6.4	4.5	6.0	8	7	78	82	82	818355	806469	<0.2	<0.2	0.3	0.4	
						3.9	0.4	200	27.6	27.6	8.1	8.1	32.3	32.3	98.0	98.0	6.4	6.4	5.7	6.0	7	7	83	82	82	818355	806469	<0.2	<0.2	0.3	0.4	
					3.9	0.4	208	27.6	27.4	8.1	8.1	32.3	32.5	98.0	100.0	6.4	6.6	5.7	6.6	6	7	82	85	85	818355	806469	<0.2	<0.2	0.3	0.4		
					6.8	0.4	200	27.4	27.4	8.1	8.1	32.5	32.5	100.0	100.0	6.6	6.6	7.9	6.6	7	7	85	84	84	818355	806469	<0.2	<0.2	0.4	0.4		
					6.8	0.4	212	27.4	27.4	8.1	8.1	32.5	32.5	100.0	100.0	6.6	6.6	7.9	6.6	7	7	84	84	84	818355	806469	<0.2	<0.2	0.4	0.4		
IM2	Fine	Calm	16:28	7.6	Surface	1.0	0.7	216	27.5	27.5	8.1	8.1	32.4	32.4	102.3	102.3	6.7	6.8	8.4	11.6	11	13	79	82	82	818837	806186	<0.2	<0.2	0.3	0.3	
						1.0	0.7	224	27.5	27.1	8.1	8.1	32.4	32.7	102.3	102.6	6.7	6.8	8.4	11.6	11	13	79	81	81	818837	806186	<0.2	<0.2	0.3	0.3	
						3.8	0.6	217	27.1	27.1	8.1	8.1	32.7	32.7	102.6	102.6	6.8	6.8	12.0	11.6	10	13	81	82	82	818837	806186	<0.2	<0.2	0.3	0.3	
					3.8	0.7	230	27.1	27.5	8.1	8.1	32.7	32.3	102.6	102.0	6.8	6.7	12.0	6.7	9	13	82	87	87	818837	806186	<0.2	<0.2	0.3	0.3		
					6.6	0.5	216	27.5	27.5	8.1	8.1	32.3	32.3	102.0	102.0	6.7	6.7	14.4	6.7	16	13	87	86	86	818837	806186	<0.2	<0.2	0.3	0.3		
					6.6	0.6	231	27.5	27.5	8.1	8.1	32.3	32.3	102.0	102.0	6.7	6.7	14.4	6.7	18	13	86	86	86	818837	806186	<0.2	<0.2	0.3	0.3		
IM3	Fine	Calm	16:22	7.7	Surface	1.0	0.6	228	27.3	27.3	8.1	8.1	32.2	32.2	103.2	103.0	6.8	6.8	9.9	12.9	14	13	77	82	82	819425	806007	<0.2	<0.2	0.3	0.4	
						1.0	0.6	232	27.3	27.2	8.1	8.1	32.2	32.3	102.8	103.1	6.8	6.8	9.5	12.9	12	13	78	81	81	819425	806007	<0.2	<0.2	0.4	0.4	
						3.9	0.6	225	27.3	27.2	8.1	8.1	32.2	32.3	102.8	103.1	6.8	6.9	13.0	6.9	12	13	81	86	86	819425	806007	<0.2	<0.2	0.3	0.4	
					3.9	0.6	238	27.0	27.2	8.1	8.1	32.4	32.3	103.4	103.1	6.9	6.9	13.0	6.9	12	13	81	86	86	819425	806007	<0.2	<0.2	0.3	0.4		
					6.7	0.5	223	27.0	27.2	8.1	8.1	32.4	32.3	103.4	103.1	6.9	6.9	16.0	6.9	14	13	86	86	86	819425	806007	<0.2	<0.2	0.4	0.4		
					6.7	0.5	224	27.4	27.2	8.1	8.1	32.1	32.3	102.8	103.1	6.8	6.8	16.0	6.8	15	13	86	86	86	819425	806007	<0.2	<0.2	0.3	0.3		
IM4	Fine	Calm	16:13	7.9	Surface	1.0	0.5	229	27.5	27.5	8.1	8.1	32.5	32.5	101.0	101.0	6.7	6.7	9.1	11.8	12	16	77	81	81	819553	805024	<0.2	<0.2	0.2	0.3	
						1.0	0.5	246	27.5	27.4	8.1	8.1	32.5	32.4	101.0	100.9	6.7	6.6	9.1	11.8	12	16	76	80	80	819553	805024	<0.2	<0.2	0.3	0.3	
						4.0	0.4	231	27.4	27.4	8.1	8.1	32.4	32.4	100.9	100.9	6.6	6.6	11.9	6.6	16	16	80	80	80	819553	805024	<0.2	<0.2	0.3	0.3	
					4.0	0.5	247	27.4	27.0	8.1	8.1	32.4	32.8	100.9	102.7	6.6	6.8	11.9	6.8	18	16	80	86	86	819553	805024	<0.2	<0.2	0.2	0.3		
					6.9	0.4	231	27.0	27.0	8.1	8.1	32.8	32.8	102.7	102.7	6.8	6.8	14.4	6.8	18	16	86	85	85	819553	805024	<0.2	<0.2	0.3	0.3		
					6.9	0.4	253	27.0	27.0	8.1	8.1	32.8	32.8	102.7	102.7	6.8	6.8	14.4	6.8	17	16	85	85	85	819553	805024	<0.2	<0.2	0.3	0.3		
IM5	Fine	Calm	16:06	6.7	Surface	1.0	0.5	217	27.1	27.1	8.1	8.1	32.4	32.4	106.5	106.5	7.1	7.1	10.1	12.1	14	14	77	81	81	820567	804937	<0.2	<0.2	0.4	0.4	
						1.0	0.5	230	27.1	27.2	8.1	8.1	32.4	32.3	106.5	106.0	7.1	7.0	10.1	7.0	15	14</										

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 13 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA		
IM9	Cloudy	Moderate	16:25	6.7	Surface	1.0	0.4	222	25.2	25.2	7.9	7.9	32.2	32.2	102.7	102.7	7.0	7.0	2.3	7.0	8	10	86	90	822084	808799	<0.2	<0.2	0.5	0.4				
						1.0	0.4	224	25.2	7.9	7.9	32.2	32.2	102.7	102.7	7.0	7.0	2.3	7.0	9	10	87	90	86	90	822084	808799	<0.2	<0.2	0.5	0.4			
					Middle	3.4	0.4	233	25.0	25.0	7.9	7.9	32.4	32.4	102.3	102.3	7.0	7.0	4.0	4.3	8	10	8	10	91	90	822084	808799	<0.2	<0.2	0.4	0.4		
						3.4	0.4	238	25.0	25.0	7.9	7.9	32.4	32.4	102.3	102.3	7.0	7.0	4.1	4.3	10	10	8	10	90	90	822084	808799	<0.2	<0.2	0.3	0.4		
					Bottom	5.7	0.4	229	25.0	25.0	7.9	7.9	32.7	32.7	104.2	104.2	7.2	7.2	6.3	7.2	6.3	7.2	13	10	13	10	92	90	822084	808799	<0.2	<0.2	0.4	0.4
						5.7	0.4	248	25.0	25.0	7.9	7.9	32.7	32.7	104.2	104.2	7.2	7.2	6.5	7.2	6.5	7.2	12	10	12	10	93	90	822084	808799	<0.2	<0.2	0.4	0.4
IM10	Cloudy	Moderate	16:35	7.1	Surface	1.0	0.3	225	25.1	25.1	7.9	7.9	32.0	32.0	102.0	102.0	7.0	7.0	1.9	7.0	6	7	86	90	822251	809842	<0.2	<0.2	0.3	0.3				
						1.0	0.3	236	25.1	25.1	7.9	7.9	31.9	32.0	101.9	102.0	7.0	7.0	1.9	7.0	5	7	87	90	822251	809842	<0.2	<0.2	0.2	0.3				
					Middle	3.6	0.3	242	25.1	25.1	7.9	7.9	32.0	32.0	100.8	100.8	6.9	6.9	2.9	2.6	8	7	8	7	90	90	822251	809842	<0.2	<0.2	0.4	0.3		
						3.6	0.3	251	25.1	25.1	7.9	7.9	32.0	32.0	100.8	100.8	6.9	6.9	2.8	2.6	6	7	6	7	90	90	822251	809842	<0.2	<0.2	0.3	0.3		
					Bottom	6.1	0.3	226	25.0	25.0	7.9	7.9	31.9	31.9	101.0	101.1	7.0	7.0	3.0	7.0	3.0	7.0	7	7	7	10	93	90	822251	809842	<0.2	<0.2	0.4	0.4
						6.1	0.3	234	25.0	25.0	7.9	7.9	31.9	31.9	101.1	101.1	7.0	7.0	3.1	7.0	3.1	7.0	7	7	7	10	93	90	822251	809842	<0.2	<0.2	0.4	0.4
IM11	Cloudy	Moderate	16:46	7.5	Surface	1.0	0.4	249	25.2	25.2	7.9	7.9	32.2	32.2	102.6	102.6	7.0	7.0	1.9	7.0	10	10	87	91	821486	810538	<0.2	<0.2	0.3	0.3				
						1.0	0.5	258	25.2	25.2	7.9	7.9	32.2	32.2	102.5	102.6	7.0	7.0	1.9	7.0	9	10	9	10	88	91	821486	810538	<0.2	<0.2	0.3	0.3		
					Middle	3.8	0.4	255	24.8	24.8	7.9	7.9	32.4	32.4	101.7	101.7	7.0	7.0	2.9	3.1	9	10	9	10	91	91	821486	810538	<0.2	<0.2	0.2	0.2		
						3.8	0.4	257	24.8	24.8	7.9	7.9	32.4	32.4	101.7	101.7	7.0	7.0	2.9	3.1	11	10	9	10	91	91	821486	810538	<0.2	<0.2	0.2	0.2		
					Bottom	6.5	0.3	252	24.7	24.7	7.9	7.9	32.6	32.6	102.5	102.5	7.1	7.1	4.4	7.1	4.4	7.1	10	10	10	10	93	91	821486	810538	<0.2	<0.2	0.4	0.2
						6.5	0.4	267	24.7	24.7	7.9	7.9	32.6	32.6	102.5	102.5	7.1	7.1	4.5	7.1	4.5	7.1	12	10	12	10	93	91	821486	810538	<0.2	<0.2	0.2	0.2
IM12	Cloudy	Moderate	16:56	7.9	Surface	1.0	0.4	255	25.1	25.1	7.9	7.9	32.3	32.4	103.7	103.7	7.1	7.1	1.7	7.1	10	10	85	89	821157	811503	<0.2	<0.2	0.2	0.2				
						1.0	0.4	266	25.1	25.1	7.9	7.9	32.4	32.4	103.7	103.7	7.1	7.1	1.8	7.1	9	10	87	89	821157	811503	<0.2	<0.2	0.2	0.2				
					Middle	4.0	0.4	256	24.9	24.9	7.9	7.9	32.5	32.5	103.2	103.2	7.1	7.1	2.2	2.1	10	10	8	10	89	89	821157	811503	<0.2	<0.2	0.2	0.3		
						4.0	0.4	261	24.9	24.9	7.9	7.9	32.5	32.5	103.2	103.2	7.1	7.1	2.3	2.1	9	10	9	10	91	89	821157	811503	<0.2	<0.2	0.3	0.3		
					Bottom	6.9	0.4	260	24.8	24.8	7.9	7.9	32.6	32.6	103.7	103.7	7.1	7.1	2.4	7.2	2.4	7.2	10	10	10	10	92	89	821157	811503	<0.2	<0.2	0.2	0.2
						6.9	0.4	283	24.8	24.8	7.9	7.9	32.6	32.6	103.7	103.7	7.2	7.2	2.4	7.2	2.4	7.2	11	10	11	10	92	89	821157	811503	<0.2	<0.2	0.2	0.2
SR2	Cloudy	Moderate	17:21	4.4	Surface	1.0	0.4	308	25.1	25.1	7.9	7.9	31.7	31.7	105.3	105.4	7.3	7.3	4.8	7.3	7	10	86	89	821461	814154	<0.2	<0.2	0.3	0.3				
						1.0	0.4	308	25.1	25.1	7.9	7.9	31.7	31.7	105.4	105.4	7.3	7.3	4.8	7.3	8	10	87	89	821461	814154	<0.2	<0.2	0.3	0.3				
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	821461	814154	-	<0.2	-	-	
						2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	821461	814154	-	<0.2	-	-	
					Bottom	3.4	0.3	274	25.1	25.1	7.8	7.8	32.0	32.0	105.4	105.4	7.3	7.3	6.2	7.3	6.2	7.3	12	10	12	10	91	89	821461	814154	<0.2	<0.2	0.3	0.3
						3.4	0.3	288	25.1	25.1	7.8	7.8	32.0	32.0	105.4	105.4	7.3	7.3	6.0	7.3	6.0	7.3	14	10	14	10	91	89	821461	814154	<0.2	<0.2	0.3	0.3
SR3	Cloudy	Moderate	16:05	8.6	Surface	1.0	0.7	203	25.1	25.1	7.9	7.9	31.7	31.7	103.3	103.3	7.1	7.1	2.4	7.1	8	10	-	-	822148	807570	-	-	-	-				
						1.0	0.7	213	25.1	25.1	7.9	7.9	31.7	31.7	103.3	103.3	7.1	7.1	2.4	7.1	9	10	-	-	-	-	822148	807570	-	-	-	-		
					Middle	4.3	0.6	222	25.1	25.1	7.9	7.9	31.9	32.0	102.0	102.0	7.0	7.0	4.6	7.1	7.0	7.1	8	10	-	-	822148	807570	-	-	-	-		
						4.3	0.6	232	25.1	25.1	7.9	7.9	32.0	32.0	102.0	102.0	7.0	7.0	5.1	7.1	8	10	-	-	-	-	822148	807570	-	-	-	-		
					Bottom	7.6	0.4	215	25.0	25.0	7.8	7.8	32.4	32.4	103.8	103.9	7.1	7.1	14.0	7.1	14.0	7.1	13	10	-	-	822148	807570	-	-	-	-		
						7.6	0.4	224	25.0	25.0	7.8	7.8	32.4	32.4	103.9	103.9	7.1	7.1	14.0	7.1	14.0	7.1	13	10	-	-	822148	807570	-	-	-	-		
SR4A	Fine	Calm	17:18	8.9	Surface	1.0	0.4	249	27.4	27.6	8.1	8.1	32.0	31.9	99.4	99.0	6.6	6.5	9.5	6.5	14	14	-	-	817182	807818	-	-	-	-				
						1.0	0.4	268	27.8	27.6	8.0	8.1	31.7	31.9	98.5	97.7	6.5	6.5	10.1	6.5	12	14	-	-	-	-	817182	807818	-	-	-	-		
					Middle	4.5	0.3	252	27.5	27.6	8.0	8.0	31.9	31.9	97.8	97.7	6.4	6.4	11.9	6.6	14	14	-	-	-	-	817182	807818	-	-	-	-		
						4.5	0.4	255	27.6	27.4	8.0	8.0	31.9	32.1	97.6	98.9	6.4	6.6	12.0	6.6	14	14	-	-	-	-	817182	807818	-	-	-	-		
					Bottom	7.9	0.3	253	27.2	27.4	8.0	8.0	32.2	32.1	99.1	98.9	6.6	6.5	20.0	6.6	20.1	6.5	15	14	-	-	-	-	817182	807818	-	-	-	-
						7.9	0.3	253	27.6	27.4	8.0	8.0	31.9	32.1	98.7	98.9	6.5	6.5	20.1	6.5	20.1	6.5	16	14	-	-	-	-	817182	807818	-	-	-	-
SR5A	Fine	Calm	17:36	4.4	Surface	1.0	0.2	292	27.7	27.7	8.0	8.0	31.4	31.4	99.5	99.5	6.6	6.6	7.0	6.6	12	15	-	-	816610	810682	-	-	-	-				
						1.0	0.3	303	27.7	27.7	8.0	8.0	31.4	31.4	99.5																			

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 13 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value
C1	Fine	Calm	10:00	8.6	Surface	1.0	0.7	212	27.4	27.4	8.1	8.1	32.7	32.7	96.9	96.9	6.4	6.4	8.2	6.4	10	10	83	83	87	815608	804265	<0.2	0.4	<0.2	0.4		
						1.0	0.7	227	27.4	8.1	8.1	32.7	32.7	96.9	96.9	6.4	6.4	8.2	6.4	10	10	83	83	87	815608	804265	<0.2	0.4	<0.2	0.4			
					Middle	4.3	0.7	210	27.5	27.5	8.1	8.1	32.6	32.6	96.8	96.8	6.4	6.4	9.6	9.8	9.6	9.8	11	10	85	85	87	815608	804265	<0.2	0.5	<0.2	0.4
						4.3	0.7	225	27.5	27.5	8.1	8.1	32.6	32.6	96.8	96.8	6.4	6.4	9.6	9.8	9.6	9.8	10	10	86	86	87	815608	804265	<0.2	0.4	<0.2	0.4
					Bottom	7.6	0.6	220	27.4	27.4	8.1	8.1	32.6	32.6	98.1	98.1	6.4	6.4	11.5	6.4	11.5	6.4	10	10	92	92	87	815608	804265	<0.2	0.4	<0.2	0.4
						7.6	0.7	223	27.4	27.4	8.1	8.1	32.6	32.6	98.1	98.1	6.4	6.4	11.5	6.4	11.5	6.4	10	10	92	92	87	815608	804265	<0.2	0.4	<0.2	0.4
C2	Cloudy	Moderate	11:26	11.7	Surface	1.0	0.3	87	24.8	24.8	7.9	7.9	31.6	31.6	102.0	101.9	7.1	7.1	1.8	7.0	5	6	83	85	89	825681	806936	<0.2	0.6	<0.2	0.3		
						1.0	0.3	87	24.8	24.8	7.9	7.9	31.6	31.6	101.8	101.9	7.1	7.1	1.8	7.0	6	6	83	85	89	825681	806936	<0.2	0.3	<0.2	0.4		
					Middle	5.9	0.3	82	24.8	24.8	7.9	7.9	31.7	31.7	99.4	99.4	6.9	6.9	6.0	5.8	6.0	5.8	8	9	90	91	89	825681	806936	<0.2	0.4	<0.2	0.3
						5.9	0.4	85	24.8	24.8	7.9	7.9	31.7	31.7	99.4	99.4	6.9	6.9	6.2	5.8	6.2	5.8	10	9	91	91	89	825681	806936	<0.2	0.3	<0.2	0.4
					Bottom	10.7	0.3	88	24.8	24.8	7.9	7.9	31.6	31.6	100.1	100.2	6.9	6.9	9.6	6.9	9.6	6.9	12	6	93	93	89	825681	806936	<0.2	0.4	<0.2	0.3
						10.7	0.3	92	24.8	24.8	7.9	7.9	31.6	31.6	100.2	100.2	6.9	6.9	9.5	6.9	9.5	6.9	11	6	93	93	89	825681	806936	<0.2	0.3	<0.2	0.3
C3	Cloudy	Calm	09:23	12.7	Surface	1.0	0.7	173	25.4	25.4	7.9	7.9	32.9	32.9	94.2	94.2	6.4	6.4	0.8	6.4	6	4	84	83	90	822118	817822	<0.2	0.4	<0.2	0.3		
						1.0	0.8	180	25.4	25.4	7.9	7.9	32.9	32.9	94.2	94.2	6.4	6.4	0.7	6.4	4	6	83	83	90	822118	817822	<0.2	0.3	<0.2	0.3		
					Middle	6.4	0.7	176	25.4	25.4	7.9	7.9	32.8	32.8	94.3	94.4	6.4	6.4	1.0	6.4	1.0	1.0	6	6	91	91	90	822118	817822	<0.2	0.3	<0.2	0.3
						6.4	0.7	192	25.4	25.4	7.9	7.9	32.8	32.8	94.4	94.4	6.4	6.4	1.0	6.4	1.0	1.0	5	6	92	92	90	822118	817822	<0.2	0.3	<0.2	0.3
					Bottom	11.7	0.6	176	25.4	25.4	7.9	7.9	32.7	32.7	95.9	96.2	6.5	6.5	1.3	6.6	1.3	6.6	6	6	94	94	90	822118	817822	<0.2	0.3	<0.2	0.3
						11.7	0.6	185	25.4	25.4	7.9	7.9	32.7	32.7	96.5	96.2	6.6	6.6	1.4	6.6	1.4	6.6	6	6	93	93	90	822118	817822	<0.2	0.3	<0.2	0.3
IM1	Sunny	Calm	10:26	7.1	Surface	1.0	0.6	187	27.1	27.1	8.1	8.1	32.6	32.6	98.1	98.1	6.5	6.5	6.1	6.5	6	7	79	79	83	818370	806460	<0.2	0.4	<0.2	0.3		
						1.0	0.6	188	27.1	27.1	8.1	8.1	32.6	32.6	98.1	98.1	6.5	6.5	6.1	6.5	6	6.5	7	7	79	79	83	818370	806460	<0.2	0.3	<0.2	0.4
					Middle	3.6	0.5	182	27.1	27.1	8.1	8.1	32.7	32.7	98.1	98.1	6.5	6.5	9.4	6.5	9.4	6.5	7	7	84	84	83	818370	806460	<0.2	0.4	<0.2	0.4
						3.6	0.5	195	27.1	27.1	8.1	8.1	32.7	32.7	98.1	98.1	6.5	6.5	9.4	6.5	9.4	6.5	7	7	84	84	83	818370	806460	<0.2	0.4	<0.2	0.4
					Bottom	6.1	0.5	180	27.2	27.2	8.1	8.1	32.6	32.6	99.7	99.7	6.6	6.6	9.3	6.6	9.3	6.6	7	6.6	87	87	83	818370	806460	<0.2	0.7	<0.2	0.7
						6.1	0.5	195	27.2	27.2	8.1	8.1	32.6	32.6	99.7	99.7	6.6	6.6	9.3	6.6	9.3	6.6	9	6.6	87	87	83	818370	806460	<0.2	0.7	<0.2	0.7
IM2	Sunny	Calm	10:33	7.3	Surface	1.0	0.6	195	27.2	27.2	8.1	8.1	32.8	32.8	96.8	96.8	6.4	6.4	7.9	6.4	10	9	80	81	85	818860	806185	<0.2	0.3	<0.2	0.3		
						1.0	0.6	213	27.2	27.2	8.1	8.1	32.8	32.8	96.8	96.8	6.4	6.4	8.1	6.4	9	6.4	9	10	81	81	85	818860	806185	<0.2	0.3	<0.2	0.3
					Middle	3.7	0.5	190	27.2	27.2	8.1	8.1	32.8	32.8	96.3	96.3	6.4	6.4	10.1	6.4	10.1	6.4	9	10	83	83	85	818860	806185	<0.2	0.3	<0.2	0.4
						3.7	0.6	208	27.2	27.2	8.1	8.1	32.8	32.8	96.3	96.3	6.4	6.4	10.1	6.4	10.1	6.4	11	10	86	86	85	818860	806185	<0.2	0.4	<0.2	0.3
					Bottom	6.3	0.5	195	27.3	27.3	8.1	8.1	32.7	32.7	98.6	99.3	6.2	6.2	8.1	6.3	8.1	6.3	8	6.3	88	88	85	818860	806185	<0.2	0.3	<0.2	0.4
						6.3	0.5	201	27.3	27.3	8.1	8.1	32.7	32.7	99.9	99.3	6.3	6.3	8.5	6.3	8.5	6.3	12	6.3	89	89	85	818860	806185	<0.2	0.4	<0.2	0.4
IM3	Sunny	Calm	10:41	7.6	Surface	1.0	0.5	199	27.3	27.3	8.1	8.1	32.8	32.8	99.3	99.3	6.7	6.6	5.8	6.6	9	8	79	79	84	819404	806013	<0.2	0.4	<0.2	0.4		
						1.0	0.6	205	27.3	27.3	8.1	8.1	32.8	32.8	99.3	99.3	6.6	6.6	5.8	6.6	8	6.6	8	10	79	79	84	819404	806013	<0.2	0.4	<0.2	0.3
					Middle	3.8	0.5	197	27.1	27.1	8.1	8.1	32.9	32.9	99.3	99.3	6.5	6.5	7.6	6.5	7.6	6.5	10	10	83	83	84	819404	806013	<0.2	0.3	<0.2	0.3
						3.8	0.5	206	27.1	27.1	8.1	8.1	32.9	32.9	99.3	99.3	6.5	6.5	7.6	6.5	7.6	6.5	12	10	83	83	84	819404	806013	<0.2	0.3	<0.2	0.3
					Bottom	6.6	0.4	194	27.4	27.4	8.1	8.1	32.5	32.5	100.3	100.3	6.4	6.4	8.5	6.4	8.5	6.4	10	6.4	90	90	84	819404	806013	<0.2	0.3	<0.2	0.4
						6.6	0.5	205	27.4	27.4	8.1	8.1	32.5	32.5	100.3	100.3	6.4	6.4	8.5	6.4	8.5	6.4	10	6.4	90	90	84	819404	806013	<0.2	0.4	<0.2	0.4
IM4	Sunny	Calm	10:50	7.8	Surface	1.0	0.6	194	27.3	27.3	8.1	8.1	32.8	32.8	100.4	100.4	6.6	6.6	7.3	6.6	11	14	78	78	83	819572	805026	<0.2	0.3	<0.2	0.2		
						1.0	0.6	195	27.3	27.3	8.1	8.1	32.8	32.8	100.4	100.4	6.6	6.6	7.5	6.6	7.5	6.6	13	14	78	78	83	819572	805026	<0.2	0.2	<0.2	0.4
					Middle	3.9	0.5	187	27.4	27.4	8.1	8.1	32.6	32.6	100.0	100.0	6.6	6.6	9.3	6.6	9.3	6.6	12	13	82	82	83	819572	805026	<0.2	0.4	<0.2	0.4
						3.9	0.6	193	27.4	27.4	8.1	8.1	32.6	32.6	100.0	100.0	6.6	6.6	9.2	6.6	9.2	6.6	13	13	83	83	83	819572	805026	<0.2	0.4	<0.2	0.4
					Bottom	6.8	0.5	189	27.4	27.4	8.1	8.1	32.5	32.5	100.5	100.5	6.6	6.6	15.8	6.6	15.8	6.6	16	6.6	88	88	83	819572	805026	<0.2	0.4	<0.2	0.4
						6.8	0.5	190	27.4	27.4	8.1	8.1	32.5	32.5	100.5	100.5	6.6	6.6	16.0	6.6	16.0	6.6	17	6.6	89	89	83	819572	805026	<0.2	0.3	<0.2	0.3

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 13 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	10:39	7.4	Surface	1.0	0.5	145	24.4	24.4	7.9	7.9	32.1	32.1	101.7	101.7	7.1	7.1	3.1	7.1	7	85	89	822086	808791	<0.2	<0.2	0.4	0.4			
						1.0	0.6	148	24.4	24.4	7.9	7.9	32.1	32.1	101.7	101.7	7.1	7.1	3.1	7.1	7	87	89	822086	808791	<0.2	<0.2	0.4	0.4			
					Middle	3.7	0.5	135	24.5	24.5	7.9	7.9	32.2	32.2	101.2	101.3	7.0	7.0	4.9	5.2	8	91	10	85	89	822086	808791	<0.2	<0.2	0.3	0.3	
						3.7	0.5	138	24.5	24.5	7.9	7.9	32.2	32.2	101.3	101.3	7.0	7.0	5.0	5.2	8	90	10	85	89	822086	808791	<0.2	<0.2	0.3	0.3	
					Bottom	6.4	0.5	136	24.5	24.5	7.9	7.9	32.4	32.4	103.3	103.4	7.2	7.2	7.6	7.2	7.6	15	91	10	85	89	822086	808791	<0.2	<0.2	0.3	0.3
						6.4	0.5	146	24.5	24.5	7.9	7.9	32.4	32.4	103.5	103.4	7.2	7.2	7.7	7.2	7.7	14	92	10	85	89	822086	808791	<0.2	<0.2	0.4	0.4
IM10	Cloudy	Moderate	10:29	7.8	Surface	1.0	0.5	98	24.6	24.6	7.9	7.9	33.4	33.4	100.3	100.3	6.9	6.9	6.6	9	87	90	822251	809833	<0.2	<0.2	0.4	0.4				
						1.0	0.6	99	24.6	24.6	7.9	7.9	33.4	33.4	100.3	100.3	6.9	6.9	6.6	9	85	90	822251	809833	<0.2	<0.2	0.4	0.4				
					Middle	3.9	0.5	106	24.6	24.6	7.9	7.9	33.4	33.4	100.1	100.1	6.9	6.9	8.7	9.4	16	92	15	87	90	822251	809833	<0.2	<0.2	0.4	0.4	
						3.9	0.5	116	24.6	24.6	7.9	7.9	33.4	33.4	100.1	100.1	6.9	6.9	8.8	9.4	14	92	15	85	90	822251	809833	<0.2	<0.2	0.3	0.3	
					Bottom	6.8	0.4	109	24.6	24.6	7.9	7.9	33.3	33.3	101.9	101.9	7.0	7.0	12.8	7.0	12.8	21	94	15	85	90	822251	809833	<0.2	<0.2	0.5	0.5
						6.8	0.4	109	24.6	24.6	7.9	7.9	33.3	33.3	101.9	101.9	7.0	7.0	12.8	7.0	12.8	19	90	15	85	90	822251	809833	<0.2	<0.2	0.3	0.3
IM11	Cloudy	Calm	10:19	8.7	Surface	1.0	0.6	100	24.5	24.5	7.9	7.9	33.4	33.4	98.8	98.8	6.8	6.8	6.7	13	86	91	821518	810560	<0.2	<0.2	0.4	0.4				
						1.0	0.6	103	24.5	24.5	7.9	7.9	33.4	33.4	98.8	98.8	6.8	6.8	6.8	10.0	14	89	15	85	91	821518	810560	<0.2	<0.2	0.3	0.3	
					Middle	4.4	0.6	93	24.4	24.4	7.9	7.9	33.4	33.4	98.6	98.7	6.8	6.8	8.8	10.0	15	91	15	85	91	821518	810560	<0.2	<0.2	0.5	0.5	
						4.4	0.6	93	24.4	24.4	7.9	7.9	33.4	33.4	98.7	98.7	6.8	6.8	8.9	10.0	17	93	15	85	91	821518	810560	<0.2	<0.2	0.3	0.3	
					Bottom	7.7	0.5	93	24.4	24.4	7.9	7.9	33.6	33.6	99.5	99.5	6.9	6.9	14.4	6.9	14.4	17	95	15	85	91	821518	810560	<0.2	<0.2	0.3	0.3
						7.7	0.5	94	24.4	24.4	7.9	7.9	33.6	33.6	99.5	99.5	6.9	6.9	14.4	6.9	14.4	16	94	15	85	91	821518	810560	<0.2	<0.2	0.3	0.3
IM12	Cloudy	Calm	10:10	9.0	Surface	1.0	0.6	101	24.9	24.9	7.9	7.9	32.8	32.8	97.4	97.4	6.7	6.7	3.5	10	87	90	821155	811521	<0.2	<0.2	0.4	0.4				
						1.0	0.6	107	24.9	24.9	7.9	7.9	32.8	32.8	97.4	97.4	6.7	6.7	3.5	10.4	9	87	13	85	90	821155	811521	<0.2	<0.2	0.5	0.5	
					Middle	4.5	0.5	96	24.9	24.9	7.9	7.9	32.9	32.9	96.7	96.7	6.6	6.6	6.1	10.4	11	90	13	85	90	821155	811521	<0.2	<0.2	0.4	0.4	
						4.5	0.5	104	24.9	24.9	7.9	7.9	32.9	32.9	96.7	96.7	6.6	6.6	6.2	10.4	10	90	13	85	90	821155	811521	<0.2	<0.2	0.4	0.4	
					Bottom	8.0	0.5	99	24.8	24.8	7.9	7.9	33.0	33.0	97.4	97.8	6.7	6.7	21.8	6.8	21.2	19	92	13	85	90	821155	811521	<0.2	<0.2	0.4	0.4
						8.0	0.5	102	24.7	24.8	7.9	7.9	33.0	33.0	98.1	98.1	6.8	6.8	21.2	6.8	21.2	17	92	13	85	90	821155	811521	<0.2	<0.2	0.3	0.3
SR2	Cloudy	Moderate	09:48	5.0	Surface	1.0	0.4	89	25.0	25.0	7.9	7.9	32.6	32.6	97.1	97.1	6.7	6.7	2.0	8	84	88	821444	814181	<0.2	<0.2	0.7	0.7				
						1.0	0.4	93	25.0	25.0	7.9	7.9	32.6	32.6	97.1	97.1	6.7	6.7	2.1	2.3	6	83	7	85	88	821444	814181	<0.2	<0.2	0.6	0.6	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88	821444	814181	<0.2	<0.2	-	-
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88	821444	814181	<0.2	<0.2	-	-
					Bottom	4.0	0.3	95	25.1	25.1	7.8	7.8	32.7	32.7	101.8	101.9	7.0	7.0	2.6	7.0	2.6	6	93	7	85	88	821444	814181	<0.2	<0.2	0.6	0.6
						4.0	0.3	95	25.1	25.1	7.8	7.8	32.7	32.7	102.0	101.9	7.0	7.0	2.6	7.0	2.6	6	92	7	85	88	821444	814181	<0.2	<0.2	0.8	0.8
SR3	Cloudy	Moderate	10:56	9.5	Surface	1.0	0.5	167	24.5	24.5	7.9	7.9	32.2	32.2	101.0	101.0	7.0	7.0	5.9	9	-	-	822150	807583	-	-	-	-				
						1.0	0.6	170	24.5	24.5	7.9	7.9	32.2	32.2	101.0	101.0	7.0	7.0	6.0	7.0	7	-	-	-	822150	807583	-	-	-	-		
					Middle	4.8	0.5	162	24.5	24.5	7.9	7.9	32.2	32.2	101.0	101.1	7.0	7.0	8.2	11.0	8	-	-	-	-	822150	807583	-	-	-	-	
						4.8	0.5	167	24.5	24.5	7.9	7.9	32.2	32.2	101.1	101.1	7.0	7.0	8.3	11.0	8	-	-	-	-	822150	807583	-	-	-	-	
					Bottom	8.5	0.5	163	24.4	24.4	7.9	7.9	32.4	32.4	101.9	102.0	7.1	7.1	18.7	7.1	18.7	23	-	-	-	-	822150	807583	-	-	-	-
						8.5	0.5	164	24.4	24.4	7.9	7.9	32.4	32.4	102.0	102.0	7.1	7.1	18.8	7.1	18.8	25	-	-	-	-	822150	807583	-	-	-	-
SR4A	Fine	Calm	09:41	9.1	Surface	1.0	0.4	103	27.1	27.1	8.1	8.1	32.7	32.7	96.2	96.2	6.4	6.4	5.4	7	-	-	817187	807803	-	-	-	-				
						1.0	0.4	108	27.1	27.1	8.1	8.1	32.7	32.7	96.2	96.2	6.4	6.4	5.4	5.7	9	-	-	-	817187	807803	-	-	-	-		
					Middle	4.6	0.4	100	27.2	27.2	8.1	8.1	32.5	32.5	95.9	95.9	6.3	6.3	5.8	5.7	11	-	-	-	-	817187	807803	-	-	-	-	
						4.6	0.5	108	27.2	27.2	8.1	8.1	32.5	32.5	95.9	95.9	6.3	6.3	5.8	5.7	12	-	-	-	-	817187	807803	-	-	-	-	
					Bottom	8.1	0.4	95	27.2	27.2	8.1	8.1	32.5	32.5	96.6	96.6	6.4	6.4	5.9	6.4	5.9	11	-	-	-	-	817187	807803	-	-	-	-
						8.1	0.5	99	27.2	27.2	8.1	8.1	32.5	32.5	96.6	96.6	6.4	6.4	5.9	6.4	5.9	13	-	-	-	-	817187	807803	-	-	-	-
SR5A	Fine	Calm	09:21	4.0	Surface	1.0	0.2	151	27.3	27.3	8.1	8.1	31.3	31.3	96.0	96.0	6.4	6.4	3.9	10	-	-	816592	810679	-	-	-	-				
						1.0	0.2	161	27.3	27.3	8.1	8.1	31.3	31.3	96.0	96.0	6.4	6.4	3.9	4.1	10	-	-	-	816592	810679	-	-	-	-		
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816592	810679	-	-	-	-	
						2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816592	810679	-	-	-	-	
					Bottom																											

**Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring**

Water Quality Monitoring Results on 15 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Calm	17:51	8.3	Surface	1.0	0.5	92	27.6	27.6	8.1	8.1	33.0	33.0	98.0	98.0	6.4	6.4	9.3	15	13	79	84	815622	804239	<0.2	<0.2	0.6	0.5					
						1.0	0.6	99	27.6	27.6	8.1	8.1	33.0	33.0	98.0	98.0	6.4	6.4	9.9	15	15	80	84	84	84	<0.2	<0.2	0.4	0.5					
						4.2	0.5	57	27.6	27.6	8.1	8.1	32.9	32.9	97.5	97.6	6.4	6.4	14.2	22	22	84	83	83	83	<0.2	<0.2	0.4	0.4					
					Middle	4.2	0.5	59	27.6	27.6	8.1	8.1	32.9	32.9	97.6	97.6	6.4	6.4	15.1	21	21	84	83	83	83	<0.2	<0.2	0.4	0.4					
						7.3	0.6	59	27.6	27.6	8.1	8.1	32.9	32.9	99.0	98.8	6.5	6.5	22.1	39	39	87	88	88	88	<0.2	<0.2	0.4	0.4					
						7.3	0.6	63	27.7	27.7	8.1	8.1	32.9	32.9	98.5	98.8	6.5	6.5	21.9	37	37	88	88	88	88	<0.2	<0.2	0.4	0.4					
C2	Cloudy	Moderate	16:43	11.7	Surface	1.0	0.4	102	25.1	25.1	7.9	7.9	29.4	29.4	101.6	101.6	7.1	7.1	3.0	7	7	81	88	825664	806951	<0.2	<0.2	0.7	0.7					
						1.0	0.4	102	25.1	25.1	7.9	7.9	29.4	29.4	101.5	101.6	7.1	7.1	3.1	7	7	82	90	90	90	<0.2	<0.2	0.8	0.8					
						5.9	0.4	61	25.0	25.0	7.9	7.9	29.3	29.3	99.6	99.6	7.0	7.0	4.2	9	9	90	90	90	90	<0.2	<0.2	0.7	0.7					
					Middle	5.9	0.4	62	25.0	25.0	7.9	7.9	29.3	29.3	99.6	99.6	7.0	7.0	4.2	11	11	90	90	90	90	<0.2	<0.2	0.7	0.7					
						10.7	0.6	49	24.9	24.9	7.9	7.9	29.2	29.2	100.0	100.0	7.0	7.0	6.1	12	12	93	91	91	91	<0.2	<0.2	0.7	0.7					
						10.7	0.6	49	24.9	24.9	7.9	7.9	29.2	29.2	100.0	100.0	7.0	7.0	6.2	10	10	91	86	86	86	<0.2	<0.2	0.7	0.7					
C3	Cloudy	Moderate	18:22	11.8	Surface	1.0	0.3	240	25.1	25.1	7.9	7.9	31.0	31.0	98.0	98.0	6.8	6.8	8.7	20	20	86	90	822117	817791	<0.2	<0.2	0.6	0.7					
						1.0	0.3	251	25.1	25.1	7.9	7.9	31.0	31.0	98.0	98.0	6.8	6.8	8.7	18	18	87	90	90	90	<0.2	<0.2	0.6	0.7					
						5.9	0.4	237	25.1	25.1	7.9	7.9	31.0	31.0	97.8	97.8	6.8	6.8	9.4	19	19	86	92	92	92	<0.2	<0.2	0.6	0.7					
					Middle	5.9	0.4	255	25.1	25.1	7.9	7.9	31.0	31.0	97.8	97.8	6.8	6.8	9.5	19	19	86	92	92	92	<0.2	<0.2	0.6	0.7					
						10.8	0.4	251	25.1	25.1	7.9	7.9	31.0	31.0	97.9	97.9	6.8	6.8	13.2	20	20	93	93	93	93	<0.2	<0.2	0.7	0.7					
						10.8	0.5	261	25.1	25.1	7.9	7.9	31.0	31.0	97.9	97.9	6.8	6.8	13.1	22	22	94	93	93	93	<0.2	<0.2	0.6	0.6					
IM1	Fine	Calm	17:31	7.4	Surface	1.0	0.5	213	27.5	27.6	8.1	8.1	32.8	32.8	100.0	99.9	6.6	6.5	8.1	15	15	73	80	818358	806444	<0.2	<0.2	0.6	0.6					
						1.0	0.5	215	27.6	27.6	8.1	8.1	32.8	32.8	99.7	99.2	6.5	6.5	9.1	16	16	75	79	79	79	<0.2	<0.2	0.5	0.6					
						3.7	0.7	203	27.6	27.6	8.1	8.1	32.8	32.8	99.2	99.2	6.5	6.5	13.0	22	22	79	80	80	80	<0.2	<0.2	0.6	0.6					
					Middle	3.7	0.7	215	27.6	27.6	8.1	8.1	32.8	32.8	99.1	99.2	6.5	6.5	14.4	21	21	80	87	87	87	<0.2	<0.2	0.6	0.6					
						6.4	0.5	223	27.6	27.6	8.1	8.1	32.8	32.8	99.1	99.1	6.5	6.5	18.9	30	30	87	86	86	86	<0.2	<0.2	0.6	0.6					
						6.4	0.5	232	27.6	27.6	8.1	8.1	32.8	32.8	99.5	99.3	6.5	6.5	20.8	33	33	86	86	86	86	<0.2	<0.2	0.6	0.6					
IM2	Fine	Calm	17:24	8.1	Surface	1.0	0.4	238	27.7	27.7	8.1	8.1	32.9	33.0	98.0	97.9	6.4	6.4	7.1	12	12	75	80	818857	806206	<0.2	<0.2	0.6	0.4					
						1.0	0.5	252	27.6	27.6	8.1	8.1	33.0	33.0	97.7	97.9	6.4	6.4	7.7	12	12	74	78	78	78	<0.2	<0.2	0.6	0.3					
						4.1	0.5	286	27.4	27.6	8.1	8.1	33.1	33.0	97.1	96.8	6.4	6.4	10.5	10	10	78	80	80	80	<0.2	<0.2	0.3	0.4					
					Middle	4.1	0.5	292	27.8	27.8	8.1	8.1	32.8	33.0	96.5	96.8	6.3	6.3	11.6	11	11	80	86	86	86	<0.2	<0.2	0.4	0.3					
						7.1	0.5	200	27.4	27.4	8.1	8.1	33.0	33.0	97.2	97.5	6.4	6.4	15.1	22	22	86	87	87	87	<0.2	<0.2	0.3	0.3					
						7.1	0.5	213	27.6	27.6	8.1	8.1	32.9	33.0	97.7	97.5	6.4	6.4	14.2	23	23	87	86	86	86	<0.2	<0.2	0.3	0.3					
IM3	Fine	Calm	17:17	8.4	Surface	1.0	0.6	226	27.6	27.6	8.1	8.1	32.9	32.9	97.3	97.1	6.4	6.4	6.5	10	10	73	79	819393	806001	<0.2	<0.2	0.2	0.2					
						1.0	0.6	247	27.6	27.6	8.1	8.1	32.9	32.9	96.9	96.1	6.4	6.4	6.6	12	12	74	77	77	77	<0.2	<0.2	0.2	0.3					
						4.2	0.4	200	27.6	27.6	8.1	8.1	32.9	32.9	96.1	96.1	6.3	6.3	8.4	13	13	77	78	78	78	<0.2	<0.2	0.3	0.2					
					Middle	4.2	0.4	210	27.6	27.6	8.1	8.1	32.8	32.9	96.0	96.1	6.3	6.3	8.5	12	12	78	84	84	84	<0.2	<0.2	0.3	0.2					
						7.4	0.5	246	27.6	27.6	8.1	8.1	32.8	32.8	96.7	96.9	6.3	6.3	9.1	20	20	84	85	85	85	<0.2	<0.2	0.2	0.2					
						7.4	0.6	269	27.6	27.6	8.1	8.1	32.8	32.8	97.1	96.9	6.4	6.4	8.5	22	22	85	85	85	85	<0.2	<0.2	0.2	0.2					
IM4	Fine	Calm	17:09	8.0	Surface	1.0	0.4	214	27.7	27.5	8.1	8.1	32.9	33.0	99.4	99.7	6.5	6.6	8.1	13	13	78	82	819580	805055	<0.2	<0.2	0.3	0.3					
						1.0	0.5	227	27.3	27.5	8.1	8.1	33.1	33.0	99.9	99.4	6.6	6.6	8.2	14	14	80	81	81	81	<0.2	<0.2	0.2	0.3					
						4.0	0.7	226	27.3	27.5	8.1	8.1	33.1	33.0	99.7	99.4	6.6	6.6	9.3	17	17	81	81	81	81	<0.2	<0.2	0.3	0.3					
					Middle	4.0	0.7	244	27.7	27.7	8.1	8.1	32.8	33.0	99.1	99.4	6.5	6.5	9.2	16	16	81	87	87	87	<0.2	<0.2	0.3	0.3					
						7.0	0.3	258	27.4	27.4	8.1	8.1	33.0	32.9	99.5	99.5	6.5	6.5	19.6	38	38	87	86	86	86	<0.2	<0.2	0.3	0.3					
						7.0	0.3	265	27.7	27.6	8.1	8.1	32.8	32.9	100.5	100.0	6.6	6.6	21.8	38	38	86	86	86	86	<0.2	<0.2	0.3	0.3					
IM5	Fine	Calm	17:02	7.0	Surface	1.0	0.4	203	27.3	27.5	8.1	8.1	33.1	33.0	101.0	100.7	6.6	6.6	8.7	16	16	76	81	820571	804918	<0.2	<0.2	0.3	0.3					
						1.0	0.4	215	27.7	27.5	8.1	8.1	32.8	33.0	100.4	100.0	6.6	6.6	9.1	14	14	76	80	80	80	<0.2	<0.2	0.4	0.3					
						3.5	0.6	234	27.6	27.5	8.1	8.1	32.8	32.9	99.9	100.0	6.6	6.6	15.4	20	20	80	80	80	80	<0.2	<0.2	0.4	0.3					
					Middle	3.5	0.7	246	27.3	27.3	8.1	8.1	33.0	32.9	100.1	100.0	6.6	6.6	16.7	22	22	80	86	86	86	<0.2	<0.2	0.3	0.3					
						6.0	0.4	260	27.3	27.3	8.1	8.1	33.0	32.9	100.0	99.8	6.6	6.6	22.3	31	31	86	86	86	86	<0.2	<0.2	0.4	0.3					
						6.0	0.4	280	27.7	27.5	8.1	8.1	32.7	32.9	99.6	99.8	6.5	6.5	21.2	32	32	86	86	86	86	<0.2	<0.2	0.3	0.3					

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 15 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Moderate	17:21	7.0	Surface	1.0	0.2	253	25.0	25.0	7.9	7.9	30.3	30.3	103.6	103.6	7.2	7.2	7.7	7.2	9	17	85	89	822093	808811	<0.2	<0.2	0.4	0.4			
						1.0	0.2	268	25.0	25.0	7.9	7.9	30.3	30.3	103.6	103.6	7.2	7.2	7.9	7.2	10	17	84	89	822093	808811	<0.2	<0.2	0.4	0.4			
					Middle	3.5	0.2	283	24.9	24.9	7.9	7.9	30.4	30.4	102.7	102.7	7.2	7.2	13.3	7.2	13.3	15.7	11	17	91	89	822093	808811	<0.2	<0.2	0.3	0.4	
						3.5	0.2	288	24.9	24.9	7.9	7.9	30.4	30.4	102.7	102.7	7.2	7.2	13.6	7.2	13.6	15.7	12	17	89	89	822093	808811	<0.2	<0.2	0.4	0.4	
					Bottom	6.0	0.3	284	24.9	24.9	7.9	7.9	30.4	30.4	102.8	102.8	7.2	7.2	26.0	7.2	26.0	15.7	31	17	91	89	822093	808811	<0.2	<0.2	0.3	0.3	
						6.0	0.3	301	24.9	24.9	7.9	7.9	30.4	30.4	102.8	102.8	7.2	7.2	25.8	7.2	25.8	15.7	29	17	93	89	822093	808811	<0.2	<0.2	0.3	0.3	
IM10	Cloudy	Moderate	17:28	7.2	Surface	1.0	0.3	237	25.0	25.0	7.9	7.9	30.5	30.5	103.4	103.4	7.2	7.2	6.7	7.2	9	13	86	90	822250	809835	<0.2	<0.2	0.3	0.3			
						1.0	0.3	243	25.0	25.0	7.9	7.9	30.5	30.5	103.3	103.3	7.2	7.2	7.3	7.2	7	13	86	90	822250	809835	<0.2	<0.2	0.3	0.3			
					Middle	3.6	0.4	260	24.9	25.0	7.9	7.9	30.5	30.5	103.1	103.1	7.2	7.2	9.7	7.2	9.7	11.8	17	13	91	90	822250	809835	<0.2	<0.2	0.3	0.3	
						3.6	0.4	261	25.0	25.0	7.9	7.9	30.5	30.5	103.1	103.1	7.2	7.2	9.8	7.2	9.8	11.8	17	13	90	90	822250	809835	<0.2	<0.2	0.3	0.3	
					Bottom	6.2	0.4	256	24.9	24.9	7.8	7.8	30.4	30.4	103.9	103.9	7.2	7.2	18.4	7.2	18.4	11.8	15	13	92	90	822250	809835	<0.2	<0.2	0.4	0.4	
						6.2	0.4	272	24.9	24.9	7.8	7.8	30.4	30.4	103.9	103.9	7.2	7.2	19.1	7.2	19.1	11.8	15	13	92	90	822250	809835	<0.2	<0.2	0.4	0.4	
IM11	Cloudy	Moderate	17:35	7.4	Surface	1.0	0.3	230	24.9	24.9	7.9	7.9	30.8	30.8	104.9	105.0	7.3	7.3	8.7	7.3	16	17	84	89	821494	810555	<0.2	<0.2	0.4	0.4			
						1.0	0.3	235	24.9	24.9	7.9	7.9	30.8	30.8	105.0	105.0	7.3	7.3	8.6	7.3	8.6	19.2	15	17	85	89	821494	810555	<0.2	<0.2	0.4	0.4	
					Middle	3.7	0.4	267	24.9	24.9	7.9	7.9	30.8	30.8	104.4	104.4	7.3	7.3	16.4	7.3	16.4	19.2	17	17	90	89	821494	810555	<0.2	<0.2	0.3	0.4	
						3.7	0.4	275	24.9	24.9	7.9	7.9	30.8	30.8	104.4	104.4	7.3	7.3	15.9	7.3	15.9	19.2	15	17	91	89	821494	810555	<0.2	<0.2	0.4	0.4	
					Bottom	6.4	0.4	266	24.9	24.9	7.9	7.9	30.8	30.8	103.9	103.9	7.2	7.2	32.8	7.2	32.8	19.2	18	17	93	89	821494	810555	<0.2	<0.2	0.4	0.4	
						6.4	0.4	287	24.9	24.9	7.9	7.9	30.8	30.8	103.9	103.9	7.2	7.2	32.7	7.2	32.7	19.2	18	17	92	89	821494	810555	<0.2	<0.2	0.3	0.3	
IM12	Cloudy	Moderate	17:41	8.9	Surface	1.0	0.3	243	24.9	24.9	8.0	8.0	31.0	31.0	104.9	104.9	7.3	7.3	8.7	7.3	18	30	86	89	821156	811534	<0.2	<0.2	0.3	0.4			
						1.0	0.3	260	24.9	24.9	8.0	8.0	31.0	31.0	104.9	104.9	7.3	7.3	8.8	7.3	8.8	14.2	16	30	83	89	821156	811534	<0.2	<0.2	0.3	0.3	
					Middle	4.5	0.3	242	24.9	24.9	8.0	8.0	31.0	31.0	104.3	104.3	7.2	7.2	10.6	7.2	10.6	14.2	29	30	90	89	821156	811534	<0.2	<0.2	0.5	0.5	
						4.5	0.3	250	24.9	24.9	8.0	8.0	31.0	31.0	104.3	104.3	7.2	7.2	10.8	7.2	10.8	14.2	28	30	89	89	821156	811534	<0.2	<0.2	0.5	0.5	
					Bottom	7.9	0.3	216	24.9	24.9	7.9	7.9	31.1	31.1	103.1	103.1	7.2	7.2	23.0	7.2	23.0	14.2	45	30	92	89	821156	811534	<0.2	<0.2	0.4	0.4	
						7.9	0.4	217	24.9	24.9	7.9	7.9	31.1	31.1	103.1	103.1	7.2	7.2	23.0	7.2	23.0	14.2	42	30	93	89	821156	811534	<0.2	<0.2	0.4	0.4	
SR2	Cloudy	Moderate	18:07	4.2	Surface	1.0	0.2	117	25.1	25.1	7.9	7.9	31.0	31.0	101.6	101.6	7.0	7.0	13.0	7.0	20	24	86	89	821477	814151	<0.2	<0.2	0.5	0.5			
						1.0	0.2	118	25.1	25.1	7.9	7.9	31.0	31.0	101.6	101.6	7.0	7.0	13.2	7.0	13.2	18.5	20	24	85	89	821477	814151	<0.2	<0.2	0.5	0.5	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	89	821477	814151	-	<0.2	-	-
						2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	89	821477	814151	-	<0.2	-	-
					Bottom	3.2	0.2	112	24.9	24.9	7.9	7.9	31.0	31.0	101.6	101.6	7.1	7.1	23.9	7.1	23.9	18.5	28	24	91	89	821477	814151	<0.2	<0.2	0.4	0.4	
						3.2	0.2	118	24.9	24.9	7.9	7.9	31.0	31.0	101.7	101.7	7.1	7.1	23.9	7.1	23.9	18.5	29	24	92	89	821477	814151	<0.2	<0.2	0.4	0.4	
SR3	Cloudy	Moderate	17:10	8.6	Surface	1.0	0.3	239	24.9	24.9	7.9	7.9	30.0	30.0	102.6	102.6	7.2	7.2	7.4	7.2	17	16	-	-	822164	807571	-	-	-	-			
						1.0	0.3	262	24.9	24.9	7.9	7.9	30.0	30.0	102.6	102.6	7.2	7.2	7.4	7.2	7.4	7.4	15	16	-	-	822164	807571	-	-	-	-	
					Middle	4.3	0.3	265	24.9	24.9	7.9	7.9	30.0	30.0	102.1	102.1	7.1	7.1	7.1	7.1	7.1	7.4	16	16	-	-	822164	807571	-	-	-	-	
						4.3	0.3	278	24.9	24.9	7.9	7.9	30.0	30.0	102.1	102.1	7.1	7.1	7.2	7.1	7.2	7.4	16	16	-	-	822164	807571	-	-	-	-	
					Bottom	7.6	0.4	242	24.8	24.8	7.9	7.9	29.9	29.9	101.9	101.9	7.1	7.1	7.6	7.1	7.6	7.4	17	16	-	-	822164	807571	-	-	-	-	
						7.6	0.4	245	24.8	24.8	7.9	7.9	29.9	29.9	101.9	101.9	7.1	7.1	7.5	7.1	7.5	7.4	17	16	-	-	822164	807571	-	-	-	-	
SR4A	Fine	Calm	18:15	8.6	Surface	1.0	0.6	68	27.6	27.6	8.0	8.1	32.6	32.7	96.0	96.2	6.3	6.3	7.0	6.3	14	16	-	-	817191	807791	-	-	-	-			
						1.0	0.6	70	27.5	27.6	8.1	8.1	32.7	32.7	96.3	96.2	6.3	6.3	7.2	6.3	7.2	6.3	16	16	-	-	817191	807791	-	-	-	-	
					Middle	4.3	0.3	94	27.5	27.5	8.1	8.1	32.8	32.8	96.5	96.6	6.3	6.3	7.6	6.3	7.6	6.3	18	16	-	-	817191	807791	-	-	-	-	
						4.3	0.3	94	27.5	27.5	8.1	8.1	32.8	32.8	96.6	96.6	6.3	6.3	8.4	6.3	8.4	6.3	18	16	-	-	817191	807791	-	-	-	-	
					Bottom	7.6	0.3	86	27.5	27.5	8.1	8.1	32.8	32.8	97.8	98.1	6.4	6.4	8.6	6.4	8.6	6.5	16	16	-	-	817191	807791	-	-	-	-	
						7.6	0.3	91	27.5	27.5	8.1	8.1	32.8	32.8	98.3	98.3	6.5	6.5	8.6	6.5	8.6	6.5	17	16	-	-	817191	807791	-	-	-	-	
SR5A	Fine	Calm	18:34	3.6	Surface	1.0	0.3	123	28.1	28.1	8.1	8.1	32.0	32.0	102.2	101.6	6.7	6.7	6.3	6.7	6	9	-	-	816583	810679	-	-	-	-			
						1.0	0.3	134	28.0	28.1	8.0	8.0	32.0	32.0																			

