

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

Construction Phase Monthly EM&A Report No.14 (For February 2017)

March 2017

Airport Authority Hong Kong

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March 2017

This Monthly EM&A Report No. 14 has been reviewed and certified by

the Environmental Team Leader (ETL) in accordance with

Condition 3.5 of Environmental Permit No. EP-489/2014.

In Kory

**Certified by:** 

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

Date

14 March 2017



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#### 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

14 March 2017

Dear Sir,

### Contract No. 3102 **3RS Independent Environmental Checker Consultancy Services**

### Submission of Monthly EM&A Report No.14 (February 2017)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No.14 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 March 2017.

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.

all

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 14<sup>th</sup> 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 to 28 February 2017.

### Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included five deep cement mixing (DCM) contracts, an advanced works contract and a reclamation contract. The DCM contracts involved DCM works and trials, site office establishment, laying of geotextile and sand blanket; the advanced works contract involved horizontal directional drilling (HDD) works and pipeline supporting works; and the reclamation contract involved site office establishment 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, 21 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 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 Marine Mammal Watching Plan (MMWP), silt curtains were in place by the contractors for sand blanket laying works and dolphin observers were deployed in accordance with the Plan. On the implementation of Dolphin Exclusion Zone (DEZ) Plan, dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there was one record of dolphin

sighting within the DEZ of DCM works in this reporting month. Audits of acoustic decoupling for construction vessels were also carried out by the ET.

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 February 2017 were in the range of 89 to 93 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 783 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the Speed Control Zone (SCZ) with average speeds under 15 knots (6.4 to 14.1 knots), which were in compliance with the SkyPier Plan. One ferry movements with minor deviation from the diverted route is under investigation by ET. The investigation result will be presented in the next monthly