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 15 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA		
C1	Fine	Calm	11:54	9.0	Surface	1.0	0.6	256	<u>27.5</u>	27.5	8.1	8.1	33.1	33.1	96.5	96.4	6.3	6.3	9.8	12.4	16	18	82	87	87	815612	804256	<0.2	<0.2	0.4	0.3			
						1.0	0.6	274	<u>27.5</u>	27.5	8.1	8.1	33.1	33.1	96.3	96.4	6.3	6.3	10.4	12.4	15	18	84	87	87	815612	804256	<0.2	<0.2	0.4	0.3			
					Middle	4.5	0.6	144	<u>27.5</u>	27.5	8.1	8.1	33.0	33.0	95.8	95.8	6.3	6.3	12.2	12.4	17	18	87	87	87	815612	804256	<0.2	<0.2	0.3	0.3			
						4.5	0.6	148	<u>27.5</u>	27.5	8.1	8.1	33.0	33.0	95.8	95.8	6.3	6.3	12.7	12.4	16	18	87	87	87	815612	804256	<0.2	<0.2	0.3	0.3			
					Bottom	8.0	0.6	143	<u>27.5</u>	27.5	8.1	8.1	32.9	33.0	95.8	96.2	6.3	6.3	15.6	6.3	6.3	15.6	12.4	24	18	90	87	87	815612	804256	<0.2	<0.2	0.2	0.3
						8.0	0.6	144	<u>27.5</u>	27.5	8.1	8.1	33.0	33.0	96.5	96.2	6.3	6.3	13.6	6.3	6.3	13.6	12.4	22	18	90	87	87	815612	804256	<0.2	<0.2	0.3	0.3
C2	Cloudy	Moderate	12:36	12.4	Surface	1.0	0.5	116	<u>25.0</u>	25.0	7.9	7.9	30.4	30.4	100.7	100.7	7.0	7.0	4.1	4.8	10	10	81	89	88	825676	806926	<0.2	<0.2	0.4	0.5			
						1.0	0.5	124	<u>25.0</u>	25.0	7.9	7.9	30.4	30.4	100.7	100.7	7.0	7.0	4.1	4.8	9	10	84	89	88	825676	806926	<0.2	<0.2	0.5	0.5			
					Middle	6.2	0.5	54	<u>25.0</u>	25.0	7.9	7.9	30.4	30.4	99.9	99.9	7.0	7.0	5.0	7.0	9	10	9	10	89	90	88	825676	806926	<0.2	<0.2	0.4	0.5	
						6.2	0.5	57	<u>25.0</u>	25.0	7.9	7.9	30.4	30.4	99.9	99.9	7.0	7.0	5.0	7.0	11	10	11	10	90	92	88	825676	806926	<0.2	<0.2	0.5	0.5	
					Bottom	11.4	0.4	60	<u>24.9</u>	24.9	7.9	7.9	30.3	30.3	99.7	99.7	7.0	7.0	5.2	7.0	7.0	7.0	5.2	7.0	11	10	92	88	825676	806926	<0.2	<0.2	0.7	0.6
						11.4	0.4	63	<u>24.9</u>	24.9	7.9	7.9	30.3	30.3	99.7	99.7	7.0	7.0	5.1	7.0	7.0	7.0	5.1	7.0	10	10	93	88	825676	806926	<0.2	<0.2	0.6	0.6
C3	Fine	Moderate	10:51	11.8	Surface	1.0	0.4	76	<u>25.3</u>	25.3	7.8	7.8	30.7	30.7	90.6	90.6	6.3	6.3	4.3	5.3	11	12	88	87	90	822128	817803	<0.2	<0.2	0.4	0.5			
						1.0	0.4	79	<u>25.3</u>	25.3	7.8	7.8	30.7	30.7	90.6	90.6	6.3	6.3	4.3	5.3	9	12	87	88	91	822128	817803	<0.2	<0.2	0.4	0.5			
					Middle	5.9	0.4	83	<u>25.3</u>	25.3	7.8	7.8	30.7	30.7	90.6	90.6	6.3	6.3	5.4	6.3	12	12	12	12	88	88	91	822128	817803	<0.2	<0.2	0.5	0.4	
						5.9	0.4	86	<u>25.3</u>	25.3	7.8	7.8	30.7	30.7	90.6	90.6	6.3	6.3	5.4	6.3	14	12	14	12	91	93	91	822128	817803	<0.2	<0.2	0.4	0.5	
					Bottom	10.8	0.4	86	<u>25.3</u>	25.3	7.8	7.8	30.7	30.7	91.7	91.8	6.3	6.3	6.1	6.3	6.1	6.3	6.1	6.3	14	12	93	822128	817803	<0.2	<0.2	0.5	0.5	
						10.8	0.4	90	<u>25.3</u>	25.3	7.8	7.8	30.7	30.7	91.9	91.8	6.3	6.3	6.0	6.3	6.0	6.3	6.0	6.3	14	12	94	822128	817803	<0.2	<0.2	0.5	0.5	
IM1	Fine	Calm	12:19	8.1	Surface	1.0	0.4	128	<u>27.5</u>	27.5	8.1	8.1	33.1	33.1	97.2	97.1	6.4	6.4	9.3	11.2	15	20	76	77	82	818341	806458	<0.2	<0.2	0.2	0.3			
						1.0	0.4	135	<u>27.5</u>	27.5	8.1	8.1	33.1	33.1	97.0	97.1	6.4	6.4	9.4	11.2	16	20	77	80	81	818341	806458	<0.2	<0.2	0.2	0.3			
					Middle	4.1	0.4	190	<u>27.5</u>	27.5	8.1	8.1	33.0	33.0	96.2	96.1	6.3	6.3	11.1	11.2	22	20	80	81	81	818341	806458	<0.2	<0.2	0.3	0.3			
						4.1	0.4	193	<u>27.5</u>	27.5	8.1	8.1	33.0	33.0	96.0	96.1	6.3	6.3	12.0	11.2	23	20	81	81	81	818341	806458	<0.2	<0.2	0.3	0.3			
					Bottom	7.1	0.3	181	<u>27.5</u>	27.5	8.1	8.1	33.0	33.0	96.5	96.8	6.3	6.4	12.8	6.4	6.4	6.4	12.8	11.2	23	20	89	81	818341	806458	<0.2	<0.2	0.3	0.3
						7.1	0.3	191	<u>27.5</u>	27.5	8.1	8.1	32.9	33.0	97.1	96.8	6.4	6.4	12.8	6.4	6.4	6.4	12.8	11.2	22	20	89	81	818341	806458	<0.2	<0.2	0.3	0.3
IM2	Fine	Calm	12:25	8.4	Surface	1.0	0.5	111	<u>27.6</u>	27.6	8.1	8.1	32.9	32.9	96.3	96.3	6.3	6.3	10.4	13.4	16	22	78	76	82	818837	806203	<0.2	<0.2	0.3	0.3			
						1.0	0.5	111	<u>27.6</u>	27.6	8.1	8.1	32.9	32.9	96.2	96.3	6.3	6.3	10.7	13.4	17	22	76	80	81	818837	806203	<0.2	<0.2	0.4	0.3			
					Middle	4.2	0.4	134	<u>27.6</u>	27.6	8.1	8.1	32.9	32.9	95.8	95.9	6.3	6.3	13.4	6.3	6.3	6.3	13.4	13.4	22	22	80	81	818837	806203	<0.2	<0.2	0.2	0.3
						4.2	0.4	143	<u>27.6</u>	27.6	8.1	8.1	32.9	32.9	95.9	95.9	6.3	6.3	14.9	6.3	6.3	6.3	14.9	13.4	21	22	81	81	818837	806203	<0.2	<0.2	0.3	0.3
					Bottom	7.4	0.6	186	<u>27.6</u>	27.6	8.1	8.1	32.8	32.8	96.1	96.3	6.3	6.3	15.7	6.3	6.3	6.3	15.7	13.4	28	22	87	81	818837	806203	<0.2	<0.2	0.3	0.3
						7.4	0.6	188	<u>27.6</u>	27.6	8.1	8.1	32.8	32.8	96.5	96.3	6.3	6.3	15.1	6.3	6.3	6.3	15.1	13.4	28	22	89	81	818837	806203	<0.2	<0.2	0.3	0.3
IM3	Fine	Calm	12:33	8.7	Surface	1.0	0.5	109	<u>27.8</u>	27.8	8.1	8.1	32.8	32.9	96.9	97.0	6.3	6.3	7.9	9.3	10	17	75	76	81	819413	806020	<0.2	<0.2	0.2	0.3			
						1.0	0.5	110	<u>27.7</u>	27.8	8.1	8.1	32.9	32.9	97.1	97.0	6.4	6.4	8.1	9.3	10	17	76	80	80	819413	806020	<0.2	<0.2	0.3	0.3			
					Middle	4.4	0.6	156	<u>27.7</u>	27.8	8.1	8.1	32.8	32.8	96.7	96.6	6.3	6.3	9.0	9.3	18	17	80	80	80	80	819413	806020	<0.2	<0.2	0.3	0.3		
						4.4	0.6	159	<u>27.8</u>	27.8	8.1	8.1	32.7	32.8	96.4	96.6	6.3	6.3	9.3	9.3	17	17	80	80	80	80	819413	806020	<0.2	<0.2	0.3	0.3		
					Bottom	7.7	0.4	189	<u>27.6</u>	27.7	8.1	8.1	32.8	32.8	97.1	97.4	6.4	6.4	11.0	6.4	6.4	6.4	11.0	9.3	23	17	86	81	819413	806020	<0.2	<0.2	0.2	0.2
						7.7	0.5	200	<u>27.8</u>	27.8	8.1	8.1	32.7	32.7	97.7	97.4	6.4	6.4	10.7	6.4	6.4	6.4	10.7	9.3	21	17	87	81	819413	806020	<0.2	<0.2	0.2	0.2
IM4	Fine	Calm	12:43	8.4	Surface	1.0	0.3	131	<u>27.4</u>	27.6	8.1	8.1	33.1	33.0	97.7	97.4	6.4	6.4	7.3	8.5	17	19	79	81	84	819551	805046	<0.2	<0.2	0.2	0.4			
						1.0	0.3	134	<u>27.7</u>	27.6	8.1	8.1	32.8	33.0	97.1	97.4	6.4	6.4	7.4	8.5	17	19	81	84	84	819551	805046	<0.2	<0.2	0.2	0.6			
					Middle	4.2	0.5	180	<u>27.8</u>	27.8	8.1	8.1	32.8	32.8	96.2	96.2	6.3	6.3	8.7	6.3	6.3	6.3	8.7	8.5	17	19	84	84	819551	805046	<0.2	<0.2	0.6	0.6
						4.2	0.5	197	<u>27.8</u>	27.8	8.1	8.1	32.7	32.7	96.1	96.2	6.3	6.3	8.9	6.3	6.3	6.3	8.9	8.5	18	19	84	84	819551	805046	<0.2	<0.2	0.6	0.6
					Bottom	7.4	0.4	121	<u>27.8</u>	27.8	8.1	8.1	32.7	32.7	97.3	97.7	6.4	6.4	9.7	6.4	6.4	6.4	9.7	8.5	21	19	87	81	819551</					

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 15 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA		
IM9	Cloudy	Moderate	11:55	8.1	Surface	1.0	0.6	153	24.8	24.8	7.9	7.9	31.1	31.1	99.6	99.6	6.9	6.9	5.5	6.9	10	10	86	86	89	89	822098	808810	<0.2	<0.2	0.4	0.4		
						1.0	0.6	166	24.8	24.8	7.9	7.9	31.1	31.1	99.6	99.6	6.9	6.9	5.6	6.9	10	10	83	83	89	89	822098	808810	<0.2	<0.2	0.5	0.5		
					Middle	4.1	0.4	160	24.8	24.8	7.9	7.9	31.1	31.1	99.6	99.6	6.9	6.9	5.5	6.9	10	10	90	90	89	89	89	89	822098	808810	<0.2	<0.2	0.3	0.3
						4.1	0.5	172	24.8	24.8	7.9	7.9	31.1	31.1	99.6	99.6	6.9	6.9	5.5	6.9	9	9	89	89	89	89	89	89	822098	808810	<0.2	<0.2	0.3	0.3
					Bottom	7.1	0.5	160	24.8	24.8	7.9	7.9	31.0	31.0	100.8	100.9	7.0	7.0	5.8	7.0	12	12	92	92	92	92	92	92	822098	808810	<0.2	<0.2	0.5	0.5
						7.1	0.5	162	24.8	24.8	7.9	7.9	31.0	31.0	101.0	100.9	7.0	7.0	5.8	7.0	11	11	92	92	92	92	92	92	822098	808810	<0.2	<0.2	0.5	0.5
IM10	Cloudy	Moderate	11:46	7.4	Surface	1.0	0.3	107	25.0	25.0	7.9	7.9	31.0	31.0	96.3	96.3	6.7	6.7	6.0	6.7	11	11	85	85	90	90	822255	809824	<0.2	<0.2	0.4	0.4		
						1.0	0.3	111	25.0	25.0	7.9	7.9	31.0	31.0	96.3	96.3	6.7	6.7	5.9	6.7	12	12	88	88	90	90	822255	809824	<0.2	<0.2	0.3	0.3		
					Middle	3.7	0.2	178	25.0	25.0	7.9	7.9	31.0	31.0	96.3	96.3	6.7	6.7	6.6	6.7	14	14	90	90	91	91	90	90	822255	809824	<0.2	<0.2	0.6	0.6
						3.7	0.2	184	25.0	25.0	7.9	7.9	31.0	31.0	96.3	96.3	6.7	6.7	6.6	6.7	16	16	91	91	91	91	90	90	822255	809824	<0.2	<0.2	0.5	0.5
					Bottom	6.4	0.3	171	25.0	25.0	7.9	7.9	31.0	31.0	97.6	98.0	6.8	6.8	7.5	6.8	16	16	92	92	92	92	92	92	822255	809824	<0.2	<0.2	0.6	0.6
						6.4	0.4	183	25.0	25.0	7.9	7.9	31.0	31.0	98.3	98.0	6.8	6.8	7.6	6.8	18	18	93	93	93	93	93	93	822255	809824	<0.2	<0.2	0.6	0.6
IM11	Cloudy	Moderate	11:39	8.8	Surface	1.0	0.3	129	25.1	25.1	7.9	7.9	31.0	31.0	95.8	95.8	6.6	6.6	6.1	6.6	10	10	85	85	90	90	821482	810556	<0.2	<0.2	0.5	0.5		
						1.0	0.3	137	25.1	25.1	7.9	7.9	31.0	31.0	95.8	95.8	6.6	6.6	6.1	6.6	12	12	85	85	90	90	821482	810556	<0.2	<0.2	0.6	0.6		
					Middle	4.4	0.3	180	25.1	25.1	7.8	7.8	31.0	31.0	96.1	96.2	6.7	6.7	6.9	6.7	12	12	91	91	91	91	90	90	821482	810556	<0.2	<0.2	0.5	0.5
						4.4	0.3	189	25.1	25.1	7.8	7.8	31.0	31.0	96.2	96.2	6.7	6.7	7.1	6.7	12	12	91	91	91	91	90	90	821482	810556	<0.2	<0.2	0.5	0.5
					Bottom	7.8	0.4	172	25.1	25.1	7.8	7.8	31.0	31.0	97.5	97.6	6.8	6.8	7.1	6.8	15	15	92	92	92	92	93	93	821482	810556	<0.2	<0.2	0.5	0.5
						7.8	0.4	179	25.1	25.1	7.8	7.8	31.0	31.0	97.6	97.6	6.8	6.8	7.0	6.8	17	17	93	93	93	93	93	93	821482	810556	<0.2	<0.2	0.5	0.5
IM12	Cloudy	Moderate	11:31	9.6	Surface	1.0	0.3	151	25.0	25.0	7.8	7.8	30.8	30.8	96.1	96.1	6.7	6.7	6.0	6.7	10	10	86	86	90	90	821165	811501	<0.2	<0.2	0.5	0.5		
						1.0	0.3	156	25.0	25.0	7.8	7.8	30.8	30.8	96.1	96.1	6.7	6.7	6.1	6.7	10	10	87	87	90	90	821165	811501	<0.2	<0.2	0.5	0.5		
					Middle	4.8	0.3	140	25.0	25.0	7.8	7.8	30.8	30.8	96.1	96.1	6.7	6.7	8.2	6.7	12	12	91	91	91	91	90	90	821165	811501	<0.2	<0.2	0.6	0.6
						4.8	0.3	150	25.0	25.0	7.8	7.8	30.8	30.8	96.1	96.1	6.7	6.7	8.3	6.7	13	13	90	90	91	91	90	90	821165	811501	<0.2	<0.2	0.6	0.6
					Bottom	8.6	0.3	113	25.0	25.0	7.8	7.8	30.8	30.8	97.8	97.9	6.8	6.8	10.9	6.8	13	13	92	92	92	92	93	93	821165	811501	<0.2	<0.2	0.6	0.6
						8.6	0.3	117	25.0	25.0	7.8	7.8	30.8	30.8	97.9	97.9	6.8	6.8	10.8	6.8	12	12	93	93	93	93	93	93	821165	811501	<0.2	<0.2	0.6	0.6
SR2	Fine	Moderate	11:12	4.9	Surface	1.0	0.4	115	25.0	25.0	7.8	7.8	30.5	30.5	96.6	96.7	6.7	6.7	5.7	6.7	13	13	86	86	89	89	821453	814183	<0.2	<0.2	0.6	0.6		
						1.0	0.4	122	25.0	25.0	7.8	7.8	30.5	30.5	96.7	96.7	6.7	6.7	5.8	6.7	13	13	87	87	89	89	821453	814183	<0.2	<0.2	0.7	0.7		
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	3.9	0.4	112	25.0	25.0	7.8	7.8	30.5	30.5	96.8	96.8	6.7	6.7	9.8	6.7	15	15	91	91	92	92	92	92	821453	814183	<0.2	<0.2	0.5	0.5
						3.9	0.4	116	25.0	25.0	7.8	7.8	30.5	30.5	96.8	96.8	6.7	6.7	10.2	6.7	17	17	92	92	92	92	92	92	821453	814183	<0.2	<0.2	0.5	0.5
SR3	Cloudy	Moderate	12:09	9.2	Surface	1.0	0.5	153	24.8	24.8	8.0	8.0	31.4	31.4	98.8	98.8	6.9	6.9	8.8	6.9	12	12	-	-	-	-	822158	807565	-	-	-	-		
						1.0	0.5	154	24.8	24.8	8.0	8.0	31.4	31.4	98.8	98.8	6.9	6.9	8.9	6.9	14	14	-	-	-	-	822158	807565	-	-	-	-		
					Middle	4.6	0.5	170	24.8	24.8	8.0	8.0	31.4	31.4	98.1	98.2	6.8	6.8	12.1	6.8	16	16	-	-	-	-	-	-	822158	807565	-	-	-	-
						4.6	0.5	177	24.8	24.8	8.0	8.0	31.4	31.4	98.2	98.2	6.8	6.8	12.0	6.8	18	18	-	-	-	-	-	-	822158	807565	-	-	-	-
					Bottom	8.2	0.5	160	24.8	24.8	8.0	8.0	31.4	31.4	98.3	98.3	6.8	6.8	20.9	6.8	18	18	-	-	-	-	-	-	822158	807565	-	-	-	-
						8.2	0.5	170	24.8	24.8	8.0	8.0	31.4	31.4	98.2	98.2	6.8	6.8	21.0	6.8	21	21	-	-	-	-	-	-	822158	807565	-	-	-	-
SR4A	Fine	Calm	11:30	9.1	Surface	1.0	0.5	189	27.5	27.5	8.1	8.1	32.9	32.9	95.8	95.8	6.3	6.3	10.8	6.3	20	20	-	-	-	-	817183	807809	-	-	-	-		
						1.0	0.5	207	27.5	27.5	8.1	8.1	32.9	32.9	95.7	95.7	6.3	6.3	11.3	6.3	18	18	-	-	-	-	817183	807809	-	-	-	-		
					Middle	4.6	0.3	116	27.5	27.5	8.1	8.1	32.9	32.9	95.2	95.2	6.3	6.3	13.0	6.3	22	22	-	-	-	-	-	-	817183	807809	-	-	-	-
						4.6	0.3	119	27.5	27.5	8.1	8.1	32.8	32.8	95.1	95.1	6.3	6.3	13.6	6.3	23	23	-	-	-	-	-	-	817183	807809	-	-	-	-
					Bottom	8.1	0.4	146	27.5	27.6	8.1	8.1	32.8	32.8	95.2	95.3	6.3	6.3	14.1	6.3	32	32	-	-	-	-	-	-	817183	807809	-	-	-	-
						8.1	0.4	148	27.6	27.6	8.1	8.1	32.8	32.8	95.4	95.3	6.3	6.3	13.6	6.3	30	30	-	-	-	-	-	-	817183	807809	-	-	-	-
SR5A	Fine	Calm	11:11	4.6	Surface	1.0	0.3	165	27.7	27.8	8.0																							

**Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring**

Water Quality Monitoring Results on 20 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	10:21	9.0	Surface	1.0	0.7	48	27.6	27.6	7.9	7.9	31.5	31.5	95.3	95.3	6.3	6.3	12.5	16.2	20	23	83	88	815621	804232	<0.2	<0.2	0.6	0.6				
						1.0	0.8	51	27.6	27.6	7.9	7.9	31.5	31.5	95.3	95.3	6.3	6.3	12.6	16.2	19	23	83	88	815621	804232	<0.2	<0.2	0.6	0.6				
						4.5	0.8	51	27.6	27.4	7.9	7.9	31.5	31.7	95.0	95.3	6.3	6.3	14.4	16.2	21	23	89	88	815621	804232	<0.2	<0.2	0.7	0.6				
					Middle	4.5	0.8	53	27.2	27.4	7.9	7.9	31.8	31.7	95.6	95.3	6.4	6.3	14.5	16.2	19	23	90	23	90	88	815621	804232	<0.2	<0.2	0.6	0.6		
						8.0	0.7	51	27.5	27.5	7.9	7.9	31.5	31.5	95.2	95.3	6.3	6.3	21.8	16.2	28	23	91	23	91	88	815621	804232	<0.2	<0.2	0.5	0.4		
						8.0	0.7	52	27.5	27.5	7.9	7.9	31.4	31.5	95.4	95.3	6.3	6.3	21.2	16.2	31	23	92	23	92	88	815621	804232	<0.2	<0.2	0.4	0.4		
C2	Cloudy	Moderate	11:12	12.6	Surface	1.0	0.5	88	24.9	24.9	7.7	7.7	26.9	26.9	91.3	91.3	6.5	6.5	4.2	14.5	7	15	81	89	825672	806928	<0.2	<0.2	1.9	1.7				
						1.0	0.5	92	24.9	24.9	7.7	7.7	26.9	28.0	91.3	90.9	6.5	6.4	4.3	14.5	8	15	82	89	825672	806928	<0.2	<0.2	1.9	1.7				
						6.3	0.5	65	24.7	24.7	7.7	7.7	28.0	28.0	90.9	90.9	6.4	6.4	9.7	14.5	8	15	90	89	825672	806928	<0.2	<0.2	2.0	2.0				
					Middle	6.3	0.6	67	24.7	24.7	7.7	7.7	28.0	28.0	90.9	90.9	6.4	6.4	9.9	14.5	7	15	92	89	825672	806928	<0.2	<0.2	2.0	2.0				
						11.6	0.5	74	24.8	24.8	7.7	7.7	29.0	29.0	92.2	92.2	6.5	6.5	29.6	14.5	29	15	93	89	825672	806928	<0.2	<0.2	1.2	1.2				
						11.6	0.5	81	24.8	24.8	7.7	7.7	29.0	29.0	92.2	92.2	6.5	6.5	29.4	14.5	29	15	93	89	825672	806928	<0.2	<0.2	1.2	1.2				
C3	Cloudy	Moderate	09:28	12.4	Surface	1.0	0.7	72	24.7	24.7	7.8	7.8	30.9	30.9	96.4	96.4	6.7	6.7	5.3	14.7	7	18	86	90	822118	817810	<0.2	<0.2	0.4	0.5				
						1.0	0.8	73	24.7	24.6	7.8	7.8	30.9	31.0	96.4	95.7	6.7	6.7	5.4	14.7	9	18	85	90	822118	817810	<0.2	<0.2	0.5	0.7				
						6.2	0.8	267	24.6	24.6	7.8	7.8	31.0	31.0	95.7	95.7	6.7	6.7	18.0	14.7	17	18	90	90	822118	817810	<0.2	<0.2	0.7	0.7				
					Middle	6.2	0.8	270	24.6	24.6	7.8	7.8	31.0	31.0	95.7	95.7	6.7	6.7	18.1	14.7	17	18	92	90	822118	817810	<0.2	<0.2	0.7	0.7				
						11.4	0.5	274	24.6	24.6	7.8	7.8	31.0	31.0	96.8	96.8	6.8	6.8	20.6	14.7	29	18	93	90	822118	817810	<0.2	<0.2	0.4	0.4				
						11.4	0.6	274	24.6	24.6	7.8	7.8	31.0	31.0	96.8	96.8	6.8	6.8	20.6	14.7	27	18	93	90	822118	817810	<0.2	<0.2	0.4	0.4				
IM1	Fine	Moderate	11:13	8.2	Surface	1.0	0.6	238	27.9	27.9	7.9	7.9	29.8	29.8	94.9	94.9	6.3	6.3	6.8	10.2	9	9	83	89	818350	806440	<0.2	<0.2	2.6	1.5				
						1.0	0.6	256	27.9	27.7	7.9	7.9	29.8	30.9	94.9	94.3	6.3	6.3	6.9	10.2	10	9	84	89	818350	806440	<0.2	<0.2	2.5	1.1				
						4.1	0.6	232	27.7	27.7	7.9	7.9	30.9	30.9	94.3	94.3	6.2	6.3	8.2	10.2	10	9	89	89	818350	806440	<0.2	<0.2	1.1	1.0				
					Middle	4.1	0.6	245	27.7	27.7	7.9	7.9	30.9	30.9	94.3	94.3	6.3	6.3	8.4	10.2	9	9	91	89	818350	806440	<0.2	<0.2	1.0	1.0				
						7.2	0.5	244	27.5	27.5	7.9	7.9	31.1	31.1	94.9	95.0	6.3	6.3	15.5	10.2	9	9	92	89	818350	806440	<0.2	<0.2	1.0	1.0				
						7.2	0.5	247	27.5	27.5	7.9	7.9	31.1	31.1	95.0	95.0	6.3	6.3	15.5	10.2	9	9	92	89	818350	806440	<0.2	<0.2	1.0	1.0				
IM2	Fine	Moderate	11:36	8.3	Surface	1.0	0.7	235	27.9	27.9	7.9	7.9	29.8	29.7	94.7	94.7	6.3	6.3	7.1	11.8	10	10	84	89	818856	806201	<0.2	<0.2	2.1	2.2				
						1.0	0.7	253	27.9	27.6	7.9	7.9	29.6	31.0	94.6	92.9	6.3	6.2	7.0	11.8	11	10	86	89	818856	806201	<0.2	<0.2	2.0	2.5				
						4.2	0.6	238	27.6	27.6	7.9	7.9	31.0	31.0	92.9	92.9	6.2	6.2	12.6	11.8	10	10	89	89	818856	806201	<0.2	<0.2	2.5	2.4				
					Middle	4.2	0.6	246	27.6	27.6	7.9	7.9	31.0	31.0	92.9	92.9	6.2	6.2	12.8	11.8	11	10	90	89	818856	806201	<0.2	<0.2	2.4	2.2				
						7.3	0.5	247	27.5	27.5	7.9	7.9	31.1	31.1	92.6	92.6	6.1	6.1	15.5	11.8	10	10	92	89	818856	806201	<0.2	<0.2	2.2	2.2				
						7.3	0.5	269	27.5	27.5	7.9	7.9	31.1	31.1	92.6	92.6	6.1	6.1	15.5	11.8	9	10	93	89	818856	806201	<0.2	<0.2	2.2	2.2				
IM3	Fine	Moderate	11:45	8.6	Surface	1.0	0.6	233	27.9	27.9	7.9	7.9	29.7	29.7	94.3	94.3	6.3	6.3	8.0	12.9	7	10	83	88	819414	806005	<0.2	<0.2	1.6	1.6				
						1.0	0.6	242	27.9	27.6	7.9	7.9	29.7	30.9	94.2	93.0	6.3	6.2	8.0	12.9	9	10	83	89	819414	806005	<0.2	<0.2	1.5	1.5				
						4.3	0.6	255	27.6	27.6	7.9	7.9	30.9	30.9	93.0	93.1	6.2	6.2	13.8	12.9	9	10	89	88	819414	806005	<0.2	<0.2	1.7	1.6				
					Middle	4.3	0.6	277	27.6	27.6	7.9	7.9	30.9	30.9	93.1	93.1	6.2	6.2	14.0	12.9	11	10	89	88	819414	806005	<0.2	<0.2	1.7	1.6				
						7.6	0.5	264	27.5	27.5	7.9	7.9	31.1	31.1	92.9	92.9	6.2	6.2	17.3	12.9	12	10	92	88	819414	806005	<0.2	<0.2	1.6	1.6				
						7.6	0.5	267	27.5	27.5	7.9	7.9	31.1	31.1	92.9	92.9	6.2	6.2	16.3	12.9	12	10	93	88	819414	806005	<0.2	<0.2	1.6	1.6				
IM4	Fine	Moderate	11:53	8.2	Surface	1.0	0.7	239	27.9	27.9	7.9	7.9	29.6	29.6	94.3	94.3	6.3	6.3	8.0	12.3	12	12	83	88	819574	805023	<0.2	<0.2	1.7	1.8				
						1.0	0.7	242	27.9	27.6	7.9	7.9	29.6	30.9	94.3	93.0	6.3	6.2	8.2	12.3	11	12	83	88	819574	805023	<0.2	<0.2	1.8	1.8				
						4.1	0.6	239	27.6	27.6	7.9	7.9	30.9	30.9	93.0	93.0	6.2	6.2	13.9	12.3	12	12	87	88	819574	805023	<0.2	<0.2	1.8	1.9				
					Middle	4.1	0.7	243	27.6	27.6	7.9	7.9	30.9	31.0	93.0	93.0	6.2	6.2	14.0	12.3	11	12	89	88	819574	805023	<0.2	<0.2	1.9	1.9				
						7.2	0.5	241	27.5	27.5	7.9	7.9	31.0	31.0	93.1	93.1	6.2	6.2	14.9	12.3	12	12	91	88	819574	805023	<0.2	<0.2	1.9	1.9				
						7.2	0.5	252	27.5	27.5	7.9	7.9	31.0	31.0	93.1	93.1	6.2	6.2	14.5	12.3	14	12	92	88	819574	805023	<0.2	<0.2	1.9	1.9				
IM5	Fine	Moderate	12:01	7.1	Surface	1.0	0.7	259	27.7	27.7	7.9	7.9	30.6	30.6	93.5	93.5	6.2	6.2	11.2	17.0	5	6	82	88	820548	804940	<0.2	<0.2	2.2	2.1				
						1.0	0.7	259	27.7	27.5	7.9	7.9	30.5	31.0	93.4	92.7	6.2	6.2	11.1	17.0	4	6	84	88	820548	804940	<0.2	<0.2	2.1	2.2				
						3.6	0.6	263	27.5	27.5	7.9	7.9	31.0	31.0	92.7	92.7	6.2	6.2	17.1	17.0	5	6	87	88										

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 20 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Moderate	10:30	7.8	Surface	1.0	0.4	177	24.9	24.9	7.8	7.8	28.7	28.7	94.6	94.6	6.7	6.6	3.1	6.6	2	5	85	89	822083	808792	<0.2	<0.2	1.5	1.3			
						1.0	0.4	192	24.9	7.8	7.8	28.7	28.7	94.6	94.6	6.6	6.6	3.2	5.2	2	5	84	89	85	89	<0.2	<0.2	1.4	1.3				
					Middle	3.9	0.5	243	24.8	24.8	7.8	7.8	29.6	29.6	94.2	94.2	6.6	6.6	5.4	5.2	5	5	89	90	89	90	<0.2	<0.2	1.0	1.3			
						3.9	0.5	266	24.8	24.8	7.8	7.8	29.6	29.6	94.2	94.2	6.6	6.6	5.5	5.2	5	5	89	90	89	90	<0.2	<0.2	1.2	1.3			
					Bottom	6.8	0.4	221	24.7	24.7	7.8	7.8	29.6	29.6	94.9	95.2	6.7	6.7	7.3	6.7	9	9	92	93	92	93	<0.2	<0.2	1.2	1.3			
						6.8	0.5	221	24.7	24.7	7.8	7.8	29.6	29.6	95.4	95.2	6.7	6.7	6.9	6.7	9	9	92	93	92	93	<0.2	<0.2	1.2	1.3			
IM10	Cloudy	Moderate	10:22	7.6	Surface	1.0	0.5	279	24.8	24.8	7.8	7.8	30.7	30.7	98.0	98.0	6.8	6.8	5.5	6.8	5	12	86	90	822240	809837	<0.2	<0.2	1.2	1.4			
						1.0	0.6	283	24.8	24.8	7.8	7.8	30.7	30.7	98.0	98.0	6.8	6.8	5.3	6.8	6	12	87	90	86	90	<0.2	<0.2	1.2	1.4			
					Middle	3.8	0.5	271	24.7	24.7	7.8	7.8	31.0	31.0	97.6	97.6	6.8	6.8	8.3	6.8	8	12	91	90	91	90	<0.2	<0.2	1.4	1.4			
						3.8	0.5	290	24.7	24.7	7.8	7.8	31.0	31.0	97.6	97.6	6.8	6.8	8.5	6.8	8	12	90	90	90	90	<0.2	<0.2	1.4	1.4			
					Bottom	6.6	0.4	253	24.6	24.6	7.8	7.8	31.2	31.2	97.8	97.8	6.8	6.8	22.8	6.8	21	6.8	21	12	93	92	93	92	<0.2	<0.2	1.5	1.7	
						6.6	0.5	274	24.6	24.6	7.8	7.8	31.2	31.2	97.8	97.8	6.8	6.8	22.9	6.8	21	6.8	21	12	92	92	92	92	<0.2	<0.2	1.5	1.7	
IM11	Cloudy	Moderate	10:14	8.4	Surface	1.0	0.6	275	24.6	24.6	7.8	7.8	31.0	31.0	96.8	96.8	6.8	6.8	16.3	6.8	31	32	84	90	821515	810559	<0.2	<0.2	1.0	0.8			
						1.0	0.6	294	24.6	24.6	7.8	7.8	31.0	31.0	96.8	96.8	6.8	6.8	16.3	6.8	33	6.8	33	32	84	90	821515	810559	<0.2	<0.2	0.9	0.8	
					Middle	4.2	0.5	276	24.6	24.6	7.8	7.8	31.0	31.0	96.6	96.6	6.7	6.7	21.2	6.7	33	6.7	33	32	92	92	821515	810559	<0.2	<0.2	0.7	0.8	
						4.2	0.5	299	24.6	24.6	7.8	7.8	31.0	31.0	96.5	96.6	6.7	6.7	20.9	6.7	32	6.7	32	32	92	92	821515	810559	<0.2	<0.2	0.6	0.8	
					Bottom	7.4	0.5	271	24.5	24.5	7.8	7.8	31.2	31.2	96.9	96.9	6.8	6.8	25.4	6.8	31	6.8	31	30	94	93	821515	810559	<0.2	<0.2	0.8	0.8	
						7.4	0.5	295	24.5	24.5	7.8	7.8	31.2	31.2	96.9	96.9	6.8	6.8	25.7	6.8	30	6.8	30	30	93	93	821515	810559	<0.2	<0.2	0.8	0.8	
IM12	Cloudy	Moderate	10:07	9.0	Surface	1.0	0.7	264	24.8	24.8	7.8	7.8	30.8	30.8	96.6	96.6	6.7	6.7	7.5	6.7	10	18	84	89	821142	811520	<0.2	<0.2	0.8	0.9			
						1.0	0.8	276	24.8	24.8	7.8	7.8	30.8	30.8	96.6	96.6	6.7	6.7	7.5	6.7	9	18	82	89	821142	811520	<0.2	<0.2	0.9	0.9			
					Middle	4.5	0.7	266	24.7	24.7	7.8	7.8	30.9	30.9	96.2	96.3	6.7	6.7	13.0	6.7	12	6.7	12	18	90	89	821142	811520	<0.2	<0.2	0.9	0.9	
						4.5	0.8	274	24.7	24.7	7.8	7.8	30.9	30.9	96.3	96.3	6.7	6.7	13.2	6.7	13	6.7	13	18	90	89	821142	811520	<0.2	<0.2	1.1	0.9	
					Bottom	8.0	0.5	270	24.6	24.6	7.8	7.8	31.2	31.2	96.6	96.6	6.7	6.7	29.1	6.7	30	6.7	30	18	93	89	821142	811520	<0.2	<0.2	0.9	1.0	
						8.0	0.6	281	24.6	24.6	7.8	7.8	31.2	31.2	96.6	96.6	6.7	6.7	29.1	6.7	31	6.7	31	18	94	89	821142	811520	<0.2	<0.2	1.0	1.0	
SR2	Cloudy	Moderate	09:47	4.8	Surface	1.0	0.3	263	24.6	24.6	7.8	7.8	31.2	31.2	96.7	96.7	6.7	6.7	14.9	6.7	20	21	86	89	821464	814153	<0.2	<0.2	1.0	0.9			
						1.0	0.3	284	24.6	24.6	7.8	7.8	31.2	31.2	96.7	96.7	6.7	6.7	15.1	6.7	20	6.7	20	21	86	89	821464	814153	<0.2	<0.2	0.9	0.9	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.3	-	21	89	821464	814153	-	<0.2	-	0.9
						2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.3	-	21	89	821464	814153	-	<0.2	-	0.9
					Bottom	3.8	0.2	265	24.6	24.6	7.7	7.7	31.4	31.4	98.0	98.1	6.8	6.8	21.5	6.8	22	6.8	22	21	91	89	821464	814153	<0.2	<0.2	0.9	0.9	
						3.8	0.3	289	24.6	24.6	7.7	7.7	31.4	31.4	98.1	98.1	6.8	6.8	21.6	6.8	21	6.8	21	21	91	89	821464	814153	<0.2	<0.2	0.9	0.9	
SR3	Cloudy	Moderate	10:44	9.1	Surface	1.0	0.5	169	24.9	24.9	7.8	7.8	27.9	27.9	92.5	92.5	6.5	6.5	3.7	6.5	6	15	-	-	822133	807553	-	-	-	-			
						1.0	0.6	183	24.9	24.9	7.8	7.8	27.9	27.9	92.4	92.5	6.5	6.5	3.8	6.5	6	15	-	-	-	-	822133	807553	-	-	-	-	
					Middle	4.6	0.7	68	24.7	24.7	7.8	7.8	29.1	29.1	92.0	92.0	6.5	6.5	7.2	6.5	6	6.5	6	15	-	-	822133	807553	-	-	-	-	
						4.6	0.7	74	24.7	24.7	7.8	7.8	29.1	29.1	92.0	92.0	6.5	6.5	7.2	6.5	8	6.5	8	15	-	-	822133	807553	-	-	-	-	
					Bottom	8.1	0.5	101	24.6	24.6	7.8	7.8	30.3	30.3	93.3	93.4	6.5	6.5	29.1	6.5	33	6.5	33	15	-	-	822133	807553	-	-	-	-	
						8.1	0.5	110	24.6	24.6	7.8	7.8	30.3	30.3	93.4	93.4	6.5	6.5	29.2	6.5	31	6.5	31	15	-	-	822133	807553	-	-	-	-	
SR4A	Fine	Calm	09:42	8.9	Surface	1.0	0.1	174	27.2	27.3	7.9	7.9	31.2	31.2	94.3	94.3	6.3	6.3	12.3	6.3	21	25	-	-	817187	807801	-	-	-	-			
						1.0	0.1	183	27.3	27.3	7.9	7.9	31.2	31.2	94.3	94.3	6.3	6.3	12.1	6.3	21	6.3	21	25	-	-	817187	807801	-	-	-	-	
					Middle	4.5	0.1	143	27.2	27.2	7.9	7.9	31.3	31.3	94.1	94.1	6.3	6.3	15.8	6.3	22	6.3	22	25	-	-	817187	807801	-	-	-	-	
						4.5	0.1	143	27.2	27.2	7.9	7.9	31.3	31.3	94.1	94.1	6.3	6.3	15.9	6.3	21	6.3	21	25	-	-	817187	807801	-	-	-	-	
					Bottom	7.9	0.1	125	27.2	27.2	7.9	7.9	31.4	31.4	94.0	94.1	6.3	6.3	19.1	6.3	33	6.3	33	25	-	-	817187	807801	-	-	-	-	
						7.9	0.1	134	27.2	27.2	7.9	7.9	31.4	31.4	94.2	94.1	6.3	6.3	19.7	6.3	33	6.3	33	25	-	-	817187	807801	-	-	-	-	
SR5A	Fine	Calm	09:25	4.4	Surface	1.0	0.3	263	27.4	27.3	7.9	7.9	30.8	30.9	94.0	94.1	6.3	6.3	6.0	6.3	10	9	-	-	816592	810693	-	-	-	-			
						1.0	0.3	278	27.2	27.2	7.9	7.9	30.9	30.9	94.2	94.1	6.3	6.3	6.1	6.3	8	6.3	8	9	-	-	816592	810693	-	-	-	-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1	9	-	-	816592	810693	-	-	-	-
						2.2	-	-	-																								

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 20 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value
C1	Fine	Moderate	15:49	8.6	Surface	1.0	0.2	186	27.7	27.8	7.9	7.9	30.5	30.5	93.7	93.7	6.2	6.2	10.7	6.2	10.7	8	8	86	86	815605	804260	<0.2	1.0	<0.2	1.0
						1.0	0.2	195	27.8	7.9	7.9	30.5	30.5	93.6	93.6	6.2	6.2	10.7	6.2	10.7	10	10	86	86							
					Middle	4.3	0.2	195	27.5	7.9	7.9	31.1	31.1	93.1	93.1	6.2	6.2	14.6	6.2	14.6	11	11	90	90							
						4.3	0.2	207	27.6	7.9	7.9	31.1	31.1	93.1	93.1	6.2	6.2	14.6	6.2	14.6	12	12	90	90							
					Bottom	7.6	0.2	144	27.4	7.9	7.9	31.2	31.2	92.5	92.5	6.1	6.1	19.6	6.1	19.6	11	11	93	93							
						7.6	0.2	157	27.5	7.9	7.9	31.1	31.2	92.5	92.5	6.1	6.1	19.1	6.1	19.1	11	11	95	95							
C2	Cloudy	Moderate	14:21	11.8	Surface	1.0	0.3	117	25.0	25.0	7.7	7.7	28.6	28.6	92.2	92.2	6.5	6.5	3.1	6.5	3.2	8	8	82	82	825698	806959	<0.2	1.7	<0.2	1.9
						1.0	0.3	123	25.0	7.7	7.7	28.6	28.6	92.2	92.2	6.5	6.5	3.2	6.5	3.2	8	8	83	83							
					Middle	5.9	0.3	96	24.8	7.7	7.7	29.0	29.0	91.3	91.3	6.4	6.4	5.3	6.4	5.4	8	8	88	88							
						5.9	0.3	98	24.8	7.7	7.7	29.0	29.0	91.3	91.3	6.4	6.4	5.4	6.4	5.4	7	7	90	90							
					Bottom	10.8	0.2	101	24.7	7.7	7.7	30.8	30.8	93.2	93.3	6.5	6.5	20.0	6.5	20.0	19	19	93	93							
						10.8	0.2	110	24.7	7.7	7.7	30.8	30.8	93.3	93.3	6.5	6.5	20.1	6.5	20.1	20	20	93	93							
C3	Cloudy	Moderate	16:05	12.0	Surface	1.0	0.6	76	25.0	25.0	7.8	7.8	31.1	31.1	92.4	92.4	6.4	6.4	0.1	6.4	0.1	8	8	86	86	822089	817809	<0.2	0.6	<0.2	0.5
						1.0	0.6	79	25.0	7.8	7.8	31.1	31.1	92.4	92.4	6.4	6.4	0.1	6.4	0.1	9	9	87	87							
					Middle	6.0	0.5	80	24.8	7.8	7.8	31.1	31.1	91.0	91.1	6.3	6.3	2.0	6.3	2.0	8	8	91	91							
						6.0	0.5	81	24.8	7.8	7.8	31.1	31.1	91.1	91.1	6.3	6.3	2.0	6.3	2.0	10	10	91	91							
					Bottom	11.0	0.4	102	24.8	7.8	7.8	31.1	31.1	93.3	93.4	6.5	6.5	2.8	6.5	2.8	10	10	93	93							
						11.0	0.5	109	24.8	7.8	7.8	31.1	31.1	93.4	93.4	6.5	6.5	2.8	6.5	2.8	12	12	94	94							
IM1	Fine	Moderate	15:25	7.9	Surface	1.0	0.1	142	27.6	27.6	7.9	7.9	30.9	30.9	93.9	94.0	6.2	6.2	14.1	6.2	14.3	5	6	85	85	818363	806467	<0.2	1.0	<0.2	1.0
						1.0	0.2	144	27.6	7.9	7.9	30.9	30.9	94.0	94.0	6.2	6.2	14.3	6.2	14.3	6	6	86	86							
					Middle	4.0	0.2	154	27.6	7.9	7.9	31.0	31.1	94.2	94.2	6.2	6.2	18.0	6.2	18.2	5	6	88	88							
						4.0	0.2	157	27.6	7.9	7.9	31.1	31.1	94.2	94.2	6.3	6.3	18.2	6.3	18.2	4	6	88	88							
					Bottom	6.9	0.1	114	27.6	7.9	7.9	31.0	31.0	96.2	96.3	6.4	6.4	20.0	6.4	20.0	7	7	92	92							
						6.9	0.1	124	27.6	7.9	7.9	31.0	31.0	96.3	96.3	6.4	6.4	19.9	6.4	19.9	9	9	93	93							
IM2	Fine	Moderate	15:12	8.4	Surface	1.0	0.2	166	27.6	27.6	7.9	7.9	30.9	30.9	93.3	93.3	6.2	6.2	12.6	6.2	12.6	7	7	84	84	818860	806203	<0.2	1.1	<0.2	1.0
						1.0	0.2	167	27.6	7.9	7.9	30.9	30.9	93.3	93.3	6.2	6.2	12.6	6.2	12.6	8	8	84	84							
					Middle	4.2	0.2	102	27.4	7.9	7.9	31.1	31.1	92.3	92.4	6.1	6.1	20.4	6.1	20.6	6	7	87	87							
						4.2	0.2	104	27.4	7.9	7.9	31.1	31.1	92.4	92.4	6.1	6.1	20.6	6.1	20.6	6	7	86	86							
					Bottom	7.4	0.2	177	27.4	7.9	7.9	31.2	31.2	92.5	92.6	6.1	6.1	24.8	6.1	24.8	7	7	92	92							
						7.4	0.2	185	27.4	7.9	7.9	31.2	31.2	92.6	92.6	6.1	6.1	22.7	6.1	22.7	9	9	92	92							
IM3	Fine	Moderate	15:01	8.5	Surface	1.0	0.3	158	27.6	27.6	7.9	7.9	30.9	30.9	93.3	93.3	6.2	6.2	12.5	6.2	12.7	9	9	83	85	819419	806034	<0.2	1.1	<0.2	1.0
						1.0	0.3	172	27.6	7.9	7.9	30.9	30.9	93.3	93.3	6.2	6.2	12.7	6.2	12.7	9	9	85	85							
					Middle	4.3	0.3	159	27.5	7.9	7.9	31.1	31.1	92.8	92.8	6.2	6.2	17.5	6.2	17.7	11	10	85	87							
						4.3	0.3	167	27.5	7.9	7.9	31.1	31.1	92.8	92.8	6.2	6.2	17.7	6.2	17.7	9	10	87	87							
					Bottom	7.5	0.3	178	27.4	7.9	7.9	31.1	31.1	92.2	92.2	6.1	6.1	26.8	6.1	26.8	9	9	91	91							
						7.5	0.3	188	27.4	7.9	7.9	31.1	31.1	92.2	92.2	6.1	6.1	26.1	6.1	26.1	10	10	92	92							
IM4	Fine	Moderate	14:47	8.0	Surface	1.0	0.4	126	27.6	27.6	7.9	7.9	30.9	30.9	93.3	93.3	6.2	6.2	12.6	6.2	12.6	14	14	84	85	819564	805030	<0.2	1.1	<0.2	1.0
						1.0	0.4	131	27.6	7.9	7.9	30.8	30.9	93.2	93.3	6.2	6.2	12.6	6.2	12.6	15	14	85	89							
					Middle	4.0	0.3	120	27.5	7.9	7.9	31.1	31.1	92.8	92.9	6.2	6.2	15.5	6.2	15.8	14	14	89	88							
						4.0	0.3	122	27.5	7.9	7.9	31.1	31.1	92.9	92.9	6.2	6.2	15.8	6.2	15.8	14	14	88	88							
					Bottom	7.0	0.3	178	27.4	7.9	7.9	31.1	31.1	92.4	92.5	6.1	6.1	20.8	6.1	20.4	13	13	91	91							
						7.0	0.3	190	27.4	7.9	7.9	31.1	31.1	92.5	92.5	6.1	6.1	20.4	6.1	20.4	13	13	92	92							
IM5	Fine	Moderate	14:37	7.4	Surface	1.0	0.3	184	27.6	27.6	7.9	7.9	30.7	30.7	93.5	93.5	6.2	6.2	11.5	6.2	11.5	12	12	84	84	820578	804927	<0.2	1.1	<0.2	1.0
						1.0	0.3	189	27.6	7.9	7.9	30.7	30.7	93.5	93.5	6.2	6.2	11.5	6.2	11.5	12	12	84	84							
					Middle	3.7	0.3	162	27.5	7.9	7.9	31.1	31.1	93.0	93.0	6.2	6.2	15.2	6.2	15.4	13	13	86	86							
						3.7	0.3	166	27.5	7.9	7.9	31.1	31.1	93.0	93.0	6.2	6.2	15.4	6.2	15.4	14	13	86	89							
					Bottom	6.4	0.3	190	27.5	7.9	7.9	31.1	31.1	92.9	93.0	6.2	6.2	17.3	6.2	17.3	13	13	89	89							
						6.4	0.3	208	27.5	7.9	7.9	31.1	31.1	93.1	93.1	6.2	6.2	17.3	6.2	17.3	12	12	90	90							
IM6	Fine	Moderate	14:26	7.3	Surface	1.0	0.3	179	27.7	27.7	7.9	7.9	30.6	30.6	93.8	93.8	6.2	6.2	10.3	6.2	10.3	9	9	85	84	821046	805838	<0.2	0.9	<0.2	1.0
						1.0	0.3	196	27.7	7.9	7.9	30.5	30.6	93.8	93.8	6.2	6.2	10.2	6.2	10.2	10	10	84	84							
					Middle	3.7	0.3	172	27.5	7.9	7.9	31.1	31.1	93.2	93.2	6.2	6.2	14.7	6.2	14.7	13	12	87	87							
						3.7	0.3	178	27.5	7.9	7.9	31.1	31.1	93.2	93.2	6.2	6.2	15.2	6.2	15.2	14	14	88	88							
					Bottom	6.3	0.3	168	27.5	7.9	7.9	31.1	31.1	92.8	92.8	6.2	6.2	22.2	6.2	22.2	12	12	90	90							
						6.3	0.3	184	27.5	7.9	7.9	31.1	31.1	92.8	92.8	6.2	6.2	22.5	6.2	22.5	12	12	92	92							
IM7	Fine	Moderate	14:18	7.6	Surface	1.0	0.4	147	27.7	27.7	7.9	7.9	30.5	30.5	93.9	93.9	6.2	6.2	11.9	6.2	11.9	5	6	85	85	821362	806829	<0.2	1.0	<0.2	1.0
						1.0	0.4	157	27.7	7.9	7.9	30.5	30.5	93.9	93.9	6.2	6.2	12.0	6.2	12.0	5	6									

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 20 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)						
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA			
IM9	Cloudy	Moderate	15:06	7.2	Surface	1.0	0.6	194	25.1	25.1	7.8	7.8	29.8	29.8	97.0	97.0	6.8	6.8	3.0	6.8	5	17	85	89	822090	808798	<0.2	<0.2	1.0	0.8					
						1.0	0.7	206	25.1	7.8	7.8	29.8	29.8	96.9	97.0	6.8	6.8	3.1	6.8	4	6.8	4	6.8	4	6.8	4	6.8	85	89	822090	808798	<0.2	<0.2	1.0	0.8
					Middle	3.6	0.7	196	24.9	24.9	7.8	7.8	30.5	30.5	96.1	96.1	6.7	6.7	6.8	6.7	6.8	11.5	7	17	90	89	822090	808798	<0.2	<0.2	0.9	0.8			
						3.6	0.7	199	24.9	24.9	7.8	7.8	30.5	30.5	96.1	96.1	6.7	6.7	7.0	6.7	7.0	11.5	7	17	90	89	822090	808798	<0.2	<0.2	0.8	0.8			
					Bottom	6.2	0.5	181	24.7	24.7	7.8	7.8	31.0	31.0	95.4	95.4	6.6	6.6	25.0	6.6	25.0	6.6	6.6	11.5	7	17	91	89	822090	808798	<0.2	<0.2	0.6	0.7	
						6.2	0.5	182	24.7	24.7	7.8	7.8	31.0	31.0	95.4	95.4	6.6	6.6	24.0	6.6	24.0	6.6	6.6	11.5	7	17	92	89	822090	808798	<0.2	<0.2	0.6	0.7	
IM10	Cloudy	Moderate	15:12	7.4	Surface	1.0	0.5	105	25.0	25.0	7.8	7.8	30.6	30.6	96.8	96.9	6.7	6.7	3.8	6.7	8	10	86	89	822257	809854	<0.2	<0.2	0.8	0.7					
						1.0	0.5	114	25.0	25.0	7.8	7.8	30.6	30.6	96.9	96.9	6.7	6.7	3.9	6.7	7	6.7	7	10	84	89	822257	809854	<0.2	<0.2	0.7	0.7			
					Middle	3.7	0.5	187	24.9	24.9	7.8	7.8	30.8	30.8	96.6	96.6	6.7	6.7	3.9	6.7	3.9	6.7	4.0	4.0	10	10	91	89	822257	809854	<0.2	<0.2	0.8	0.7	
						3.7	0.5	198	24.9	24.9	7.8	7.8	30.8	30.8	96.6	96.6	6.7	6.7	3.9	6.7	3.9	6.7	4.0	4.0	11	10	89	89	822257	809854	<0.2	<0.2	0.7	0.7	
					Bottom	6.4	0.5	196	24.7	24.7	7.8	7.8	31.4	31.4	97.0	97.0	6.7	6.7	4.3	6.7	4.3	6.7	6.7	6.7	12	10	93	89	822257	809854	<0.2	<0.2	0.6	0.6	
						6.4	0.5	208	24.7	24.7	7.8	7.8	31.4	31.4	97.0	97.0	6.7	6.7	4.4	6.7	4.4	6.7	6.7	6.7	10	10	92	89	822257	809854	<0.2	<0.2	0.6	0.6	
IM11	Cloudy	Moderate	15:19	7.3	Surface	1.0	0.5	108	25.1	25.1	7.8	7.8	30.4	30.4	98.5	98.5	6.8	6.8	1.4	6.8	5	7	85	89	821497	810537	<0.2	<0.2	0.8	0.7					
						1.0	0.5	110	25.1	25.1	7.8	7.8	30.4	30.4	98.5	98.5	6.8	6.8	1.5	6.8	7	6.8	7	7	85	89	821497	810537	<0.2	<0.2	0.8	0.7			
					Middle	3.7	0.5	114	25.0	25.0	7.8	7.8	31.0	31.1	98.5	98.6	6.8	6.8	2.1	6.8	2.1	6.8	2.5	2.5	7	7	90	89	821497	810537	<0.2	<0.2	0.6	0.7	
						3.7	0.5	116	24.9	25.0	7.8	7.8	31.1	31.1	98.6	98.6	6.8	6.8	2.3	6.8	2.3	6.8	2.5	2.5	7	7	91	89	821497	810537	<0.2	<0.2	0.7	0.7	
					Bottom	6.3	0.5	114	24.9	24.9	7.8	7.8	31.6	31.6	99.4	99.4	6.9	6.9	3.9	6.9	3.9	6.9	6.9	6.9	7	7	91	89	821497	810537	<0.2	<0.2	0.5	0.6	
						6.3	0.5	117	24.9	24.9	7.8	7.8	31.6	31.6	99.4	99.4	6.9	6.9	4.0	6.9	4.0	6.9	6.9	6.9	6	7	92	89	821497	810537	<0.2	<0.2	0.6	0.6	
IM12	Cloudy	Moderate	15:26	8.6	Surface	1.0	0.6	194	25.2	25.2	7.8	7.8	30.0	30.0	99.0	99.0	6.9	6.9	1.5	6.9	6	6	85	89	821173	811523	<0.2	<0.2	0.9	0.7					
						1.0	0.7	197	25.2	25.2	7.8	7.8	30.0	30.0	99.0	99.0	6.9	6.9	1.5	6.9	5	6.9	6	6	83	89	821173	811523	<0.2	<0.2	0.9	0.7			
					Middle	4.3	0.7	197	25.0	25.0	7.8	7.8	30.8	30.8	98.5	98.6	6.8	6.8	2.0	6.8	2.0	6.8	2.2	2.2	6	6	89	89	821173	811523	<0.2	<0.2	0.7	0.7	
						4.3	0.7	210	25.0	25.0	7.8	7.8	30.8	30.8	98.6	98.6	6.8	6.8	2.1	6.8	2.1	6.8	2.2	2.2	6	6	90	89	821173	811523	<0.2	<0.2	0.7	0.7	
					Bottom	7.6	0.5	188	24.8	24.8	7.8	7.8	31.5	31.5	98.0	98.0	6.8	6.8	2.9	6.8	2.9	6.8	6.8	6.8	6	6	93	89	821173	811523	<0.2	<0.2	0.6	0.5	
						7.6	0.5	188	24.7	24.8	7.8	7.8	31.5	31.5	98.0	98.0	6.8	6.8	2.9	6.8	2.9	6.8	6.8	6.8	6	6	91	89	821173	811523	<0.2	<0.2	0.5	0.5	
SR2	Cloudy	Moderate	15:46	5.1	Surface	1.0	0.5	89	24.8	24.8	7.8	7.8	31.2	31.2	98.0	98.0	6.8	6.8	4.8	6.8	10	5.3	84	88	821468	814179	<0.2	<0.2	0.4	0.4					
						1.0	0.6	90	24.8	24.8	7.8	7.8	31.2	31.2	98.0	98.0	6.8	6.8	4.9	6.8	11	6.8	11	5.3	85	88	821468	814179	<0.2	<0.2	0.4	0.4			
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.3	-	-	14	-	88	821468	814179	<0.2	<0.2	-	-
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.3	-	-	-	-	88	821468	814179	<0.2	<0.2	-	-
					Bottom	4.1	0.4	100	24.7	24.7	7.8	7.8	31.3	31.3	99.8	100.0	6.9	6.9	5.7	6.9	5.7	6.9	7.0	7.0	18	14	93	88	821468	814179	<0.2	<0.2	0.4	0.4	
						4.1	0.5	107	24.7	24.7	7.8	7.8	31.3	31.3	100.1	100.0	7.0	7.0	5.6	6.9	5.6	6.9	7.0	7.0	16	14	91	88	821468	814179	<0.2	<0.2	0.4	0.4	
SR3	Cloudy	Moderate	14:51	8.8	Surface	1.0	0.4	165	24.9	24.9	7.8	7.8	31.1	31.1	97.1	97.1	6.7	6.7	9.1	6.7	12	22.3	-	-	822140	807572	-	-	-	-					
						1.0	0.4	177	24.9	24.9	7.8	7.8	31.1	31.1	97.1	97.1	6.7	6.7	9.3	6.7	11	6.7	11	22.3	-	-	822140	807572	-	-	-	-			
					Middle	4.4	0.4	103	24.8	24.8	7.8	7.8	31.3	31.3	96.4	96.4	6.7	6.7	20.3	6.7	20.3	6.7	22.3	22.3	27	25	-	-	822140	807572	-	-	-	-	
						4.4	0.4	105	24.8	24.8	7.8	7.8	31.3	31.3	96.4	96.4	6.7	6.7	20.1	6.7	20.1	6.7	22.3	22.3	31	25	-	-	822140	807572	-	-	-	-	
					Bottom	7.8	0.5	179	24.8	24.8	7.8	7.8	31.5	31.5	96.6	96.6	6.7	6.7	37.4	6.7	37.4	6.7	6.7	6.7	36	25	-	-	822140	807572	-	-	-	-	
						7.8	0.5	190	24.8	24.8	7.8	7.8	31.5	31.5	96.6	96.6	6.7	6.7	37.4	6.7	37.4	6.7	6.7	6.7	34	25	-	-	822140	807572	-	-	-	-	
SR4A	Fine	Calm	16:11	9.2	Surface	1.0	0.4	84	27.8	27.7	8.0	8.0	31.8	31.9	96.2	96.3	6.3	6.3	15.0	6.3	22	19.8	-	-	817206	807829	-	-	-	-					
						1.0	0.4	91	27.6	27.7	8.0	8.0	31.9	31.9	96.4	96.3	6.4	6.4	15.3	6.4	23	6.4	23	19.8	28	-	-	817206	807829	-	-	-	-		
					Middle	4.6	0.4	83	27.5	27.4	8.0	8.0	32.0	32.2	95.7	96.0	6.3	6.3	21.5	6.3	21.5	6.3	19.8	19.8	29	28	-	-	817206	807829	-	-	-	-	
						4.6	0.4	83	27.2	27.4	8.0	8.0	32.3	32.3	96.3	96.3	6.4	6.4	21.0	6.4	21.0	6.3	19.8	19.8	30	28	-	-	817206	807829	-	-	-	-	
					Bottom	8.2	0.4	91	27.4	27.5	8.0	8.0	32.1	32.1	95.8	95.8	6.3	6.3	23.0	6.3	23.0	6.3	6.3	19.8	19.8	30	28	-	-	817206	807829	-	-	-	-
						8.2	0.4	94	27.5	27.5	8.0	8.0	32.0	32.1	95.7	95.8	6.3	6.3	23.1	6.3	23.1	6.3	6.3	19.8	19.8	34	28	-	-	817206	807829	-			

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 22 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	12:02	7.4	Surface	1.0	0.4	266	24.8	24.8	7.7	7.7	21.5	21.5	99.1	99.1	7.3	7.2	5.2	14.6	16	15	84	88	822099	808801	<0.2	<0.2	2.6	2.6		
						1.0	0.5	291	24.8	7.7	7.7	21.4	21.5	99.1	99.1	7.3	7.2	5.2	14.6	14	15	83	88	<0.2	<0.2	2.4	2.6					
					Middle	3.7	0.6	252	24.4	24.4	7.7	7.7	23.8	23.8	97.7	97.7	7.1	7.1	20.0	14.6	14	15	90	88	<0.2	<0.2	2.9	2.6				
						3.7	0.6	252	24.4	24.4	7.7	7.7	23.8	23.8	97.7	97.7	7.1	7.1	20.0	14.6	14	15	90	88	<0.2	<0.2	2.7	2.6				
					Bottom	6.4	0.7	268	24.3	24.3	7.7	7.7	26.2	26.2	98.4	98.4	7.1	7.1	18.6	7.1	16	15	91	88	<0.2	<0.2	2.5	2.6				
						6.4	0.7	276	24.3	24.3	7.7	7.7	26.2	26.2	98.4	98.4	7.1	7.1	18.6	7.1	16	15	92	88	<0.2	<0.2	2.5	2.6				
IM10	Fine	Moderate	12:42	7.3	Surface	1.0	0.6	290	24.5	24.5	7.8	7.8	23.8	23.8	98.6	98.6	7.2	7.1	13.1	21.3	8	11	83	88	822250	809820	<0.2	<0.2	2.3	1.8		
						1.0	0.7	294	24.5	24.5	7.8	7.8	23.8	23.8	98.6	98.6	7.2	7.1	13.1	21.3	7	11	83	88	<0.2	<0.2	2.3	1.8				
					Middle	3.7	0.6	290	24.3	24.3	7.8	7.8	27.0	27.0	97.1	97.1	7.0	7.0	23.7	21.3	7	11	89	88	<0.2	<0.2	1.7	1.8				
						3.7	0.7	295	24.3	24.3	7.8	7.8	26.9	27.0	97.1	97.1	7.0	7.0	23.0	21.3	9	11	90	88	<0.2	<0.2	1.7	1.8				
					Bottom	6.3	0.6	289	24.3	24.3	7.8	7.8	27.4	27.4	98.2	98.2	7.0	7.0	27.3	7.0	18	11	92	88	<0.2	<0.2	1.4	1.8				
						6.3	0.6	313	24.3	24.3	7.8	7.8	27.4	27.4	98.2	98.2	7.0	7.0	27.3	7.0	18	11	92	88	<0.2	<0.2	1.3	1.8				
IM11	Fine	Moderate	12:35	8.2	Surface	1.0	0.6	281	24.5	24.5	7.8	7.8	23.4	23.5	98.6	98.6	7.2	7.2	6.0	16.9	6	8	84	89	821507	810542	<0.2	<0.2	2.1	1.9		
						1.0	0.6	307	24.5	24.5	7.8	7.8	23.5	23.5	98.6	98.6	7.2	7.2	6.0	16.9	6	8	84	89	<0.2	<0.2	2.1	1.9				
					Middle	4.1	0.7	274	24.4	24.4	7.8	7.8	25.6	25.6	98.1	98.1	7.1	7.1	18.2	7.2	6	8	90	89	<0.2	<0.2	2.8	1.9				
						4.1	0.8	280	24.4	24.4	7.8	7.8	25.6	25.6	98.1	98.1	7.1	7.1	18.7	7.2	7	8	91	89	<0.2	<0.2	2.9	1.9				
					Bottom	7.2	0.6	280	24.3	24.3	7.8	7.8	28.5	28.5	98.7	98.7	7.0	7.0	26.3	7.0	10	8	91	89	<0.2	<0.2	0.9	1.9				
						7.2	0.6	302	24.3	24.3	7.8	7.8	28.5	28.5	98.7	98.7	7.0	7.0	26.3	7.0	11	8	93	89	<0.2	<0.2	0.8	1.9				
IM12	Fine	Moderate	12:26	8.8	Surface	1.0	0.8	272	24.6	24.6	7.8	7.8	25.4	25.4	97.0	97.0	7.0	7.0	7.2	19.0	8	11	83	89	821164	811524	<0.2	<0.2	2.6	2.0		
						1.0	0.8	273	24.6	24.6	7.8	7.8	25.4	25.4	97.0	97.0	7.0	7.0	7.1	19.0	7	11	83	89	<0.2	<0.2	2.5	2.0				
					Middle	4.4	0.7	279	24.3	24.3	7.8	7.8	28.6	28.6	96.4	96.4	6.9	6.9	21.8	7.0	6	11	90	89	<0.2	<0.2	1.7	2.0				
						4.4	0.8	290	24.3	24.3	7.8	7.8	28.6	28.6	96.4	96.4	6.9	6.9	22.0	7.0	7	11	91	89	<0.2	<0.2	1.8	2.0				
					Bottom	7.8	0.5	270	24.3	24.3	7.8	7.8	29.1	29.1	97.2	97.2	6.9	6.9	27.8	6.9	18	11	92	89	<0.2	<0.2	1.7	2.0				
						7.8	0.5	279	24.3	24.3	7.8	7.8	29.1	29.1	97.2	97.2	6.9	6.9	27.8	6.9	18	11	92	89	<0.2	<0.2	1.6	2.0				
SR2	Fine	Moderate	12:05	4.9	Surface	1.0	0.2	278	24.9	24.9	7.7	7.7	21.9	21.9	100.2	100.3	7.3	7.3	8.9	15.0	7	6	86	89	821479	814146	<0.2	<0.2	1.2	1.5		
						1.0	0.2	281	24.9	24.9	7.7	7.7	21.9	21.9	100.3	100.3	7.3	7.3	9.0	15.0	5	6	85	89	<0.2	<0.2	1.0	1.5				
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6	-	89	821479	814146	<0.2	<0.2	-	1.5
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6	-	89	821479	814146	<0.2	<0.2	-
					Bottom	3.9	0.2	235	24.3	24.3	7.6	7.6	25.1	25.1	99.4	99.4	7.2	7.2	21.0	7.2	7	6	92	89	<0.2	<0.2	1.9	1.5				
						3.9	0.2	247	24.3	24.3	7.6	7.6	25.1	25.1	99.4	99.4	7.2	7.2	21.0	7.2	7	6	91	89	<0.2	<0.2	1.8	1.5				
SR3	Fine	Moderate	13:10	8.6	Surface	1.0	0.4	247	24.9	24.9	7.7	7.7	21.1	21.1	97.6	97.6	7.2	7.1	6.7	12.5	10	11	-	-	822134	807565	-	-	-	-		
						1.0	0.4	256	24.8	24.9	7.7	7.7	21.1	21.1	97.5	97.5	6.9	6.9	6.8	12.5	8	11	-	-	-	-	-	-	-	-		
					Middle	4.3	0.8	236	24.3	24.3	7.7	7.7	25.3	25.3	95.5	95.5	6.9	6.9	12.9	7.1	14	11	-	-	-	-	-	-	-	-	-	-
						4.3	0.8	258	24.3	24.3	7.7	7.7	25.3	25.3	95.5	95.5	6.9	6.9	12.9	7.1	12	11	-	-	-	-	-	-	-	-	-	-
					Bottom	7.6	0.7	231	24.3	24.3	7.7	7.7	25.6	25.6	96.4	96.5	7.0	7.0	18.0	7.0	12	11	-	-	-	-	-	-	-	-	-	-
						7.6	0.7	245	24.3	24.3	7.7	7.7	25.6	25.6	96.5	96.5	7.0	7.0	17.8	7.0	12	11	-	-	-	-	-	-	-	-	-	-
SR4A	Fine	Calm	11:46	8.6	Surface	1.0	0.3	240	27.3	27.3	7.8	7.8	29.8	29.8	93.5	93.5	6.3	6.3	16.9	19.5	24	25	-	-	817191	807808	-	-	-	-		
						1.0	0.4	252	27.3	27.3	7.8	7.8	29.8	29.8	93.5	93.5	6.3	6.3	17.0	19.5	24	25	-	-	-	-	-	-	-	-	-	
					Middle	4.3	0.3	239	27.2	27.2	7.8	7.8	29.8	29.8	93.1	93.1	6.3	6.3	19.7	6.3	23	25	-	-	-	-	-	-	-	-	-	-
						4.3	0.3	252	27.2	27.2	7.8	7.8	29.8	29.8	93.1	93.1	6.3	6.3	19.7	6.3	24	25	-	-	-	-	-	-	-	-	-	-
					Bottom	7.6	0.2	227	27.0	27.0	7.8	7.8	29.9	29.9	93.5	93.6	6.3	6.3	21.9	6.3	28	25	-	-	-	-	-	-	-	-	-	-
						7.6	0.3	240	27.0	27.0	7.8	7.8	29.9	29.9	93.6	93.6	6.3	6.3	21.7	6.3	28	25	-	-	-	-	-	-	-	-	-	-
SR5A	Fine	Calm	11:30	3.8	Surface	1.0	0.3	298	27.1	27.1	7.8	7.8	29.8	29.8	94.0	94.0	6.3	6.3	13.4	14.0	21	22	-	-	816610	810684	-	-	-	-		
						1.0	0.3	314	27.1	27.1	7.8	7.8	29.8	29.8	93.9	93.9	6.3	6.3	13.2	14.0	22	22	-	-	-	-	-	-	-	-		
					Middle	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	22	-	-	-	-	-	-	-	-
						1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	22	-	-	-	-	-	-	-
					Bottom	2.8	0.3	291	27.0	27.0	7.8	7.8	29.9	29.9	94.9	95.1	6.4	6.4	14.7	6.4	22	22	-	-	-	-	-	-	-	-	-	-
						2.8	0.3	307	27.0	27.0	7.8	7.8	29.9	29.9	95.3	95.3	6.4	6.4	14.7	6.4	21	22	-	-	-	-	-	-	-	-	-	
SR6	Fine	Calm	11:06	3.7	Surface	1.0	0.2	275	27.2	27.2	7.7	7.7	27.8	27.8	96.4	96.4	6.5	6.5	15.0	17.3	28	30	-	-	817893	814679	-	-	-	-		
						1.0	0.2																									

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 22 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA		
C1	Fine	Calm	17:47	8.6	Surface	1.0	0.3	214	27.4	27.5	7.9	7.9	25.9	25.8	96.4	96.3	6.6	6.6	8.1	6.6	9	16	85	89	815636	804251	<0.2	<0.2	1.7	1.3				
						1.0	0.3	218	27.5	7.9	7.9	25.7	25.8	96.1	96.3	6.6	6.6	8.2	6.6	11	16	86	89	<0.2			<0.2	1.6	1.3					
					Middle	4.3	0.4	200	26.8	27.0	7.9	7.9	28.8	28.5	96.3	96.0	6.6	6.6	12.7	6.6	11	10	90	91			89	89	<0.2	<0.2	1.0	1.3		
						4.3	0.4	214	27.2	27.0	7.9	7.9	28.2	28.5	95.7	96.0	6.5	6.5	12.8	6.5	13	10	91	91			89	89	<0.2	<0.2	1.3	1.3		
					Bottom	7.6	0.4	198	27.3	27.3	7.9	7.9	29.1	29.1	96.6	96.7	6.5	6.5	13.3	6.5	13.3	6.5	24	10			92	92	89	89	<0.2	<0.2	1.1	1.3
						7.6	0.4	206	27.3	27.3	7.9	7.9	29.1	29.1	96.8	96.7	6.5	6.5	13.3	6.5	13.3	6.5	26	10			92	92	89	89	<0.2	<0.2	1.2	1.3
C2	Fine	Moderate	16:28	12.8	Surface	1.0	0.3	162	24.8	24.8	7.7	7.7	23.1	23.1	96.3	96.3	7.0	6.9	10.1	6.9	8	9	81	88	825667	806931	<0.2	<0.2	4.2	3.7				
						1.0	0.4	163	24.8	24.8	7.7	7.7	23.1	23.1	96.2	96.3	7.0	6.9	10.3	6.9	8	9	82	88			<0.2	<0.2	4.1	3.7				
					Middle	6.4	0.3	120	24.4	24.4	7.6	7.6	24.8	24.8	93.3	93.3	6.8	6.8	18.1	6.8	8	9	89	90			88	88	<0.2	<0.2	3.3	3.4		
						6.4	0.3	120	24.4	24.4	7.6	7.6	24.8	24.8	93.3	93.3	6.8	6.8	18.1	6.8	8	9	90	90			88	88	<0.2	<0.2	3.6	3.4		
					Bottom	11.8	0.4	188	24.5	24.5	7.6	7.6	26.1	26.1	96.9	96.9	7.0	7.0	23.4	7.0	23.4	7.0	12	10			91	92	88	88	<0.2	<0.2	3.2	3.4
						11.8	0.4	191	24.5	24.5	7.6	7.6	26.1	26.1	96.9	96.9	7.0	7.0	23.4	7.0	23.4	7.0	12	10			92	92	88	88	<0.2	<0.2	3.8	3.4
C3	Cloudy	Moderate	18:21	11.9	Surface	1.0	0.4	130	24.8	24.8	7.8	7.8	28.7	28.7	95.2	95.2	6.7	6.7	4.4	6.7	8	10	87	90	822108	817787	<0.2	<0.2	1.6	1.3				
						1.0	0.4	140	24.8	24.8	7.8	7.8	28.7	28.7	95.1	95.2	6.7	6.7	4.4	6.7	9	10	87	91			90	90	<0.2	<0.2	1.2	1.3		
					Middle	6.0	0.3	135	24.5	24.5	7.8	7.8	29.1	29.1	93.5	93.5	6.6	6.6	5.9	6.6	5.9	6.6	10	10			91	91	90	90	<0.2	<0.2	1.2	1.3
						6.0	0.3	144	24.5	24.5	7.8	7.8	29.1	29.1	93.5	93.5	6.6	6.6	5.9	6.6	5.9	6.6	9	10			91	91	90	90	<0.2	<0.2	1.3	1.3
					Bottom	10.9	0.3	123	24.5	24.5	7.7	7.7	29.1	29.1	94.7	94.7	6.7	6.7	6.5	6.7	6.5	6.7	11	10			92	93	90	90	<0.2	<0.2	1.1	1.3
						10.9	0.3	132	24.5	24.5	7.7	7.7	29.1	29.1	94.7	94.7	6.7	6.7	6.5	6.7	6.5	6.7	12	10			93	93	90	90	<0.2	<0.2	1.1	1.3
IM1	Fine	Calm	17:24	7.6	Surface	1.0	0.3	149	27.5	27.8	7.9	7.9	25.5	25.3	100.8	100.5	6.9	6.8	6.5	6.8	8	10	83	87	818363	806457	<0.2	<0.2	1.9	1.8				
						1.0	0.3	160	28.0	27.8	7.9	7.9	25.0	25.3	100.1	100.5	6.8	6.8	6.3	6.8	10	10	84	89			87	87	<0.2	<0.2	1.9	1.8		
					Middle	3.8	0.4	145	27.8	27.6	7.9	7.9	26.8	27.0	98.5	98.8	6.7	6.7	8.4	6.7	9	10	87	89			87	87	<0.2	<0.2	1.7	1.8		
						3.8	0.4	158	27.4	27.6	7.9	7.9	27.2	27.0	99.0	98.8	6.7	6.7	8.6	6.7	10	10	89	91			89	89	<0.2	<0.2	1.8	1.8		
					Bottom	6.6	0.3	173	27.5	27.7	7.9	7.9	28.1	27.9	100.4	100.2	6.8	6.8	7.0	6.8	7.0	6.8	11	10			90	91	87	87	<0.2	<0.2	1.8	1.8
						6.6	0.3	174	27.9	27.7	7.9	7.9	27.7	27.9	99.9	100.2	6.7	6.7	6.5	6.7	6.5	6.7	11	10			91	91	87	87	<0.2	<0.2	1.7	1.8
IM2	Fine	Calm	17:16	8.4	Surface	1.0	0.3	158	28.0	28.1	7.9	7.9	24.9	24.9	98.5	98.4	6.7	6.6	6.4	6.6	7	10	84	87	818836	806174	<0.2	<0.2	1.9	1.6				
						1.0	0.3	172	28.1	28.1	7.9	7.9	24.8	24.9	98.2	98.4	6.7	6.6	6.3	6.6	8	10	84	88			87	87	<0.2	<0.2	1.9	1.6		
					Middle	4.2	0.4	146	26.9	27.2	7.9	7.9	28.4	28.3	97.2	96.9	6.6	6.6	7.2	6.6	9	10	87	88			87	87	<0.2	<0.2	1.7	1.6		
						4.2	0.4	151	27.4	27.2	7.9	7.9	28.1	28.3	96.6	96.9	6.5	6.5	7.0	6.5	9	10	88	89			87	87	<0.2	<0.2	1.6	1.6		
					Bottom	7.4	0.3	142	27.4	27.4	7.9	7.9	28.4	28.4	97.6	97.9	6.6	6.6	7.3	6.6	7.3	6.6	13	10			90	91	87	87	<0.2	<0.2	1.2	1.6
						7.4	0.3	148	27.4	27.4	7.9	7.9	28.4	28.4	98.2	97.9	6.6	6.6	7.5	6.6	7.5	6.6	14	10			91	91	87	87	<0.2	<0.2	1.3	1.6
IM3	Fine	Calm	17:09	8.8	Surface	1.0	0.3	135	28.2	28.0	7.9	7.9	25.5	25.6	98.6	98.8	6.7	6.6	7.0	6.6	10	10	85	89	819398	806012	<0.2	<0.2	1.8	1.7				
						1.0	0.3	140	27.8	28.0	7.9	7.9	25.7	25.6	99.0	98.8	6.7	6.6	7.1	6.6	9	10	86	89			89	89	<0.2	<0.2	1.6	1.7		
					Middle	4.4	0.3	134	27.4	27.6	7.9	7.9	26.3	26.2	97.1	96.8	6.6	6.6	8.5	6.6	11	10	89	91			89	89	<0.2	<0.2	1.4	1.7		
						4.4	0.3	138	27.8	27.6	7.9	7.9	26.1	26.2	96.4	96.8	6.5	6.5	8.4	6.5	11	10	89	91			89	89	<0.2	<0.2	1.5	1.7		
					Bottom	7.8	0.3	124	27.2	27.1	7.9	7.9	28.5	28.6	96.3	96.7	6.5	6.5	11.6	6.5	11.6	6.5	10	10			92	92	89	89	<0.2	<0.2	2.0	1.7
						7.8	0.3	127	26.9	27.1	7.9	7.9	28.7	28.6	97.0	96.7	6.6	6.6	11.5	6.6	11.5	6.6	11	10			92	92	89	89	<0.2	<0.2	1.9	1.7
IM4	Fine	Calm	17:02	7.9	Surface	1.0	0.3	154	28.1	28.1	7.9	7.9	25.4	25.4	98.5	98.5	6.7	6.6	7.9	6.6	7	15	84	88	819585	805051	<0.2	<0.2	1.5	1.5				
						1.0	0.3	166	28.1	28.1	7.9	7.9	25.4	25.4	98.4	98.5	6.7	6.6	8.1	6.6	6	15	85	89			88	88	<0.2	<0.2	1.5	1.5		
					Middle	4.0	0.4	155	26.9	27.1	7.9	7.9	28.1	28.0	95.0	94.7	6.5	6.5	16.3	6.4	9	15	87	89			88	88	<0.2	<0.2	1.6	1.5		
						4.0	0.4	155	27.3	27.1	7.9	7.9	27.9	28.0	94.4	94.7	6.4	6.4	16.4	6.4	9	15	89	91			88	88	<0.2	<0.2	1.4	1.5		
					Bottom	6.9	0.3	154	27.3	27.1	7.9	7.9	28.0	28.2	95.6	96.2	6.5	6.5	20.1	6.6	20.1	6.6	30	15			91	92	88	88	<0.2	<0.2	1.3	1.5
						6.9	0.3	165	26.9	27.1	7.9	7.9	28.3	28.2	96.7	96.2	6.6	6.6	20.1	6.6	20.1	6.6	31	15			92	92	88	88	<0.2	<0.2	1.4	1.5
IM5	Fine	Calm	16:46	7.1	Surface	1.0	0.3	151	27.7	27.9	7.8	7.8	25.5	25.4	96.7	96.4	6.6	6.5	7.9	6.5	8	18	83	87	820552	804928	<0.2	<0.2	2.5	1.8				
						1.0	0.3	163	28.0	27.9	7.8	7.8	25.3	25.4	96.0	96.4	6.5	6.5	8.4	6.5	8	18	84	89			87	87	<0.2	<0.2	2.0	1.8		
					Middle	3.6	0.3	151	27.5	27.5	7.8	7.8	26.8	26.8	95.5	95.5	6.5	6.5	13.1	6.5	12	18	87	89			87	87	<0.2	<0.2	1.7	1.8		
						3.6	0.4	151	27.5	27.5	7.8	7.8	26.8	26.8	95.5																			

**Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring**

Water Quality Monitoring Results on 25 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Calm	15:47	7.8	Surface	1.0	0.4	103	29.4	29.4	7.8	7.8	17.9	17.9	98.3	98.4	6.8	6.8	2.3	2.3	5	5	84	84	87	815603	804242	<0.2	<0.2	5.3	5.3			
						1.0	0.4	110	29.4	29.4	7.8	7.8	17.9	17.9	98.4	98.4	6.8	6.8	2.2	2.2	5	5	85	85				<0.2	<0.2	5.4	5.4			
						3.9	0.6	61	28.4	28.4	7.8	7.8	19.4	19.4	97.8	97.8	6.8	6.8	2.6	2.6	5	5	88	88				<0.2	<0.2	4.8	4.8			
					3.9	0.6	64	28.4	28.4	7.8	7.8	19.4	19.4	97.8	97.8	6.8	6.8	2.4	2.4	4	4	87	87	<0.2				<0.2	4.9	4.9				
					6.8	0.4	79	27.9	27.9	7.8	7.8	23.5	23.5	97.5	97.5	6.7	6.7	2.1	2.1	6	6	89	89	<0.2				<0.2	3.4	3.4				
					6.8	0.5	85	27.9	27.9	7.8	7.8	23.5	23.5	97.6	97.6	6.7	6.7	2.2	2.2	5	5	90	90	<0.2				<0.2	3.1	3.1				
C2	Cloudy	Moderate	14:46	12.0	Surface	1.0	0.4	139	25.3	25.3	7.6	7.6	17.3	17.3	83.5	83.5	6.2	6.2	3.6	3.6	7	7	81	81	87	825681	806959	<0.2	<0.2	5.3	5.3			
						1.0	0.4	144	25.3	25.3	7.6	7.6	17.3	17.3	83.5	83.5	6.2	6.2	3.7	3.7	7	7	82	82				<0.2	<0.2	5.3	5.3			
						6.0	0.4	202	24.9	24.9	7.7	7.7	24.0	24.0	82.6	82.6	6.0	6.0	8.1	8.1	14	14	88	88				<0.2	<0.2	3.0	3.0			
					6.0	0.4	218	24.9	24.9	7.7	7.7	24.0	24.0	82.6	82.6	6.0	6.0	8.1	8.1	14	14	89	89	<0.2				<0.2	3.1	3.1				
					11.0	0.4	180	24.9	24.9	7.6	7.6	24.5	24.5	85.0	85.0	6.1	6.1	10.9	10.9	19	19	91	91	<0.2				<0.2	2.8	2.8				
					11.0	0.5	194	24.9	24.9	7.6	7.6	24.5	24.5	85.1	85.1	6.1	6.1	11.0	11.0	21	21	91	91	<0.2				<0.2	2.8	2.8				
C3	Cloudy	Moderate	16:37	12.0	Surface	1.0	0.4	271	25.3	25.3	7.8	7.8	24.8	24.8	94.7	94.7	6.8	6.8	2.4	2.4	5	5	87	87	90	822092	817818	<0.2	<0.2	2.3	2.3			
						1.0	0.4	271	25.3	25.3	7.8	7.8	24.8	24.8	94.6	94.6	6.8	6.8	2.4	2.4	6	6	86	86				<0.2	<0.2	2.5	2.5			
						6.0	0.6	262	24.9	24.9	7.7	7.7	25.6	25.6	87.3	87.3	6.3	6.3	3.8	3.8	8	8	91	91				<0.2	<0.2	2.6	2.6			
					6.0	0.6	288	24.9	24.9	7.7	7.7	25.6	25.6	87.3	87.3	6.3	6.3	3.8	3.8	10	10	91	91	<0.2				<0.2	2.7	2.7				
					11.0	0.4	277	24.7	24.7	7.7	7.7	27.0	27.0	86.6	86.6	6.2	6.2	7.9	7.9	9	9	93	93	<0.2				<0.2	2.3	2.3				
					11.0	0.5	285	24.7	24.7	7.7	7.7	27.0	27.0	86.7	86.7	6.2	6.2	7.7	7.7	8	8	92	92	<0.2				<0.2	2.2	2.2				
IM1	Fine	Calm	15:25	6.9	Surface	1.0	0.6	268	28.1	28.1	7.8	7.8	23.4	22.7	93.0	92.5	6.4	6.4	4.5	4.5	6	6	85	85	88	818369	806454	<0.2	<0.2	3.6	3.6			
						1.0	0.6	271	28.0	28.0	7.8	7.8	21.9	21.9	92.0	92.0	6.4	6.4	4.8	4.8	8	8	85	85				<0.2	<0.2	3.5	3.5			
						3.5	0.5	277	27.5	27.5	7.8	7.8	25.1	25.1	89.6	89.6	6.1	6.1	6.3	6.3	9	9	87	87				<0.2	<0.2	2.3	2.3			
					3.5	0.6	294	27.5	27.5	7.8	7.8	25.0	25.1	89.6	89.6	6.2	6.2	6.5	6.5	10	10	88	88	<0.2				<0.2	2.6	2.6				
					5.9	0.4	234	27.3	27.3	7.8	7.8	27.9	27.9	92.4	92.4	6.3	6.3	7.8	7.8	11	11	90	90	<0.2				<0.2	2.0	2.0				
					5.9	0.4	236	27.3	27.3	7.8	7.8	28.0	28.0	92.7	92.6	6.3	6.3	7.7	7.7	13	13	91	91	<0.2				<0.2	2.0	2.0				
IM2	Fine	Calm	15:20	7.9	Surface	1.0	0.6	263	28.3	28.3	7.8	7.8	19.4	19.5	92.7	92.6	6.5	6.5	4.7	4.7	5	5	85	85	88	818859	806181	<0.2	<0.2	4.0	4.0			
						1.0	0.7	279	28.2	28.2	7.8	7.8	19.5	19.5	92.5	92.6	6.5	6.5	4.9	4.9	5	5	85	85				<0.2	<0.2	4.1	4.1			
						4.0	0.6	271	27.5	27.5	7.8	7.8	24.8	24.8	89.1	89.1	6.1	6.1	9.2	9.2	9	9	88	88				<0.2	<0.2	3.0	3.0			
					4.0	0.6	295	27.5	27.5	7.8	7.8	24.8	24.8	89.1	89.1	6.1	6.1	9.4	9.4	7	7	89	89	<0.2				<0.2	3.1	3.1				
					6.9	0.4	226	27.5	27.5	7.8	7.8	28.5	28.4	90.9	90.9	6.1	6.1	7.2	7.2	12	12	90	90	<0.2				<0.2	2.4	2.4				
					6.9	0.4	249	27.6	27.6	7.8	7.8	28.2	28.4	90.9	90.9	6.1	6.1	6.8	6.8	10	10	90	90	<0.2				<0.2	2.4	2.4				
IM3	Fine	Calm	15:11	7.7	Surface	1.0	0.6	221	28.1	28.1	7.8	7.8	19.3	19.4	92.3	92.3	6.5	6.5	4.5	4.5	4	4	85	85	88	819423	806002	<0.2	<0.2	2.7	2.7			
						1.0	0.6	229	28.0	28.0	7.8	7.8	19.4	19.4	92.3	92.3	6.5	6.5	4.7	4.7	3	3	85	85				<0.2	<0.2	2.6	2.6			
						3.9	0.5	218	27.9	27.9	7.8	7.8	21.6	21.5	92.0	92.0	6.4	6.4	6.5	6.5	3	3	87	87				<0.2	<0.2	2.8	2.8			
					3.9	0.6	227	27.9	27.9	7.8	7.8	21.4	21.5	92.0	92.0	6.4	6.4	6.7	6.7	4	4	89	89	<0.2				<0.2	2.7	2.7				
					6.7	0.4	245	27.6	27.6	7.8	7.8	25.3	25.3	94.3	94.4	6.4	6.4	8.1	8.1	13	13	90	90	<0.2				<0.2	2.7	2.7				
					6.7	0.4	250	27.6	27.6	7.8	7.8	25.3	25.3	94.4	94.4	6.5	6.5	7.7	7.7	12	12	90	90	<0.2				<0.2	2.6	2.6				
IM4	Fine	Calm	15:03	7.3	Surface	1.0	0.5	212	28.6	28.6	7.8	7.8	19.7	19.7	93.9	93.9	6.5	6.5	3.4	3.4	6	6	83	83	86	819559	805024	<0.2	<0.2	3.9	3.9			
						1.0	0.6	213	28.6	28.6	7.8	7.8	19.7	19.7	93.8	93.8	6.5	6.5	3.5	3.5	4	4	83	83				<0.2	<0.2	3.6	3.6			
						3.7	0.5	222	28.1	28.1	7.8	7.8	21.7	21.7	90.8	90.8	6.3	6.3	5.3	5.3	6	6	86	86				<0.2	<0.2	3.5	3.5			
					3.7	0.5	232	28.0	28.0	7.8	7.8	21.7	21.7	90.8	90.8	6.3	6.3	5.4	5.4	6	6	86	86	<0.2				<0.2	3.2	3.2				
					6.3	0.4	233	27.8	27.8	7.8	7.8	25.6	25.6	92.1	92.2	6.3	6.3	7.0	7.0	13	13	89	89	<0.2				<0.2	2.0	2.0				
					6.3	0.4	251	27.8	27.8	7.8	7.8	25.6	25.6	92.3	92.2	6.3	6.3	7.0	7.0	13	13	90	90	<0.2				<0.2	2.0	2.0				
IM5	Fine	Calm	14:56	6.2	Surface	1.0	0.5	224	28.2	28.3	7.8	7.8	21.5	21.5	89.9	89.8	6.2	6.2	4.6	4.6	9	9	83	83	87	820582	804931	<0.2	<0.2	3.4	3.4			
						1.0	0.5	233	28.3	28.3	7.8	7.8	21.4	21.4	89.7	89.7	6.2	6.2	4.6	4.6	10	10	84	84				<0.2	<0.2	3.1	3.1			
						3.1	0.6	232	28.0	28.0	7.8	7.8	24.3	24.2	87.9	87.8	6.0	6.0	5.0	5.0	11	11	87	87				<0.2	<0.2	3.2	3.2			
					3.1	0.6	249	28.1	28.1	7.8	7.8	24.0	24.2	87.6	87.8	6.0	6.0	5.1	5.1	12	12	87	87	<0.2				<0.2	3.0	3.0				
					5.2	0.4	217	27.9	27.9	7.8	7.8	26.4	26.4	87.9	88.0	5.9	5.9	5.5	5.5	12	12	89	89	<0.2				<0.2	2.1	2.1				
					5.2	0.4	217	27.9	27.9	7.8	7.8	26.4	26.4	88.0	88.0	6.0	6.0	5.6	5.6	10	10	89	89	<0.2				<0.2	2.1	2.1				
IM6	Fine	Calm	14:49	6.3	Surface	1.0	0.6	233	28.5	28.5	7.8	7.8	21.9	22.0	88.8	88.8	6.1	6.1	5.2	5.2	6	6	84	84	87	821068	805							

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 25 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)									
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA						
C1	Cloudy	Calm	08:25	8.5	Surface	1.0	0.4	227	27.6	27.9	7.8	7.8	22.6	22.4	91.8	91.5	6.4	6.3	3.9	7.1	4	10	86	87	815613	804250	<0.2	<0.2	4.3	2.7								
						1.0	0.4	245	28.1		7.8	7.8	22.1	22.4	91.1	91.5	6.3		3.7		5		83				<0.2		4.0									
					Middle	4.3	0.3	184	27.5	27.6	7.8	7.8	26.3	26.3	90.6	90.6	6.2	6.4	7.1	7.1	6	7.1	6	7.1			86		87		<0.2	<0.2	2.8	2.7				
						4.3	0.3	198	27.6		7.8	7.8	26.3	26.3	90.5	90.6	6.2		7.3		5		86				<0.2				2.9							
					Bottom	7.5	0.3	192	27.0	27.2	7.8	7.8	29.3	29.2	94.1	93.9	6.4	6.4	10.7	6.4	10.7	6.4	19	6.4			19		6.4		89		87		<0.2	<0.2	1.2	2.7
						7.5	0.3	209	27.4		7.8	7.8	29.0	29.2	93.7	93.9	6.3		10.1		22		90				<0.2				1.2							
C2	Cloudy	Moderate	10:11	11.9	Surface	1.0	0.2	168	25.4	25.4	7.7	7.7	18.2	18.2	87.0	87.0	6.4	6.2	3.9	9.2	3	8	81	86	825690	806935	<0.2	<0.2	5.0	3.7								
						1.0	0.2	174	25.4		7.7	7.7	18.2	18.2	87.0	87.0	6.4		3.9		4		81				<0.2		4.7									
					Middle	6.0	0.2	232	24.9	24.9	7.7	7.7	25.2	25.2	83.6	83.6	6.0	6.2	9.2	9.2	7	9.2	7	9.2			88		86		<0.2	<0.2	3.5	3.7				
						6.0	0.2	239	24.9		7.7	7.7	25.2	25.2	83.6	83.6	6.0		9.2		9		86				<0.2				3.6							
					Bottom	10.9	0.2	200	24.9	24.9	7.7	7.7	26.2	26.2	86.4	86.5	6.2	6.2	14.5	6.2	14.5	6.2	12	6.2			12		6.2		91		86		<0.2	<0.2	2.7	3.7
						10.9	0.2	219	24.9		7.7	7.7	26.2	26.2	86.6	86.5	6.2		14.4		13		91				<0.2				2.7							
C3	Fine	Moderate	08:08	12.2	Surface	1.0	0.4	178	24.7	24.7	7.7	7.7	25.5	25.5	92.7	92.7	6.7	6.6	1.7	2.1	5	5	85	89	822101	817788	<0.2	<0.2	2.6	2.5								
						1.0	0.4	192	24.7		7.7	7.7	25.5	25.5	92.6	92.7	6.7		1.7		6		86				<0.2		2.7									
					Middle	6.1	0.2	170	24.8	24.8	7.7	7.7	26.4	26.4	90.4	90.4	6.5	6.5	2.0	6.5	6	6.5	6	6.5			88		89		<0.2	<0.2	2.2	2.5				
						6.1	0.2	171	24.8		7.7	7.7	26.4	26.4	90.4	90.4	6.5		2.1		6		90				<0.2				2.6							
					Bottom	11.2	0.5	188	24.8	24.8	7.7	7.7	27.0	27.0	91.1	91.1	6.5	6.5	2.5	6.5	5	6.5	5	6.5			91		89		<0.2		<0.2		2.4	2.5		
						11.2	0.6	190	24.8		7.7	7.7	27.0	27.0	91.1	91.1	6.5		2.5		4		91				<0.2				2.2							
IM1	Cloudy	Calm	08:51	6.7	Surface	1.0	0.3	152	27.8	27.6	7.8	7.8	25.5	25.6	87.9	88.2	6.0	6.0	6.4	8.5	7	12	83	86	818344	806474	<0.2	<0.2	2.7	1.9								
						1.0	0.3	153	27.4		7.8	7.8	25.7	25.6	88.4	88.2	6.0		6.6		5		84				<0.2		2.9									
					Middle	3.4	0.3	134	27.1	27.3	7.8	7.8	27.5	27.4	88.5	88.3	6.0	6.1	8.5	8.5	10	8.5	10	8.5			86		86		<0.2	<0.2		1.6	1.9			
						3.4	0.3	135	27.5		7.8	7.8	27.2	27.4	88.0	88.3	6.0		8.5		12		85				<0.2				1.7							
					Bottom	5.7	0.3	144	27.4	27.2	7.8	7.8	28.4	28.5	90.0	90.4	6.1	6.1	10.4	6.1	10.4	6.1	17	6.1			17		6.1		89		86	<0.2		<0.2	1.4	1.9
						5.7	0.3	158	27.0		7.8	7.8	28.6	28.5	90.7	90.4	6.1		10.3		18		90				<0.2				1.3							
IM2	Cloudy	Calm	09:00	7.9	Surface	1.0	0.3	191	28.4	28.4	7.8	7.8	21.5	21.6	96.7	96.6	6.7	6.5	2.4	3.8	4	5	86	89	818867	806192	<0.2	<0.2	4.1	3.2								
						1.0	0.3	203	28.4		7.8	7.8	21.6	21.6	96.5	96.6	6.6		2.4		3		86				<0.2		4.0									
					Middle	4.0	0.3	170	28.3	28.2	7.8	7.8	23.1	23.1	93.4	93.4	6.4	6.4	3.3	3.8	3	3.8	3	3.8			89		89		<0.2	<0.2	3.6	3.2				
						4.0	0.3	182	28.1		7.8	7.8	23.1	23.1	93.4	93.4	6.4		3.5		2		89				<0.2				3.4							
					Bottom	6.9	0.3	191	27.8	27.8	7.8	7.8	26.5	26.6	94.2	94.4	6.4	6.4	5.6	6.4	5.6	6.4	10	6.4			10		6.4		91		89		<0.2	<0.2	2.0	3.2
						6.9	0.3	201	27.8		7.8	7.8	26.6	26.6	94.6	94.4	6.4		5.6		9		92				<0.2				2.2							
IM3	Cloudy	Calm	09:09	7.7	Surface	1.0	0.3	192	27.7	27.9	7.8	7.8	21.2	21.0	95.7	95.4	6.7	6.4	2.6	3.2	5	8	84	89	819423	806016	<0.2	<0.2	4.8	3.5								
						1.0	0.3	200	28.1		7.8	7.8	20.8	21.0	95.1	95.4	6.6		2.4		6		87				<0.2		4.5									
					Middle	3.9	0.3	179	28.0	28.1	7.8	7.8	22.6	22.6	89.6	89.5	6.2	6.3	3.3	3.2	6	3.2	6	3.2			90		89		<0.2	<0.2	3.8	3.5				
						3.9	0.3	180	28.1		7.8	7.8	22.6	22.6	89.3	89.5	6.1		3.3		8		90				<0.2				3.9							
					Bottom	6.7	0.3	163	27.7	27.7	7.8	7.8	26.6	26.7	92.6	92.9	6.3	6.3	3.7	6.3	3.7	6.3	11	6.3			11		6.3		92		89		<0.2	<0.2	2.0	3.5
						6.7	0.3	174	27.6		7.8	7.8	26.7	26.7	93.1	92.9	6.3		3.8		12		92				<0.2				2.2							
IM4	Cloudy	Calm	09:18	7.3	Surface	1.0	0.3	187	28.1	28.1	7.7	7.7	18.6	18.6	93.7	93.8	6.6	6.4	2.8	4.1	4	6	83	86	819564	805045	<0.2	<0.2	4.8	3.7								
						1.0	0.3	198	28.1		7.7	7.7	18.6	18.6	93.8	93.8	6.6		2.8		5		83				<0.2		5.0									
					Middle	3.7	0.4	139	28.0	28.0	7.8	7.8	22.3	22.3	89.5	89.5	6.2	6.1	5.1	4.1	4	4.1	4	4.1			86		86		<0.2	<0.2	3.7	3.7				
						3.7	0.4	139	28.0		7.8	7.8	22.3	22.3	89.5	89.5	6.2		5.0		6		87				<0.2				3.9							
					Bottom	6.3	0.3	164	27.8	27.9	7.7	7.7	26.4	26.4	93.0	93.1	6.3	6.3	4.5	6.3	9	6.3	9	6.3			87		86		<0.2		<0.2		2.5	3.7		
						6.3	0.3	175	27.9		7.7	7.7	26.3	26.4	93.1	93.1	6.3		4.1		10		88				<0.2				2.4							
IM5	Cloudy	Calm	09:27	6.5	Surface	1.0	0.3	191	28.0	28.1	7.7	7.7	19.7	19.7	89.1	89.0	6.3	6.1	5.2	8.8	7	15	82	85	820581	804941	<0.2	<0.2	5.0	3.5								
						1.0	0.3	196	28.1		7.7	7.7	19.7	19.7	88.9	89.0	6.2		5.0		7		80				<0.2		4.7									
					Middle	3.3	0.3	136	27.8	27.8	7.8	7.8	23.0	22.9	86.3	86.3	6.0	6.0	9.3	8.8	16	8.8	16	8.8			84		85		<0.2	<0.2		3.2	3.5			
						3.3	0.3	147	27.8		7.8	7.8	22.7	22.9	86.2	86.3	6.0		9.2		15		85				<0.2				3.5							
					Bottom	5.5	0.3	179	27.7	27.7	7.8	7.8	25.4	25.4	88.0	88.1	6.0	6.0	12.1	6.0	12.1	6.0	21	6.0			21		6.0		88		85	<0.2		<0.2	2.5	3.5
						5.5	0.3	188	27.7		7.8	7.8	25.4	25.4	88.1	88.1	6.0		12.0		22		89				<0.2				2.3							
IM6	Cloudy	Calm	09:37	6.2	Surface	1.0	0.3	122	28.2	28.1	7.8	7.8	21.6	21.6	89.0	89.1	6.2	6.1	4.4	7.4	7	12	84	87	821058	805845	<0.2	<0.2	4.0	2.8								
						1.0	0.3	133	28.0		7.8	7.8	21.6	21.6	89.1	89.1	6.2		4.6		7		83				<0.2		4.2									
					Middle	3.1	0.3	117	27.8	27.6	7.8	7.8	25.1	25.2	85.9	86.2	5.9	6.1	7.7	7.4	10	7.4	10	7.4			86		87		<							

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 25 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	09:21	6.9	Surface	1.0	0.4	130	25.2	25.2	7.7	7.7	18.2	18.2	94.6	94.6	7.0	6.9	0.6	6.9	5	6	83	88	822090	808817	<0.2	<0.2	5.2	4.0		
						1.0	0.4	134	25.2	25.2	7.7	7.7	18.2	18.2	94.6	94.6	7.0	6.9	0.6	6.9	5	6	82	88	822090	808817	<0.2	<0.2	5.2	4.0		
					Middle	3.5	0.4	121	25.4	25.4	7.7	7.7	24.5	24.6	94.0	94.0	6.7	6.6	2.1	4.2	5	6	90	88	822090	808817	<0.2	<0.2	3.9	4.0		
						3.5	0.5	131	25.4	25.4	7.7	7.7	24.6	24.6	94.0	94.0	6.7	6.6	2.1	4.2	7	6	90	88	822090	808817	<0.2	<0.2	3.9	4.0		
					Bottom	5.9	0.4	137	24.8	24.8	7.7	7.7	26.4	26.4	92.0	92.0	6.6	6.6	10.1	6.6	7	6	91	88	822090	808817	<0.2	<0.2	2.9	4.0		
						5.9	0.4	140	24.8	24.8	7.7	7.7	26.3	26.4	92.0	92.0	6.6	6.6	9.8	6.6	8	6	90	88	822090	808817	<0.2	<0.2	3.0	4.0		
IM10	Cloudy	Moderate	09:13	7.8	Surface	1.0	0.5	134	25.1	25.1	7.7	7.7	19.9	19.9	93.1	93.1	6.9	6.7	1.2	6.7	6	7	84	88	822242	809825	<0.2	<0.2	4.9	3.8		
						1.0	0.5	141	25.1	25.1	7.7	7.7	19.9	19.9	93.1	93.1	6.9	6.7	1.2	6.7	4	7	83	88	822242	809825	<0.2	<0.2	5.0	3.8		
					Middle	3.9	0.4	125	25.0	25.0	7.7	7.7	25.7	25.7	89.2	89.2	6.4	6.3	4.4	4.7	8	7	89	88	822242	809825	<0.2	<0.2	4.4	3.8		
						3.9	0.4	125	25.0	25.0	7.7	7.7	25.7	25.7	89.2	89.2	6.4	6.3	4.4	4.7	7	7	90	88	822242	809825	<0.2	<0.2	4.5	3.8		
					Bottom	6.8	0.4	130	24.6	24.6	7.7	7.7	27.1	27.1	88.4	88.4	6.3	6.3	8.5	6.3	10	6	90	88	822242	809825	<0.2	<0.2	2.1	3.8		
						6.8	0.4	135	24.6	24.6	7.7	7.7	27.1	27.1	88.4	88.4	6.3	6.3	8.5	6.3	8	6	90	88	822242	809825	<0.2	<0.2	2.1	3.8		
IM11	Cloudy	Moderate	09:05	8.0	Surface	1.0	0.5	134	25.4	25.4	7.7	7.7	22.0	22.0	99.0	99.0	7.2	7.1	0.8	7.1	5	9	83	88	821515	810528	<0.2	<0.2	4.2	3.2		
						1.0	0.5	137	25.4	25.4	7.7	7.7	22.0	22.0	98.9	99.0	7.2	7.1	0.9	7.1	4	9	83	88	821515	810528	<0.2	<0.2	4.1	3.2		
					Middle	4.0	0.4	126	25.3	25.3	7.8	7.8	22.9	22.9	95.9	95.9	6.9	6.6	2.2	5.0	6	9	90	88	821515	810528	<0.2	<0.2	3.8	3.2		
						4.0	0.4	134	25.3	25.3	7.8	7.8	22.9	22.9	95.9	95.9	6.9	6.6	2.3	5.0	8	9	89	88	821515	810528	<0.2	<0.2	3.6	3.2		
					Bottom	7.0	0.3	143	24.6	24.6	7.8	7.8	27.2	27.2	91.8	91.9	6.6	6.6	11.9	6.6	16	6	90	88	821515	810528	<0.2	<0.2	2.0	3.2		
						7.0	0.3	150	24.6	24.6	7.8	7.8	27.2	27.2	91.9	91.9	6.6	6.6	12.0	6.6	14	6	90	88	821515	810528	<0.2	<0.2	1.7	3.2		
IM12	Cloudy	Moderate	08:56	8.6	Surface	1.0	0.5	129	25.1	25.1	7.7	7.7	23.0	23.0	98.1	98.1	7.1	7.0	0.6	7.0	4	4	83	88	821158	811530	<0.2	<0.2	3.9	3.7		
						1.0	0.5	141	25.1	25.1	7.7	7.7	23.0	23.0	98.1	98.1	7.1	7.0	0.6	7.0	3	4	83	88	821158	811530	<0.2	<0.2	3.8	3.7		
					Middle	4.3	0.3	133	25.1	25.1	7.7	7.7	23.1	23.1	94.5	94.5	6.8	6.3	2.5	5.0	4	4	89	88	821158	811530	<0.2	<0.2	4.0	3.7		
						4.3	0.3	142	25.1	25.1	7.7	7.7	23.1	23.1	94.4	94.5	6.8	6.3	2.6	5.0	5	4	89	88	821158	811530	<0.2	<0.2	3.9	3.7		
					Bottom	7.6	0.4	124	24.8	24.8	7.7	7.7	26.2	26.2	88.2	88.3	6.3	6.3	11.8	6.3	5	6	91	88	821158	811530	<0.2	<0.2	3.1	3.7		
						7.6	0.5	132	24.8	24.8	7.7	7.7	26.2	26.2	88.3	88.3	6.3	6.3	11.9	6.3	4	6	91	88	821158	811530	<0.2	<0.2	3.2	3.7		
SR2	Fine	Moderate	08:31	4.8	Surface	1.0	0.4	132	25.0	25.0	7.7	7.7	23.0	23.0	91.8	91.6	6.7	6.7	2.7	5.7	2	9	83	87	821478	814162	<0.2	<0.2	3.5	3.1		
						1.0	0.4	142	25.0	25.0	7.7	7.7	23.0	23.0	91.4	91.6	6.6	6.1	2.8	5.7	4	9	84	87	821478	814162	<0.2	<0.2	3.8	3.1		
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87	821478	814162	<0.2	<0.2	-	3.1
						2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87	821478	814162	<0.2	<0.2	-	3.1
					Bottom	3.8	0.3	131	24.7	24.8	7.7	7.7	26.0	26.0	85.3	85.4	6.1	6.1	8.5	6.1	16	6	91	87	821478	814162	<0.2	<0.2	2.5	3.1		
						3.8	0.3	133	24.8	24.8	7.7	7.7	26.0	26.0	85.5	85.4	6.1	6.1	8.9	6.1	14	6	91	87	821478	814162	<0.2	<0.2	2.4	3.1		
SR3	Cloudy	Moderate	09:36	8.7	Surface	1.0	0.4	115	25.2	25.2	7.7	7.7	18.3	18.3	92.3	92.3	6.9	6.7	0.9	6.7	2	5	-	-	822153	807573	-	-	-	-		
						1.0	0.4	124	25.2	25.2	7.7	7.7	18.3	18.3	92.2	92.3	6.9	6.7	0.9	6.7	3	5	-	5	-	-	822153	807573	-	-	-	-
					Middle	4.4	0.6	124	25.1	25.1	7.7	7.7	23.1	23.1	90.0	90.0	6.5	6.3	2.7	3.1	5	5	-	5	-	-	822153	807573	-	-	-	-
						4.4	0.6	125	25.1	25.1	7.7	7.7	23.1	23.1	89.9	90.0	6.5	6.3	2.8	3.1	3	5	-	5	-	-	822153	807573	-	-	-	-
					Bottom	7.7	0.4	102	24.8	24.8	7.7	7.7	26.6	26.6	92.3	92.4	6.6	6.6	5.6	6.6	7	6	-	7	-	-	822153	807573	-	-	-	-
						7.7	0.4	111	24.8	24.8	7.7	7.7	26.6	26.6	92.5	92.4	6.6	6.6	5.6	6.6	7	6	-	7	-	-	822153	807573	-	-	-	-
SR4A	Cloudy	Calm	08:06	9.0	Surface	1.0	0.3	172	27.6	27.6	7.8	7.8	23.0	23.0	91.5	91.5	6.3	6.2	8.6	15.0	8	24	-	-	817206	807790	-	-	-	-		
						1.0	0.3	181	27.6	27.6	7.8	7.8	23.0	23.0	91.4	91.5	6.3	6.2	8.5	15.0	9	24	-	24	-	-	817206	807790	-	-	-	-
					Middle	4.5	0.4	180	27.4	27.4	7.8	7.8	24.8	24.9	88.0	88.0	6.1	6.1	15.6	6.1	28	15.0	28	24	-	-	817206	807790	-	-	-	-
						4.5	0.4	196	27.3	27.3	7.8	7.8	24.9	24.9	88.0	88.0	6.1	6.1	15.6	6.1	29	15.0	29	24	-	-	817206	807790	-	-	-	-
					Bottom	8.0	0.3	195	27.2	27.2	7.8	7.8	28.6	28.6	89.7	90.2	6.1	6.1	21.1	6.1	34	6.1	34	24	-	-	817206	807790	-	-	-	-
						8.0	0.4	211	27.2	27.2	7.8	7.8	28.6	28.6	90.6	90.2	6.1	6.1	20.6	6.1	35	6.1	35	24	-	-	817206	807790	-	-	-	-
SR5A	Fine	Calm	07:49	4.1	Surface	1.0	0.1	176	27.9	27.9	7.7	7.7	25.4	25.4	93.0	93.0	6.3	6.3	6.3	7.9	6	12	-	-	816598	810694	-	-	-	-		
						1.0	0.1	181	27.9	27.9	7.7	7.7	25.4	25.4	93.0	93.0	6.3	6.3	6.2	7.9	5	12	-	12	-	-	816598	810694	-	-	-	-
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816598	810694	-	-	-	-
						2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816598	810694	-	-	-	-
					Bottom	3.1	0.2	166	27.8	27.8	7.7	7.7	25.9																			

**Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring**

Water Quality Monitoring Results on 27 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Calm	16:47	7.8	Surface	1.0	0.4	127	28.8	29.1	7.8	7.8	20.1	20.0	101.7	101.4	7.0	6.9	3.4	7	85	85	87	87	815626	804251	<0.2	<0.2	4.0	4.4		
						1.0	0.4	132	29.3	7.8	7.8	19.9	101.0	6.9	3.2	5	85	85	87	87	815626	804251	<0.2	<0.2	3.2	3.2						
						3.9	0.4	114	28.7	7.9	7.9	22.4	100.2	6.8	4.2	8	87	87	87	87	815626	804251	<0.2	<0.2	3.1	3.1						
					Middle	3.9	0.4	118	28.6	7.9	7.9	22.5	100.3	6.9	4.3	8	87	87	87	87	815626	804251	<0.2	<0.2	3.1	3.1						
						6.8	0.5	76	28.4	7.9	7.9	23.8	100.2	6.8	4.6	12	90	90	90	90	815626	804251	<0.2	<0.2	2.7	2.7						
						6.8	0.5	80	28.3	7.9	7.9	23.9	100.4	6.8	4.7	10	90	90	90	90	815626	804251	<0.2	<0.2	2.3	2.3						
C2	Cloudy	Moderate	15:44	10.2	Surface	1.0	0.4	150	25.7	25.7	7.6	7.6	18.4	18.6	80.3	80.3	5.9	5.9	4.9	6	82	82	88	825697	806947	<0.2	<0.2	2.4	2.4			
						1.0	0.4	162	25.7	7.6	7.6	18.7	80.3	5.9	4.9	6	82	82	88	825697	806947	<0.2	<0.2	2.6	2.6							
						5.1	0.4	202	25.1	7.7	7.7	24.2	80.6	5.8	7.1	8	90	90	90	90	825697	806947	<0.2	<0.2	3.6	3.6						
					Middle	5.1	0.5	208	25.1	7.7	7.7	24.1	80.7	5.8	7.1	7	89	89	89	89	825697	806947	<0.2	<0.2	3.4	3.4						
						9.2	0.5	265	25.1	7.7	7.7	27.4	82.9	5.9	12.0	8	91	91	91	91	825697	806947	<0.2	<0.2	2.5	2.5						
						9.2	0.5	273	25.1	7.7	7.7	27.4	82.9	5.9	12.1	8	92	92	92	92	825697	806947	<0.2	<0.2	2.7	2.7						
C3	Cloudy	Moderate	17:42	11.9	Surface	1.0	0.5	265	25.5	25.5	7.8	7.8	25.3	25.3	95.3	95.2	6.8	6.7	3.9	6	86	86	90	822117	817795	<0.2	<0.2	1.8	1.8			
						1.0	0.5	290	25.5	7.8	7.8	25.3	95.1	6.7	4.0	5	87	87	87	87	822117	817795	<0.2	<0.2	2.8	2.8						
						6.0	0.5	257	25.0	7.8	7.8	27.9	89.0	6.3	8.8	5	91	91	91	91	822117	817795	<0.2	<0.2	2.1	2.1						
					Middle	6.0	0.5	265	25.0	7.8	7.8	27.9	89.0	6.3	8.9	4	92	92	92	92	822117	817795	<0.2	<0.2	2.1	2.1						
						10.9	0.5	262	24.9	7.7	7.7	28.4	90.4	6.4	13.5	6	93	93	93	93	822117	817795	<0.2	<0.2	2.3	2.3						
						10.9	0.5	282	24.9	7.7	7.7	28.4	90.5	6.4	13.5	5	92	92	92	92	822117	817795	<0.2	<0.2	2.0	2.0						
IM1	Fine	Calm	16:23	6.7	Surface	1.0	0.3	199	28.8	28.8	7.8	7.8	21.5	21.6	93.1	93.0	6.4	6.2	6.5	6	82	82	87	818331	806442	<0.2	<0.2	2.8	2.8			
						1.0	0.3	217	28.8	7.8	7.8	21.6	92.9	6.4	6.4	8	83	83	83	83	818331	806442	<0.2	<0.2	3.0	3.0						
						3.4	0.4	163	28.1	7.8	7.8	24.7	88.6	6.0	11.7	11	86	86	86	86	818331	806442	<0.2	<0.2	2.2	2.2						
					Middle	3.4	0.4	175	28.0	7.8	7.8	24.7	88.5	6.0	12.0	10	87	87	87	87	818331	806442	<0.2	<0.2	2.3	2.3						
						5.7	0.4	104	27.8	7.8	7.8	26.8	89.4	6.0	17.4	14	90	90	90	90	818331	806442	<0.2	<0.2	2.1	2.1						
						5.7	0.5	104	27.8	7.8	7.8	26.9	89.6	6.1	17.7	13	91	91	91	91	818331	806442	<0.2	<0.2	2.0	2.0						
IM2	Fine	Calm	16:18	7.6	Surface	1.0	0.5	233	28.9	28.9	7.8	7.8	20.3	20.4	93.1	93.1	6.4	6.3	4.8	5	84	84	88	818862	806205	<0.2	<0.2	3.7	3.7			
						1.0	0.6	244	28.9	7.8	7.8	20.4	93.1	6.4	5.0	5	84	84	84	84	818862	806205	<0.2	<0.2	3.8	3.8						
						3.8	0.4	237	28.6	7.8	7.8	22.4	89.4	6.1	8.3	11	89	89	89	89	818862	806205	<0.2	<0.2	2.6	2.6						
					Middle	3.8	0.5	258	28.5	7.8	7.8	22.5	89.5	6.1	8.5	10	89	89	89	89	818862	806205	<0.2	<0.2	2.7	2.7						
						6.6	0.4	205	27.5	7.8	7.8	26.6	89.7	6.1	11.0	11	91	91	91	91	818862	806205	<0.2	<0.2	2.8	2.8						
						6.6	0.5	222	28.0	7.8	7.8	26.1	89.2	6.0	10.9	11	92	92	92	92	818862	806205	<0.2	<0.2	2.7	2.7						
IM3	Fine	Calm	16:10	7.7	Surface	1.0	0.7	252	28.7	28.7	7.7	7.7	20.8	20.8	88.5	88.6	6.1	6.2	4.9	6	87	87	89	819410	806024	<0.2	<0.2	3.6	3.6			
						1.0	0.8	270	28.7	7.7	7.7	20.8	88.6	6.1	5.1	8	86	86	86	86	819410	806024	<0.2	<0.2	3.4	3.4						
						3.9	0.6	246	28.7	7.8	7.8	21.5	90.4	6.2	7.2	11	89	89	89	89	819410	806024	<0.2	<0.2	3.5	3.5						
					Middle	3.9	0.7	253	28.6	7.8	7.8	21.5	90.5	6.2	7.3	11	90	90	90	90	819410	806024	<0.2	<0.2	3.2	3.2						
						6.7	0.5	247	28.6	7.8	7.8	21.9	93.3	6.4	8.3	14	92	92	92	92	819410	806024	<0.2	<0.2	3.2	3.2						
						6.7	0.6	251	28.6	7.8	7.8	21.9	93.5	6.4	8.3	15	92	92	92	92	819410	806024	<0.2	<0.2	3.1	3.1						
IM4	Fine	Calm	16:02	7.2	Surface	1.0	0.5	229	28.8	28.8	7.8	7.8	21.9	22.0	90.4	90.3	6.2	6.1	5.8	8	83	83	87	819560	805054	<0.2	<0.2	3.0	3.0			
						1.0	0.5	245	28.7	7.8	7.8	22.0	90.1	6.2	6.3	8	84	84	84	84	819560	805054	<0.2	<0.2	3.0	3.0						
						3.6	0.6	237	28.4	7.8	7.8	23.0	88.4	6.0	9.1	9	86	86	86	86	819560	805054	<0.2	<0.2	3.0	3.0						
					Middle	3.6	0.6	252	28.0	7.8	7.8	23.2	88.9	6.1	9.3	10	87	87	87	87	819560	805054	<0.2	<0.2	3.0	3.0						
						6.2	0.4	244	28.3	7.8	7.8	24.1	91.4	6.2	15.3	16	90	90	90	90	819560	805054	<0.2	<0.2	2.6	2.6						
						6.2	0.5	252	27.9	7.8	7.8	24.3	92.1	6.3	15.6	19	90	90	90	90	819560	805054	<0.2	<0.2	2.4	2.4						
IM5	Fine	Calm	15:55	6.2	Surface	1.0	0.4	235	28.8	28.8	7.8	7.8	21.1	21.1	88.7	88.6	6.1	6.0	5.9	9	84	84	88	820570	804916	<0.2	<0.2	3.4	3.4			
						1.0	0.5	256	28.8	7.8	7.8	21.1	88.5	6.1	6.0	8	84	84	84	84	820570	804916	<0.2	<0.2	3.5	3.5						
						3.1	0.4	257	28.3	7.8	7.8	24.0	85.0	5.8	9.0	13	89	89	89	89	820570	804916	<0.2	<0.2	1.4	1.4						
					Middle	3.1	0.5	277	28.3	7.8	7.8	23.9	85.1	5.8	9.5	11	89	89	89	89	820570	804916	<0.2	<0.2	1.6	1.6						
						5.2	0.5	278	27.9	7.8	7.8	26.3	84.6	5.7	22.2	34	92	92	92	92	820570	804916	<0.2	<0.2	1.7	1.7						
						5.2	0.5	284	27.8	7.8	7.8	26.3	84.7	5.7	22.4	32	92	92	92	92	820570	804916	<0.2	<0.2	1.8	1.8						
IM6	Fine	Calm	15:48	6.2	Surface	1.0	0.6	240	28.6	28.6	7.8	7.8	22.2	22.2	86.1	86.0	5.9	5.8	8.4	9	83	83	88	821077	805820	<0.2	<0.2	3.3	3.3			
						1.0	0.6	242	28.6	7.8	7.8	22.2	85.9	5.9	8.3	11	85	85	85	85	821077	805820	<0.2	<0.2	3.2	3.2						
						3.1	0.6	259	28.1	7.8	7.8	24.3	83.7	5.7	11.8	16	87	87	87	87	821077	805820	<0.2	<0.2	2.0	2.0						
					Middle	3.1	0.6	277	28.2	7.8	7.8	24.0	83.6	5.7	11.7	19	88	88	88	88	821077	805820	<0.2	<0.2	2.0	2.0						
						5.2	0.5	264	28.0	7.8																						

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 27 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	16:25	6.4	Surface	1.0	0.3	225	26.0	26.0	7.7	7.7	20.0	20.0	92.4	92.4	6.7	6.6	3.9	4.7	5	6	83	88	822101	808817	<0.2	<0.2	3.1	3.1		
						1.0	0.3	229	26.0	26.0	7.7	7.7	20.0	20.0	92.4	92.4	6.7	6.6	3.9	4.7	4	6	83	90	83	90	<0.2	<0.2	3.2	2.8		
					Middle	3.2	0.4	276	25.7	25.7	7.7	7.7	22.5	22.5	91.1	91.1	6.5	6.5	4.3	6.5	6	4	6	4	90	90	<0.2	<0.2	2.8	3.0		
						3.2	0.4	280	25.7	25.5	7.7	7.7	22.5	24.2	91.1	90.7	6.5	6.5	4.4	6.5	4	7	90	91	90	91	<0.2	<0.2	3.1	3.2		
					Bottom	5.4	0.4	258	25.5	25.5	7.7	7.7	24.2	24.2	90.6	90.7	6.5	6.5	5.9	6.5	7	7	7	7	90	91	<0.2	<0.2	3.1	3.2		
						5.4	0.4	280	25.5	25.5	7.7	7.7	24.2	24.2	90.7	90.7	6.5	6.5	5.8	6.5	7	7	7	7	91	91	<0.2	<0.2	3.2	3.2		
IM10	Cloudy	Moderate	16:32	6.7	Surface	1.0	0.5	283	26.0	26.0	7.7	7.7	21.3	21.3	94.8	94.8	6.8	6.8	4.0	6.7	5	5	84	88	822252	809831	<0.2	<0.2	3.4	3.4		
						1.0	0.5	295	26.0	26.0	7.7	7.7	21.3	21.3	94.8	94.8	6.8	6.8	4.0	6.7	4	4	83	90	83	90	<0.2	<0.2	3.4	3.4		
					Middle	3.4	0.4	276	25.9	25.9	7.7	7.7	21.7	21.7	93.5	93.5	6.7	6.7	5.7	6.7	4	4	4	4	90	90	<0.2	<0.2	3.4	3.2		
						3.4	0.5	285	25.9	25.6	7.7	7.7	21.7	23.5	93.4	94.4	6.7	6.8	5.7	6.8	4	5	90	91	90	91	<0.2	<0.2	3.2	2.4		
					Bottom	5.7	0.5	267	25.6	25.6	7.7	7.7	23.5	23.5	94.3	94.4	6.8	6.8	10.2	6.8	5	6	5	6	91	91	<0.2	<0.2	2.4	2.6		
						5.7	0.5	286	25.6	25.6	7.7	7.7	23.4	23.5	94.4	94.4	6.8	6.8	10.3	6.8	6	6	91	91	<0.2	<0.2	2.6	2.6				
IM11	Cloudy	Moderate	16:41	7.4	Surface	1.0	0.5	271	26.0	26.0	7.8	7.8	21.7	21.7	100.3	100.3	7.2	7.2	3.5	7.2	5	11	84	89	821503	810556	<0.2	<0.2	3.2	3.4		
						1.0	0.6	289	26.0	26.0	7.8	7.8	21.7	21.7	100.2	100.3	7.2	7.2	3.6	7.2	6	11	84	91	84	91	<0.2	<0.2	3.4	3.0		
					Middle	3.7	0.6	293	25.9	25.9	7.8	7.8	21.9	21.9	98.3	98.3	7.1	7.1	6.0	7.1	7	7	7	7	90	91	<0.2	<0.2	3.3	3.0		
						3.7	0.6	320	25.9	25.2	7.8	7.7	21.9	24.5	98.3	91.3	7.1	6.5	6.2	6.5	7	6.5	91	91	91	91	<0.2	<0.2	3.0	2.7		
					Bottom	6.4	0.6	291	25.2	25.2	7.7	7.7	24.5	24.5	91.3	91.3	6.5	6.5	31.8	6.5	18	6.5	18	20	91	91	<0.2	<0.2	2.7	2.5		
						6.4	0.6	301	25.2	25.2	7.7	7.7	24.5	24.5	91.3	91.3	6.5	6.5	31.8	6.5	20	6.5	20	20	91	91	<0.2	<0.2	2.5	2.5		
IM12	Cloudy	Moderate	16:53	7.1	Surface	1.0	0.7	284	25.9	25.9	7.8	7.8	22.0	22.0	103.6	103.6	7.4	7.2	3.1	7.2	6	7	84	89	821176	811525	<0.2	<0.2	3.3	3.2		
						1.0	0.7	310	25.9	25.5	7.8	7.8	22.0	23.1	103.6	96.1	7.4	6.9	3.1	6.9	6	7	85	91	85	91	<0.2	<0.2	3.2	3.1		
					Middle	3.6	0.7	277	25.5	25.5	7.8	7.8	23.1	23.1	96.1	96.1	6.9	6.9	6.1	6.9	6	7	6	7	91	91	<0.2	<0.2	3.1	3.2		
						3.6	0.7	300	25.5	25.3	7.8	7.8	23.1	25.7	96.1	93.3	6.9	6.6	6.3	6.6	7	6.6	91	92	91	92	<0.2	<0.2	3.2	3.2		
					Bottom	6.1	0.5	269	25.3	25.3	7.8	7.8	25.7	25.7	93.3	93.3	6.6	6.6	36.3	6.6	8	6.6	8	8	92	92	<0.2	<0.2	3.2	3.2		
						6.1	0.5	269	25.3	25.3	7.8	7.8	25.7	25.7	93.3	93.3	6.6	6.6	36.3	6.6	8	6.6	8	8	92	92	<0.2	<0.2	3.2	3.2		
SR2	Cloudy	Moderate	17:18	4.4	Surface	1.0	0.2	189	25.7	25.7	7.8	7.8	24.3	24.3	96.9	96.9	6.9	6.9	9.3	11.7	11	13	86	89	821473	814183	<0.2	<0.2	2.5	2.3		
						1.0	0.2	197	25.7	25.6	7.8	7.7	24.3	24.8	96.9	98.1	6.9	7.0	9.3	7.0	11	14	85	92	85	91	<0.2	<0.2	2.3	2.6		
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	3.4	0.2	195	25.6	25.6	7.7	7.7	24.8	24.8	98.0	98.1	7.0	7.0	13.8	7.0	14	7.0	14	14	92	91	<0.2	<0.2	2.6	2.7		
						3.4	0.2	204	25.6	25.6	7.7	7.7	24.8	24.8	98.1	98.1	7.0	7.0	14.4	7.0	14	7.0	14	14	91	91	<0.2	<0.2	2.7	2.7		
SR3	Cloudy	Moderate	16:12	8.2	Surface	1.0	0.4	213	26.1	26.1	7.7	7.7	17.6	17.7	88.0	88.0	6.5	6.3	3.6	4.4	6	6	-	-	822166	807556	-	-	-	-		
						1.0	0.4	216	26.1	26.1	7.7	7.7	17.8	17.7	87.9	88.0	6.4	6.3	3.6	4.4	5	6	-	6	-	-	-	-	-	-		
					Middle	4.1	0.4	229	25.4	25.4	7.7	7.7	23.9	23.9	86.3	86.3	6.2	6.2	3.8	6.2	6	6	6	6	-	-	-	-	-	-	-	
						4.1	0.4	239	25.4	25.3	7.7	7.7	23.9	24.6	86.3	85.9	6.2	6.1	3.8	6.1	5	6.1	6	7	-	-	-	-	-	-	-	
					Bottom	7.2	0.3	236	25.3	25.3	7.7	7.7	24.6	24.6	85.9	85.9	6.1	6.1	5.8	6.1	6	6.1	6	7	-	-	-	-	-	-	-	
						7.2	0.3	239	25.3	25.3	7.7	7.7	24.6	24.6	85.8	85.8	6.1	6.1	5.8	6.1	7	6.1	7	7	-	-	-	-	-	-	-	
SR4A	Fine	Calm	17:06	8.6	Surface	1.0	0.4	248	28.3	28.4	7.9	7.9	24.8	24.8	99.6	99.5	6.8	6.7	14.3	13.4	23	23	-	-	817193	807800	-	-	-	-		
						1.0	0.4	268	28.4	28.4	7.9	7.9	24.8	24.8	99.4	98.1	6.7	6.6	14.2	13.4	22	23	-	23	-	-	-	-	-			
					Middle	4.3	0.4	254	28.3	28.4	7.9	7.9	24.8	24.8	98.2	97.9	6.7	6.6	13.4	13.4	23	23	-	23	-	-	-	-	-	-		
						4.3	0.4	273	28.4	28.1	7.9	7.9	24.7	25.1	97.9	98.8	6.6	6.7	13.4	12.6	23	22	-	22	-	-	-	-	-			
					Bottom	7.6	0.4	244	27.9	28.1	7.9	7.9	25.1	25.0	98.8	98.6	6.7	6.7	12.6	98.4	22	6.7	22	22	-	-	-	-	-	-		
						7.6	0.4	261	28.3	28.1	7.9	7.9	24.9	25.0	98.4	98.4	6.7	6.7	12.5	98.4	22	6.7	22	22	-	-	-	-	-			
SR5A	Fine	Calm	17:24	4.0	Surface	1.0	0.4	292	28.1	28.4	7.9	7.9	25.3	25.2	100.8	100.5	6.8	6.8	9.0	11.1	14	15	-	-	816577	810692	-	-	-	-		
						1.0	0.4	308	28.6	28.6	7.9	7.9	25.1	25.1	100.2	100.6	6.8	6.8	8.9	11.1	13	15	-	15	-	-	-	-				
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Bottom	3.0	0.3	286	28.6	28.6	7.9	7.9	25.0	25.1	100.5	100.6	6.8	6.8	12.8	100.5	6.8	6.8	15	17	-	-	-	-	-			
						3.0	0.3	302	28.5	28.5	7.9	7.9	25.1	25.1	100.6	100.6	6.8	6.8	13.5	100.6	6.8	6.8	17	17	-	-	-	-	-			
SR6	Fine	Calm	17:48	3.9	Surface	1.0	0.2	229	28.4	28.5	7.9	7.9	24.0	24.0	101.0	101.0	6.9															

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 27 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value
C1	Fine	Calm	10:14	8.2	Surface	1.0	0.8	210	28.0	28.0	7.9	7.9	22.9	22.9	99.6	98.9	6.9	6.5	4.2	6.5	6	17	82	86	815637	804237	<0.2	<0.2	3.5	2.3			
						1.0	0.8	220	28.0	7.9	7.9	22.9	22.9	98.2	98.9	6.8	6.5	4.8	6.5	5	11.3	5	17	83	86	815637	804237	<0.2	<0.2	3.7	2.3		
					Middle	4.1	0.7	217	27.6	7.8	7.8	28.5	28.5	91.1	91.2	6.1	6.5	15.0	6.5	7	6	7	6	84	87	815637	804237	<0.2	<0.2	2.1	2.3		
						4.1	0.7	238	27.5	7.8	7.8	28.5	28.5	91.2	91.2	6.1	6.5	15.2	6.5	6	6	6	6	87	89	815637	804237	<0.2	<0.2	2.2	2.3		
					Bottom	7.2	0.5	229	27.4	7.8	7.8	28.9	28.9	96.6	96.7	6.5	6.5	14.7	6.5	8	6.5	14.7	6.5	38	39	89	90	815637	804237	<0.2	<0.2	1.0	1.1
						7.2	0.5	245	27.5	7.8	7.8	28.8	28.9	96.8	96.7	6.5	6.5	14.1	6.5	6	6.5	14.1	6.5	39	39	90	90	815637	804237	<0.2	<0.2	1.1	1.1
C2	Cloudy	Moderate	12:14	10.8	Surface	1.0	0.4	181	26.6	26.6	7.6	7.6	16.9	16.9	84.0	84.0	6.1	6.1	4.4	6.1	7	8	81	87	825689	806928	<0.2	<0.2	5.0	3.9			
						1.0	0.4	197	26.6	7.6	7.6	16.9	16.9	83.9	84.0	6.1	6.1	4.5	6.1	5	7.9	5	8	81	89	825689	806928	<0.2	<0.2	5.1	3.9		
					Middle	5.4	0.4	175	25.3	7.7	7.7	23.6	23.6	82.6	82.6	6.0	6.1	6.5	6.0	7	6.1	7	8	7	7	89	90	825689	806928	<0.2	<0.2	4.3	3.9
						5.4	0.4	179	25.3	7.7	7.7	23.6	23.6	82.6	82.6	6.0	6.0	6.5	6.0	7	6.0	7	8	7	7	90	91	825689	806928	<0.2	<0.2	4.3	3.9
					Bottom	9.8	0.4	154	25.1	7.7	7.7	26.6	26.6	82.7	82.8	5.9	5.9	12.7	5.9	11	5.9	12.7	5.9	11	10	91	91	825689	806928	<0.2	<0.2	2.3	2.3
						9.8	0.4	158	25.1	7.7	7.7	26.5	26.6	82.8	82.8	5.9	5.9	12.6	5.9	10	5.9	12.6	5.9	10	10	91	91	825689	806928	<0.2	<0.2	2.3	2.3
C3	Cloudy	Moderate	10:03	12.4	Surface	1.0	0.3	127	25.6	25.6	7.7	7.7	25.0	25.0	94.5	94.5	6.7	6.5	2.8	6.5	3	6	86	89	822122	817810	<0.2	<0.2	2.9	2.5			
						1.0	0.3	128	25.6	7.7	7.7	25.0	25.0	94.4	94.5	6.7	6.5	2.9	6.5	4	4.5	4	6	86	89	822122	817810	<0.2	<0.2	2.6	2.5		
					Middle	6.2	0.2	133	25.2	7.7	7.7	26.4	26.4	89.6	89.6	6.4	6.2	4.4	6.2	5	6.2	5	6	5	6	89	90	822122	817810	<0.2	<0.2	2.3	2.5
						6.2	0.2	146	25.2	7.7	7.7	26.4	26.4	89.5	89.6	6.3	6.2	4.4	6.2	6	6.2	6	6	6	6	90	91	822122	817810	<0.2	<0.2	2.5	2.5
					Bottom	11.4	0.2	92	25.0	7.7	7.7	27.5	27.5	87.2	87.2	6.2	6.2	6.1	6.2	8	6.2	6.1	6.2	8	10	92	91	822122	817810	<0.2	<0.2	2.3	2.6
						11.4	0.2	100	25.0	7.7	7.7	27.5	27.5	87.2	87.2	6.2	6.2	6.2	6.2	10	6.2	6.2	6.2	10	10	91	91	822122	817810	<0.2	<0.2	2.6	2.6
IM1	Fine	Calm	10:43	6.7	Surface	1.0	0.7	200	28.5	28.6	7.8	7.8	21.6	21.6	95.7	95.1	6.6	6.4	4.5	6.4	5	15	84	87	818339	806462	<0.2	<0.2	3.6	2.5			
						1.0	0.7	210	28.6	7.8	7.8	21.5	21.6	94.4	95.1	6.5	6.5	4.9	6.5	7	8.7	7	15	83	87	818339	806462	<0.2	<0.2	3.8	2.5		
					Middle	3.4	0.4	189	27.9	7.8	7.8	25.4	25.4	90.5	90.6	6.2	6.2	10.0	6.2	10	6.2	15	15	87	89	818339	806462	<0.2	<0.2	1.8	2.5		
						3.4	0.4	190	27.8	7.8	7.8	25.4	25.4	90.7	90.6	6.2	6.2	10.2	6.2	16	6.2	16	15	89	89	818339	806462	<0.2	<0.2	2.2	2.5		
					Bottom	5.7	0.4	190	27.3	7.8	7.8	27.5	27.4	96.3	96.2	6.5	6.5	11.4	6.5	22	6.5	11.4	6.5	22	6	89	91	818339	806462	<0.2	<0.2	1.9	2.5
						5.7	0.4	203	27.8	7.8	7.8	27.3	27.4	96.0	96.0	6.5	6.5	11.1	6.5	22	6.5	11.1	6.5	22	6	91	91	818339	806462	<0.2	<0.2	1.6	2.5
IM2	Fine	Calm	10:50	7.7	Surface	1.0	0.8	222	28.1	28.4	7.8	7.8	22.2	22.0	100.9	100.5	7.0	6.8	2.8	6.8	5	9	82	87	818862	806190	<0.2	<0.2	4.3	3.6			
						1.0	0.8	234	28.6	7.8	7.8	21.8	22.0	100.1	100.5	6.9	6.8	2.7	6.8	3	4.3	3	9	83	86	818862	806190	<0.2	<0.2	4.5	3.6		
					Middle	3.9	0.8	211	28.4	7.8	7.8	22.0	22.1	97.0	97.2	6.7	6.8	4.6	6.8	6	6.8	6	9	86	87	818862	806190	<0.2	<0.2	4.0	3.6		
						3.9	0.8	224	28.0	7.8	7.8	22.2	22.1	97.4	97.4	6.7	6.8	4.8	6.8	4	6.8	4	9	87	89	818862	806190	<0.2	<0.2	3.6	3.6		
					Bottom	6.7	0.6	195	27.9	7.8	7.8	26.1	26.2	100.4	100.7	6.8	6.8	5.7	6.8	18	6.8	5.7	6.8	18	6	90	91	818862	806190	<0.2	<0.2	2.2	3.6
						6.7	0.6	196	27.8	7.8	7.8	26.2	26.2	100.9	100.7	6.8	6.8	5.4	6.8	17	6.8	5.4	6.8	17	6	91	91	818862	806190	<0.2	<0.2	2.8	3.6
IM3	Fine	Calm	10:58	7.5	Surface	1.0	0.7	220	28.6	28.6	7.8	7.8	21.4	21.4	93.6	93.4	6.4	6.3	3.1	6.3	4	5	85	88	819405	806013	<0.2	<0.2	4.0	3.4			
						1.0	0.7	237	28.6	7.8	7.8	21.4	21.4	93.2	93.4	6.4	6.3	3.2	6.3	4	5.0	4	5	86	88	819405	806013	<0.2	<0.2	3.8	3.4		
					Middle	3.8	0.7	228	28.5	7.8	7.8	22.5	22.6	89.2	89.2	6.1	6.1	5.0	6.1	4	6.1	4	5	88	89	819405	806013	<0.2	<0.2	3.6	3.4		
						3.8	0.7	238	28.4	7.8	7.8	22.6	22.6	89.2	89.2	6.1	6.1	5.2	6.1	6	6.1	6	5	89	92	819405	806013	<0.2	<0.2	3.4	3.4		
					Bottom	6.5	0.6	228	27.8	7.8	7.8	26.5	26.5	90.6	91.2	6.1	6.2	7.1	6.1	7	6.2	7.1	6.2	6	6	92	92	819405	806013	<0.2	<0.2	2.7	3.4
						6.5	0.6	249	27.9	7.8	7.8	26.4	26.5	91.8	91.8	6.2	6.2	6.4	6.2	7	6.2	6.4	6.2	7	6	92	92	819405	806013	<0.2	<0.2	2.9	3.4
IM4	Fine	Calm	11:06	7.2	Surface	1.0	0.7	212	28.4	28.4	7.8	7.8	20.7	20.7	94.6	94.5	6.5	6.3	4.9	6.3	5	9	84	87	819574	805050	<0.2	<0.2	4.1	3.3			
						1.0	0.8	218	28.4	7.8	7.8	20.7	20.7	94.4	94.5	6.5	6.3	5.1	6.3	4	7.7	4	9	82	87	819574	805050	<0.2	<0.2	4.3	3.3		
					Middle	3.6	0.6	220	28.2	7.8	7.8	22.7	22.7	89.0	88.9	6.1	6.1	6.2	6.1	10	6.1	10	9	87	88	819574	805050	<0.2	<0.2	3.4	3.3		
						3.6	0.7	227	28.1	7.8	7.8	22.7	22.7	88.8	88.8	6.1	6.1	6.4	6.1	10	6.1	10	9	88	90	819574	805050	<0.2	<0.2	3.5	3.3		
					Bottom	6.2	0.5	223	27.7	7.8	7.8	26.7	26.7	86.5	86.6	5.9	5.9	11.7	5.9	12	5.9	11.7	5.9	12	6	90	91	819574	805050	<0.2	<0.2	2.3	3.3
						6.2	0.5	237	27.7	7.8	7.8	26.7	26.7	86.6	86.6	5.9	5.9	11.7	5.9	14	5.9	11.7	5.9	14	6	91	91	819574	805050	<0.2	<0.2	2.0	3.3
IM5	Fine	Calm	11:16	6.1	Surface	1.0	0.7	217	28.8	28.6	7.8	7.8	19.4	19.4	87.8	88.0	6.1	6.0	4.6	6.0	8	11	82	83	820552	804923	<0.2	<0.2	4.3	3.0			
						1.0	0.7	230	28.4	7.8	7.8	19.3	19.4	88.2																			

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 27 October 16 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)						
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA			
IM9	Cloudy	Moderate	11:22	6.4	Surface	1.0	0.5	157	25.7	25.7	7.7	7.7	20.9	21.0	92.4	92.4	6.7	6.6	3.9	6.5	6	7	82	88	822098	808797	<0.2	<0.2	3.8	3.0					
						1.0	0.6	161	25.7	25.7	7.7	7.7	21.0	21.0	92.3	92.4	6.7	6.6	3.9	6.5	6	7	84	90	88	822098	808797	<0.2	<0.2	3.9	3.0				
					Middle	3.2	0.5	126	25.5	25.5	7.7	7.7	23.2	23.2	88.9	88.9	6.4	6.4	5.5	6.5	7	7	7	7	90	90	822098	808797	<0.2	<0.2	2.6	3.0			
						3.2	0.5	131	25.5	25.5	7.7	7.7	23.2	23.2	88.8	88.9	6.4	6.4	5.6	6.5	8	7	7	7	90	90	822098	808797	<0.2	<0.2	2.6	3.0			
					Bottom	5.4	0.4	106	25.1	25.1	7.7	7.7	25.5	25.5	90.0	90.1	6.4	6.4	10.2	6.4	10.2	7	7	7	7	91	91	822098	808797	<0.2	<0.2	2.7	3.0		
						5.4	0.4	109	25.1	25.1	7.7	7.7	25.5	25.5	90.2	90.1	6.4	6.4	10.1	6.4	10.1	7	7	7	7	91	91	822098	808797	<0.2	<0.2	2.5	3.0		
IM10	Cloudy	Moderate	11:13	6.9	Surface	1.0	0.6	139	26.1	26.1	7.7	7.7	22.4	22.4	92.9	92.9	6.6	6.5	3.0	7.1	4	4	83	88	822226	809854	<0.2	<0.2	2.8	2.8					
						1.0	0.6	145	26.1	26.1	7.7	7.7	22.4	22.4	92.8	92.9	6.6	6.5	3.0	7.1	3	4	3	4	83	88	822226	809854	<0.2	<0.2	2.8	2.8			
					Middle	3.5	0.5	118	25.3	25.3	7.7	7.7	23.4	23.4	88.4	88.4	6.4	6.4	4.6	6.3	4	4	3	4	89	89	822226	809854	<0.2	<0.2	2.8	2.8			
						3.5	0.5	120	25.3	25.3	7.7	7.7	23.4	23.4	88.3	88.4	6.4	6.4	4.7	6.3	4	4	3	4	89	89	822226	809854	<0.2	<0.2	2.8	2.8			
					Bottom	5.9	0.4	132	25.1	25.1	7.7	7.7	25.7	25.7	88.6	88.7	6.3	6.3	13.5	6.3	13.5	6.3	4	4	5	4	92	91	822226	809854	<0.2	<0.2	2.8	2.8	
						5.9	0.4	141	25.1	25.1	7.7	7.7	25.7	25.7	88.8	88.7	6.3	6.3	13.5	6.3	13.5	6.3	4	4	5	4	92	91	822226	809854	<0.2	<0.2	2.5	2.8	
IM11	Cloudy	Moderate	11:04	7.2	Surface	1.0	0.6	135	25.7	25.7	7.7	7.7	21.0	21.0	93.8	93.7	6.8	6.6	2.9	7.1	3	3	83	88	821511	810559	<0.2	<0.2	3.7	2.9					
						1.0	0.6	138	25.7	25.7	7.7	7.7	21.0	21.0	93.6	93.7	6.8	6.6	3.0	7.1	2	3	2	3	83	88	821511	810559	<0.2	<0.2	3.6	2.9			
					Middle	3.6	0.7	101	25.3	25.3	7.7	7.7	24.1	24.2	88.2	88.2	6.3	6.3	5.4	6.3	4	4	4	4	90	89	821511	810559	<0.2	<0.2	2.4	2.9			
						3.6	0.7	102	25.3	25.3	7.7	7.7	24.2	24.2	88.2	88.2	6.3	6.3	5.4	6.3	4	4	4	4	89	89	821511	810559	<0.2	<0.2	2.2	2.9			
					Bottom	6.2	0.6	128	24.9	24.9	7.7	7.7	26.1	26.1	90.6	90.7	6.5	6.5	13.0	6.5	13.0	6.5	4	4	4	4	91	91	821511	810559	<0.2	<0.2	2.8	2.9	
						6.2	0.7	138	24.9	24.9	7.7	7.7	26.1	26.1	90.8	90.7	6.5	6.5	13.0	6.5	13.0	6.5	3	3	3	3	92	92	821511	810559	<0.2	<0.2	2.5	2.9	
IM12	Cloudy	Moderate	10:55	8.8	Surface	1.0	0.7	120	25.6	25.6	7.7	7.7	22.4	22.4	94.1	94.1	6.8	6.8	3.0	4.0	4	5	83	88	821181	811513	<0.2	<0.2	3.1	2.9					
						1.0	0.7	126	25.6	25.6	7.7	7.7	22.4	22.4	94.0	94.1	6.8	6.8	3.0	4.0	4	5	4	5	83	88	821181	811513	<0.2	<0.2	3.2	2.9			
					Middle	4.4	0.7	104	25.3	25.3	7.7	7.7	23.3	23.3	93.4	93.4	6.7	6.7	3.7	6.7	6	4	6	5	89	88	821181	811513	<0.2	<0.2	2.9	2.9			
						4.4	0.7	104	25.3	25.3	7.7	7.7	23.2	23.3	93.4	93.4	6.7	6.7	3.7	6.7	4	4	4	5	90	89	821181	811513	<0.2	<0.2	2.7	2.9			
					Bottom	7.8	0.6	134	25.2	25.2	7.7	7.7	24.4	24.4	97.4	97.5	7.0	7.0	5.3	7.0	5.3	7.0	5	5	5	5	92	92	821181	811513	<0.2	<0.2	2.8	2.9	
						7.8	0.6	141	25.2	25.2	7.7	7.7	24.4	24.4	97.6	97.5	7.0	7.0	5.3	7.0	5.3	7.0	5	5	5	5	92	92	821181	811513	<0.2	<0.2	2.9	2.9	
SR2	Cloudy	Moderate	10:31	4.2	Surface	1.0	0.6	175	25.3	25.3	7.7	7.7	23.9	23.9	93.2	93.2	6.7	6.7	6.1	10.3	4	7	84	88	821467	814170	<0.2	<0.2	3.3	2.9					
						1.0	0.6	184	25.3	25.3	7.7	7.7	23.9	23.9	93.1	93.2	6.7	6.7	6.1	10.3	3	7	3	7	84	88	821467	814170	<0.2	<0.2	3.1	2.9			
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3	7	-	7	-	88	821467	814170	<0.2	<0.2	-	2.9	
						2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3	7	-	7	-	88	821467	814170	<0.2	<0.2	-	2.9
					Bottom	3.2	0.3	169	25.1	25.1	7.7	7.7	25.3	25.3	93.6	93.7	6.7	6.7	14.3	6.7	14.3	6.7	10.3	7	10	92	88	821467	814170	<0.2	<0.2	2.4	2.9		
						3.2	0.3	176	25.1	25.1	7.7	7.7	25.3	25.3	93.8	93.7	6.7	6.7	14.6	6.7	14.6	6.7	10.3	7	12	92	88	821467	814170	<0.2	<0.2	2.6	2.9		
SR3	Cloudy	Moderate	11:36	8.1	Surface	1.0	0.3	182	25.5	25.5	7.7	7.7	22.6	22.6	88.2	88.2	6.4	6.3	5.3	11.8	5	5	-	-	822132	807589	-	-	-	-					
						1.0	0.3	190	25.5	25.5	7.7	7.7	22.5	22.6	88.1	88.2	6.4	6.3	5.4	11.8	4	5	-	5	-	-	822132	807589	-	-	-	-			
					Middle	4.1	0.3	198	25.2	25.2	7.7	7.7	25.1	25.1	84.9	84.9	6.1	6.1	9.9	6.1	11.8	5	5	-	5	-	-	822132	807589	-	-	-	-		
						4.1	0.3	199	25.2	25.2	7.7	7.7	25.1	25.1	84.9	84.9	6.1	6.1	10.0	6.1	11.8	5	5	-	5	-	-	822132	807589	-	-	-	-		
					Bottom	7.1	0.3	207	24.9	24.9	7.7	7.7	26.2	26.2	86.9	86.9	6.2	6.2	20.0	6.2	20.0	6.2	11.8	5	7	-	-	822132	807589	-	-	-	-		
						7.1	0.3	217	24.9	24.9	7.7	7.7	26.2	26.2	86.9	86.9	6.2	6.2	20.3	6.2	20.3	6.2	11.8	5	6	-	-	822132	807589	-	-	-	-		
SR4A	Fine	Calm	09:55	8.8	Surface	1.0	0.3	182	27.8	27.8	7.8	7.8	24.7	24.7	93.7	93.6	6.4	6.3	8.1	10.5	7	14	-	-	817189	807824	-	-	-	-					
						1.0	0.3	182	27.8	27.8	7.8	7.8	24.7	24.7	93.5	93.6	6.4	6.3	8.3	10.5	8	14	-	14	-	-	817189	807824	-	-	-	-			
					Middle	4.4	0.3	171	27.5	27.5	7.8	7.8	27.0	27.0	91.0	91.0	6.2	6.2	11.6	6.2	10.5	14	14	-	-	-	-	817189	807824	-	-	-	-		
						4.4	0.3	185	27.5	27.5	7.8	7.8	27.0	27.0	91.0	91.0	6.2	6.2	11.5	6.2	10.5	14	14	-	-	-	-	817189	807824	-	-	-	-		
					Bottom	7.8	0.3	138	27.5	27.5	7.8	7.8	27.9	28.0	95.4	95.6	6.4	6.4	11.7	6.4	11.7	6.5	10.5	14	19	-	-	-	-	817189	807824	-	-	-	-
						7.8	0.3	141	27.4	27.5	7.8	7.8	28.0	28.0	95.8	95.6	6.5	6.5	11.7	6.5	11.7	6.5	10.5	14	20	-	-	-	-	817189	807824	-	-	-	-
SR5A	Fine	Calm	09:37	3.9	Surface	1.0	0.2	150	28.2	28.2	7.8	7.8	24.7	24.7	97.9	97.9	6.7	6.7	12.2	9.7	6	9	-	-	816590	810690	-	-	-	-					
						1.0	0.3	164	28.2	28.2	7.8	7.8																							

**Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring**

Water Quality Monitoring Results on 29 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Calm	17:30	8.1	Surface	1.0	0.5	205	28.4	28.4	8.0	8.0	25.1	25.1	106.1	106.0	7.2	7.1	5.3	7.0	9	15	83	87	815637	804249	<0.2	<0.2	1.8	1.2				
						1.0	0.6	219	28.3	28.4	8.0	8.0	25.1	25.1	105.9	106.0	7.2	7.1	5.4	7.0	7	15	84	88	815637	804249	<0.2	<0.2	1.9	1.2				
						4.1	0.3	204	28.1	28.1	7.9	7.9	26.7	26.6	102.7	102.6	6.9	6.9	6.9	7.0	15	14	88	88	815637	804249	<0.2	<0.2	0.8	1.2				
					Middle	4.1	0.4	220	28.1	28.1	7.9	7.9	26.5	26.6	102.4	102.6	6.9	6.9	6.9	7.0	14	15	88	88	815637	804249	<0.2	<0.2	0.6	1.2				
						7.1	0.3	196	27.8	27.9	7.9	7.9	28.6	28.6	102.4	102.5	6.8	6.9	9.0	6.9	23	23	90	91	815637	804249	<0.2	<0.2	1.0	1.2				
						7.1	0.3	206	27.9	27.9	7.9	7.9	28.6	28.6	102.5	102.5	6.9	6.9	8.7	6.9	23	23	91	91	815637	804249	<0.2	<0.2	1.0	1.2				
C2	Cloudy	Moderate	16:28	10.8	Surface	1.0	0.9	170	25.8	25.8	7.7	7.7	23.3	23.3	88.9	88.9	6.4	6.3	6.4	8.5	7	8	82	88	825675	806934	<0.2	<0.2	4.0	3.6				
						1.0	1.0	178	25.8	25.8	7.7	7.7	23.3	23.3	88.8	88.9	6.3	6.3	6.5	8.5	6	8	82	89	825675	806934	<0.2	<0.2	3.6	3.6				
						5.4	0.7	174	25.3	25.3	7.8	7.8	28.9	28.9	88.6	88.7	6.2	6.2	10.1	8.5	9	8	90	89	825675	806934	<0.2	<0.2	4.0	3.6				
					Middle	5.4	0.7	178	25.3	25.3	7.8	7.8	28.9	28.9	88.7	88.7	6.2	6.2	10.1	8.5	8	8	89	89	825675	806934	<0.2	<0.2	3.9	3.6				
						9.8	0.4	171	25.3	25.3	7.8	7.8	29.5	29.5	92.1	92.2	6.4	6.4	9.0	6.4	9	8	91	91	825675	806934	<0.2	<0.2	3.2	3.6				
						9.8	0.4	177	25.3	25.3	7.8	7.8	29.5	29.5	92.3	92.2	6.4	6.4	9.0	6.4	9	8	91	91	825675	806934	<0.2	<0.2	3.1	3.6				
C3	Cloudy	Moderate	18:43	10.1	Surface	1.0	0.5	257	25.4	25.4	7.9	7.9	25.9	25.9	101.6	101.6	7.2	6.9	4.3	12.2	10	10	87	90	822111	817815	<0.2	<0.2	1.7	1.5				
						1.0	0.5	265	25.4	25.4	7.9	7.9	25.9	25.9	101.5	101.6	7.2	6.9	4.3	12.2	11	10	86	91	822111	817815	<0.2	<0.2	1.5	1.5				
						5.1	0.6	264	25.3	25.3	7.8	7.8	27.3	27.3	93.7	93.7	6.6	6.6	7.0	6.9	10	10	91	92	822111	817815	<0.2	<0.2	1.2	1.5				
					Middle	5.1	0.6	266	25.3	25.3	7.8	7.8	27.3	27.3	93.7	93.7	6.6	6.6	7.0	6.9	10	10	92	92	822111	817815	<0.2	<0.2	1.2	1.5				
						9.1	0.5	260	25.1	25.1	7.8	7.8	28.8	28.8	93.1	93.1	6.5	6.5	25.4	6.5	9	10	93	93	822111	817815	<0.2	<0.2	1.6	1.5				
						9.1	0.6	266	25.1	25.1	7.8	7.8	28.8	28.8	93.1	93.1	6.5	6.5	25.4	6.5	10	10	93	93	822111	817815	<0.2	<0.2	1.6	1.5				
IM1	Fine	Calm	17:11	6.8	Surface	1.0	0.6	203	28.4	28.4	7.9	7.9	24.4	24.4	99.0	98.7	6.7	6.6	7.2	11.8	6	15	83	86	818350	806464	<0.2	<0.2	1.7	1.1				
						1.0	0.6	207	28.3	28.4	7.9	7.9	24.4	24.4	98.4	98.7	6.7	6.6	7.8	11.8	8	15	83	86	818350	806464	<0.2	<0.2	1.4	1.1				
						3.4	0.4	186	27.9	27.9	7.9	7.9	27.0	27.0	96.2	96.3	6.5	6.5	12.4	6.6	12	15	86	87	818350	806464	<0.2	<0.2	0.8	1.1				
					Middle	3.4	0.4	186	27.9	27.9	7.9	7.9	27.0	27.0	96.3	96.3	6.5	6.5	12.6	6.6	14	15	87	89	818350	806464	<0.2	<0.2	0.9	1.1				
						5.8	0.3	168	28.0	28.0	7.9	7.9	27.5	27.7	98.7	99.1	6.6	6.6	15.5	6.6	23	15	89	89	818350	806464	<0.2	<0.2	0.9	1.1				
						5.8	0.4	169	27.6	27.8	7.9	7.9	27.8	27.7	99.4	99.1	6.7	6.7	15.3	6.7	25	15	89	89	818350	806464	<0.2	<0.2	1.0	1.1				
IM2	Fine	Calm	17:05	8.2	Surface	1.0	0.8	230	28.6	28.6	7.8	7.8	22.7	22.7	97.4	97.4	6.6	6.6	3.9	6.4	5	7	85	88	818852	806185	<0.2	<0.2	1.6	1.5				
						1.0	0.8	249	28.6	28.6	7.8	7.8	22.7	22.7	97.3	97.4	6.6	6.6	3.8	6.4	5	7	85	87	818852	806185	<0.2	<0.2	1.5	1.5				
						4.1	0.7	217	28.5	28.5	7.8	7.8	23.3	23.3	97.1	97.1	6.6	6.6	5.5	6.4	6	7	87	88	818852	806185	<0.2	<0.2	1.9	1.5				
					Middle	4.1	0.8	235	28.4	28.4	7.8	7.8	23.3	23.3	97.1	97.1	6.6	6.6	5.6	6.4	5	7	88	88	818852	806185	<0.2	<0.2	1.6	1.5				
						7.2	0.7	209	28.0	28.0	7.9	7.9	26.4	26.7	98.2	98.3	6.6	6.6	9.8	6.6	10	7	90	90	818852	806185	<0.2	<0.2	1.1	1.5				
						7.2	0.7	216	28.0	28.0	7.9	7.9	27.0	26.7	98.4	98.3	6.6	6.6	9.8	6.6	8	7	91	91	818852	806185	<0.2	<0.2	1.3	1.5				
IM3	Fine	Calm	16:57	7.8	Surface	1.0	0.7	235	28.4	28.5	7.8	7.8	23.1	23.1	92.1	92.1	6.3	6.4	5.6	8.2	7	11	85	89	819397	806010	<0.2	<0.2	2.1	1.7				
						1.0	0.8	252	28.5	28.5	7.8	7.8	23.1	23.1	92.0	92.1	6.3	6.4	5.5	8.2	9	11	86	89	819397	806010	<0.2	<0.2	2.0	1.7				
						3.9	0.6	219	28.2	28.2	7.8	7.8	24.7	24.7	93.6	93.7	6.4	6.4	8.4	6.4	10	11	89	90	819397	806010	<0.2	<0.2	1.4	1.7				
					Middle	3.9	0.7	230	28.2	28.2	7.8	7.8	24.7	24.7	93.7	93.7	6.4	6.4	8.5	6.4	12	11	90	91	819397	806010	<0.2	<0.2	1.7	1.7				
						6.8	0.4	210	28.0	27.8	7.9	7.9	27.3	27.4	95.6	95.9	6.4	6.4	10.7	6.4	15	11	91	91	819397	806010	<0.2	<0.2	1.4	1.7				
						6.8	0.5	212	27.6	27.8	7.9	7.9	27.5	27.4	96.2	95.9	6.5	6.5	10.7	6.5	14	11	91	91	819397	806010	<0.2	<0.2	1.7	1.7				
IM4	Fine	Calm	16:49	7.4	Surface	1.0	0.8	222	28.5	28.5	7.8	7.8	23.2	23.2	94.3	94.3	6.4	6.4	5.7	11.0	8	13	84	87	819567	805054	<0.2	<0.2	1.6	1.6				
						1.0	0.8	228	28.5	28.5	7.8	7.8	23.2	23.2	94.3	94.3	6.4	6.4	5.8	11.0	9	13	84	87	819567	805054	<0.2	<0.2	1.6	1.6				
						3.7	0.7	214	28.2	28.2	7.8	7.8	24.5	24.5	94.2	94.3	6.4	6.4	11.4	6.4	9	13	87	87	819567	805054	<0.2	<0.2	2.0	1.6				
					Middle	3.7	0.7	225	28.2	28.2	7.8	7.8	24.5	24.5	94.3	94.3	6.4	6.4	11.6	6.4	8	13	87	89	819567	805054	<0.2	<0.2	2.0	1.6				
						6.4	0.5	207	27.9	27.9	7.9	7.9	27.3	27.3	97.2	97.3	6.5	6.5	15.8	6.5	23	13	89	89	819567	805054	<0.2	<0.2	1.1	1.6				
						6.4	0.6	224	27.9	27.9	7.9	7.9	27.3	27.3	97.3	97.3	6.5	6.5	15.7	6.5	22	13	89	89	819567	805054	<0.2	<0.2	1.1	1.6				
IM5	Fine	Calm	16:42	6.5	Surface	1.0	0.6	202	28.5	28.5	7.8	7.8	23.4	23.4	92.5	92.5	6.3	6.4	6.4	9.9	9	13	86	90	820554	804907	<0.2	<0.2	2.2	1.5				
						1.0	0.7	202	28.5	28.5	7.8	7.8	23.4	23.4	92.5	92.5	6.3	6.4	6.5	9.9	9	13	87	91	820554	804907	<0.2	<0.2	2.3	1.5				
						3.3	0.4	198	28.1	28.1	7.8	7.8	25.1	25.1	93.8	93.9	6.4	6.4	9.8	6.4	12	13	90	91	820554	804907	<0.2	<0.2	0.9	1.5				
					Middle																													

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 29 October 16 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Moderate	17:18	6.3	Surface	1.0	0.5	206	25.9	25.9	7.7	7.7	23.4	23.4	96.7	96.8	6.9	6.9	4.5	6.9	6	8	83	88	822090	808799	<0.2	<0.2	2.1	2.1			
						1.0	0.5	209	25.9	25.9	7.7	7.7	23.4	23.4	96.8	96.8	6.9	6.9	4.4	6.9	6	8	83	88	822090	808799	<0.2	<0.2	2.1	2.1			
					Middle	3.2	0.5	216	26.0	26.0	7.7	7.7	24.3	24.3	95.7	95.5	6.8	6.8	5.0	6.8	5.0	8.9	6	8	90	90	822090	808799	<0.2	<0.2	1.9	1.8	
						3.2	0.5	233	26.0	26.0	7.7	7.7	24.3	24.3	95.3	95.5	6.8	6.8	5.2	6.8	5.2	8.9	7	8	90	90	822090	808799	<0.2	<0.2	1.8	1.8	
					Bottom	5.3	0.3	222	25.4	25.4	7.7	7.7	26.0	26.0	96.4	96.5	6.8	6.8	17.0	6.8	17.0	6.8	6.8	11	8	92	92	822090	808799	<0.2	<0.2	2.0	2.0
						5.3	0.3	239	25.4	25.4	7.7	7.7	26.0	26.0	96.6	96.5	6.8	6.8	17.0	6.8	17.0	6.8	6.8	10	8	92	92	822090	808799	<0.2	<0.2	2.4	2.4
IM10	Cloudy	Moderate	17:28	7.3	Surface	1.0	0.4	213	25.9	25.9	7.8	7.8	24.5	24.5	95.9	95.9	6.8	6.7	3.9	6.7	8	8	83	89	822222	809845	<0.2	<0.2	1.9	1.9			
						1.0	0.4	219	25.9	25.9	7.8	7.8	24.5	24.5	95.8	95.9	6.8	6.7	3.9	6.7	8	8	84	8	91	91	822222	809845	<0.2	<0.2	1.6	1.6	
					Middle	3.7	0.3	209	25.7	25.7	7.7	7.7	25.1	25.1	91.7	91.7	6.5	6.5	5.8	6.5	5.8	7.4	8	8	91	91	822222	809845	<0.2	<0.2	2.1	2.1	
						3.7	0.3	218	25.7	25.7	7.7	7.7	25.1	25.1	91.7	91.7	6.5	6.5	5.8	6.5	5.8	7.4	6	8	91	91	822222	809845	<0.2	<0.2	2.4	2.4	
					Bottom	6.3	0.3	222	25.3	25.3	7.7	7.7	26.2	26.2	93.5	93.6	6.6	6.6	12.8	6.6	12.8	6.6	6.6	9	8	92	92	822222	809845	<0.2	<0.2	1.6	1.6
						6.3	0.3	228	25.3	25.3	7.7	7.7	26.2	26.2	93.6	93.6	6.6	6.6	12.3	6.6	12.3	6.6	6.6	8	8	92	92	822222	809845	<0.2	<0.2	1.7	1.7
IM11	Cloudy	Moderate	17:38	7.9	Surface	1.0	0.5	259	25.8	25.8	7.8	7.8	24.0	24.0	97.9	97.9	7.0	6.9	4.4	6.9	7	8	84	89	821512	810545	<0.2	<0.2	2.1	2.1			
						1.0	0.5	278	25.8	25.8	7.8	7.8	24.0	24.0	97.8	97.9	7.0	6.9	4.4	6.9	5	8	85	8	91	91	821512	810545	<0.2	<0.2	2.6	2.6	
					Middle	4.0	0.4	231	25.7	25.7	7.8	7.8	24.2	24.2	94.9	94.9	6.8	6.8	5.4	6.7	5.4	5.7	8	8	91	91	821512	810545	<0.2	<0.2	1.8	1.8	
						4.0	0.4	250	25.7	25.7	7.8	7.8	24.2	24.2	94.8	94.9	6.7	6.7	5.5	6.7	5.5	5.7	8	8	91	91	821512	810545	<0.2	<0.2	1.9	1.9	
					Bottom	6.9	0.3	228	25.4	25.4	7.7	7.7	25.2	25.2	93.0	93.0	6.6	6.6	7.3	6.6	7.3	6.6	6.6	9	8	92	92	821512	810545	<0.2	<0.2	1.5	1.5
						6.9	0.3	228	25.4	25.4	7.7	7.7	25.2	25.2	93.0	93.0	6.6	6.6	7.3	6.6	7.3	6.6	6.6	9	8	92	92	821512	810545	<0.2	<0.2	1.5	1.5
IM12	Cloudy	Moderate	17:47	6.6	Surface	1.0	0.5	269	25.9	25.9	7.8	7.8	23.9	23.9	98.1	98.1	7.0	6.9	4.4	6.9	6	7	85	89	821174	811527	<0.2	<0.2	1.7	1.7			
						1.0	0.6	276	25.9	25.9	7.8	7.8	23.9	23.9	98.0	98.1	7.0	6.9	4.4	6.9	5	7	85	7	91	91	821174	811527	<0.2	<0.2	1.7	1.7	
					Middle	3.3	0.5	264	25.7	25.7	7.8	7.8	24.4	24.4	94.8	94.8	6.7	6.7	6.1	6.7	6.1	12.0	6	7	91	91	821174	811527	<0.2	<0.2	1.8	1.8	
						3.3	0.5	270	25.7	25.7	7.8	7.8	24.4	24.4	94.8	94.8	6.7	6.7	6.2	6.7	6.2	12.0	7	7	91	91	821174	811527	<0.2	<0.2	1.7	1.7	
					Bottom	5.6	0.5	257	25.3	25.3	7.8	7.8	25.9	26.0	95.0	95.1	6.7	6.8	25.4	6.7	25.4	6.8	6.8	8	8	92	92	821174	811527	<0.2	<0.2	1.2	1.2
						5.6	0.5	266	25.3	25.3	7.8	7.8	26.0	26.0	95.1	95.1	6.8	6.8	25.4	6.8	25.4	6.8	6.8	9	8	92	92	821174	811527	<0.2	<0.2	1.2	1.2
SR2	Cloudy	Moderate	18:13	4.5	Surface	1.0	0.3	238	25.5	25.5	7.8	7.8	24.7	24.7	96.4	96.4	6.9	6.9	9.0	6.9	13	14	86	90	821476	814166	<0.2	<0.2	2.0	1.9			
						1.0	0.3	260	25.5	25.5	7.8	7.8	24.7	24.7	96.3	96.4	6.9	6.9	9.1	6.9	14	14	86	14	86	90	821476	814166	<0.2	<0.2	1.9	1.9	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.2	-	14	-	-	821476	814166	<0.2	<0.2	-	-
						2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.2	-	14	-	-	821476	814166	<0.2	<0.2	-	-
					Bottom	3.5	0.3	225	25.3	25.3	7.8	7.8	25.8	25.8	91.8	91.8	6.5	6.5	17.3	6.5	17.3	6.5	6.5	13	14	93	93	821476	814166	<0.2	<0.2	1.4	1.4
						3.5	0.3	240	25.3	25.3	7.8	7.8	25.8	25.8	91.8	91.8	6.5	6.5	17.3	6.5	17.3	6.5	6.5	15	14	93	93	821476	814166	<0.2	<0.2	1.7	1.7
SR3	Cloudy	Moderate	17:00	8.5	Surface	1.0	0.7	201	25.9	25.9	7.7	7.7	23.0	23.0	91.4	91.3	6.5	6.5	4.6	6.5	6	7	-	-	822147	807565	-	-	-	-			
						1.0	0.7	202	25.9	25.9	7.7	7.7	23.0	23.0	91.2	91.3	6.5	6.5	4.6	6.5	4	7	-	7	-	-	822147	807565	-	-	-	-	
					Middle	4.3	0.6	198	25.8	25.8	7.7	7.7	23.5	23.5	89.4	89.5	6.4	6.4	6.0	6.4	6.0	8.8	6	7	-	-	822147	807565	-	-	-	-	
						4.3	0.6	216	25.8	25.8	7.7	7.7	23.4	23.5	89.5	89.5	6.4	6.4	6.1	6.4	6.1	8.8	5	7	-	-	822147	807565	-	-	-	-	
					Bottom	7.5	0.5	219	25.5	25.5	7.7	7.7	25.5	25.5	88.9	89.0	6.3	6.3	15.6	6.3	15.6	6.3	6.3	10	7	-	-	822147	807565	-	-	-	-
						7.5	0.5	219	25.5	25.5	7.7	7.7	25.5	25.5	89.0	89.0	6.3	6.3	15.6	6.3	15.6	6.3	6.3	8	7	-	-	822147	807565	-	-	-	-
SR4A	Fine	Calm	17:53	7.6	Surface	1.0	0.5	244	28.4	28.4	7.9	7.9	26.1	26.1	101.0	100.9	6.8	6.6	11.5	6.6	14	16	-	-	817185	807815	-	-	-	-			
						1.0	0.6	266	28.4	28.4	7.9	7.9	26.0	26.1	100.7	100.9	6.8	6.6	11.4	6.6	13	16	-	16	-	-	817185	807815	-	-	-	-	
					Middle	3.8	0.5	252	28.2	28.2	7.9	7.9	27.3	27.4	94.8	94.8	6.4	6.3	14.3	6.3	14.3	6.3	14.3	16	16	-	-	817185	807815	-	-	-	-
						3.8	0.5	263	28.2	28.2	7.9	7.9	27.4	27.4	94.8	94.8	6.3	6.3	14.4	6.3	14.4	6.3	6.3	15	16	-	-	817185	807815	-	-	-	-
					Bottom	6.6	0.3	232	27.9	27.8	7.9	7.9	28.3	28.4	93.6	93.9	6.3	6.3	17.0	6.3	17.0	6.3	6.3	20	16	-	-	817185	807815	-	-	-	-
						6.6	0.3	253	27.6	27.8	7.9	7.9	28.5	28.4	94.1	93.9	6.3	6.3	17.1	6.3	17.1	6.3	6.3	20	16	-	-	817185	807815	-	-	-	-
SR5A	Fine	Calm	18:15	4.6	Surface	1.0	0.3	312	28.4	28.4	7.9	7.9	25.1	25.1	104.9	104.9	7.1	7.1	6.7	7.1	9	10	-	-	816588	810684	-	-	-	-			
						1.0	0.3	315	28.4	28.4	7.9	7.9	25.1	25.1	104.9																		

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

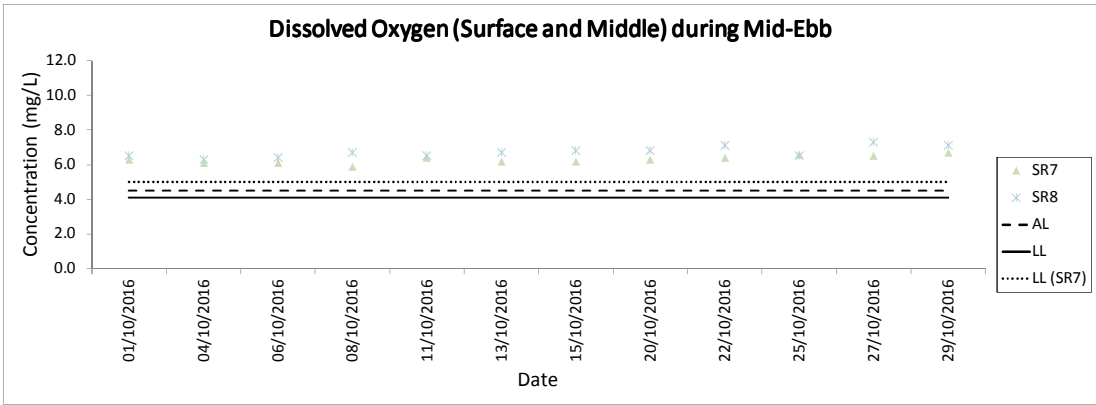
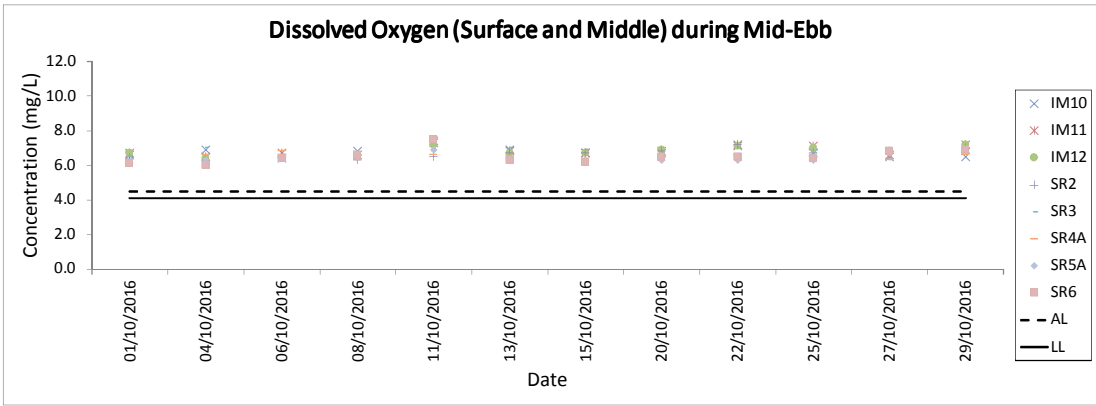
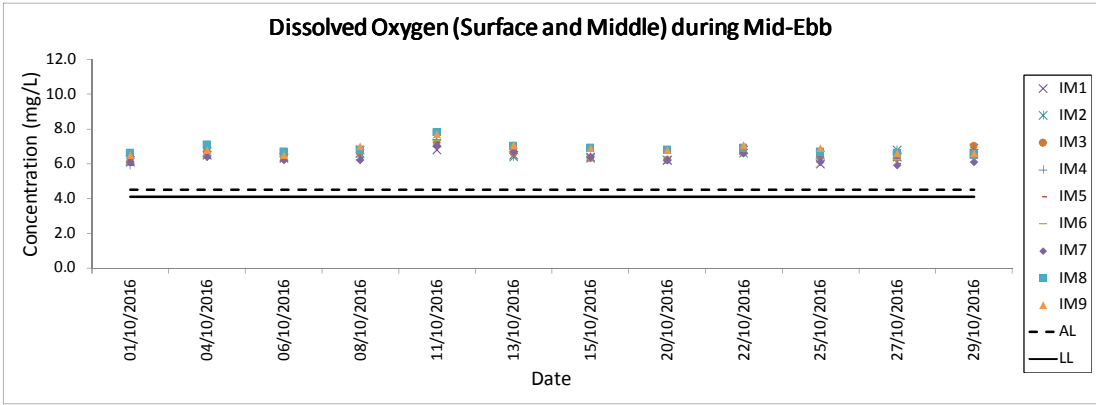
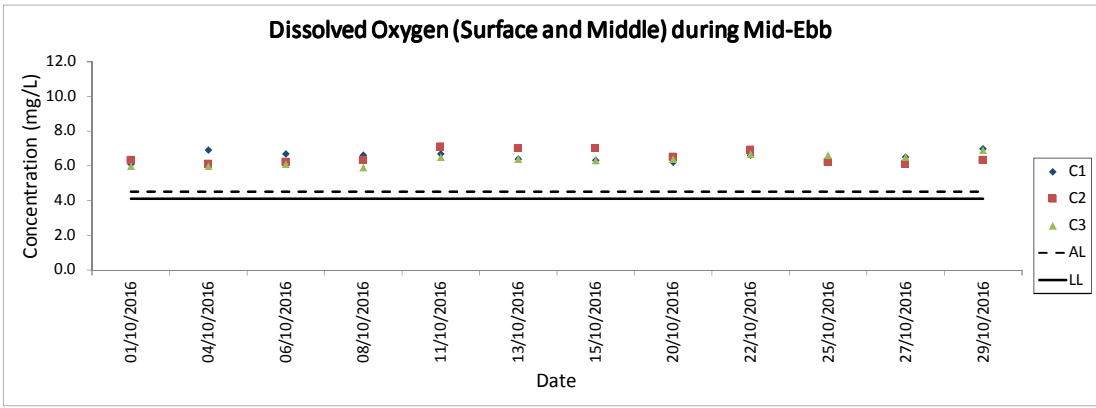
Water Quality Monitoring Results on 29 October 16 during Mid-Ebb tide

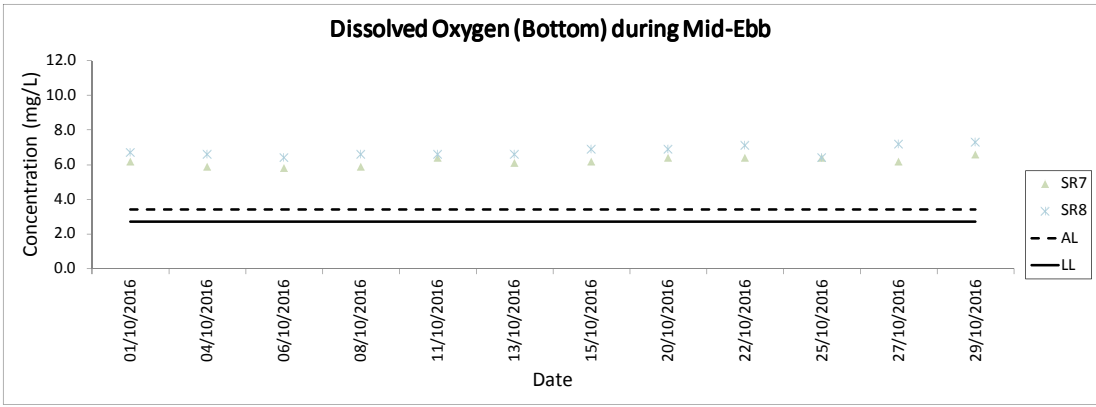
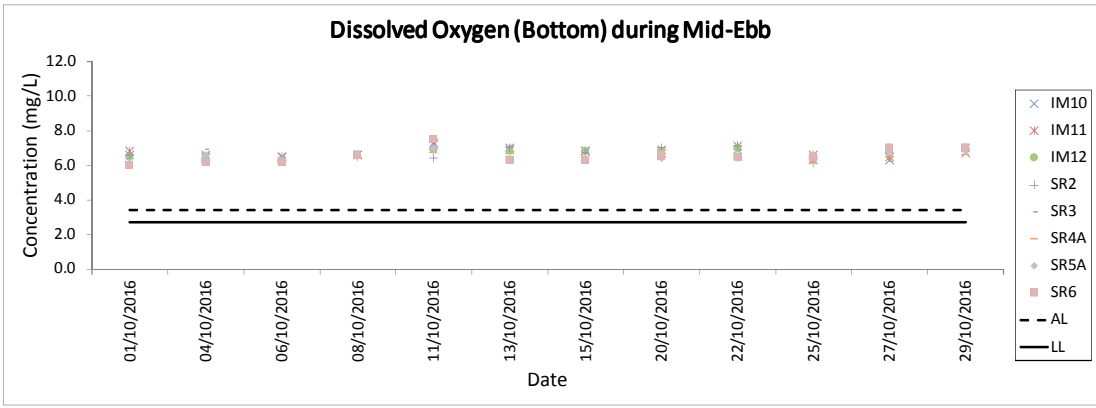
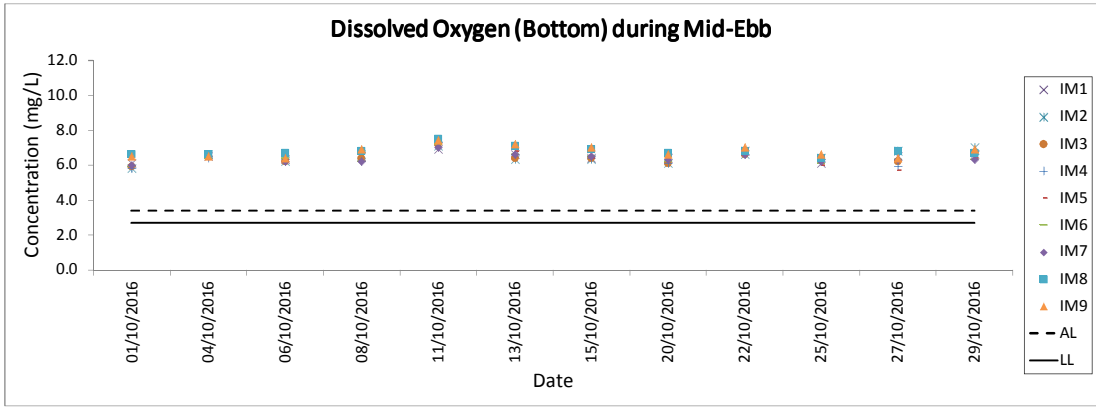
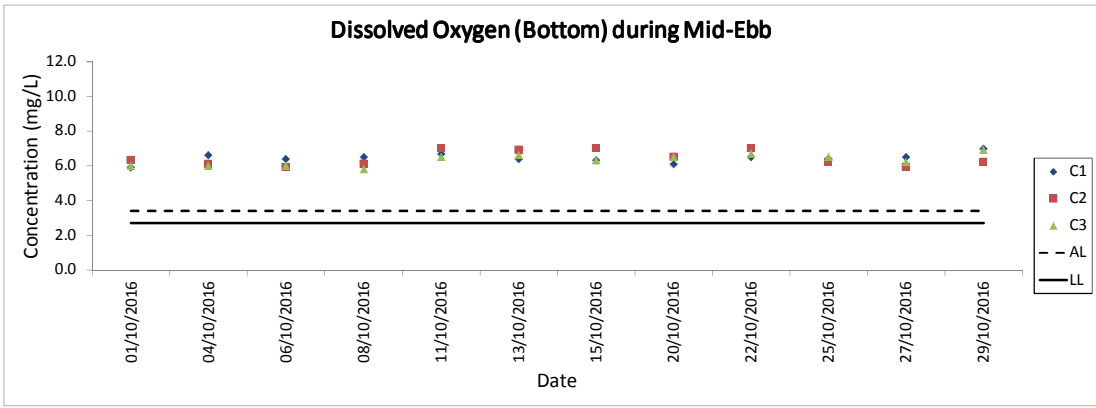
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Calm	11:35	8.6	Surface	1.0	0.6	226	28.3	28.3	7.9	7.9	25.5	25.6	105.6	105.6	7.1	7.0	5.0	7.0	9	10	83	86	815602	804263	<0.2	<0.2	1.7	1.4		
						1.0	0.6	245	28.2	7.9	7.9	25.6	25.6	105.6	105.6	7.1	7.0	5.1	7.0	11	10	83	86	815602	804263	<0.2	<0.2	1.8	1.4			
					Middle	4.3	0.5	229	28.0	28.1	7.9	7.9	26.9	26.8	102.2	102.1	6.9	6.9	5.9	5.7	9	9	9	9	85	85	815602	804263	<0.2	<0.2	1.7	1.4
						4.3	0.6	239	28.1	28.1	7.9	7.9	26.7	26.8	102.0	102.1	6.9	6.9	6.0	5.7	9	9	9	9	85	85	815602	804263	<0.2	<0.2	1.5	1.4
					Bottom	7.6	0.4	227	27.9	27.9	7.9	7.9	29.1	29.1	105.5	105.7	7.0	7.0	6.0	7.0	6.0	7.0	11	10	91	90	815602	804263	<0.2	<0.2	0.9	0.7
						7.6	0.5	229	27.9	27.9	7.9	7.9	29.1	29.1	105.8	105.7	7.0	7.0	6.0	7.0	6.0	7.0	11	10	91	90	815602	804263	<0.2	<0.2	0.9	0.7
C2	Cloudy	Moderate	13:28	10.9	Surface	1.0	0.8	178	25.9	25.9	7.7	7.7	22.3	22.3	89.5	89.6	6.4	6.3	5.3	6.3	6	9	82	88	825679	806958	<0.2	<0.2	3.0	2.9		
						1.0	0.9	180	25.9	25.9	7.7	7.7	22.3	22.3	89.6	89.6	6.4	6.3	5.4	6.3	7	9	81	89	825679	806958	<0.2	<0.2	3.0	2.9		
					Middle	5.5	0.6	178	25.3	25.3	7.7	7.7	25.9	25.9	86.4	86.5	6.1	6.1	10.5	9.5	10	10	10	12	89	90	825679	806958	<0.2	<0.2	2.7	2.9
						5.5	0.7	187	25.3	25.3	7.7	7.7	25.9	25.9	86.5	86.5	6.1	6.1	10.5	9.5	12	9	10	12	90	90	825679	806958	<0.2	<0.2	3.1	2.9
					Bottom	9.9	0.4	167	25.3	25.3	7.7	7.7	26.6	26.6	88.1	88.1	6.2	6.2	12.5	6.2	12.5	6.2	11	10	91	92	825679	806958	<0.2	<0.2	2.8	2.8
						9.9	0.4	169	25.3	25.3	7.7	7.7	26.6	26.6	88.1	88.1	6.2	6.2	12.5	6.2	12.5	6.2	11	10	91	92	825679	806958	<0.2	<0.2	2.8	2.8
C3	Cloudy	Moderate	11:11	11.3	Surface	1.0	0.4	147	25.4	25.4	7.8	7.8	25.5	25.5	96.9	96.8	6.9	6.9	3.5	6.9	6	8	87	91	822115	817807	<0.2	<0.2	1.4	1.7		
						1.0	0.4	149	25.4	25.4	7.8	7.8	25.5	25.5	96.7	96.8	6.9	6.9	3.5	6.9	8	8	86	93	822115	817807	<0.2	<0.2	1.4	1.7		
					Middle	5.7	0.4	138	25.2	25.2	7.8	7.8	26.5	26.5	95.6	95.6	6.8	6.8	3.7	6.8	7	8	91	93	822115	817807	<0.2	<0.2	1.8	1.7		
						5.7	0.4	138	25.2	25.2	7.8	7.8	26.5	26.5	95.6	95.6	6.8	6.8	3.7	6.8	7	8	91	93	822115	817807	<0.2	<0.2	1.6	1.7		
					Bottom	10.3	0.3	169	25.2	25.2	7.7	7.7	27.6	27.6	98.2	98.3	6.9	6.9	4.8	6.9	9	6.9	9	8	93	93	822115	817807	<0.2	<0.2	1.9	1.8
						10.3	0.4	182	25.2	25.2	7.7	7.7	27.6	27.6	98.3	98.3	6.9	6.9	4.8	6.9	8	6.9	8	8	93	93	822115	817807	<0.2	<0.2	1.8	1.8
IM1	Fine	Calm	12:02	7.1	Surface	1.0	0.5	197	28.2	28.3	7.9	7.9	25.0	25.0	99.2	99.1	6.7	6.6	5.6	6.6	9	13	83	86	818365	806461	<0.2	<0.2	1.9	1.2		
						1.0	0.6	206	28.4	28.3	7.9	7.9	24.9	25.0	99.0	99.1	6.7	6.6	5.6	6.6	8	13	83	85	818365	806461	<0.2	<0.2	1.7	1.2		
					Middle	3.6	0.4	202	28.1	28.0	7.9	7.9	26.8	26.9	96.9	97.2	6.5	6.5	9.3	8.4	13	13	85	86	818365	806461	<0.2	<0.2	0.9	1.2		
						3.6	0.4	203	27.8	28.0	7.9	7.9	27.0	26.9	97.4	97.2	6.6	6.6	9.4	8.4	14	13	86	86	818365	806461	<0.2	<0.2	0.9	1.2		
					Bottom	6.1	0.4	203	28.0	28.0	7.9	7.9	27.9	28.0	99.0	99.1	6.6	6.6	10.2	6.6	10.2	6.6	17	18	89	90	818365	806461	<0.2	<0.2	0.9	0.8
						6.1	0.4	203	28.0	28.0	7.9	7.9	28.0	28.0	99.1	99.1	6.6	6.6	10.3	6.6	10.3	6.6	18	18	90	90	818365	806461	<0.2	<0.2	0.8	0.8
IM2	Fine	Calm	12:00	8.1	Surface	1.0	0.6	215	28.5	28.5	7.9	7.9	23.7	23.8	104.6	104.6	7.1	6.9	4.1	6.9	6	9	83	86	818871	806202	<0.2	<0.2	2.5	1.6		
						1.0	0.6	231	28.4	28.5	7.9	7.9	23.8	23.8	104.6	104.6	7.1	6.9	4.2	6.9	5	9	84	86	818871	806202	<0.2	<0.2	2.3	1.6		
					Middle	4.1	0.5	205	28.2	28.2	7.9	7.9	26.0	26.0	99.1	99.2	6.7	6.7	6.6	6.7	6.6	6.7	9	10	86	87	818871	806202	<0.2	<0.2	1.5	1.6
						4.1	0.5	223	28.2	28.2	7.9	7.9	26.0	26.0	99.2	99.2	6.7	6.7	6.7	6.7	6.7	6.7	10	11	87	89	818871	806202	<0.2	<0.2	1.6	1.6
					Bottom	7.1	0.4	214	27.6	27.8	7.9	7.9	28.4	28.2	103.7	103.5	7.0	7.0	6.7	7.0	6.7	7.0	11	11	89	89	818871	806202	<0.2	<0.2	1.0	0.8
						7.1	0.4	235	28.0	27.8	7.9	7.9	27.9	28.2	103.3	103.5	6.9	6.9	6.4	7.0	6.4	7.0	11	11	89	89	818871	806202	<0.2	<0.2	0.8	0.8
IM3	Fine	Calm	12:17	8.0	Surface	1.0	0.4	213	28.5	28.5	7.9	7.9	23.3	23.3	108.4	108.4	7.4	7.0	3.7	7.0	6	10	85	89	819423	806037	<0.2	<0.2	2.4	1.7		
						1.0	0.5	227	28.5	28.5	7.9	7.9	23.3	23.3	108.3	108.4	7.4	7.0	3.7	7.0	5	10	86	89	819423	806037	<0.2	<0.2	2.6	1.7		
					Middle	4.0	0.5	186	28.1	28.1	7.9	7.9	25.7	25.7	98.0	97.9	6.6	6.6	7.9	7.1	9	10	89	89	819423	806037	<0.2	<0.2	1.5	1.4		
						4.0	0.5	203	28.1	28.1	7.9	7.9	25.7	25.7	97.8	97.9	6.6	6.6	7.9	7.1	9	10	89	89	819423	806037	<0.2	<0.2	1.4	1.4		
					Bottom	7.0	0.3	191	27.6	27.8	7.9	7.9	27.7	27.6	99.3	99.1	6.7	6.7	9.8	6.7	9.8	6.7	16	16	91	92	819423	806037	<0.2	<0.2	1.0	1.2
						7.0	0.3	197	28.0	27.8	7.9	7.9	27.4	27.6	98.9	99.1	6.6	6.6	9.6	6.6	9.6	6.6	16	16	92	92	819423	806037	<0.2	<0.2	1.0	1.2
IM4	Fine	Calm	12:24	7.7	Surface	1.0	0.5	219	28.6	28.6	7.8	7.9	23.0	23.0	102.1	102.1	7.0	6.8	4.0	6.8	9	11	83	88	819551	805051	<0.2	<0.2	2.5	1.8		
						1.0	0.6	229	28.6	28.6	7.9	7.9	23.0	23.0	102.0	102.1	7.0	6.8	4.0	6.8	8	11	85	88	819551	805051	<0.2	<0.2	2.6	1.8		
					Middle	3.9	0.5	197	28.4	28.4	7.9	7.9	24.8	24.8	96.2	96.2	6.5	6.5	9.0	9.4	9	11	88	89	819551	805051	<0.2	<0.2	1.7	1.8		
						3.9	0.5	211	28.4	28.4	7.9	7.9	24.8	24.8	96.2	96.2	6.5	6.5	9.2	9.4	11	11	89	89	819551	805051	<0.2	<0.2	1.7	1.8		
					Bottom	6.7	0.4	184	27.9	27.8	7.9	7.9	27.8	27.9	97.7	98.1	6.6	6.6	15.2	6.6	15.2	6.6	15	16	91	92	819551	805051	<0.2	<0.2	1.2	1.0
						6.7	0.5	185	27.6	27.8	7.9	7.9	28.0	27.9	98.4	98.1	6.6	6.6	15.0	6.6	15.0	6.6	16	16	92	92	819551	805051	<0.2	<0.2	1.0	1.0
IM5	Fine	Calm	12:33	6.2	Surface	1.0	0.6	215	28.4	28.4	7.8	7.8	23.9	23.9	95.7	95.7	6.5	6.5	6.1	6.5	9	11	82	86	820553	804914	<0.2	<0.2	2.3	1.8		
						1.0	0.6	228	28.4	28.4	7.8	7.8	23.9	23.9	95.6	95.7	6.5	6.5	6.0	6.5	9	11	83	86	820553	804914	<0.2	<0.2	2.2	1.8		
					Middle	3																										

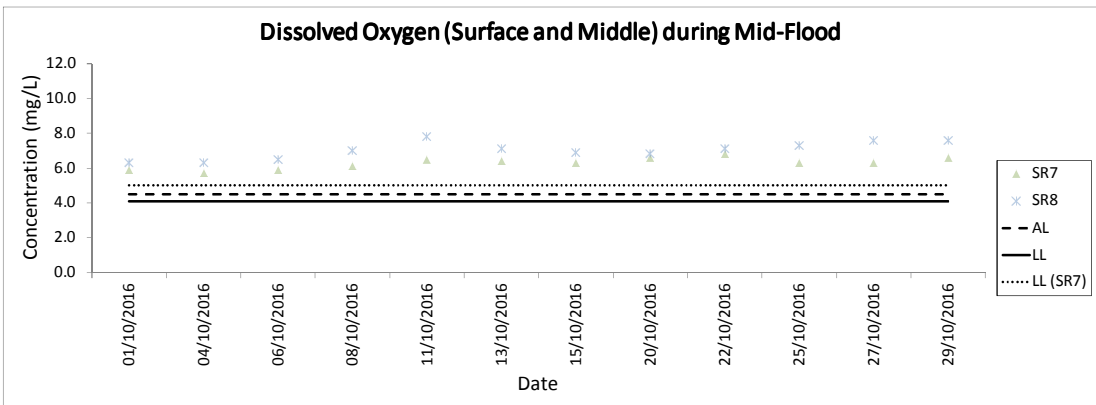
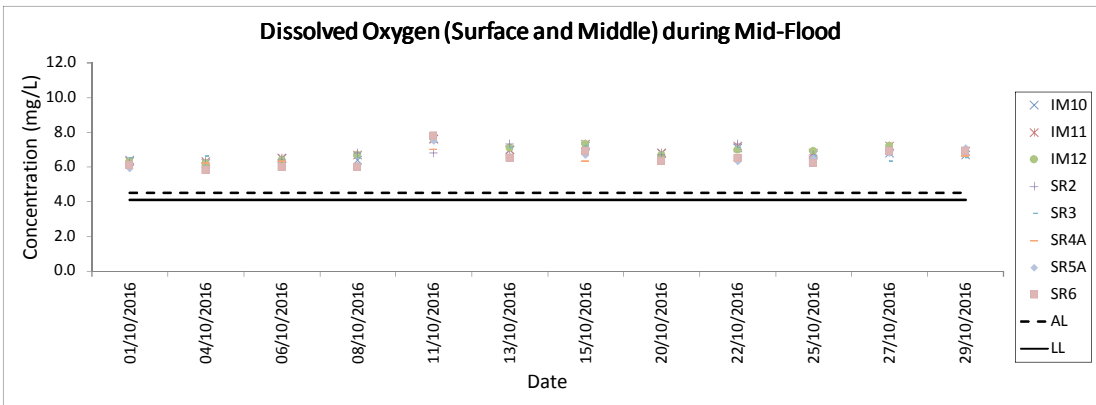
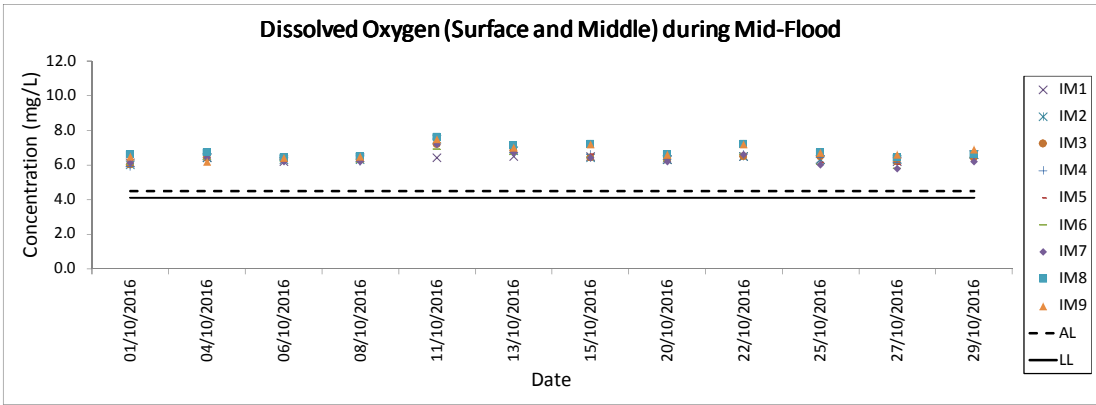
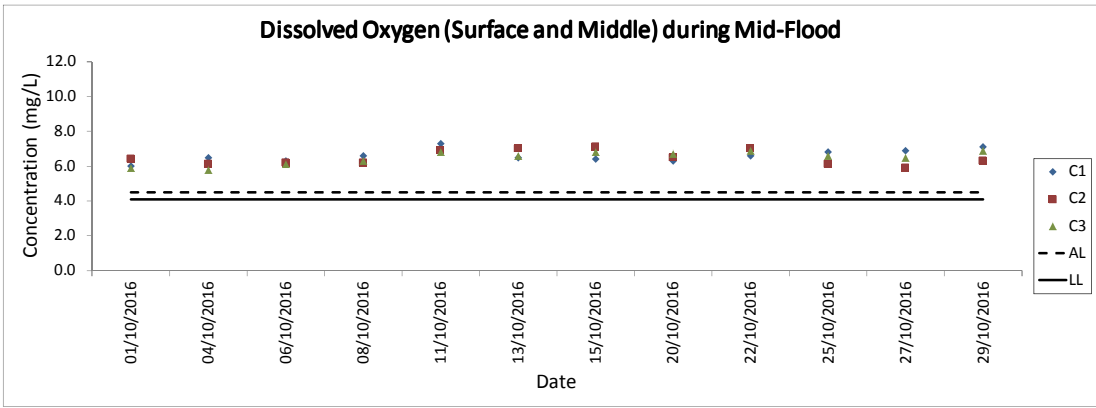
Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

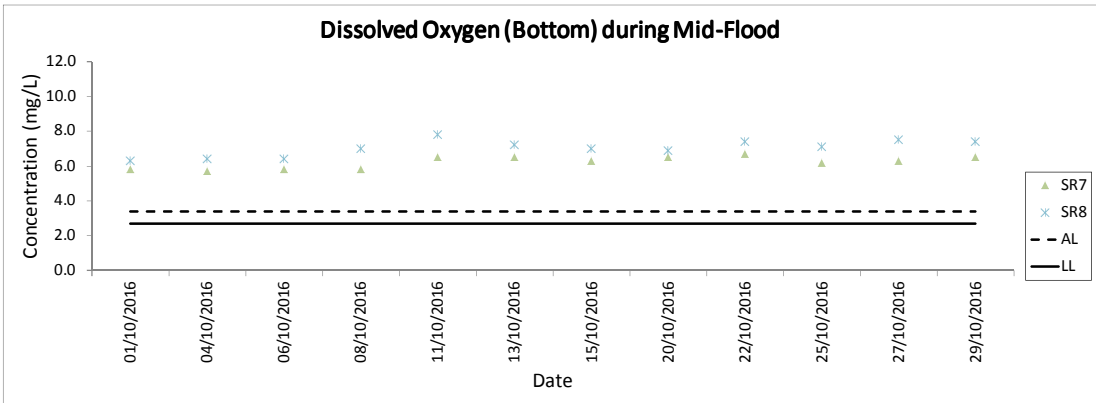
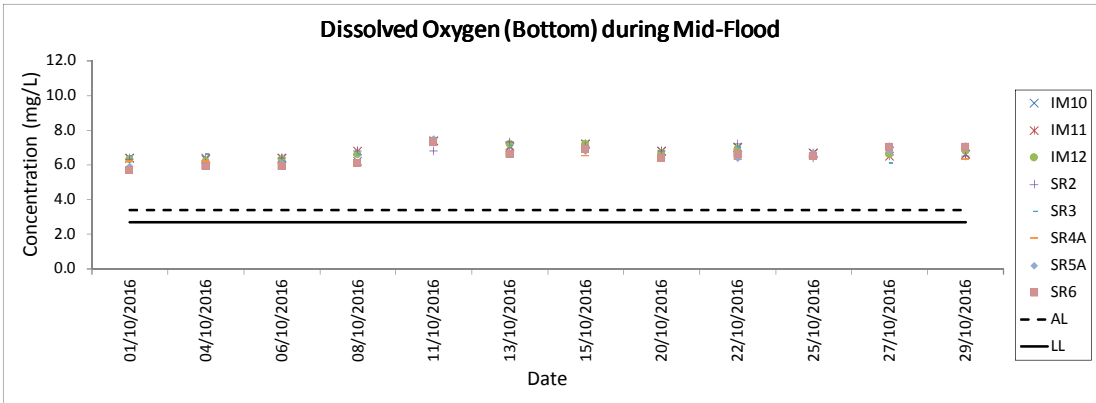
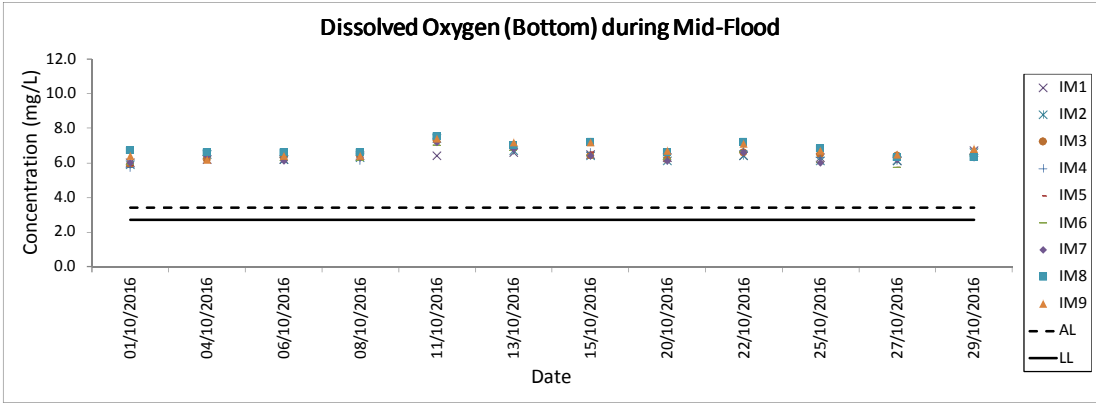
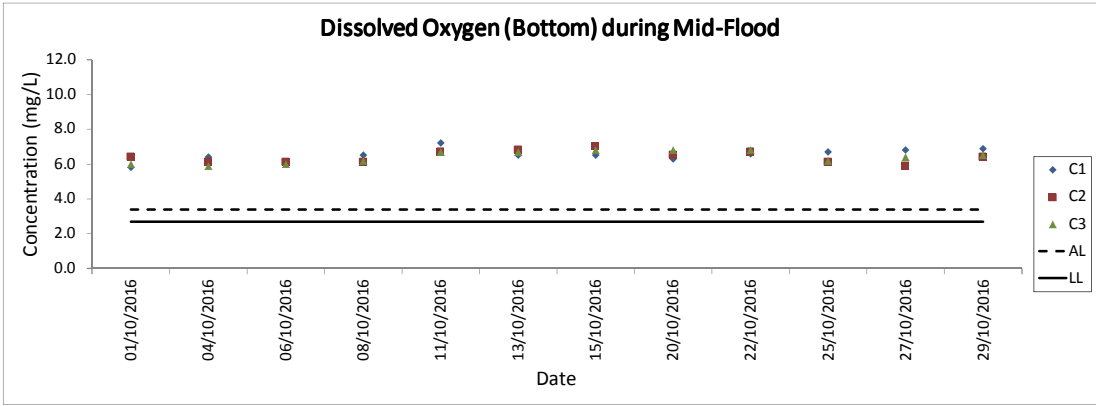
Water Quality Monitoring Results on 29 October 16 during Mid-Ebb tide

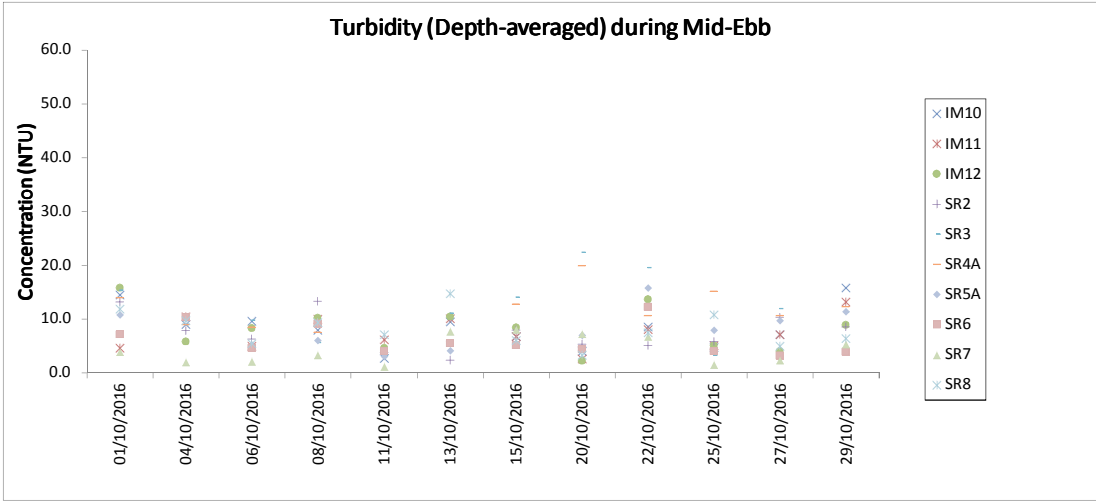
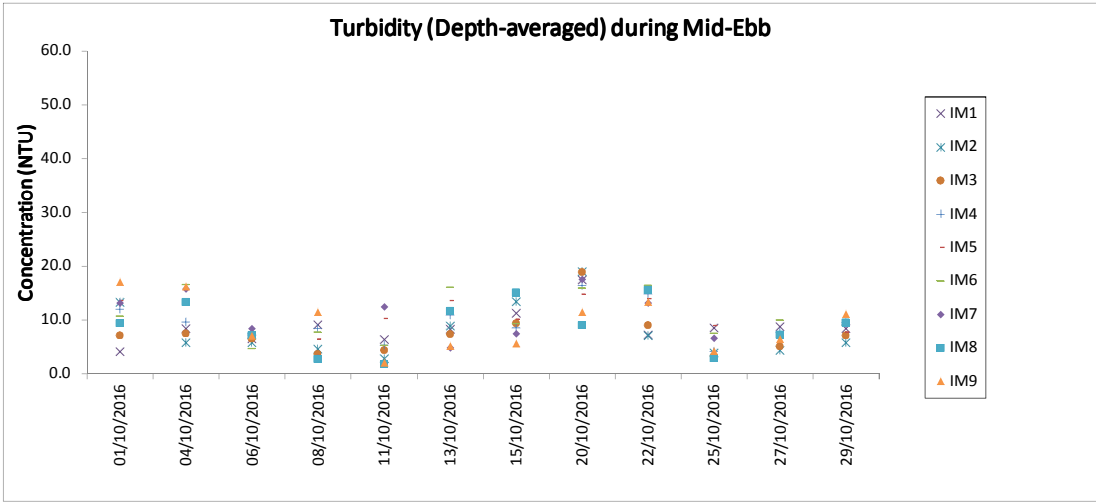
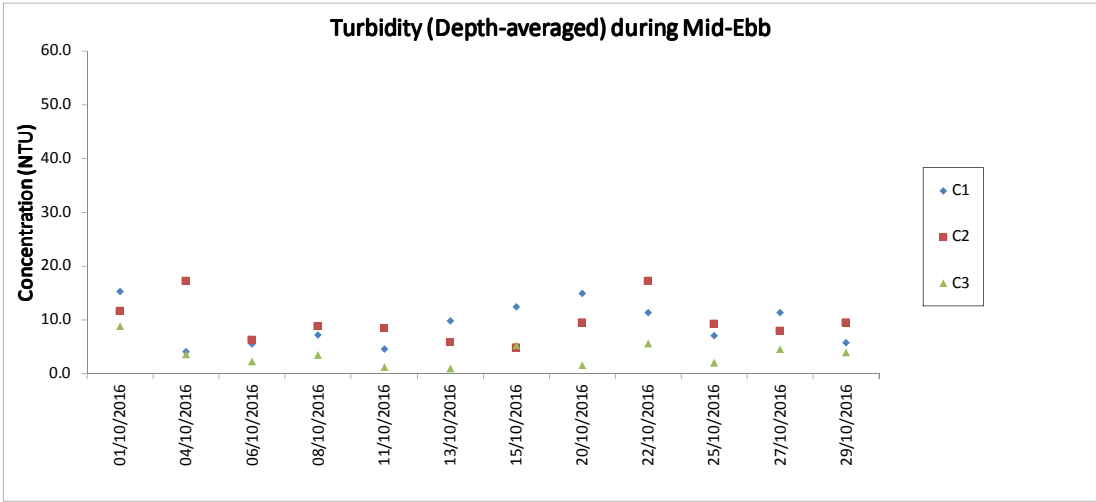
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Moderate	12:32	7.1	Surface	1.0	0.5	146	25.8	25.8	7.7	7.7	22.2	22.2	91.6	91.6	6.6	6.6	4.8	6.6	5	10	83	88	822087	808828	<0.2	<0.2	2.0	2.0			
						1.0	0.5	146	25.8	25.8	7.7	7.7	22.2	22.2	91.5	91.6	6.6	6.6	4.9	6.6	4	10	83	88	822087	808828	<0.2	<0.2	1.8	2.0			
					Middle	3.6	0.4	138	25.4	25.4	7.7	7.7	23.8	23.8	91.0	91.1	6.5	6.5	9.6	6.6	12	10	90	88	822087	808828	<0.2	<0.2	2.2	2.0			
						3.6	0.5	142	25.4	25.4	7.7	7.7	23.8	23.8	91.1	91.1	6.5	6.5	9.7	6.6	14	10	90	88	822087	808828	<0.2	<0.2	2.4	2.0			
					Bottom	6.1	0.4	103	25.1	25.1	7.8	7.8	26.1	26.1	96.9	96.9	6.9	6.9	18.8	6.9	12	10	92	88	822087	808828	<0.2	<0.2	1.6	2.0			
						6.1	0.4	109	25.1	25.1	7.8	7.8	26.1	26.1	96.9	96.9	6.9	6.9	18.8	6.9	12	10	92	88	822087	808828	<0.2	<0.2	1.7	2.0			
IM10	Rainy	Moderate	12:23	7.6	Surface	1.0	0.6	133	25.7	25.7	7.7	7.7	22.2	22.2	92.3	92.3	6.6	6.6	6.1	6.5	6	8	83	88	822232	809855	<0.2	<0.2	2.9	2.8			
						1.0	0.6	135	25.7	25.7	7.7	7.7	22.2	22.2	92.3	92.3	6.6	6.6	6.3	6.5	6	8	83	88	822232	809855	<0.2	<0.2	2.8	2.8			
					Middle	3.8	0.4	121	25.3	25.3	7.8	7.8	24.9	24.9	90.2	90.2	6.4	6.4	12.4	6.5	7	8	89	88	822232	809855	<0.2	<0.2	3.0	2.8			
						3.8	0.5	128	25.3	25.3	7.8	7.8	24.8	24.9	90.2	90.2	6.5	6.5	12.4	6.5	6	8	90	88	822232	809855	<0.2	<0.2	2.8	2.8			
					Bottom	6.6	0.3	137	25.1	25.1	7.8	7.8	26.2	26.2	93.5	93.5	6.7	6.7	28.4	6.7	11	6.7	11	8	92	88	822232	809855	<0.2	<0.2	2.5	2.8	
						6.6	0.3	142	25.1	25.1	7.8	7.8	26.2	26.2	93.5	93.5	6.7	6.7	28.3	6.7	10	6.7	10	8	92	88	822232	809855	<0.2	<0.2	2.9	2.8	
IM11	Cloudy	Moderate	12:12	7.2	Surface	1.0	0.6	102	25.6	25.6	7.8	7.8	22.5	22.5	101.0	101.0	7.3	7.2	4.5	7.2	5	6	84	89	821492	810527	<0.2	<0.2	2.5	2.6			
						1.0	0.7	102	25.6	25.6	7.8	7.8	22.5	22.5	101.0	101.0	7.3	7.2	4.5	7.2	4	6	84	89	821492	810527	<0.2	<0.2	2.6	2.6			
					Middle	3.6	0.6	98	25.4	25.4	7.8	7.8	23.7	23.7	97.7	97.8	7.0	7.0	8.5	7.0	6	7.2	6	6	91	89	821492	810527	<0.2	<0.2	2.5	2.6	
						3.6	0.6	101	25.4	25.4	7.8	7.8	23.7	23.7	97.8	97.8	7.0	7.0	8.6	7.0	6	7.2	6	6	90	89	821492	810527	<0.2	<0.2	2.8	2.6	
					Bottom	6.2	0.5	93	25.2	25.2	7.8	7.8	25.8	25.8	98.2	98.3	7.0	7.0	26.3	7.0	8	7.0	8	6	92	89	821492	810527	<0.2	<0.2	2.7	2.6	
						6.2	0.5	97	25.2	25.2	7.8	7.8	25.8	25.8	98.3	98.3	7.0	7.0	26.2	7.0	6	7.0	6	6	92	89	821492	810527	<0.2	<0.2	2.4	2.6	
IM12	Cloudy	Moderate	12:03	9.1	Surface	1.0	0.5	107	25.5	25.5	7.8	7.8	23.6	23.6	100.4	100.4	7.2	7.2	5.7	7.2	6	8	85	89	821159	811508	<0.2	<0.2	2.7	2.2			
						1.0	0.5	109	25.5	25.5	7.8	7.8	23.6	23.6	100.4	100.4	7.2	7.2	5.7	7.2	6	8	84	89	821159	811508	<0.2	<0.2	2.5	2.2			
					Middle	4.6	0.5	102	25.5	25.5	7.8	7.8	23.6	23.6	99.1	99.1	7.1	7.1	7.5	7.1	9	7.0	9	8	90	89	821159	811508	<0.2	<0.2	2.5	2.2	
						4.6	0.5	105	25.5	25.5	7.8	7.8	23.6	23.6	99.0	99.1	7.1	7.1	7.6	7.1	8	7.0	8	8	91	89	821159	811508	<0.2	<0.2	2.4	2.2	
					Bottom	8.1	0.4	110	25.3	25.3	7.7	7.7	25.5	25.5	98.7	98.8	7.0	7.0	13.4	7.0	9	7.0	9	8	93	89	821159	811508	<0.2	<0.2	1.5	2.2	
						8.1	0.4	117	25.3	25.3	7.7	7.7	25.5	25.5	98.8	98.8	7.0	7.0	13.4	7.0	7	7.0	7	8	92	89	821159	811508	<0.2	<0.2	1.6	2.2	
SR2	Cloudy	Moderate	11:40	5.2	Surface	1.0	0.5	96	25.5	25.5	7.7	7.7	23.7	23.7	97.2	97.2	7.0	7.0	5.5	7.0	7	8	86	89	821482	814183	<0.2	<0.2	2.2	1.9			
						1.0	0.5	105	25.5	25.5	7.7	7.7	23.7	23.7	97.2	97.2	7.0	7.0	5.6	7.0	8	8	85	89	821482	814183	<0.2	<0.2	1.9	1.9			
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	89	821482	814183	-	<0.2	-	1.9
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	89	821482	814183	-	<0.2	-
					Bottom	4.2	0.3	104	25.3	25.3	7.7	7.7	25.7	25.7	97.4	97.5	6.9	6.9	11.4	6.9	7	6.9	7	8	93	89	821482	814183	<0.2	<0.2	1.8	1.9	
						4.2	0.3	111	25.3	25.3	7.7	7.7	25.7	25.7	97.5	97.5	6.9	6.9	11.4	6.9	8	6.9	8	8	93	89	821482	814183	<0.2	<0.2	1.7	1.9	
SR3	Rainy	Moderate	12:51	8.3	Surface	1.0	0.5	183	25.6	25.6	7.7	7.7	22.1	22.2	91.9	91.7	6.6	6.6	7.0	6.6	3	5	-	-	822137	807560	-	-	-	-			
						1.0	0.6	187	25.6	25.6	7.7	7.7	22.2	22.2	91.4	91.7	6.6	6.6	7.5	6.6	4	5	-	-	-	-	822137	807560	-	-	-	-	
					Middle	4.2	0.5	181	25.3	25.3	7.8	7.8	24.4	24.4	92.2	92.3	6.6	6.6	11.4	6.6	4	6.6	4	5	-	-	822137	807560	-	-	-	-	
						4.2	0.5	185	25.3	25.3	7.8	7.8	24.4	24.4	92.3	92.3	6.6	6.6	11.5	6.6	5	6.6	5	5	-	-	822137	807560	-	-	-	-	
					Bottom	7.3	0.3	176	25.1	25.1	7.8	7.8	26.8	26.8	96.1	96.1	6.8	6.8	15.0	6.8	8	6.8	8	5	-	-	822137	807560	-	-	-	-	
						7.3	0.3	181	25.1	25.1	7.8	7.8	26.8	26.8	96.1	96.1	6.8	6.8	15.0	6.8	8	6.8	8	5	-	-	822137	807560	-	-	-	-	
SR4A	Fine	Calm	11:14	8.5	Surface	1.0	0.4	160	28.0	28.0	7.9	7.9	26.2	26.2	99.1	99.1	6.7	6.6	10.2	6.6	14	18	-	-	817179	807793	-	-	-	-			
						1.0	0.4	160	28.0	28.0	7.9	7.9	26.2	26.2	99.0	99.1	6.7	6.7	10.3	6.7	15	6.6	15	18	-	-	817179	807793	-	-	-	-	
					Middle	4.3	0.3	144	27.8	27.8	7.8	7.8	27.5	27.5	97.1	97.1	6.5	6.5	12.7	6.5	17	6.6	17	18	-	-	817179	807793	-	-	-	-	
						4.3	0.4	145	27.8	27.8	7.8	7.8	27.5	27.5	97.1	97.1	6.5	6.5	12.8	6.5	18	6.6	18	18	-	-	817179	807793	-	-	-	-	
					Bottom	7.5	0.3	152	27.8	27.8	7.8	7.8	28.1	28.1	98.0	98.3	6.6	6.6	13.5	6.6	22	6.6	22	18	-	-	817179	807793	-	-	-	-	
						7.5	0.3	165	27.8	27.8	7.8	7.8	28.1	28.1	98.6	98.3	6.6	6.6	13.4	6.6	21	6.6	21	18	-	-	817179	807793	-	-	-	-	
SR5A	Fine	Calm	10:57	3.4	Surface	1.0	0.2	178	28.3	28.3	7.8	7.8	25.0	25.0	101.8	101.8	6.9	6.9	8.4	6.8	10	14	-	-	816605	810712	-	-	-	-			
						1.0	0.2	179	28.3	28.3	7.8	7.8	24.9	25.0	101.7	101.8	6.9	6.9	8.3	6.8	10	6.8	10	14	-	-	816605	810712	-	-	-	-	
					Middle	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816605	810712	-	-	-	-	
						1.7	-	-																									



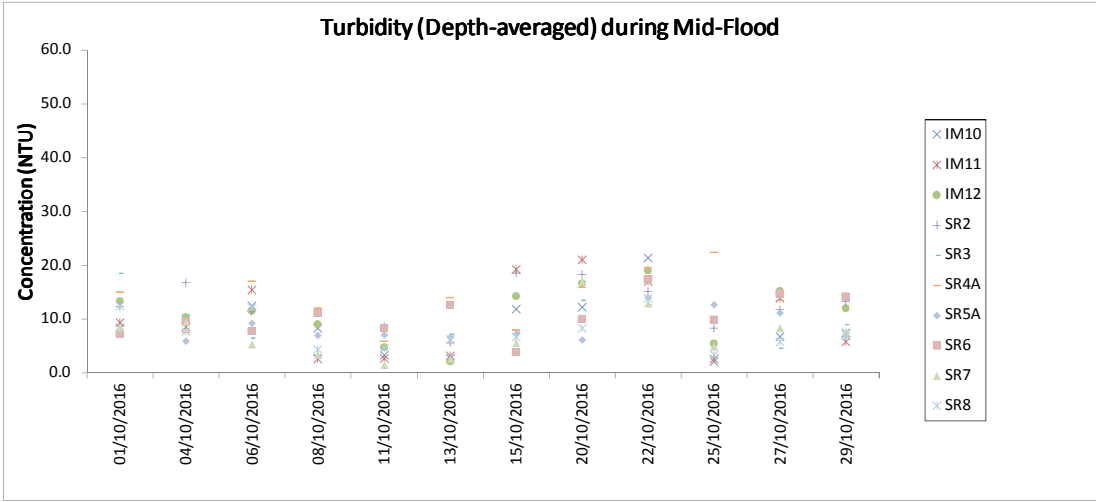
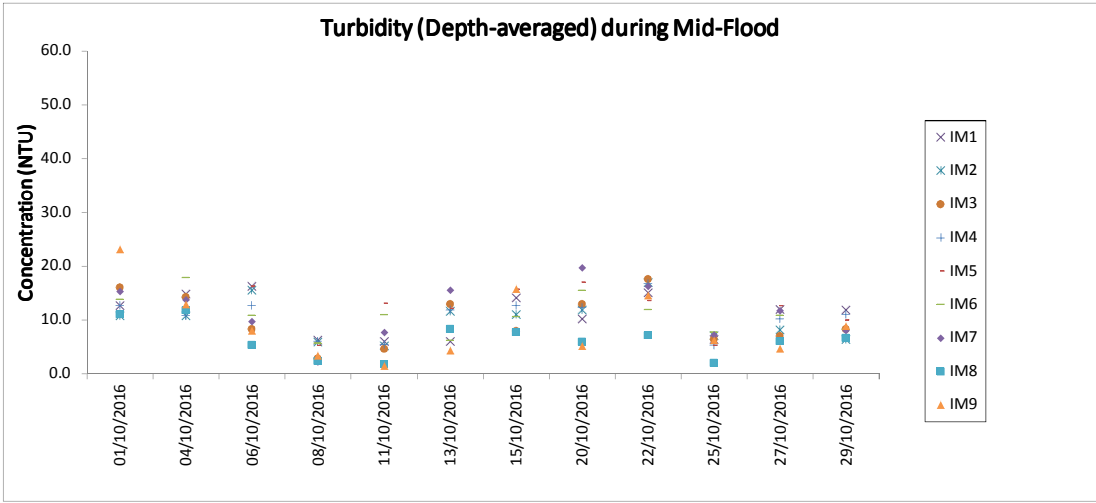
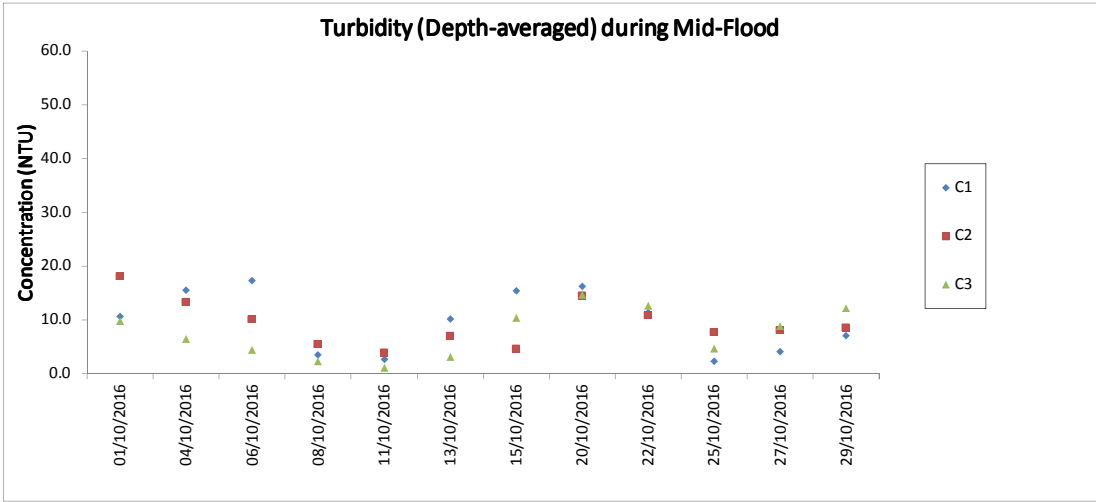




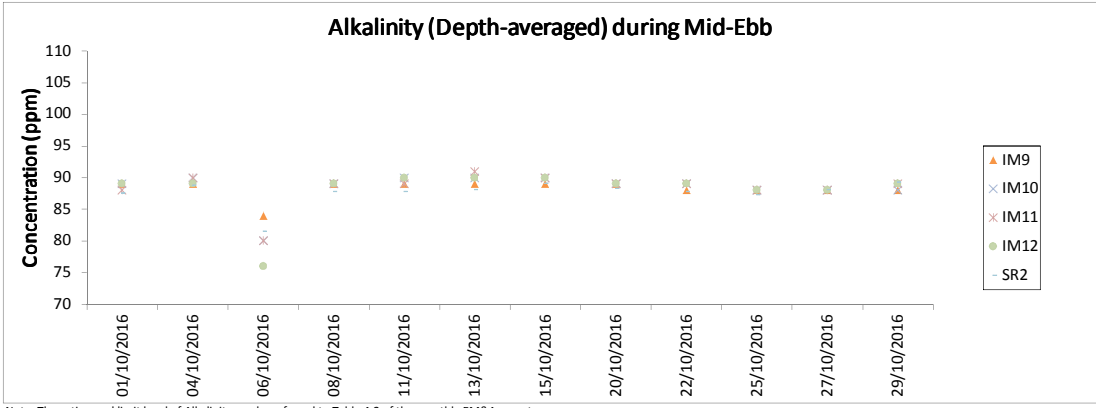
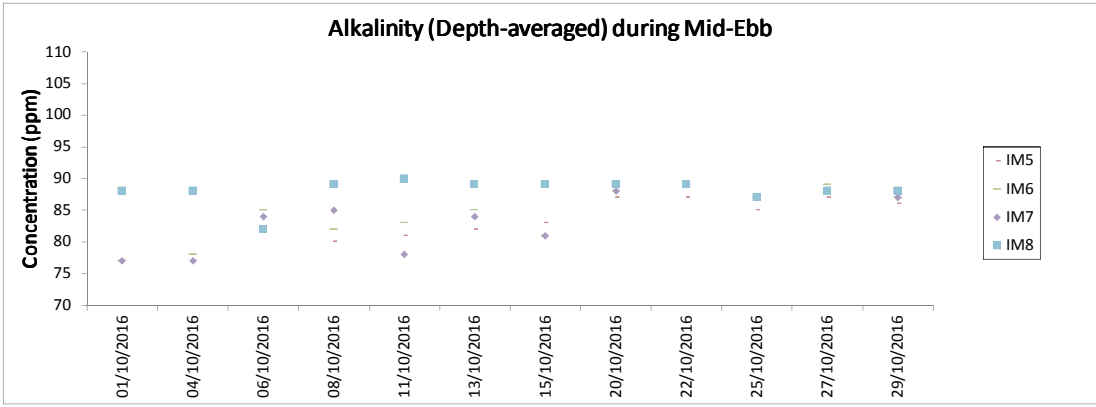
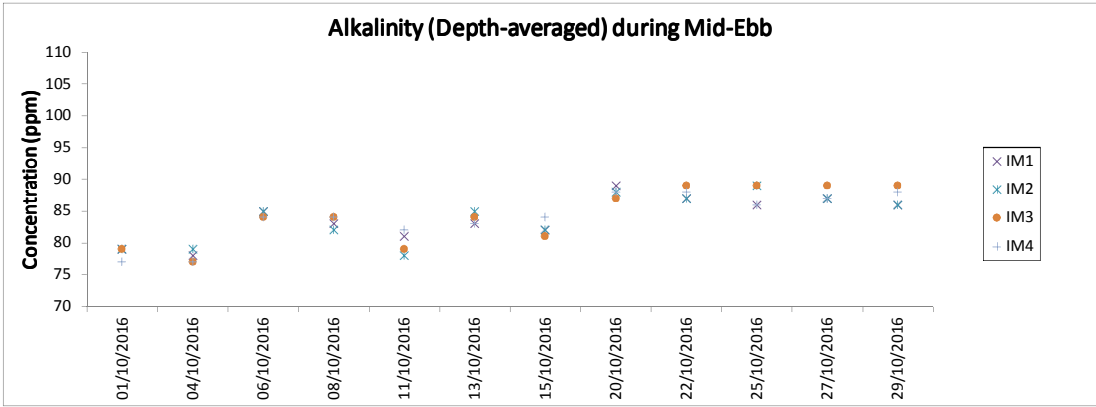
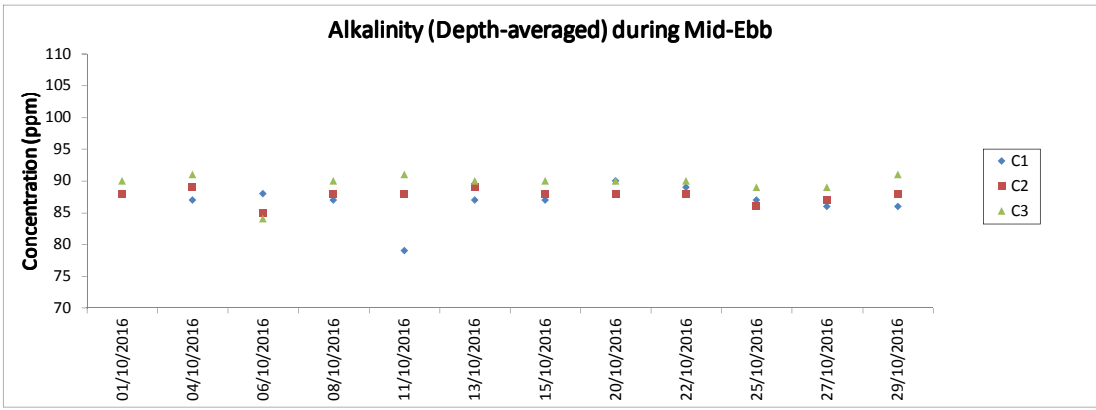




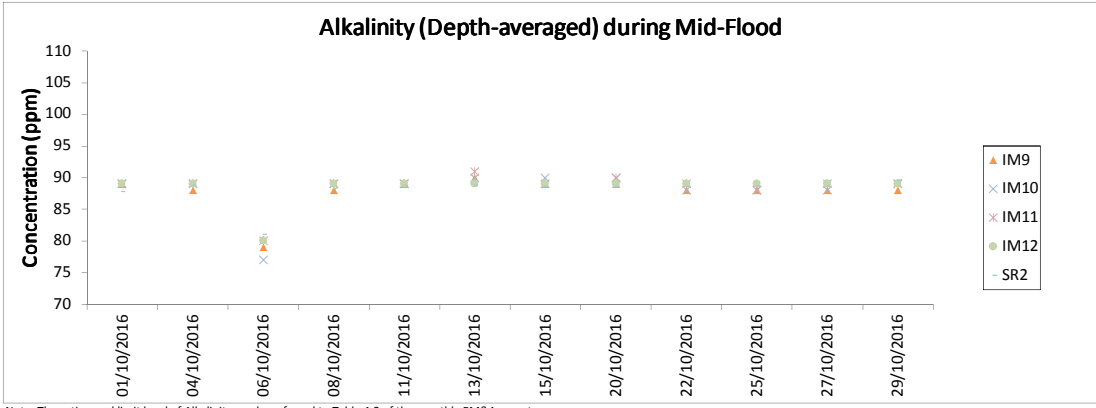
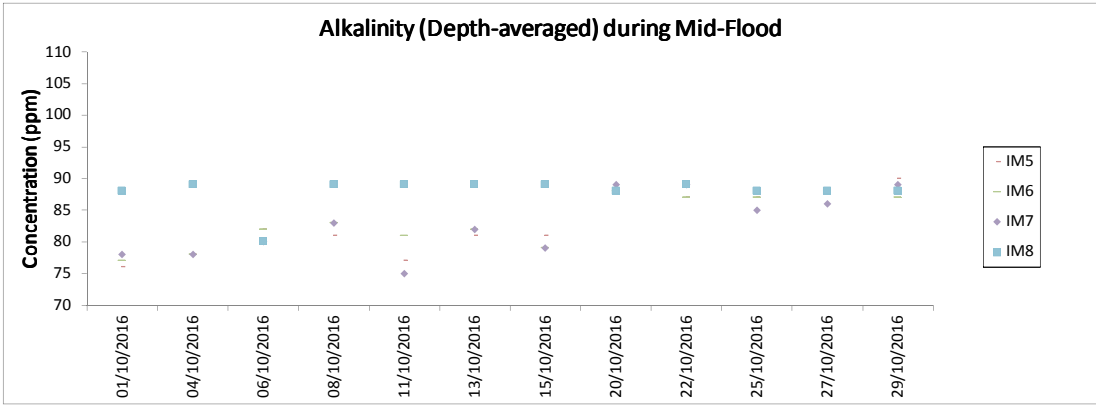
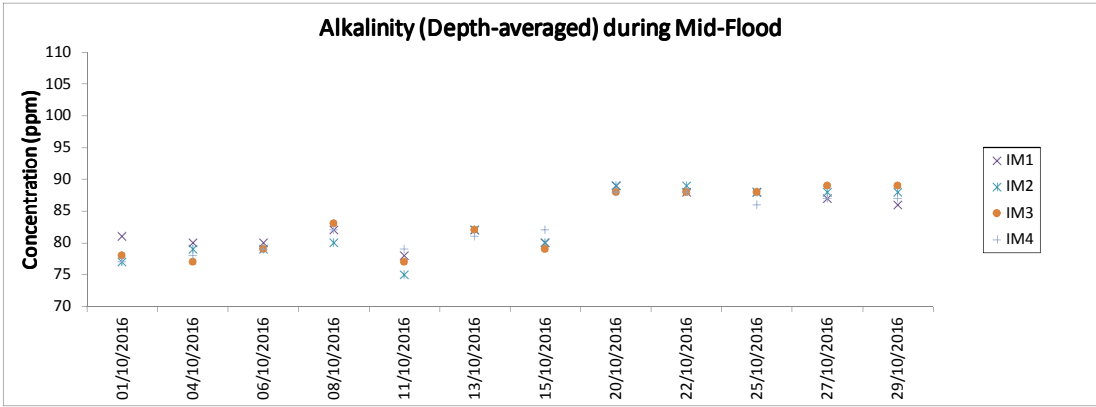
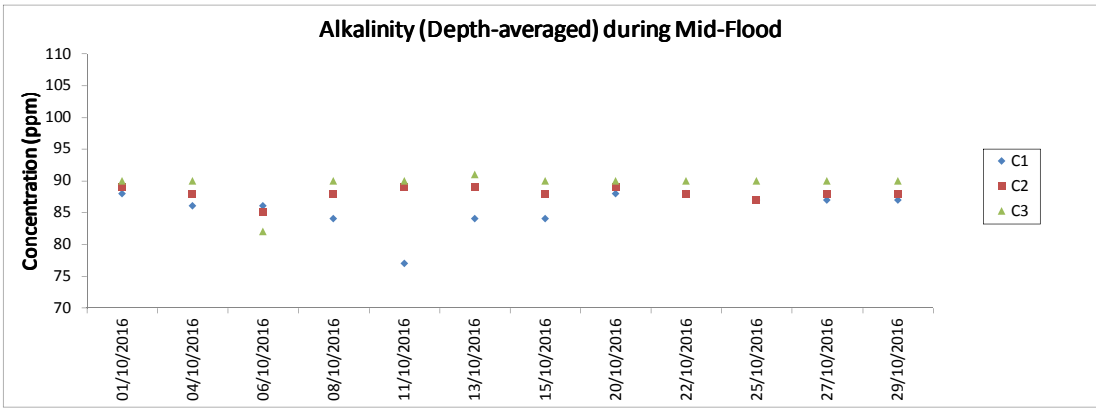
Note: The action and limit level of Turbidity can be referred to Table 4.2 of the monthly EM&A report.



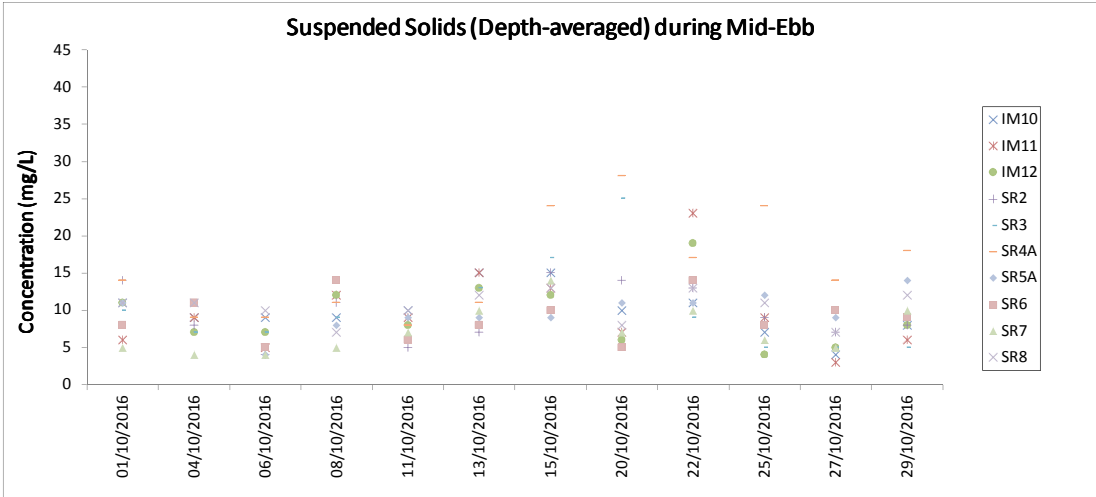
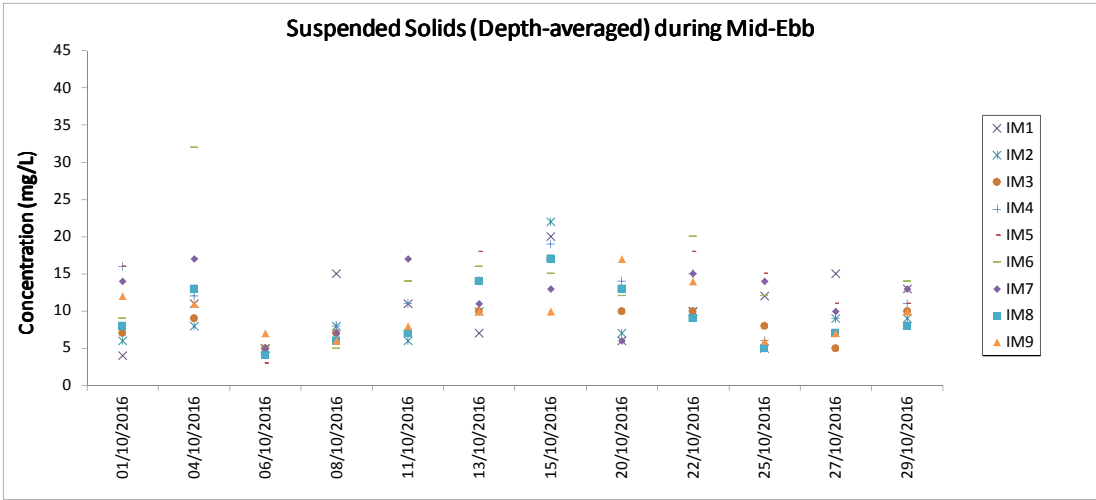
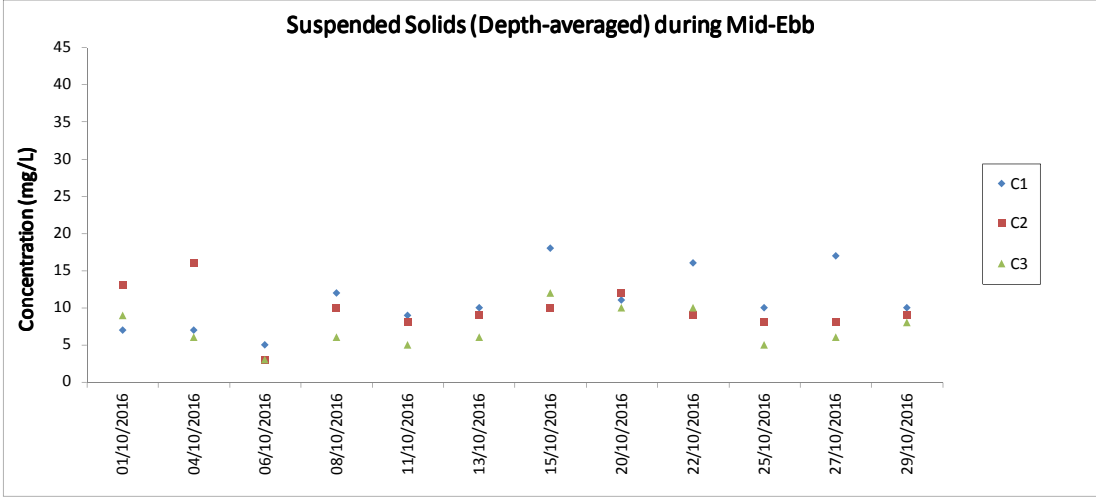
Note: The action and limit level of Turbidity can be referred to Table 4.2 of the monthly EM&A report.



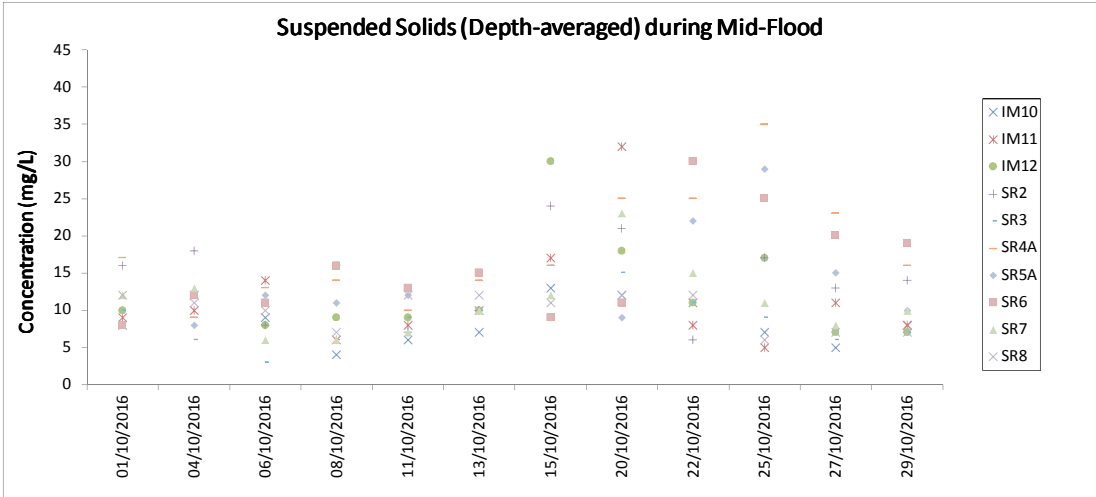
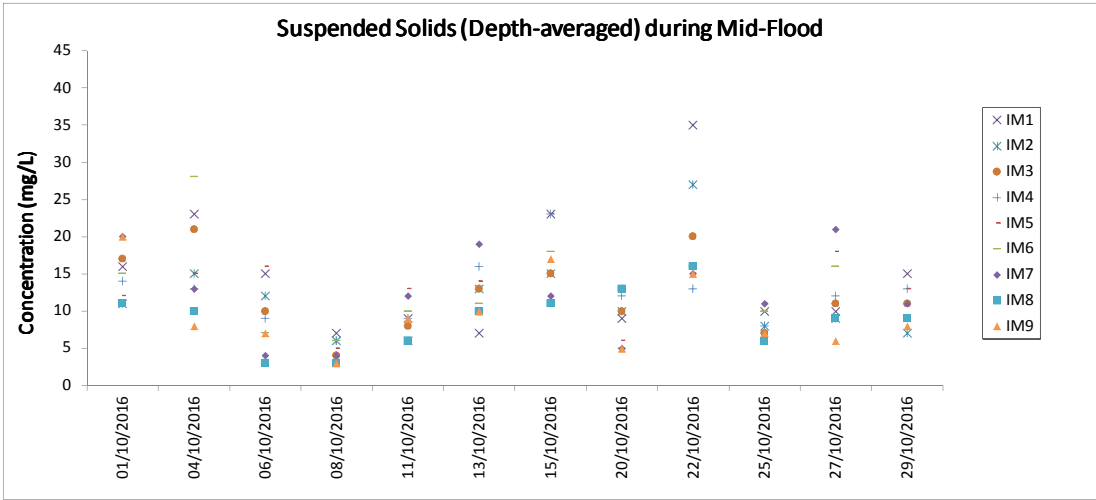
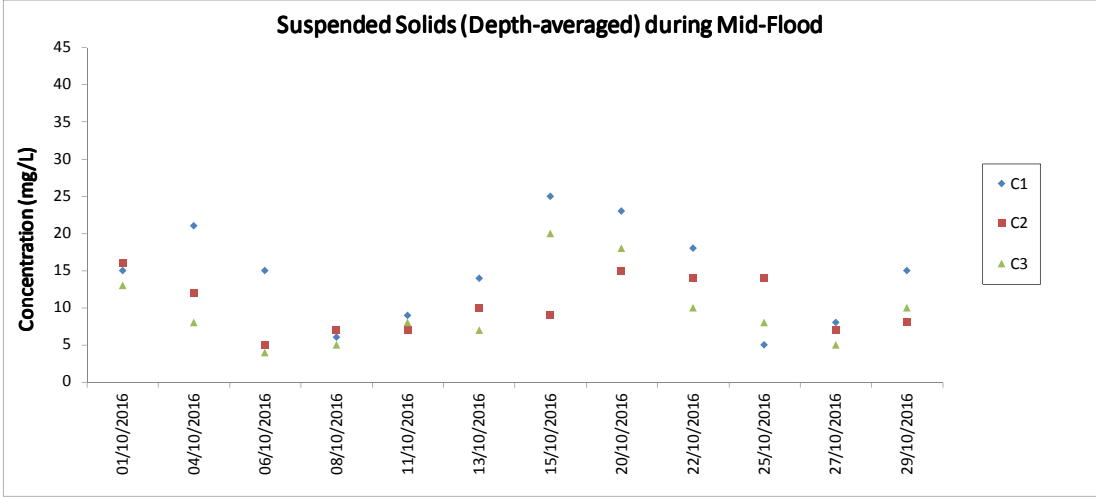
Note: The action and limit level of Alkalinity can be referred to Table 4.2 of the monthly EM&A report.



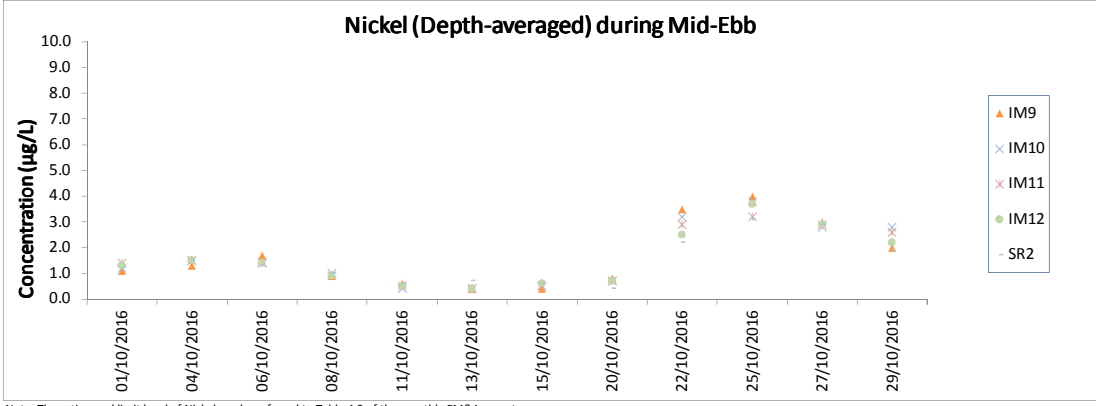
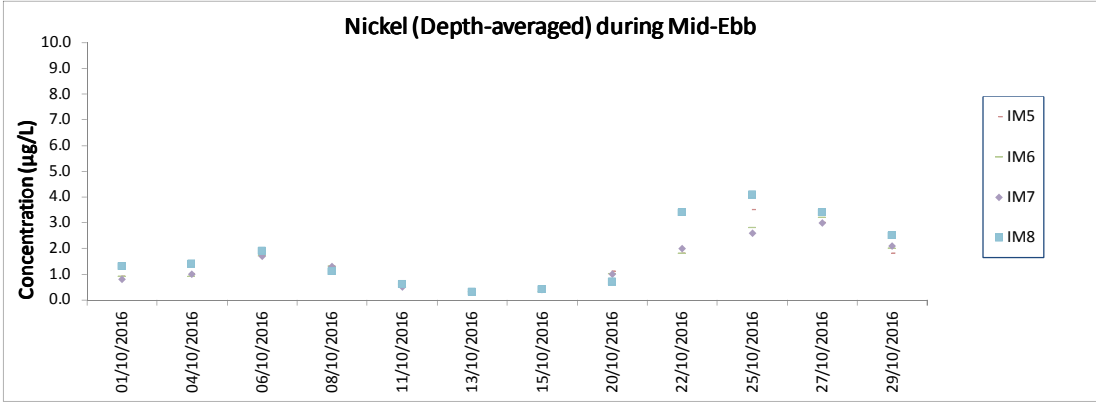
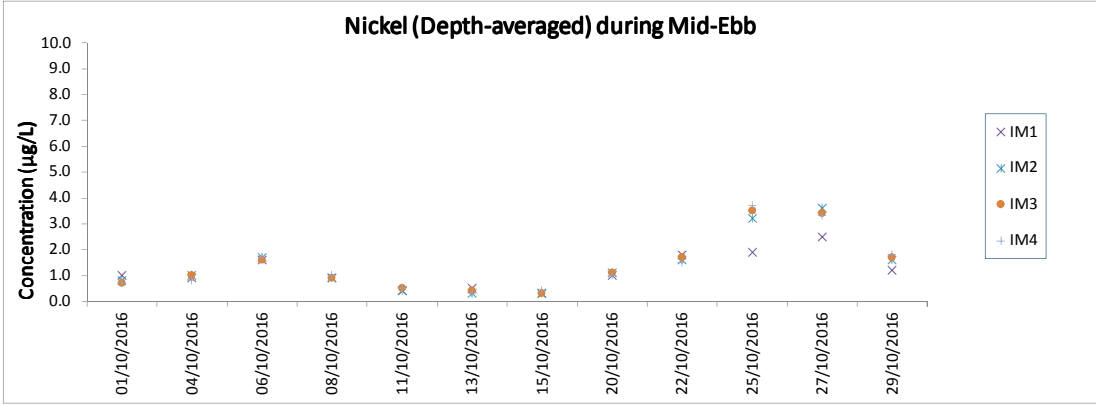
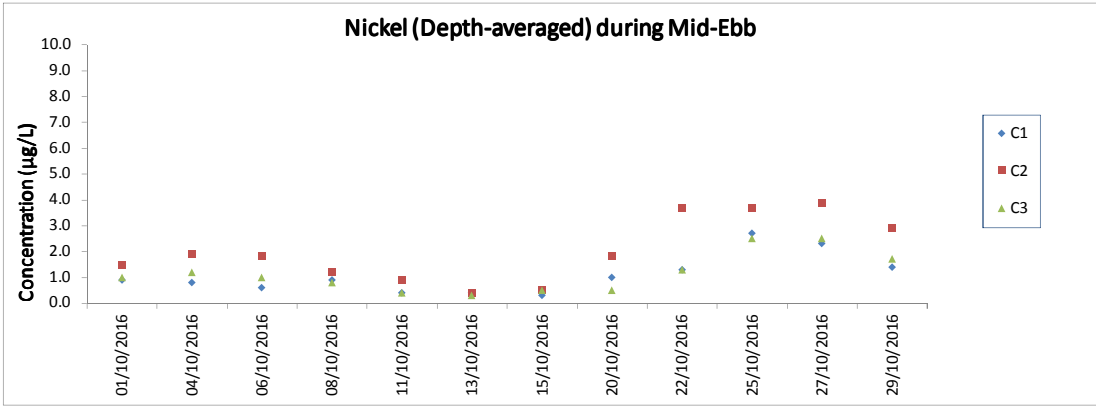
Note: The action and limit level of Alkalinity can be referred to Table 4.2 of the monthly EM&A report.



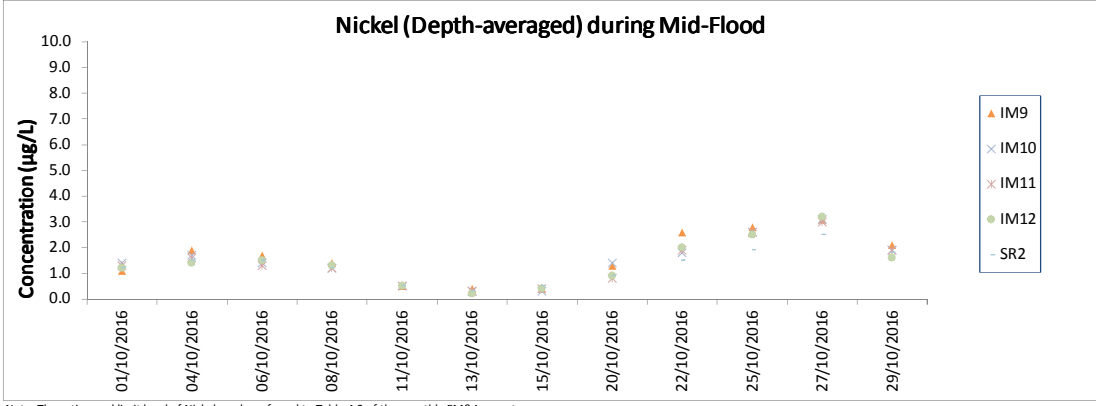
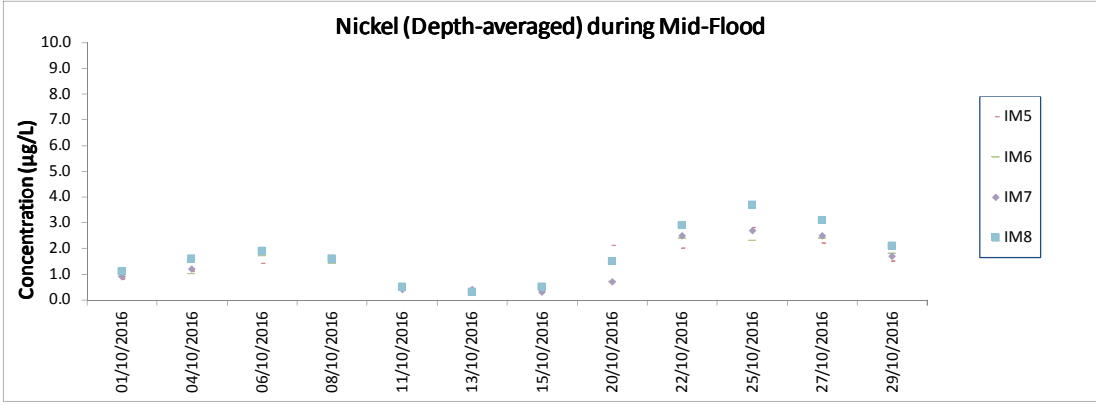
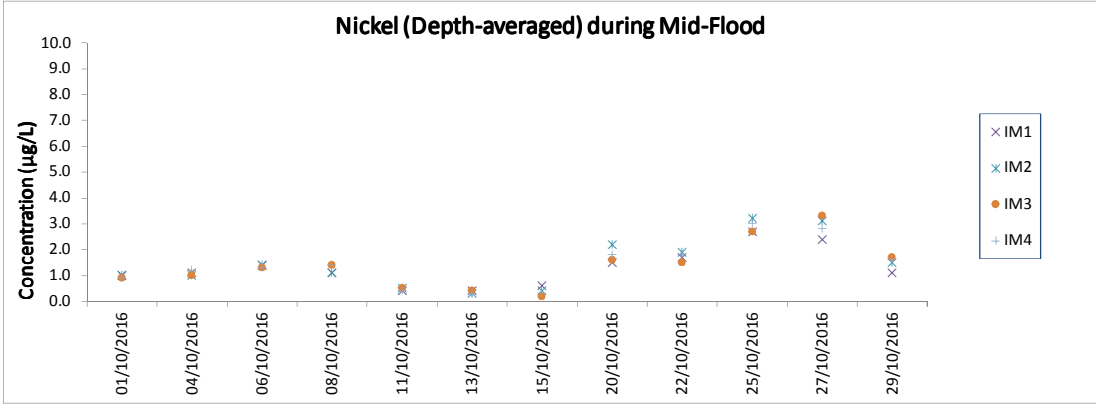
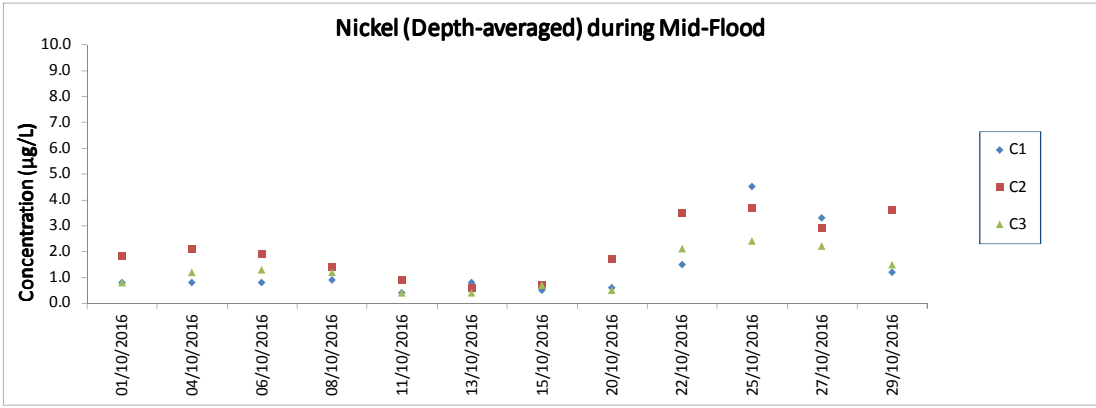
Note: The action and limit level of Suspended Solids can be referred to Table 4.2 of the monthly EM&A report.



Note: The action and limit level of Suspended Solids can be referred to Table 4.2 of the monthly EM&A report.



Note: The action and limit level of Nickel can be referred to Table 4.2 of the monthly EM&A report.



Note: The action and limit level of Nickel can be referred to Table 4.2 of the monthly EM&A report.
 The monitoring results of Chromium at all monitoring stations were below the reporting limit <0.2 µg/L,
 the impact monitoring results of Chromium at all monitoring stations can be referred to Appendix E. of the monthly EM&A report.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
05-Aug-16	NEL	2	44.36	SUMMER	32166	3RS ET
05-Aug-16	NEL	3	2.64	SUMMER	32166	3RS ET
09-Aug-16	AW	2	4.76	SUMMER	32166	3RS ET
09-Aug-16	WL	1	8.07	SUMMER	32166	3RS ET
09-Aug-16	WL	2	16.14	SUMMER	32166	3RS ET
09-Aug-16	WL	3	3.70	SUMMER	32166	3RS ET
09-Aug-16	WL	4	1.80	SUMMER	32166	3RS ET
09-Aug-16	SWL	3	1.41	SUMMER	32166	3RS ET
09-Aug-16	SWL	4	0.77	SUMMER	32166	3RS ET
09-Aug-16	SWL	5	4.79	SUMMER	32166	3RS ET
10-Aug-16	SWL	1	14.30	SUMMER	32166	3RS ET
10-Aug-16	SWL	2	37.70	SUMMER	32166	3RS ET
10-Aug-16	SWL	3	11.10	SUMMER	32166	3RS ET
15-Aug-16	NEL	1	21.10	SUMMER	32166	3RS ET
15-Aug-16	NEL	2	26.00	SUMMER	32166	3RS ET
19-Aug-16	NWL	3	68.90	SUMMER	32166	3RS ET
19-Aug-16	NWL	4	12.60	SUMMER	32166	3RS ET
19-Aug-16	NWL	5	0.40	SUMMER	32166	3RS ET
22-Aug-16	AW	2	1.58	SUMMER	32166	3RS ET
22-Aug-16	AW	3	3.20	SUMMER	32166	3RS ET
22-Aug-16	WL	2	11.83	SUMMER	32166	3RS ET
22-Aug-16	WL	3	6.71	SUMMER	32166	3RS ET
22-Aug-16	WL	4	11.94	SUMMER	32166	3RS ET
22-Aug-16	SWL	3	0.83	SUMMER	32166	3RS ET
22-Aug-16	SWL	4	6.17	SUMMER	32166	3RS ET
24-Aug-16	NWL	1	34.84	SUMMER	32166	3RS ET
24-Aug-16	NWL	2	48.06	SUMMER	32166	3RS ET
25-Aug-16	SWL	1	11.89	SUMMER	32166	3RS ET
25-Aug-16	SWL	2	38.89	SUMMER	32166	3RS ET
25-Aug-16	SWL	3	12.60	SUMMER	32166	3RS ET
05-Sep-16	NEL	2	41.60	AUTUMN	32166	3RS ET
05-Sep-16	NEL	3	5.40	AUTUMN	32166	3RS ET
06-Sep-16	NWL	1	8.62	AUTUMN	32166	3RS ET
06-Sep-16	NWL	2	47.10	AUTUMN	32166	3RS ET
06-Sep-16	NWL	3	27.38	AUTUMN	32166	3RS ET
08-Sep-16	AW	2	2.65	AUTUMN	32166	3RS ET
08-Sep-16	AW	3	2.43	AUTUMN	32166	3RS ET
08-Sep-16	WL	1	5.25	AUTUMN	32166	3RS ET
08-Sep-16	WL	2	23.16	AUTUMN	32166	3RS ET
08-Sep-16	WL	3	2.67	AUTUMN	32166	3RS ET
08-Sep-16	SWL	1	2.15	AUTUMN	32166	3RS ET
08-Sep-16	SWL	2	10.15	AUTUMN	32166	3RS ET
19-Sep-16	AW	3	4.81	AUTUMN	32166	3RS ET
19-Sep-16	WL	2	5.10	AUTUMN	32166	3RS ET
19-Sep-16	WL	3	25.61	AUTUMN	32166	3RS ET
19-Sep-16	SWL	2	6.81	AUTUMN	32166	3RS ET
20-Sep-16	NEL	1	1.10	AUTUMN	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
20-Sep-16	NEL	2	45.70	AUTUMN	32166	3RS ET
22-Sep-16	NWL	2	33.84	AUTUMN	32166	3RS ET
22-Sep-16	NWL	3	43.92	AUTUMN	32166	3RS ET
22-Sep-16	NWL	4	3.40	AUTUMN	32166	3RS ET
26-Sep-16	SWL	1	5.61	AUTUMN	32166	3RS ET
26-Sep-16	SWL	2	18.67	AUTUMN	32166	3RS ET
26-Sep-16	SWL	3	35.90	AUTUMN	32166	3RS ET
26-Sep-16	SWL	4	1.64	AUTUMN	32166	3RS ET
27-Sep-16	SWL	2	15.86	AUTUMN	32166	3RS ET
27-Sep-16	SWL	3	35.83	AUTUMN	32166	3RS ET
27-Sep-16	SWL	4	7.73	AUTUMN	32166	3RS ET
05-Oct-16	NWL	2	57.65	AUTUMN	32166	3RS ET
05-Oct-16	NWL	3	24.37	AUTUMN	32166	3RS ET
07-Oct-16	SWL	2	19.10	AUTUMN	32166	3RS ET
07-Oct-16	SWL	3	41.15	AUTUMN	32166	3RS ET
07-Oct-16	SWL	4	2.05	AUTUMN	32166	3RS ET
19-Oct-16	NEL	2	2.20	AUTUMN	32166	3RS ET
19-Oct-16	NEL	3	18.00	AUTUMN	32166	3RS ET
19-Oct-16	NEL	4	27.50	AUTUMN	32166	3RS ET
20-Oct-16	NEL	2	30.40	AUTUMN	32166	3RS ET
20-Oct-16	NEL	3	16.80	AUTUMN	32166	3RS ET
24-Oct-16	AW	1	4.80	AUTUMN	32166	3RS ET
24-Oct-16	WL	1	5.39	AUTUMN	32166	3RS ET
24-Oct-16	WL	2	6.10	AUTUMN	32166	3RS ET
24-Oct-16	WL	3	15.88	AUTUMN	32166	3RS ET
24-Oct-16	WL	4	3.82	AUTUMN	32166	3RS ET
24-Oct-16	SWL	3	4.89	AUTUMN	32166	3RS ET
24-Oct-16	SWL	4	0.41	AUTUMN	32166	3RS ET
25-Oct-16	SWL	2	1.05	AUTUMN	32166	3RS ET
25-Oct-16	SWL	3	31.73	AUTUMN	32166	3RS ET
25-Oct-16	SWL	4	28.02	AUTUMN	32166	3RS ET
25-Oct-16	SWL	5	2.00	AUTUMN	32166	3RS ET
26-Oct-16	AW	2	2.81	AUTUMN	32166	3RS ET
26-Oct-16	AW	3	1.83	AUTUMN	32166	3RS ET
26-Oct-16	WL	2	12.50	AUTUMN	32166	3RS ET
26-Oct-16	WL	3	9.25	AUTUMN	32166	3RS ET
26-Oct-16	WL	4	9.44	AUTUMN	32166	3RS ET
26-Oct-16	SWL	3	1.06	AUTUMN	32166	3RS ET
26-Oct-16	SWL	4	4.03	AUTUMN	32166	3RS ET
28-Oct-16	NWL	1	6.27	AUTUMN	32166	3RS ET
28-Oct-16	NWL	2	73.09	AUTUMN	32166	3RS ET
28-Oct-16	NWL	3	0.90	AUTUMN	32166	3RS ET

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. August 2016 and September 2016) are presented for reference only.

CWD Small Vessel Line-transect Survey

Sighting Data

DATE	STG #	TIME	CWD/FP	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
09-Aug-16	1	1037	CWD	2	WL	1	8	ON	3RS ET	22.2625	113.8563	SUMMER	NONE
09-Aug-16	2	1047	CWD	1	WL	2	85	ON	3RS ET	22.2609	113.8515	SUMMER	NONE
09-Aug-16	3	1114	CWD	5	WL	2	98	ON	3RS ET	22.2504	113.8413	SUMMER	NONE
09-Aug-16	4	1146	CWD	3	WL	2	5	ON	3RS ET	22.2394	113.8278	SUMMER	NONE
09-Aug-16	5	1325	CWD	1	SWL	4	N/A	OFF	3RS ET	22.1936	113.8473	SUMMER	NONE
10-Aug-16	1	1059	FP	1	SWL	2	130	ON	3RS ET	22.1715	113.9353	SUMMER	NONE
10-Aug-16	2	1107	FP	6	SWL	2	396	ON	3RS ET	22.1624	113.9359	SUMMER	NONE
10-Aug-16	3	1116	FP	5	SWL	2	256	ON	3RS ET	22.1524	113.9356	SUMMER	NONE
19-Aug-16	1	1201	CWD	5	NWL	3	56	ON	3RS ET	22.3869	113.8890	SUMMER	NONE
19-Aug-16	2	1358	CWD	7	NWL	3	59	ON	3RS ET	22.3749	113.9066	SUMMER	NONE
22-Aug-16	1	0950	CWD	2	WL	2	N/A	OFF	3RS ET	22.3003	113.8665	SUMMER	NONE
22-Aug-16	2	1001	CWD	5	WL	3	197	ON	3RS ET	22.3023	113.8616	SUMMER	NONE
22-Aug-16	3	1046	CWD	5	WL	2	47	ON	3RS ET	22.2661	113.8592	SUMMER	NONE
22-Aug-16	4	1116	CWD	1	WL	2	213	ON	3RS ET	22.2503	113.8345	SUMMER	NONE
22-Aug-16	5	1145	CWD	1	WL	2	390	ON	3RS ET	22.2414	113.8408	SUMMER	NONE
22-Aug-16	6	1209	CWD	5	WL	2	183	ON	3RS ET	22.2367	113.8265	SUMMER	NONE
22-Aug-16	7	1237	CWD	7	WL	2	124	ON	3RS ET	22.2236	113.8369	SUMMER	NONE
22-Aug-16	8	1318	CWD	4	WL	4	245	ON	3RS ET	22.2143	113.8209	SUMMER	NONE
24-Aug-16	1	1216	CWD	6	NWL	1	32	ON	3RS ET	22.3785	113.8888	SUMMER	NONE
24-Aug-16	2	1336	CWD	1	NWL	2	27	ON	3RS ET	22.3797	113.8976	SUMMER	NONE
25-Aug-16	1	1013	CWD	1	SWL	2	N/A	OFF	3RS ET	22.1997	113.8684	SUMMER	NONE
25-Aug-16	2	1142	CWD	7	SWL	1	1303	ON	3RS ET	22.1498	113.8887	SUMMER	NONE
06-Sep-16	1	1127	CWD	3	NWL	3	48	ON	3RS ET	22.3379	113.8784	AUTUMN	NONE
08-Sep-16	1	1020	CWD	4	WL	1	221	ON	3RS ET	22.2504	113.8387	AUTUMN	PURSE SEINE
08-Sep-16	2	1044	CWD	9	WL	1	36	ON	3RS ET	22.2416	113.8409	AUTUMN	NONE
08-Sep-16	3	1233	CWD	2	WL	2	100	ON	3RS ET	22.1871	113.8365	AUTUMN	NONE
19-Sep-16	1	0945	CWD	2	AW	3	13	ON	3RS ET	22.3009	113.8895	AUTUMN	NONE
19-Sep-16	2	1147	CWD	10	WL	3	27	ON	3RS ET	22.2319	113.8282	AUTUMN	NONE
19-Sep-16	3	1230	CWD	1	WL	3	135	ON	3RS ET	22.2138	113.8202	AUTUMN	NONE
19-Sep-16	4	1244	CWD	8	WL	3	25	ON	3RS ET	22.2142	113.8331	AUTUMN	NONE
19-Sep-16	5	1334	CWD	5	WL	3	149	ON	3RS ET	22.1963	113.8397	AUTUMN	NONE

DATE	STG #	TIME	CWD/FP	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
19-Sep-16	6	1411	CWD	1	SWL	2	124	ON	3RS ET	22.1910	113.8508	AUTUMN	NONE
19-Sep-16	7	1427	CWD	5	SWL	2	N/A	OFF	3RS ET	22.1838	113.8499	AUTUMN	NONE
19-Sep-16	8	1506	CWD	1	SWL	2	N/A	OFF	3RS ET	22.1942	113.8543	AUTUMN	PURSE SEINE
22-Sep-16	1	1007	CWD	6	NWL	2	238	ON	3RS ET	22.3373	113.8684	AUTUMN	NONE
22-Sep-16	2	1315	CWD	7	NWL	3	153	ON	3RS ET	22.3636	113.8981	AUTUMN	NONE
26-Sep-16	1	1109	FP	5	SWL	2	347	ON	3RS ET	22.1688	113.9280	AUTUMN	NONE
26-Sep-16	2	1157	FP	2	SWL	3	308	ON	3RS ET	22.1728	113.9195	AUTUMN	NONE
26-Sep-16	3	1456	CWD	5	SWL	2	15	ON	3RS ET	22.1997	113.8690	AUTUMN	NONE
27-Sep-16	1	1100	FP	2	SWL	3	48	ON	3RS ET	22.1627	113.9360	AUTUMN	NONE
27-Sep-16	2	1130	FP	1	SWL	3	34	ON	3RS ET	22.1723	113.9280	AUTUMN	NONE
27-Sep-16	3	1214	FP	4	SWL	3	62	ON	3RS ET	22.1601	113.9179	AUTUMN	NONE
27-Sep-16	4	1309	CWD	1	SWL	2	204	ON	3RS ET	22.2024	113.9078	AUTUMN	NONE
27-Sep-16	5	1412	CWD	2	SWL	2	182	ON	3RS ET	22.1851	113.8879	AUTUMN	NONE
27-Sep-16	6	1434	CWD	1	SWL	3	64	ON	3RS ET	22.2062	113.8874	AUTUMN	NONE
05-Oct-16	1	1048	CWD	2	NWL	2	N/A	OFF	3RS ET	22.2716	113.8719	AUTUMN	NONE
05-Oct-16	2	1141	CWD	1	NWL	3	19	ON	3RS ET	22.3571	113.8781	AUTUMN	NONE
05-Oct-16	3	1212	CWD	2	NWL	3	N/A	OFF	3RS ET	22.5836	115.8169	AUTUMN	NONE
05-Oct-16	4	1246	CWD	2	NWL	2	102	ON	3RS ET	22.3696	113.8886	AUTUMN	NONE
07-Oct-16	1	1200	FP	2	SWL	3	116	ON	3RS ET	22.7397	115.8400	AUTUMN	NONE
24-Oct-16	1	1017	CWD	4	WL	2	206	ON	3RS ET	22.2698	113.8436	AUTUMN	NONE
24-Oct-16	2	1054	CWD	1	WL	3	87	ON	3RS ET	22.2599	113.8416	AUTUMN	NONE
24-Oct-16	3	1127	CWD	2	WL	3	91	ON	3RS ET	22.2404	113.8307	AUTUMN	NONE
24-Oct-16	4	1154	CWD	1	WL	3	108	ON	3RS ET	22.2236	113.8326	AUTUMN	NONE
24-Oct-16	5	1242	CWD	1	WL	4	11	ON	3RS ET	22.2018	113.8219	AUTUMN	NONE
24-Oct-16	6	1252	CWD	2	WL	3	48	ON	3RS ET	22.1983	113.8274	AUTUMN	NONE
24-Oct-16	7	1321	CWD	3	WL	3	N/A	OFF	3RS ET	22.1918	113.8383	AUTUMN	NONE
24-Oct-16	8	1403	CWD	1	SWL	3	45	ON	3RS ET	22.1863	113.8587	AUTUMN	NONE
25-Oct-16	1	1457	CWD	1	SWL	4	N/A	OFF	3RS ET	22.1943	113.8519	AUTUMN	NONE
25-Oct-16	2	1511	CWD	1	WL	3	N/A	OFF	3RS ET	22.2166	113.8338	AUTUMN	NONE
25-Oct-16	3	1518	CWD	1	WL	3	N/A	OFF	3RS ET	22.2293	113.8371	AUTUMN	NONE
25-Oct-16	4	1523	CWD	3	WL	3	N/A	OFF	3RS ET	22.2386	113.8406	AUTUMN	PURSE SEINE
26-Oct-16	1	1032	CWD	1	WL	2	135	ON	3RS ET	22.2675	113.8600	AUTUMN	NONE

DATE	STG #	TIME	CWD/FP	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
26-Oct-16	2	1047	CWD	2	WL	2	149	ON	3RS ET	22.2616	113.8553	AUTUMN	NONE
26-Oct-16	3	1112	CWD	1	WL	2	168	ON	3RS ET	22.2500	113.8348	AUTUMN	NONE
26-Oct-16	4	1133	CWD	2	WL	2	38	ON	3RS ET	22.2413	113.8394	AUTUMN	NONE
26-Oct-16	5	1219	CWD	7	WL	4	286	ON	3RS ET	22.2143	113.8219	AUTUMN	NONE
26-Oct-16	6	1309	CWD	1	WL	4	390	ON	3RS ET	22.1885	113.8419	AUTUMN	PURSE SEINE
26-Oct-16	7	1350	CWD	4	SWL	3	441	ON	3RS ET	22.1933	113.8493	AUTUMN	NONE
26-Oct-16	8	1403	CWD	2	SWL	3	14	ON	3RS ET	22.1905	113.8490	AUTUMN	NONE
26-Oct-16	9	1412	CWD	2	SWL	3	395	ON	3RS ET	22.1863	113.8488	AUTUMN	NONE
26-Oct-16	10	1440	CWD	1	SWL	3	63	ON	3RS ET	22.1976	113.8589	AUTUMN	NONE
28-Oct-16	1	0949	CWD	7	NWL	2	210	ON	3RS ET	22.3757	113.8682	AUTUMN	NONE
28-Oct-16	2	1145	CWD	2	NWL	2	623	ON	3RS ET	22.3548	113.8781	AUTUMN	NONE

Abbreviations: STG# = Sighting Number; GP SZ = Dolphin Group Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance (in metres); N/A = Not Applicable; DEC LAT = Latitude (WGS84 in Decimal), DEC LON = Longitude (WGS84 in Decimal); BOAT ASSOC. = Fishing Boat Association

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. August 2016 and September 2016) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report.

Sighting data of finless porpoise (FP) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report. All FP sightings are excluded in calculation.

Calculation of the running quarterly STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 1275.15 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 49 on-effort sightings and total number of 166 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

Running Quarterly Encounter Rate of Number of Dolphin Sightings (STG)







$$STG = \frac{49}{1275.15} \times 100 = 3.84$$

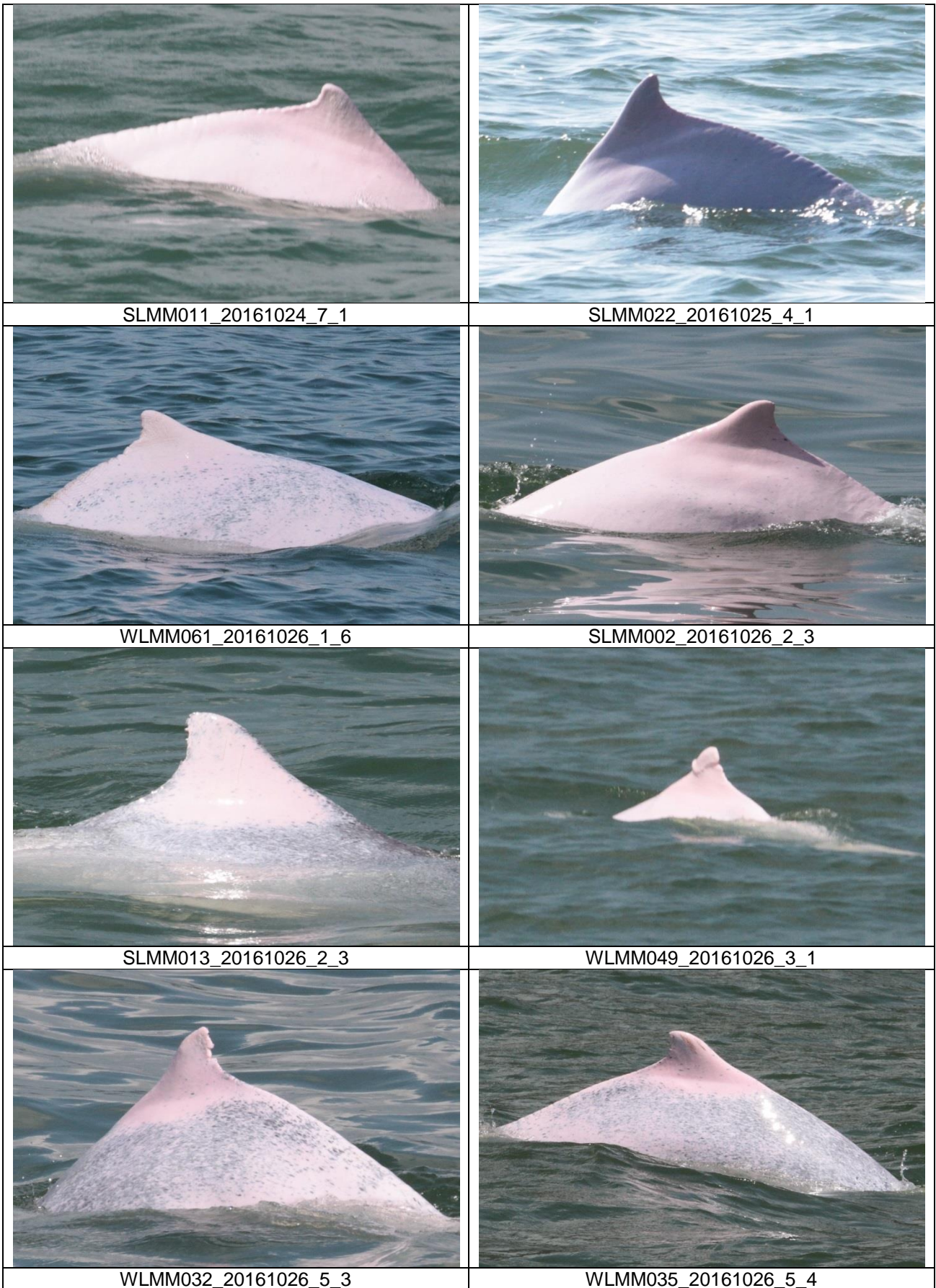
Running Quarterly Encounter Rate of Number of Dolphins (ANI)

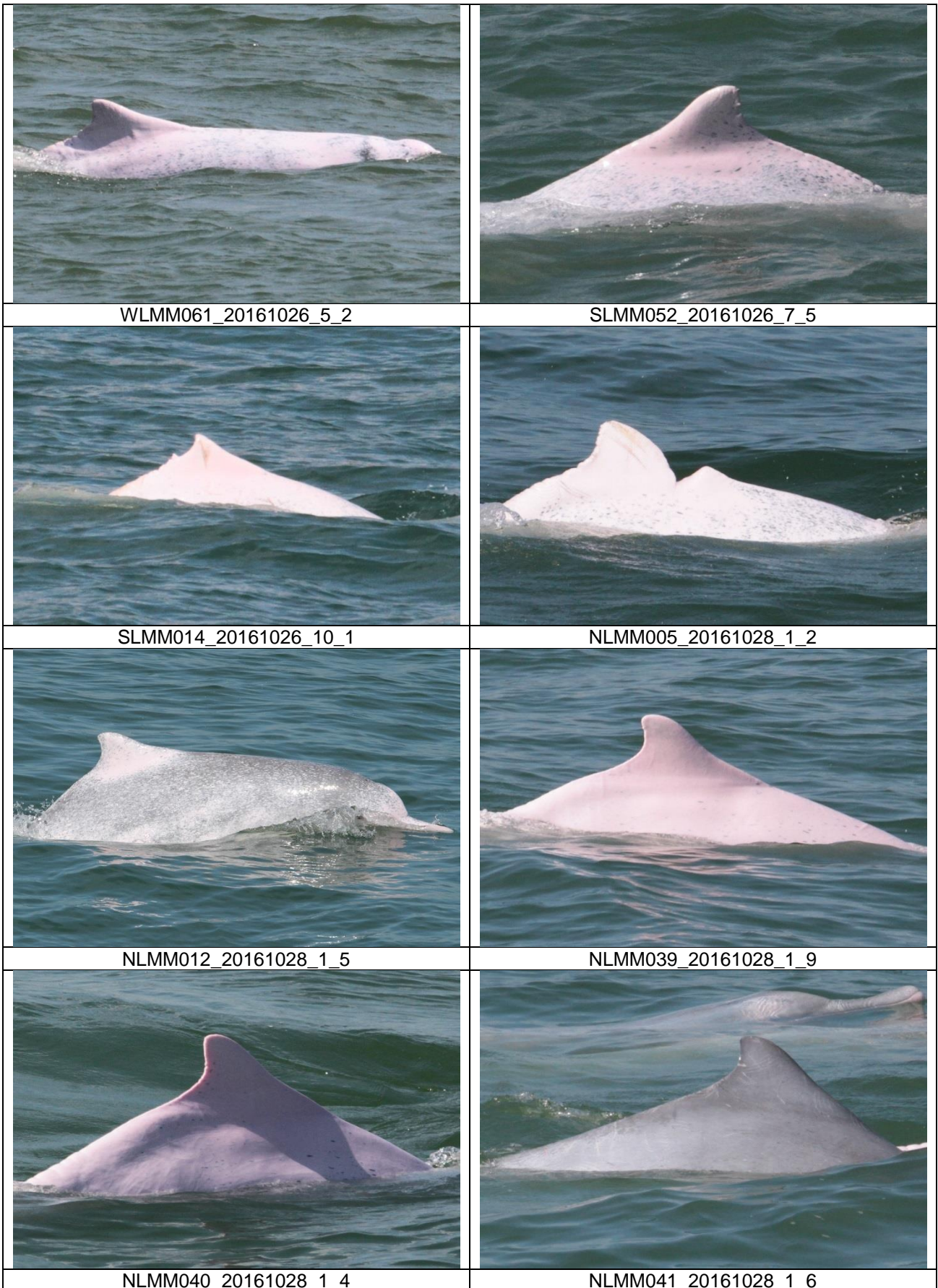
$$ANI = \frac{166}{1275.15} \times 100 = 13.02$$

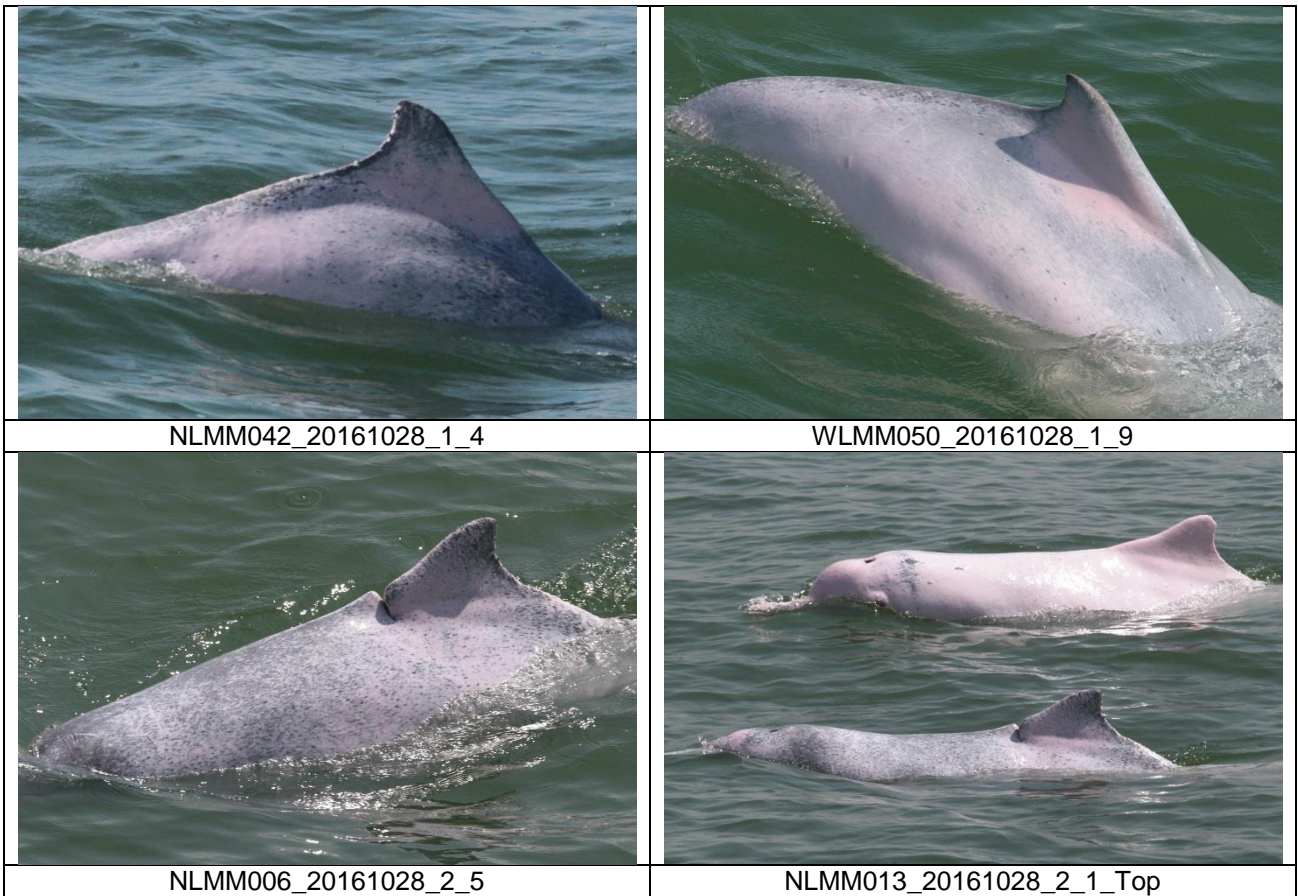
CWD Small Vessel Line-transect Survey

Photo Identification

	
WLMM027_20161005_1_2	WLMM054_20161005_1_1
	
NLMM023_20161005_4_3	WLMM049_20161024_1_1
	
WLMM060_20161024_1_3	WLMM027_20161024_7_3







CWD Land-based Theodolite Tracking**CWD Groups by Survey Date**

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
4-Oct-16	Lung Kwu Chau	8:42	14:42	6:00	2-3	2	6	1-4
6-Oct-16	Lung Kwu Chau	8:37	14:37	6:00	2-3	2	3	2-4
17-Oct-16	Sha Chau	8:36	14:36	6:00	3	3	0	N/A
27-Oct-16	Lung Kwu Chau	8:51	14:51	6:00	2	2	4	1-3
28-Oct-16	Sha Chau	8:38	14:38	6:00	2	2-3	0	N/A

Visibility: 1=Excellent, 2=Good, 3=Fair, 4=Poor

Appendix F. Status of Environmental Permits and Licences

Statutory Reference	Description		Permit/ Reference No.	Status	
EIAO	Environmental Permit		EP-489/2014	Approved on 7 Nov 2014	
Contract No.	Description	Location	Permit/ Reference No.	Status	
P560 (R)	Notification of Construction Work under APCO	Launching Site	397150	Receipt acknowledged by EPD on 15 Jan 2016	
		Site Office	397151		
		Stockpiling Area	398015		Receipt acknowledged by EPD on 18 Jan 2016
		Sheung Sha Chau	405860		Receipt acknowledged by EPD on 5 Aug 2016
	Construction Noise Permit (General Works)	Launching Site	GW-RS0968-16	Valid from 21 Sep 2016 to 20 Mar 2017	
		Site Office	GW-RS0421-16	Valid from 3 May to 2 Nov 2016	
		Stockpiling Area	GW-RS0974-16	Valid from 23 Sep 2016 to 22 Mar 2017	
	Discharge License under WPCO	Launching Site	WT00024249-2016	Approved on 25 Apr 2016	
		Stockpiling Area	WT00024250-2016	Approved on 25 Apr 2016	
	Registration as Chemical Waste Producer	Launching Site	WPN 5213-951-L2902-01	Update the Registration on 3 Oct 2016	
		Stockpiling Area	WPN 5213-951-L2902-02	Update the Registration on 3 Oct 2016	
		Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
	3201	Notification of Construction Work under APCO	Works area of 3201	406004	Receipt acknowledged by EPD on 10 Aug 2016
Construction Noise Permit (General Works)		Works area of 3201	GW-RS1025-16	Valid from 3 Oct to 31 Dec 2016	
Bill Account for disposal			A/C 7025760	Approval granted from EPD on 31 Aug 2016	

Statutory Reference	Description		Permit/ Reference No.	Status
3202	Notification of Construction Work under APCO	Works area of 3202	407624	Receipt acknowledged by EPD on 15 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS1017-16	Valid from 7 Oct 2016 to 6 Apr 2017
	Bill Account for disposal		A/C 7025739	Approval granted from EPD on 31 August 2016
3203	Notification of Construction Work under APCO	Works area of 3203	407053	Receipt acknowledged by EPD on 2 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS1019-16	Valid from 7 Oct 2016 to 6 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Completion of Registration on 15 Sep 2016
	Bill Account for disposal		7025846	Approval granted from EPD on 9 Sep 2016
3204	Notification of Construction Work under APCO	Works area of 3204	406446	Receipt acknowledged by EPD on 19 Aug 2016
		Site Office of 3204	407726	Receipt acknowledged by EPD on 19 Sep 2016
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS1086-16	Valid from 26 Oct 2016 to 24 Apr 2017
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951-C4102-01	Completion of Registration on 15 Sep 2016
	Bill Account for disposal		A/C 7025969	Approval granted from EPD on 21 Sep 2016
3213	Bill Account for disposal		A/C 7025860	Approval granted from EPD on 12 Sep 2016

Appendix G. Cumulative Statistics on Exceedances, Environmental Complaints, Notification of Summons and Status of Prosecution

Statistics for Exceedances for 1-hour TSP, Noise and Waste Monitoring

		Total no. recorded in the reporting month	Total no. recorded since the project commenced
1-hr TSP	Action	0	0
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Waste	Action	0	0
	Limit	0	0
Water	Action	0	0
	Limit	0	0
CWD	Action	0	0
	Limit	0	0

Remark: Exceedances, which are not project related, are not shown in this table.

Statistics for Complaints, Notifications of Summons and Prosecution

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting month	0	0	0
From 28 December 2015 to end of the reporting month	0	0	0

Appendix H. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 October 2016)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 October 2016)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
01-Oct	08:23	3A061	YFT	Arrival	12.0	-	-
01-Oct	08:27	8S210	MFM	Arrival	11.7	-	-
01-Oct	09:55	3A071	MFM	Arrival	12.6	-	-
01-Oct	10:34	3A081	ZUI	Arrival	12.1	-	-
01-Oct	10:43	8S212	MFM	Arrival	11.7	≤5	<1
01-Oct	11:03	8S121	MFM	Departure	10.4	-	-
01-Oct	11:20	3A063	YFT	Arrival	12.1	-	-
01-Oct	12:19	3A181	ZUI	Departure	13.3	-	-
01-Oct	12:20	3A168	YFT	Departure	12.0	-	-
01-Oct	12:47	8S215	MFM	Arrival	12.5	-	-
01-Oct	12:53	3A064	YFT	Arrival	12.9	-	-
01-Oct	13:19	8S123	MFM	Departure	11.7	-	-
01-Oct	14:07	3A082	ZUI	Arrival	13.5	-	-
01-Oct	14:24	3A164	YFT	Departure	13.2	-	-
01-Oct	14:27	3A182	ZUI	Departure	11.5	-	-
01-Oct	15:07	3A065	YFT	Arrival	11.8	-	-
01-Oct	16:14	3A167	YFT	Departure	12.4	-	-
01-Oct	16:32	3A083	ZUI	Arrival	10.9	-	-
01-Oct	16:37	8S218	MFM	Arrival	11.6	-	-
01-Oct	16:55	3A067	YFT	Arrival	12.3	-	-
01-Oct	17:04	8S126	MFM	Departure	12.4	-	-
01-Oct	17:07	3A183	ZUI	Departure	13.7	-	-
01-Oct	18:59	3A166	YFT	Departure	13.0	-	-
01-Oct	19:48	3A084	ZUI	Arrival	12.6	-	-
01-Oct	20:11	3A185	ZUI	Departure	13.7	-	-
01-Oct	20:53	8S2113	MFM	Arrival	12.2	-	-
01-Oct	21:04	3A169	YFT	Departure	13.0	-	-
01-Oct	21:54	8S522	MFM	Departure	13.7	-	-
02-Oct	08:20	3A061	YFT	Arrival	11.5	-	-
02-Oct	08:25	8S210	MFM	Arrival	12.3	-	-
02-Oct	10:00	3A071	MFM	Arrival	12.6	-	-
02-Oct	10:35	8S212	MFM	Arrival	11.7	-	-
02-Oct	10:46	3A081	ZUI	Arrival	13.3	-	-
02-Oct	11:00	8S121	MFM	Departure	12.1	-	-
02-Oct	11:26	3A063	YFT	Arrival	10.6	-	-
02-Oct	12:12	3A168	YFT	Departure	9.0	-	-
02-Oct	12:15	3A181	ZUI	Departure	13.6	-	-
02-Oct	12:41	8S215	MFM	Arrival	10.9	-	-
02-Oct	13:06	3A064	YFT	Arrival	11.7	-	-
02-Oct	13:14	8S123	MFM	Departure	9.9	-	-
02-Oct	13:49	3A082	ZUI	Arrival	13.3	-	-
02-Oct	14:14	3A182	ZUI	Departure	12.3	-	-
02-Oct	14:16	3A164	YFT	Departure	11.5	-	-
02-Oct	15:10	3A065	YFT	Arrival	11.0	-	-
02-Oct	16:11	3A167	YFT	Departure	7.5	-	-
02-Oct	16:50	3A083	ZUI	Arrival	11.3	-	-
02-Oct	16:52	8S218	MFM	Arrival	11.2	-	-
02-Oct	16:57	3A067	YFT	Arrival	11.7	-	-
02-Oct	17:05	3A183	ZUI	Departure	13.4	-	-
02-Oct	17:11	8S126	MFM	Departure	11.1	-	-
02-Oct	19:00	3A166	YFT	Departure	12.4	-	-
02-Oct	19:53	3A084	ZUI	Arrival	12.0	-	-
02-Oct	20:07	3A185	ZUI	Departure	13.4	-	-
02-Oct	20:57	8S2113	MFM	Arrival	11.6	-	-
02-Oct	20:58	3A169	YFT	Departure	11.9	-	-
02-Oct	21:54	8S522	MFM	Departure	12.3	-	-
03-Oct	08:21	3A061	YFT	Arrival	12.1	-	-
03-Oct	08:27	8S210	MFM	Arrival	10.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
03-Oct	09:55	3A071	MFM	Arrival	12.5	-	-
03-Oct	10:34	8S212	MFM	Arrival	12.0	-	-
03-Oct	10:41	3A081	ZUI	Arrival	12.5	-	-
03-Oct	11:03	8S121	MFM	Departure	12.5	-	-
03-Oct	11:17	3A063	YFT	Arrival	12.0	-	-
03-Oct	12:12	3A181	ZUI	Departure	13.7	-	-
03-Oct	12:16	3A168	YFT	Departure	12.8	-	-
03-Oct	12:41	8S215	MFM	Arrival	12.4	-	-
03-Oct	12:59	3A064	YFT	Arrival	11.9	-	-
03-Oct	13:18	8S123	MFM	Departure	12.7	-	-
03-Oct	13:51	3A082	ZUI	Arrival	11.6	-	-
03-Oct	14:16	3A182	ZUI	Departure	10.2	-	-
03-Oct	14:19	3A164	YFT	Departure	11.7	-	-
03-Oct	14:54	3A065	YFT	Arrival	13.0	-	-
03-Oct	16:12	3A167	YFT	Departure	12.8	-	-
03-Oct	16:40	3A083	ZUI	Arrival	11.7	-	-
03-Oct	16:44	8S218	MFM	Arrival	11.6	-	-
03-Oct	16:58	3A183	ZUI	Departure	11.5	-	-
03-Oct	17:00	3A067	YFT	Arrival	11.7	-	-
03-Oct	17:04	8S126	MFM	Departure	12.1	-	-
03-Oct	18:57	3A166	YFT	Departure	12.5	-	-
03-Oct	19:52	3A084	ZUI	Arrival	12.1	-	-
03-Oct	20:05	3A185	ZUI	Departure	12.5	-	-
03-Oct	20:48	8S2113	MFM	Arrival	11.0	-	-
03-Oct	20:59	3A169	YFT	Departure	11.9	-	-
03-Oct	21:59	8S522	MFM	Departure	12.0	-	-
04-Oct	08:19	3A061	YFT	Arrival	11.5	-	-
04-Oct	08:25	8S210	MFM	Arrival	11.7	-	-
04-Oct	09:50	3A071	MFM	Arrival	11.5	-	-
04-Oct	10:30	3A081	ZUI	Arrival	12.7	-	-
04-Oct	10:33	8S212	MFM	Arrival	11.9	-	-
04-Oct	11:01	8S121	MFM	Departure	12.6	-	-
04-Oct	11:20	3A063	YFT	Arrival	11.6	-	-
04-Oct	12:14	3A168	YFT	Departure	12.4	-	-
04-Oct	12:15	3A181	ZUI	Departure	12.6	-	-
04-Oct	12:40	8S215	MFM	Arrival	12.1	-	-
04-Oct	12:59	3A064	YFT	Arrival	11.6	-	-
04-Oct	13:16	8S123	MFM	Departure	12.8	-	-
04-Oct	13:42	3A082	ZUI	Arrival	12.7	-	-
04-Oct	14:21	3A182	ZUI	Departure	11.2	-	-
04-Oct	14:23	3A164	YFT	Departure	11.9	-	-
04-Oct	14:58	3A065	YFT	Arrival	12.0	-	-
04-Oct	16:21	3A167	YFT	Departure	12.2	-	-
04-Oct	16:40	3A083	ZUI	Arrival	12.7	-	-
04-Oct	16:44	8S218	MFM	Arrival	11.1	-	-
04-Oct	17:03	3A067	YFT	Arrival	11.4	-	-
04-Oct	17:17	3A183	ZUI	Departure	11.4	-	-
04-Oct	17:24	8S126	MFM	Departure	13.1	-	-
04-Oct	18:59	3A166	YFT	Departure	12.7	-	-
04-Oct	19:51	3A084	ZUI	Arrival	12.2	-	-
04-Oct	20:21	3A185	ZUI	Departure	13.7	-	-
04-Oct	20:51	8S2113	MFM	Arrival	12.8	-	-
04-Oct	21:01	3A169	YFT	Departure	12.7	-	-
04-Oct	21:58	8S522	MFM	Departure	12.6	-	-
05-Oct	08:27	3A061	YFT	Arrival	11.5	-	-
05-Oct	08:28	8S210	MFM	Arrival	11.8	-	-
05-Oct	09:57	3A071	MFM	Arrival	11.5	-	-
05-Oct	10:31	8S212	MFM	Arrival	12.9	-	-
05-Oct	10:35	3A081	ZUI	Arrival	13.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
05-Oct	11:01	8S121	MFM	Departure	12.9	-	-
05-Oct	11:23	3A063	YFT	Arrival	12.1	-	-
05-Oct	12:19	3A181	ZUI	Departure	11.4	-	-
05-Oct	12:19	3A168	YFT	Departure	12.7	-	-
05-Oct	12:44	8S215	MFM	Arrival	11.0	-	-
05-Oct	13:03	3A064	YFT	Arrival	12.0	-	-
05-Oct	13:16	8S123	MFM	Departure	10.6	-	-
05-Oct	13:46	3A082	ZUI	Arrival	11.9	-	-
05-Oct	14:14	3A164	YFT	Departure	12.2	-	-
05-Oct	14:17	3A182	ZUI	Departure	10.6	-	-
05-Oct	14:57	3A065	YFT	Arrival	12.3	-	-
05-Oct	16:15	3A167	YFT	Departure	12.8	-	-
05-Oct	16:32	3A083	ZUI	Arrival	12.5	-	-
05-Oct	16:46	8S218	MFM	Arrival	11.7	-	-
05-Oct	16:55	3A067	YFT	Arrival	12.6	-	-
05-Oct	17:11	3A183	ZUI	Departure	12.9	-	-
05-Oct	17:11	8S126	MFM	Departure	12.4	-	-
05-Oct	19:10	3A166	YFT	Departure	12.9	-	-
05-Oct	19:54	3A084	ZUI	Arrival	12.6	-	-
05-Oct	20:14	3A185	ZUI	Departure	13.1	-	-
05-Oct	20:52	8S2113	MFM	Arrival	12.1	-	-
05-Oct	21:01	3A169	YFT	Departure	11.8	-	-
05-Oct	22:01	8S522	MFM	Departure	12.2	-	-
06-Oct	08:17	3A061	YFT	Arrival	11.0	-	-
06-Oct	08:28	8S210	MFM	Arrival	11.7	-	-
06-Oct	10:08	3A071	MFM	Arrival	11.5	-	-
06-Oct	10:30	3A081	ZUI	Arrival	12.7	-	-
06-Oct	10:31	8S212	MFM	Arrival	12.2	-	-
06-Oct	11:02	8S121	MFM	Departure	11.6	-	-
06-Oct	11:21	3A063	YFT	Arrival	11.3	-	-
06-Oct	12:16	3A168	YFT	Departure	11.9	-	-
06-Oct	12:19	3A181	ZUI	Departure	12.6	-	-
06-Oct	12:45	8S215	MFM	Arrival	11.6	-	-
06-Oct	13:13	8S123	MFM	Departure	12.7	-	-
06-Oct	13:14	3A064	YFT	Arrival	8.5	-	-
06-Oct	13:47	3A082	ZUI	Arrival	13.2	-	-
06-Oct	14:17	3A164	YFT	Departure	10.1	-	-
06-Oct	14:18	3A182	ZUI	Departure	12.3	-	-
06-Oct	15:00	3A065	YFT	Arrival	12.4	-	-
06-Oct	16:20	3A167	YFT	Departure	12.4	≤5	<1
06-Oct	16:37	8S218	MFM	Arrival	12.6	-	-
06-Oct	16:41	3A083	ZUI	Arrival	13.1	-	-
06-Oct	17:06	3A067	YFT	Arrival	10.6	-	-
06-Oct	17:13	8S126	MFM	Departure	13.1	-	-
06-Oct	17:16	3A183	ZUI	Departure	12.4	-	-
06-Oct	19:07	3A166	YFT	Departure	12.2	-	-
06-Oct	20:01	3A084	ZUI	Arrival	11.6	-	-
06-Oct	20:31	3A185	ZUI	Departure	13.5	-	-
06-Oct	21:01	8S2113	MFM	Arrival	13.1	-	-
06-Oct	21:10	3A169	YFT	Departure	12.9	-	-
06-Oct	22:06	8S522	MFM	Departure	12.5	-	-
07-Oct	08:15	3A061	YFT	Arrival	11.8	-	-
07-Oct	08:23	8S210	MFM	Arrival	12.8	-	-
07-Oct	10:11	3A071	MFM	Arrival	12.6	-	-
07-Oct	10:39	8S212	MFM	Arrival	13.4	-	-
07-Oct	10:49	3A081	ZUI	Arrival	13.1	-	-
07-Oct	11:12	8S121	MFM	Departure	13.5	-	-
07-Oct	11:23	3A063	YFT	Arrival	12.3	-	-
07-Oct	12:14	3A181	ZUI	Departure	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
07-Oct	12:18	3A168	YFT	Departure	12.9	-	-
07-Oct	12:47	8S215	MFM	Arrival	12.2	-	-
07-Oct	12:56	3A064	YFT	Arrival	12.9	-	-
07-Oct	13:17	8S123	MFM	Departure	13.2	-	-
07-Oct	13:56	3A082	ZUI	Arrival	12.5	-	-
07-Oct	14:33	3A164	YFT	Departure	13.0	-	-
07-Oct	14:36	3A182	ZUI	Departure	13.1	-	-
07-Oct	15:01	3A065	YFT	Arrival	13.0	-	-
07-Oct	16:19	3A167	YFT	Departure	13.3	-	-
07-Oct	16:36	3A083	ZUI	Arrival	13.3	-	-
07-Oct	16:52	8S218	MFM	Arrival	12.2	-	-
07-Oct	16:58	3A067	YFT	Arrival	13.0	-	-
07-Oct	17:16	8S126	MFM	Departure	12.6	-	-
07-Oct	17:19	3A183	ZUI	Departure	12.9	-	-
07-Oct	19:07	3A166	YFT	Departure	11.7	-	-
07-Oct	19:58	3A084	ZUI	Arrival	12.7	-	-
07-Oct	20:18	3A185	ZUI	Departure	12.9	-	-
07-Oct	20:58	8S2113	MFM	Arrival	11.1	-	-
07-Oct	21:13	3A169	YFT	Departure	12.5	-	-
07-Oct	22:00	8S522	MFM	Departure	12.0	-	-
08-Oct	08:18	3A061	YFT	Arrival	10.9	-	-
08-Oct	08:26	8S210	MFM	Arrival	12.4	-	-
08-Oct	10:07	3A071	MFM	Arrival	12.0	-	-
08-Oct	10:42	3A081	ZUI	Arrival	12.9	-	-
08-Oct	10:52	8S212	MFM	Arrival	11.8	-	-
08-Oct	11:13	8S121	MFM	Departure	11.8	-	-
08-Oct	11:21	3A063	YFT	Arrival	11.6	-	-
08-Oct	12:23	3A168	YFT	Departure	11.9	-	-
08-Oct	12:28	3A181	ZUI	Departure	12.8	-	-
08-Oct	12:42	8S215	MFM	Arrival	10.6	-	-
08-Oct	13:16	3A064	YFT	Arrival	12.1	-	-
08-Oct	13:17	8S123	MFM	Departure	10.4	-	-
08-Oct	13:50	3A082	ZUI	Arrival	11.0	-	-
08-Oct	14:24	3A164	YFT	Departure	12.3	-	-
08-Oct	14:27	3A182	ZUI	Departure	12.3	-	-
08-Oct	14:59	3A065	YFT	Arrival	11.7	-	-
08-Oct	16:26	3A167	YFT	Departure	11.8	-	-
08-Oct	16:40	3A083	ZUI	Arrival	12.2	-	-
08-Oct	16:54	8S218	MFM	Arrival	10.6	-	-
08-Oct	17:03	3A067	YFT	Arrival	11.8	-	-
08-Oct	17:20	3A183	ZUI	Departure	13.7	-	-
08-Oct	17:24	8S126	MFM	Departure	10.6	-	-
08-Oct	19:11	3A166	YFT	Departure	11.0	≤5	<1
08-Oct	19:54	3A084	ZUI	Arrival	13.0	-	-
08-Oct	20:09	3A185	ZUI	Departure	13.4	-	-
08-Oct	20:52	8S2113	MFM	Arrival	13.1	-	-
08-Oct	21:05	3A169	YFT	Departure	10.9	-	-
08-Oct	22:01	8S522	MFM	Departure	13.5	-	-
09-Oct	08:24	8S210	MFM	Arrival	10.8	-	-
09-Oct	08:27	3A061	YFT	Arrival	10.5	-	-
09-Oct	10:08	3A071	MFM	Arrival	12.7	-	-
09-Oct	10:43	3A081	ZUI	Arrival	12.7	-	-
09-Oct	10:56	8S212	MFM	Arrival	10.0	-	-
09-Oct	11:16	8S121	MFM	Departure	12.2	-	-
09-Oct	11:27	3A063	YFT	Arrival	11.5	-	-
09-Oct	12:26	3A168	YFT	Departure	12.1	-	-
09-Oct	12:31	3A181	ZUI	Departure	13.0	-	-
09-Oct	12:49	8S215	MFM	Arrival	12.4	-	-
09-Oct	12:55	3A064	YFT	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
09-Oct	13:22	8S123	MFM	Departure	10.9	-	-
09-Oct	13:53	3A082	ZUI	Arrival	12.6	-	-
09-Oct	14:27	3A164	YFT	Departure	13.3	-	-
09-Oct	14:29	3A182	ZUI	Departure	12.8	-	-
09-Oct	14:57	3A065	YFT	Arrival	10.7	-	-
09-Oct	16:34	3A083	ZUI	Arrival	13.0	-	-
09-Oct	16:34	3A167	YFT	Departure	12.4	-	-
09-Oct	16:47	8S218	MFM	Arrival	11.8	-	-
09-Oct	16:59	3A067	YFT	Arrival	12.6	-	-
09-Oct	17:30	3A183	ZUI	Departure	12.6	-	-
09-Oct	17:34	8S126	MFM	Departure	12.1	-	-
09-Oct	19:13	3A166	YFT	Departure	9.4	-	-
09-Oct	19:58	3A084	ZUI	Arrival	13.6	-	-
09-Oct	20:29	3A185	ZUI	Departure	12.7	-	-
09-Oct	21:09	8S2113	MFM	Arrival	12.2	-	-
09-Oct	21:27	3A169	YFT	Departure	13.5	-	-
09-Oct	22:08	8S522	MFM	Departure	13.1	-	-
10-Oct	08:18	3A061	YFT	Arrival	12.0	-	-
10-Oct	08:31	8S210	MFM	Arrival	11.0	-	-
10-Oct	10:10	3A071	MFM	Arrival	12.7	≤5	<2
10-Oct	10:45	3A081	ZUI	Arrival	12.9	-	-
10-Oct	10:48	8S212	MFM	Arrival	11.8	-	-
10-Oct	11:11	8S121	MFM	Departure	13.0	-	-
10-Oct	11:27	3A063	YFT	Arrival	12.9	-	-
10-Oct	12:35	3A181	ZUI	Departure	13.7	-	-
10-Oct	12:38	3A168	YFT	Departure	13.4	-	-
10-Oct	12:59	8S215	MFM	Arrival	12.5	-	-
10-Oct	13:16	3A064	YFT	Arrival	11.9	-	-
10-Oct	13:25	8S123	MFM	Departure	11.7	-	-
10-Oct	13:52	3A082	ZUI	Arrival	12.2	-	-
10-Oct	14:27	3A182	ZUI	Departure	13.3	-	-
10-Oct	14:29	3A164	YFT	Departure	12.1	-	-
10-Oct	14:57	3A065	YFT	Arrival	12.9	-	-
10-Oct	16:28	3A167	YFT	Departure	13.9	-	-
10-Oct	16:35	3A083	ZUI	Arrival	12.6	-	-
10-Oct	16:46	8S218	MFM	Arrival	11.8	-	-
10-Oct	17:01	3A067	YFT	Arrival	11.6	-	-
10-Oct	17:08	3A183	ZUI	Departure	14.0	-	-
10-Oct	17:12	8S126	MFM	Departure	11.8	-	-
10-Oct	19:19	3A166	YFT	Departure	13.0	-	-
10-Oct	19:56	3A084	ZUI	Arrival	13.4	-	-
10-Oct	20:18	3A185	ZUI	Departure	14.0	-	-
10-Oct	20:49	8S2113	MFM	Arrival	12.5	-	-
10-Oct	21:04	3A169	YFT	Departure	11.8	-	-
10-Oct	22:01	8S522	MFM	Departure	12.1	-	-
11-Oct	08:22	3A061	YFT	Arrival	12.9	-	-
11-Oct	08:24	8S210	MFM	Arrival	12.4	-	-
11-Oct	10:05	3A071	MFM	Arrival	12.3	-	-
11-Oct	10:31	8S212	MFM	Arrival	11.9	-	-
11-Oct	10:46	3A081	ZUI	Arrival	12.7	-	-
11-Oct	11:21	8S121	MFM	Departure	11.5	-	-
11-Oct	11:27	3A063	YFT	Arrival	12.1	-	-
11-Oct	12:29	3A181	ZUI	Departure	13.8	-	-
11-Oct	12:38	3A168	YFT	Departure	13.3	≤5	<1
11-Oct	12:53	8S215	MFM	Arrival	10.4	-	-
11-Oct	13:04	3A064	YFT	Arrival	12.7	-	-
11-Oct	13:25	8S123	MFM	Departure	10.7	-	-
11-Oct	13:39	3A082	ZUI	Arrival	12.5	-	-
11-Oct	14:25	3A164	YFT	Departure	13.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
11-Oct	14:27	3A182	ZUI	Departure	13.6	-	-
11-Oct	15:01	3A065	YFT	Arrival	12.8	-	-
11-Oct	16:28	3A167	YFT	Departure	13.5	≤5	<1
11-Oct	16:35	3A083	ZUI	Arrival	13.4	-	-
11-Oct	16:47	8S218	MFM	Arrival	10.2	-	-
11-Oct	17:06	3A067	YFT	Arrival	12.9	-	-
11-Oct	17:10	8S126	MFM	Departure	11.6	-	-
11-Oct	17:12	3A183	ZUI	Departure	14.1	-	-
11-Oct	19:04	3A166	YFT	Departure	11.8	-	-
11-Oct	19:48	3A084	ZUI	Arrival	13.3	-	-
11-Oct	20:10	3A185	ZUI	Departure	13.8	-	-
11-Oct	20:49	8S2113	MFM	Arrival	12.8	-	-
11-Oct	21:03	3A169	YFT	Departure	11.8	-	-
11-Oct	21:55	8S522	MFM	Departure	12.9	-	-
12-Oct	08:16	3A061	YFT	Arrival	12.2	-	-
12-Oct	08:28	8S210	MFM	Arrival	10.2	-	-
12-Oct	10:03	3A071	MFM	Arrival	12.2	-	-
12-Oct	10:34	8S212	MFM	Arrival	12.1	-	-
12-Oct	10:46	3A081	ZUI	Arrival	13.1	-	-
12-Oct	11:20	8S121	MFM	Departure	12.9	-	-
12-Oct	11:25	3A063	YFT	Arrival	12.3	-	-
12-Oct	12:33	3A181	ZUI	Departure	13.6	-	-
12-Oct	12:34	3A168	YFT	Departure	12.4	-	-
12-Oct	12:54	8S215	MFM	Arrival	12.3	-	-
12-Oct	13:20	8S123	MFM	Departure	12.6	-	-
12-Oct	13:27	3A064	YFT	Arrival	11.2	-	-
12-Oct	14:02	3A082	ZUI	Arrival	9.9	-	-
12-Oct	14:22	3A182	ZUI	Departure	11.5	-	-
12-Oct	14:28	3A164	YFT	Departure	11.1	-	-
12-Oct	14:57	3A065	YFT	Arrival	11.9	-	-
12-Oct	15:30	8S125	MFM	Departure	12.6	-	-
12-Oct	16:24	3A167	YFT	Departure	12.8	-	-
12-Oct	16:42	3A083	ZUI	Arrival	12.8	-	-
12-Oct	16:52	8S218	MFM	Arrival	12.3	-	-
12-Oct	17:00	3A067	YFT	Arrival	10.8	-	-
12-Oct	17:08	3A183	ZUI	Departure	13.9	-	-
12-Oct	17:16	8S126	MFM	Departure	11.8	-	-
12-Oct	19:02	3A166	YFT	Departure	12.8	-	-
12-Oct	19:45	3A084	ZUI	Arrival	13.2	-	-
12-Oct	20:07	3A185	ZUI	Departure	13.8	-	-
12-Oct	21:03	3A169	YFT	Departure	12.1	-	-
12-Oct	21:07	8S2113	MFM	Arrival	12.2	-	-
12-Oct	22:03	8S522	MFM	Departure	12.0	-	-
13-Oct	08:19	3A061	YFT	Arrival	12.2	-	-
13-Oct	08:23	8S210	MFM	Arrival	12.7	-	-
13-Oct	10:14	3A071	MFM	Arrival	12.3	-	-
13-Oct	10:43	3A081	ZUI	Arrival	13.8	-	-
13-Oct	10:46	8S212	MFM	Arrival	12.4	-	-
13-Oct	11:21	8S121	MFM	Departure	10.9	-	-
13-Oct	11:28	3A063	YFT	Arrival	12.3	-	-
13-Oct	12:23	3A181	ZUI	Departure	12.9	-	-
13-Oct	12:24	3A168	YFT	Departure	12.4	-	-
13-Oct	13:01	3A064	YFT	Arrival	12.3	-	-
13-Oct	13:02	8S215	MFM	Arrival	12.5	-	-
13-Oct	13:25	8S123	MFM	Departure	12.6	-	-
13-Oct	13:48	3A082	ZUI	Arrival	11.7	-	-
13-Oct	14:17	3A182	ZUI	Departure	12.7	-	-
13-Oct	14:19	3A164	YFT	Departure	12.9	-	-
13-Oct	15:01	3A065	YFT	Arrival	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
13-Oct	16:11	3A167	YFT	Departure	12.5	-	-
13-Oct	16:36	3A083	ZUI	Arrival	13.2	-	-
13-Oct	16:36	8S218	MFM	Arrival	11.1	-	-
13-Oct	17:04	3A067	YFT	Arrival	11.5	-	-
13-Oct	17:09	3A183	ZUI	Departure	13.5	-	-
13-Oct	17:11	8S126	MFM	Departure	13.0	-	-
13-Oct	19:07	3A166	YFT	Departure	10.0	-	-
13-Oct	19:46	3A084	ZUI	Arrival	11.9	-	-
13-Oct	20:18	3A185	ZUI	Departure	13.7	-	-
13-Oct	20:53	8S2113	MFM	Arrival	11.9	-	-
13-Oct	21:11	3A169	YFT	Departure	11.7	-	-
13-Oct	22:00	8S522	MFM	Departure	12.4	-	-
14-Oct	08:22	3A061	YFT	Arrival	13.1	-	-
14-Oct	08:31	8S210	MFM	Arrival	12.3	-	-
14-Oct	09:56	3A071	MFM	Arrival	10.2	-	-
14-Oct	10:32	8S212	MFM	Arrival	13.3	-	-
14-Oct	10:48	3A081	ZUI	Arrival	13.4	-	-
14-Oct	11:18	8S121	MFM	Departure	12.8	-	-
14-Oct	11:29	3A063	YFT	Arrival	12.8	-	-
14-Oct	12:24	3A168	YFT	Departure	12.5	-	-
14-Oct	12:29	3A181	ZUI	Departure	12.5	-	-
14-Oct	12:48	8S215	MFM	Arrival	12.6	-	-
14-Oct	12:58	3A064	YFT	Arrival	13.4	-	-
14-Oct	13:18	8S123	MFM	Departure	11.7	-	-
14-Oct	13:44	3A082	ZUI	Arrival	12.0	-	-
14-Oct	14:18	3A182	ZUI	Departure	12.1	-	-
14-Oct	14:24	3A164	YFT	Departure	13.3	-	-
14-Oct	14:57	3A065	YFT	Arrival	12.7	-	-
14-Oct	16:21	3A167	YFT	Departure	12.7	-	-
14-Oct	16:26	3A083	ZUI	Arrival	11.8	-	-
14-Oct	16:43	8S218	MFM	Arrival	9.2	-	-
14-Oct	17:03	3A067	YFT	Arrival	13.1	-	-
14-Oct	17:08	3A183	ZUI	Departure	12.1	-	-
14-Oct	17:11	8S126	MFM	Departure	11.7	-	-
14-Oct	19:08	3A166	YFT	Departure	12.6	-	-
14-Oct	19:47	3A084	ZUI	Arrival	12.8	-	-
14-Oct	20:08	3A185	ZUI	Departure	13.6	-	-
14-Oct	20:54	8S2113	MFM	Arrival	12.7	-	-
14-Oct	21:00	3A169	YFT	Departure	12.7	-	-
14-Oct	21:55	8S522	MFM	Departure	14.6	>5 and ≤15	<2
15-Oct	08:23	3A061	YFT	Arrival	10.5	-	-
15-Oct	08:34	8S210	MFM	Arrival	10.8	-	-
15-Oct	10:12	3A071	MFM	Arrival	12.2	-	-
15-Oct	10:41	8S212	MFM	Arrival	12.7	-	-
15-Oct	10:51	3A081	ZUI	Arrival	12.5	-	-
15-Oct	11:10	8S121	MFM	Departure	13.4	-	-
15-Oct	11:20	3A063	YFT	Arrival	12.9	-	-
15-Oct	12:16	3A181	ZUI	Departure	13.6	-	-
15-Oct	12:24	3A168	YFT	Departure	12.5	-	-
15-Oct	12:51	8S215	MFM	Arrival	12.6	-	-
15-Oct	13:05	3A064	YFT	Arrival	11.1	-	-
15-Oct	13:23	8S123	MFM	Departure	9.5	-	-
15-Oct	13:37	3A082	ZUI	Arrival	12.5	-	-
15-Oct	14:11	3A182	ZUI	Departure	11.3	-	-
15-Oct	14:30	3A164	YFT	Departure	11.4	-	-
15-Oct	15:02	3A065	YFT	Arrival	12.1	-	-
15-Oct	16:22	3A167	YFT	Departure	12.6	-	-
15-Oct	16:24	3A083	ZUI	Arrival	11.8	-	-
15-Oct	16:52	8S218	MFM	Arrival	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
15-Oct	17:07	3A067	YFT	Arrival	11.3	≤5	<1
15-Oct	17:17	3A183	ZUI	Departure	12.4	-	-
15-Oct	17:17	8S126	MFM	Departure	12.6	-	-
15-Oct	19:01	3A166	YFT	Departure	12.0	-	-
15-Oct	19:43	3A084	ZUI	Arrival	13.4	-	-
15-Oct	20:09	3A185	ZUI	Departure	13.5	-	-
15-Oct	20:51	8S2113	MFM	Arrival	11.6	-	-
15-Oct	20:58	3A169	YFT	Departure	10.1	-	-
15-Oct	22:00	8S522	MFM	Departure	12.2	-	-
16-Oct	08:14	3A061	YFT	Arrival	12.2	-	-
16-Oct	08:25	8S210	MFM	Arrival	12.6	-	-
16-Oct	09:55	3A071	MFM	Arrival	13.3	-	-
16-Oct	10:41	8S212	MFM	Arrival	11.8	-	-
16-Oct	10:50	3A081	ZUI	Arrival	13.7	-	-
16-Oct	11:07	8S121	MFM	Departure	10.7	-	-
16-Oct	11:15	3A063	YFT	Arrival	13.1	-	-
16-Oct	12:21	3A168	YFT	Departure	13.3	-	-
16-Oct	12:22	3A181	ZUI	Departure	13.9	-	-
16-Oct	12:49	8S215	MFM	Arrival	12.5	-	-
16-Oct	12:54	3A064	YFT	Arrival	12.4	-	-
16-Oct	13:17	8S123	MFM	Departure	12.1	-	-
16-Oct	13:53	3A082	ZUI	Arrival	10.7	-	-
16-Oct	14:23	3A164	YFT	Departure	12.3	-	-
16-Oct	14:27	3A182	ZUI	Departure	10.5	-	-
16-Oct	14:53	3A065	YFT	Arrival	13.2	-	-
16-Oct	16:21	3A167	YFT	Departure	13.3	-	-
16-Oct	16:36	3A083	ZUI	Arrival	12.6	-	-
16-Oct	16:43	8S218	MFM	Arrival	12.5	-	-
16-Oct	17:03	3A067	YFT	Arrival	12.6	-	-
16-Oct	17:12	3A183	ZUI	Departure	13.9	-	-
16-Oct	17:18	8S126	MFM	Departure	13.1	-	-
16-Oct	19:10	3A166	YFT	Departure	13.6	-	-
16-Oct	19:47	3A084	ZUI	Arrival	12.6	-	-
16-Oct	20:16	3A185	ZUI	Departure	13.9	-	-
16-Oct	20:56	8S2113	MFM	Arrival	11.7	-	-
16-Oct	21:01	3A169	YFT	Departure	12.1	-	-
16-Oct	21:54	8S522	MFM	Departure	12.9	-	-
17-Oct	08:12	3A061	YFT	Arrival	13.1	-	-
17-Oct	08:25	8S210	MFM	Arrival	12.1	-	-
17-Oct	10:06	3A071	MFM	Arrival	10.6	-	-
17-Oct	10:42	8S212	MFM	Arrival	13.2	-	-
17-Oct	10:52	3A081	ZUI	Arrival	13.7	-	-
17-Oct	11:10	8S121	MFM	Departure	12.6	-	-
17-Oct	11:37	3A063	YFT	Arrival	11.5	-	-
17-Oct	12:16	3A181	ZUI	Departure	13.0	-	-
17-Oct	12:19	3A168	YFT	Departure	11.3	-	-
17-Oct	12:49	8S215	MFM	Arrival	11.9	-	-
17-Oct	12:56	3A064	YFT	Arrival	11.9	-	-
17-Oct	13:16	8S123	MFM	Departure	12.7	-	-
17-Oct	13:47	3A082	ZUI	Arrival	12.1	-	-
17-Oct	14:25	3A164	YFT	Departure	11.4	-	-
17-Oct	14:35	3A182	ZUI	Departure	12.6	-	-
17-Oct	15:06	3A065	YFT	Arrival	11.8	-	-
17-Oct	16:26	3A167	YFT	Departure	11.3	-	-
17-Oct	16:47	8S218	MFM	Arrival	11.7	-	-
17-Oct	16:59	3A083	ZUI	Arrival	13.0	≤5	<1
17-Oct	17:07	3A067	YFT	Arrival	12.4	-	-
17-Oct	17:19	3A183	ZUI	Departure	14.0	-	-
17-Oct	17:19	8S126	MFM	Departure	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Oct	19:04	3A166	YFT	Departure	11.1	-	-
17-Oct	19:44	3A084	ZUI	Arrival	13.2	-	-
17-Oct	20:07	3A185	ZUI	Departure	13.4	-	-
17-Oct	20:58	8S2113	MFM	Arrival	12.7	-	-
17-Oct	21:02	3A169	YFT	Departure	12.9	-	-
17-Oct	22:02	8S522	MFM	Departure	12.6	-	-
18-Oct	08:23	3A061	YFT	Arrival	11.2	-	-
18-Oct	08:38	8S210	MFM	Arrival	10.7	-	-
18-Oct	10:00	3A071	MFM	Arrival	12.7	-	-
18-Oct	10:30	3A081	ZUI	Arrival	12.5	-	-
18-Oct	10:46	8S212	MFM	Arrival	12.5	-	-
18-Oct	11:07	8S121	MFM	Departure	13.0	-	-
18-Oct	11:13	3A063	YFT	Arrival	12.4	-	-
18-Oct	12:33	3A181	ZUI	Departure	11.6	-	-
18-Oct	12:35	3A168	YFT	Departure	13.0	-	-
18-Oct	12:57	8S215	MFM	Arrival	12.3	-	-
18-Oct	13:02	3A064	YFT	Arrival	10.8	-	-
18-Oct	13:19	8S123	MFM	Departure	12.8	-	-
18-Oct	13:48	3A082	ZUI	Arrival	12.7	-	-
18-Oct	14:13	3A164	YFT	Departure	10.1	-	-
18-Oct	14:33	3A182	ZUI	Departure	14.6	≤5	<1
18-Oct	14:57	3A065	YFT	Arrival	12.6	-	-
18-Oct	16:20	3A167	YFT	Departure	11.2	-	-
18-Oct	16:47	8S218	MFM	Arrival	12.1	-	-
18-Oct	16:55	3A083	ZUI	Arrival	12.7	-	-
18-Oct	17:03	3A067	YFT	Arrival	11.2	-	-
18-Oct	17:16	3A183	ZUI	Departure	13.9	-	-
18-Oct	17:20	8S126	MFM	Departure	13.0	-	-
18-Oct	19:02	3A166	YFT	Departure	11.7	-	-
18-Oct	19:49	3A084	ZUI	Arrival	13.6	-	-
18-Oct	20:10	3A185	ZUI	Departure	12.6	-	-
18-Oct	21:00	8S2113	MFM	Arrival	13.0	-	-
18-Oct	21:04	3A169	YFT	Departure	13.7	≤5	<1
18-Oct	21:55	8S522	MFM	Departure	12.6	>5 and ≤15	<1
19-Oct	08:13	3A061	YFT	Arrival	12.3	-	-
19-Oct	08:30	8S210	MFM	Arrival	12.5	-	-
19-Oct	10:07	3A071	MFM	Arrival	11.2	-	-
19-Oct	10:40	8S212	MFM	Arrival	11.7	-	-
19-Oct	10:46	3A081	ZUI	Arrival	13.8	-	-
19-Oct	11:06	8S121	MFM	Departure	11.2	-	-
19-Oct	11:20	3A063	YFT	Arrival	12.9	-	-
19-Oct	12:19	3A168	YFT	Departure	13.0	-	-
19-Oct	12:21	3A181	ZUI	Departure	13.1	-	-
19-Oct	12:56	8S215	MFM	Arrival	10.0	-	-
19-Oct	12:57	3A064	YFT	Arrival	12.1	-	-
19-Oct	13:22	8S123	MFM	Departure	10.7	-	-
19-Oct	13:47	3A082	ZUI	Arrival	13.6	-	-
19-Oct	14:17	3A182	ZUI	Departure	13.2	-	-
19-Oct	14:18	3A164	YFT	Departure	11.8	-	-
19-Oct	14:56	3A065	YFT	Arrival	13.1	-	-
19-Oct	16:12	3A167	YFT	Departure	12.5	-	-
19-Oct	16:35	3A083	ZUI	Arrival	13.1	-	-
19-Oct	16:40	8S218	MFM	Arrival	11.1	-	-
19-Oct	16:54	3A067	YFT	Arrival	12.7	-	-
19-Oct	17:16	8S126	MFM	Departure	12.0	-	-
19-Oct	17:20	3A183	ZUI	Departure	12.6	-	-
19-Oct	19:16	3A166	YFT	Departure	12.3	-	-
19-Oct	19:52	3A084	ZUI	Arrival	13.9	-	-
19-Oct	20:10	3A185	ZUI	Departure	13.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
19-Oct	20:51	8S2113	MFM	Arrival	12.9	-	-
19-Oct	21:13	3A169	YFT	Departure	12.1	-	-
19-Oct	21:59	8S522	MFM	Departure	12.7	-	-
20-Oct	08:18	3A061	YFT	Arrival	12.1	-	-
20-Oct	08:41	8S210	MFM	Arrival	11.1	-	-
20-Oct	09:59	3A071	MFM	Arrival	12.5	-	-
20-Oct	10:42	3A081	ZUI	Arrival	14.1	-	-
20-Oct	10:42	8S212	MFM	Arrival	12.6	-	-
20-Oct	11:07	8S121	MFM	Departure	11.4	-	-
20-Oct	11:20	3A063	YFT	Arrival	12.0	-	-
20-Oct	12:26	3A168	YFT	Departure	11.9	-	-
20-Oct	12:29	3A181	ZUI	Departure	12.1	-	-
20-Oct	12:48	8S215	MFM	Arrival	12.9	-	-
20-Oct	13:04	3A064	YFT	Arrival	12.2	-	-
20-Oct	13:17	8S123	MFM	Departure	13.0	-	-
20-Oct	13:46	3A082	ZUI	Arrival	12.3	-	-
20-Oct	14:18	3A164	YFT	Departure	10.7	-	-
20-Oct	14:22	3A182	ZUI	Departure	13.4	-	-
20-Oct	15:10	3A065	YFT	Arrival	11.8	-	-
20-Oct	16:23	3A167	YFT	Departure	11.7	-	-
20-Oct	16:28	8S218	MFM	Arrival	12.1	-	-
20-Oct	16:44	3A083	ZUI	Arrival	13.2	-	-
20-Oct	17:04	3A067	YFT	Arrival	12.5	-	-
20-Oct	17:12	8S126	MFM	Departure	12.7	-	-
20-Oct	17:16	3A183	ZUI	Departure	14.1	-	-
20-Oct	19:02	3A166	YFT	Departure	11.8	-	-
20-Oct	20:54	8S2113	MFM	Arrival	13.1	-	-
20-Oct	21:00	3A169	YFT	Departure	12.8	-	-
21-Oct	21:58	8S522	MFM	Departure	12.7	-	-
22-Oct	08:17	3A061	YFT	Arrival	12.2	-	-
22-Oct	08:34	8S210	MFM	Arrival	12.3	-	-
22-Oct	09:56	3A071	MFM	Arrival	12.7	-	-
22-Oct	10:29	3A081	ZUI	Arrival	12.3	-	-
22-Oct	10:42	8S212	MFM	Arrival	12.2	-	-
22-Oct	11:09	8S121	MFM	Departure	12.7	-	-
22-Oct	11:23	3A063	YFT	Arrival	10.2	-	-
22-Oct	12:19	3A181	ZUI	Departure	12.6	-	-
22-Oct	12:24	3A168	YFT	Departure	11.7	-	-
22-Oct	13:01	8S215	MFM	Arrival	10.5	-	-
22-Oct	13:04	3A064	YFT	Arrival	11.1	-	-
22-Oct	13:29	8S123	MFM	Departure	11.1	-	-
22-Oct	13:53	3A082	ZUI	Arrival	9.2	-	-
22-Oct	14:32	3A182	ZUI	Departure	10.6	-	-
22-Oct	14:36	3A164	YFT	Departure	12.4	-	-
22-Oct	15:09	3A065	YFT	Arrival	11.2	-	-
22-Oct	16:17	3A167	YFT	Departure	11.8	-	-
22-Oct	16:48	3A083	ZUI	Arrival	13.9	-	-
22-Oct	16:48	8S218	MFM	Arrival	10.8	-	-
22-Oct	17:04	3A067	YFT	Arrival	12.4	-	-
22-Oct	17:10	3A183	ZUI	Departure	13.1	-	-
22-Oct	17:15	8S126	MFM	Departure	10.9	-	-
22-Oct	19:05	3A166	YFT	Departure	13.1	-	-
22-Oct	19:47	3A084	ZUI	Arrival	13.8	≤5	<1
22-Oct	20:04	3A185	ZUI	Departure	13.4	-	-
22-Oct	20:53	8S2113	MFM	Arrival	13.6	-	-
22-Oct	21:13	3A169	YFT	Departure	12.6	-	-
22-Oct	22:02	8S522	MFM	Departure	12.2	-	-
23-Oct	08:25	3A061	YFT	Arrival	12.1	-	-
23-Oct	08:39	8S210	MFM	Arrival	11.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
23-Oct	09:59	3A071	MFM	Arrival	13.1	-	-
23-Oct	10:46	8S212	MFM	Arrival	11.3	-	-
23-Oct	10:49	3A081	ZUI	Arrival	13.1	-	-
23-Oct	11:13	8S121	MFM	Departure	11.2	-	-
23-Oct	11:24	3A063	YFT	Arrival	12.1	-	-
23-Oct	12:17	3A181	ZUI	Departure	13.3	-	-
23-Oct	12:20	3A168	YFT	Departure	11.8	-	-
23-Oct	12:51	8S215	MFM	Arrival	12.2	-	-
23-Oct	13:00	3A064	YFT	Arrival	12.5	-	-
23-Oct	13:19	8S123	MFM	Departure	12.5	-	-
23-Oct	13:46	3A082	ZUI	Arrival	12.9	-	-
23-Oct	14:25	3A182	ZUI	Departure	12.4	-	-
23-Oct	14:31	3A164	YFT	Departure	12.7	-	-
23-Oct	15:03	3A065	YFT	Arrival	11.9	-	-
23-Oct	16:19	3A167	YFT	Departure	11.9	-	-
23-Oct	16:37	3A083	ZUI	Arrival	12.8	-	-
23-Oct	16:45	8S218	MFM	Arrival	12.8	-	-
23-Oct	16:57	3A067	YFT	Arrival	13.0	-	-
23-Oct	17:12	3A183	ZUI	Departure	13.3	-	-
23-Oct	17:14	8S126	MFM	Departure	12.6	-	-
23-Oct	19:14	3A166	YFT	Departure	13.0	-	-
23-Oct	19:53	3A084	ZUI	Arrival	13.1	-	-
23-Oct	20:09	3A185	ZUI	Departure	13.0	>5 and ≤15	<1
23-Oct	20:59	3A169	YFT	Departure	12.2	-	-
23-Oct	21:06	8S2113	MFM	Arrival	12.3	-	-
23-Oct	22:12	8S522	MFM	Departure	12.5	-	-
24-Oct	08:20	3A061	YFT	Arrival	11.6	-	-
24-Oct	08:28	8S210	MFM	Arrival	12.8	-	-
24-Oct	10:11	3A071	MFM	Arrival	11.5	-	-
24-Oct	10:37	8S212	MFM	Arrival	11.8	-	-
24-Oct	10:52	3A081	ZUI	Arrival	12.7	≤5	<1
24-Oct	11:04	8S121	MFM	Departure	12.2	-	-
24-Oct	11:30	3A063	YFT	Arrival	11.9	-	-
24-Oct	12:21	3A181	ZUI	Departure	13.1	-	-
24-Oct	12:22	3A168	YFT	Departure	12.1	-	-
24-Oct	13:04	8S215	MFM	Arrival	10.5	-	-
24-Oct	13:12	3A064	YFT	Arrival	10.7	-	-
24-Oct	13:26	8S123	MFM	Departure	11.2	-	-
24-Oct	13:48	3A082	ZUI	Arrival	12.3	-	-
24-Oct	14:15	3A182	ZUI	Departure	11.7	-	-
24-Oct	14:31	3A164	YFT	Departure	11.0	-	-
24-Oct	14:53	3A065	YFT	Arrival	11.5	-	-
24-Oct	16:20	3A167	YFT	Departure	12.3	-	-
24-Oct	16:33	3A083	ZUI	Arrival	11.9	-	-
24-Oct	16:53	8S218	MFM	Arrival	10.2	-	-
24-Oct	17:11	3A183	ZUI	Departure	12.7	-	-
24-Oct	17:18	3A067	YFT	Arrival	9.9	-	-
24-Oct	17:19	8S126	MFM	Departure	13.1	-	-
24-Oct	19:12	3A166	YFT	Departure	12.5	-	-
24-Oct	19:47	3A084	ZUI	Arrival	12.7	-	-
24-Oct	20:08	3A185	ZUI	Departure	13.8	-	-
24-Oct	20:59	8S2113	MFM	Arrival	11.3	-	-
24-Oct	21:00	3A169	YFT	Departure	11.9	-	-
24-Oct	22:24	8S522	MFM	Departure	12.0	-	-
25-Oct	08:15	3A061	YFT	Arrival	11.9	-	-
25-Oct	08:31	8S210	MFM	Arrival	10.5	-	-
25-Oct	09:58	3A071	MFM	Arrival	13.7	-	-
25-Oct	10:40	3A081	ZUI	Arrival	12.7	-	-
25-Oct	10:40	8S212	MFM	Arrival	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
25-Oct	11:06	8S121	MFM	Departure	10.2	-	-
25-Oct	11:24	3A063	YFT	Arrival	11.7	-	-
25-Oct	12:13	3A168	YFT	Departure	9.9	-	-
25-Oct	12:20	3A181	ZUI	Departure	13.3	-	-
25-Oct	12:54	8S215	MFM	Arrival	12.9	-	-
25-Oct	13:08	3A064	YFT	Arrival	10.3	-	-
25-Oct	13:18	8S123	MFM	Departure	12.4	-	-
25-Oct	13:51	3A082	ZUI	Arrival	11.8	-	-
25-Oct	14:12	3A182	ZUI	Departure	11.5	-	-
25-Oct	14:29	3A164	YFT	Departure	11.3	-	-
25-Oct	15:07	3A065	YFT	Arrival	10.3	-	-
25-Oct	16:16	3A167	YFT	Departure	12.3	-	-
25-Oct	16:35	3A083	ZUI	Arrival	12.3	-	-
25-Oct	16:36	8S218	MFM	Arrival	12.6	-	-
25-Oct	17:03	3A183	ZUI	Departure	13.4	-	-
25-Oct	17:07	8S126	MFM	Departure	12.6	-	-
25-Oct	17:19	3A067	YFT	Arrival	10.6	-	-
25-Oct	19:14	3A166	YFT	Departure	13.3	-	-
25-Oct	19:44	3A084	ZUI	Arrival	12.8	-	-
25-Oct	20:06	3A185	ZUI	Departure	13.7	-	-
25-Oct	21:00	3A169	YFT	Departure	12.1	-	-
25-Oct	21:20	8S2113	MFM	Arrival	11.3	-	-
25-Oct	22:25	8S522	MFM	Departure	11.8	-	-
26-Oct	08:25	3A061	YFT	Arrival	12.6	-	-
26-Oct	08:26	8S210	MFM	Arrival	12.7	-	-
26-Oct	10:01	3A071	MFM	Arrival	12.2	-	-
26-Oct	10:46	8S212	MFM	Arrival	12.1	-	-
26-Oct	10:50	3A081	ZUI	Arrival	13.2	-	-
26-Oct	11:12	8S121	MFM	Departure	11.6	-	-
26-Oct	11:24	3A063	YFT	Arrival	12.5	-	-
26-Oct	12:20	3A168	YFT	Departure	11.8	-	-
26-Oct	12:22	3A181	ZUI	Departure	13.1	-	-
26-Oct	12:55	8S215	MFM	Arrival	8.4	-	-
26-Oct	13:09	3A064	YFT	Arrival	12.9	-	-
26-Oct	13:22	8S123	MFM	Departure	10.8	-	-
26-Oct	13:49	3A082	ZUI	Arrival	11.7	-	-
26-Oct	14:16	3A182	ZUI	Departure	11.8	-	-
26-Oct	14:17	3A164	YFT	Departure	12.2	-	-
26-Oct	14:57	3A065	YFT	Arrival	12.0	-	-
26-Oct	16:18	3A167	YFT	Departure	12.1	-	-
26-Oct	16:34	3A083	ZUI	Arrival	12.8	-	-
26-Oct	16:41	8S218	MFM	Arrival	10.3	-	-
26-Oct	17:05	3A067	YFT	Arrival	12.2	-	-
26-Oct	17:07	3A183	ZUI	Departure	13.4	-	-
26-Oct	17:07	8S126	MFM	Departure	11.5	-	-
26-Oct	19:11	3A166	YFT	Departure	13.3	-	-
26-Oct	19:44	3A084	ZUI	Arrival	12.8	-	-
26-Oct	20:06	3A185	ZUI	Departure	13.6	-	-
26-Oct	20:58	3A169	YFT	Departure	11.8	-	-
26-Oct	20:58	8S2113	MFM	Arrival	10.8	-	-
26-Oct	22:04	8S522	MFM	Departure	12.7	-	-
27-Oct	08:20	3A061	YFT	Arrival	11.8	-	-
27-Oct	08:40	8S210	MFM	Arrival	10.7	-	-
27-Oct	09:59	3A071	MFM	Arrival	12.7	-	-
27-Oct	10:38	8S212	MFM	Arrival	13.3	-	-
27-Oct	10:43	3A081	ZUI	Arrival	12.6	-	-
27-Oct	11:08	8S121	MFM	Departure	12.5	-	-
27-Oct	11:16	3A063	YFT	Arrival	12.0	-	-
27-Oct	12:12	3A168	YFT	Departure	10.0	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
27-Oct	12:20	3A181	ZUI	Departure	13.4	-	-
27-Oct	12:46	8S215	MFM	Arrival	12.2	-	-
27-Oct	13:08	3A064	YFT	Arrival	11.8	-	-
27-Oct	13:22	8S123	MFM	Departure	12.4	-	-
27-Oct	13:49	3A082	ZUI	Arrival	12.2	-	-
27-Oct	14:17	3A164	YFT	Departure	13.2	-	-
27-Oct	14:18	3A182	ZUI	Departure	13.6	-	-
27-Oct	14:55	3A065	YFT	Arrival	11.8	-	-
27-Oct	16:16	3A167	YFT	Departure	11.9	-	-
27-Oct	16:38	3A083	ZUI	Arrival	12.8	-	-
27-Oct	16:40	8S218	MFM	Arrival	11.4	-	-
27-Oct	17:08	3A183	ZUI	Departure	13.4	-	-
27-Oct	17:08	8S126	MFM	Departure	12.5	-	-
27-Oct	17:23	3A067	YFT	Arrival	12.5	-	-
27-Oct	19:02	3A166	YFT	Departure	12.0	-	-
27-Oct	19:42	3A084	ZUI	Arrival	13.0	-	-
27-Oct	20:06	3A185	ZUI	Departure	12.9	-	-
27-Oct	20:52	8S2113	MFM	Arrival	12.8	-	-
27-Oct	21:08	3A169	YFT	Departure	12.9	-	-
27-Oct	22:20	8S522	MFM	Departure	12.5	-	-
28-Oct	08:17	3A061	YFT	Arrival	11.4	-	-
28-Oct	08:33	8S210	MFM	Arrival	11.3	-	-
28-Oct	09:54	3A071	MFM	Arrival	11.8	-	-
28-Oct	10:41	8S212	MFM	Arrival	12.6	-	-
28-Oct	11:10	8S121	MFM	Departure	12.1	-	-
28-Oct	11:23	3A063	YFT	Arrival	12.7	-	-
28-Oct	12:14	3A181	ZUI	Departure	12.2	-	-
28-Oct	12:16	3A168	YFT	Departure	13.3	-	-
28-Oct	12:58	8S215	MFM	Arrival	12.7	-	-
28-Oct	13:04	3A064	YFT	Arrival	11.8	-	-
28-Oct	13:29	8S123	MFM	Departure	12.5	-	-
28-Oct	13:50	3A082	ZUI	Arrival	11.1	-	-
28-Oct	14:15	3A182	ZUI	Departure	10.9	-	-
28-Oct	14:17	3A164	YFT	Departure	10.8	-	-
28-Oct	15:04	3A065	YFT	Arrival	12.4	-	-
28-Oct	16:18	3A167	YFT	Departure	13.2	-	-
28-Oct	16:33	3A081	ZUI	Arrival	13.1	-	-
28-Oct	16:33	3A083	ZUI	Arrival	11.3	-	-
28-Oct	16:41	8S218	MFM	Arrival	12.7	-	-
28-Oct	17:04	3A067	YFT	Arrival	11.7	-	-
28-Oct	17:07	3A183	ZUI	Departure	14.3	-	-
28-Oct	17:26	8S126	MFM	Departure	11.8	-	-
28-Oct	19:18	3A166	YFT	Departure	12.4	-	-
28-Oct	19:46	3A084	ZUI	Arrival	11.8	-	-
28-Oct	20:09	3A185	ZUI	Departure	13.7	-	-
28-Oct	21:00	3A169	YFT	Departure	12.0	-	-
28-Oct	21:11	8S2113	MFM	Arrival	12.3	-	-
28-Oct	22:00	8S522	MFM	Departure	11.9	-	-
29-Oct	08:23	3A061	YFT	Arrival	12.9	-	-
29-Oct	08:40	8S210	MFM	Arrival	12.4	-	-
29-Oct	09:54	3A071	MFM	Arrival	12.8	-	-
29-Oct	10:46	8S212	MFM	Arrival	12.3	-	-
29-Oct	10:52	3A081	ZUI	Arrival	13.8	-	-
29-Oct	11:12	8S121	MFM	Departure	11.5	-	-
29-Oct	11:22	3A063	YFT	Arrival	11.6	-	-
29-Oct	12:15	3A168	YFT	Departure	12.9	-	-
29-Oct	12:19	3A181	ZUI	Departure	13.0	-	-
29-Oct	12:51	8S215	MFM	Arrival	12.5	-	-
29-Oct	12:58	3A064	YFT	Arrival	13.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
29-Oct	13:21	8S123	MFM	Departure	11.7	-	-
29-Oct	13:47	3A082	ZUI	Arrival	12.5	-	-
29-Oct	14:14	3A182	ZUI	Departure	12.4	-	-
29-Oct	14:17	3A164	YFT	Departure	12.8	-	-
29-Oct	15:00	3A065	YFT	Arrival	12.2	-	-
29-Oct	16:25	3A167	YFT	Departure	13.2	-	-
29-Oct	16:35	3A083	ZUI	Arrival	12.9	-	-
29-Oct	16:41	8S218	MFM	Arrival	13.0	-	-
29-Oct	16:59	3A067	YFT	Arrival	12.4	-	-
29-Oct	17:10	8S126	MFM	Departure	13.6	-	-
29-Oct	17:11	3A183	ZUI	Departure	13.8	-	-
29-Oct	19:04	3A166	YFT	Departure	12.7	-	-
29-Oct	19:49	3A084	ZUI	Arrival	13.2	-	-
29-Oct	20:13	3A185	ZUI	Departure	12.9	-	-
29-Oct	20:54	8S2113	MFM	Arrival	12.7	-	-
29-Oct	20:59	3A169	YFT	Departure	12.3	-	-
29-Oct	22:03	8S522	MFM	Departure	13.6	-	-
30-Oct	08:19	3A061	YFT	Arrival	12.7	-	-
30-Oct	08:22	8S210	MFM	Arrival	12.2	-	-
30-Oct	09:58	3A071	MFM	Arrival	12.4	-	-
30-Oct	10:40	3A081	ZUI	Arrival	13.4	-	-
30-Oct	10:40	8S212	MFM	Arrival	12.6	-	-
30-Oct	11:06	8S121	MFM	Departure	13.1	-	-
30-Oct	11:30	3A063	YFT	Arrival	12.6	-	-
30-Oct	12:22	3A181	ZUI	Departure	13.7	-	-
30-Oct	12:23	3A168	YFT	Departure	13.5	-	-
30-Oct	12:51	8S215	MFM	Arrival	12.3	-	-
30-Oct	13:01	3A064	YFT	Arrival	11.8	-	-
30-Oct	13:15	8S123	MFM	Departure	12.8	-	-
30-Oct	13:50	3A082	ZUI	Arrival	13.4	-	-
30-Oct	14:24	3A182	ZUI	Departure	13.2	-	-
30-Oct	14:26	3A164	YFT	Departure	10.9	-	-
30-Oct	15:01	3A065	YFT	Arrival	12.5	-	-
30-Oct	16:24	3A167	YFT	Departure	12.2	-	-
30-Oct	16:39	3A083	ZUI	Arrival	12.9	-	-
30-Oct	16:43	8S218	MFM	Arrival	11.7	-	-
30-Oct	17:10	8S126	MFM	Departure	13.2	-	-
30-Oct	17:16	3A067	YFT	Arrival	10.0	-	-
30-Oct	17:19	3A183	ZUI	Departure	14.1	-	-
30-Oct	19:04	3A166	YFT	Departure	13.6	-	-
30-Oct	19:54	3A084	ZUI	Arrival	13.3	-	-
30-Oct	20:10	3A185	ZUI	Departure	13.1	-	-
30-Oct	20:59	8S2113	MFM	Arrival	13.0	-	-
30-Oct	21:02	3A169	YFT	Departure	13.5	-	-
30-Oct	22:16	8S522	MFM	Departure	13.0	-	-
31-Oct	08:21	3A061	YFT	Arrival	11.1	-	-
31-Oct	08:35	8S210	MFM	Arrival	10.5	-	-
31-Oct	09:53	3A071	MFM	Arrival	10.6	-	-
31-Oct	10:38	8S212	MFM	Arrival	12.4	-	-
31-Oct	10:40	3A081	ZUI	Arrival	14.0	-	-
31-Oct	11:08	8S121	MFM	Departure	11.7	-	-
31-Oct	11:23	3A063	YFT	Arrival	13.0	-	-
31-Oct	12:17	3A168	YFT	Departure	13.4	-	-
31-Oct	12:18	3A181	ZUI	Departure	13.3	-	-
31-Oct	12:54	3A064	YFT	Arrival	11.5	-	-
31-Oct	12:55	8S215	MFM	Arrival	12.4	-	-
31-Oct	13:26	8S123	MFM	Departure	12.9	-	-
31-Oct	13:53	3A082	ZUI	Arrival	11.6	-	-
31-Oct	14:24	3A164	YFT	Departure	11.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Prevailing Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
31-Oct	14:30	3A182	ZUI	Departure	10.4	-	-
31-Oct	15:05	3A065	YFT	Arrival	13.0	-	-
31-Oct	16:17	3A167	YFT	Departure	13.0	-	-
31-Oct	16:38	3A083	ZUI	Arrival	13.9	-	-
31-Oct	16:41	8S218	MFM	Arrival	12.6	-	-
31-Oct	16:56	3A067	YFT	Arrival	11.7	-	-
31-Oct	17:06	3A183	ZUI	Departure	12.5	-	-
31-Oct	17:07	8S126	MFM	Departure	13.6	-	-
31-Oct	19:15	3A166	YFT	Departure	12.4	-	-
31-Oct	20:04	3A084	ZUI	Arrival	13.4	-	-
31-Oct	20:22	3A185	ZUI	Departure	13.3	-	-
31-Oct	20:52	8S2113	MFM	Arrival	13.0	-	-
31-Oct	21:00	3A169	YFT	Departure	13.4	-	-
31-Oct	22:06	8S522	MFM	Departure	13.5	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in October 2016, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 15 HSF movements. The duration of instantaneous speeding of all 13 movements were less than 1 minute, whilst the remaining two movements lasted for less than 2 minutes. After investigation, the AIS data and ferry operators' responses from 2 cases showed the cases were due to local strong water currents, which are public safety / emergency reason. The captain had reduced speed and maintained the speed at less than 15 knots after the public safety / emergency incidents. One of the cases (26 Oct HKT10:01 Ferry no. 3A071) is a suspected case as Shipxy showed no speeding. Animation data of AA AIS will be reviewed for this case. The remaining 13 cases are pending for FO's responses and under investigation.

Six HSF movements with insufficient transmission of AIS data received in October. AIS data was retrieved from other sources such as Marine Traffic Data and Shipxy. Vessel captain was also requested to provide the radar track photos which indicated the vessel entered the SCZ though the gate access point and no speeding in the SCZ.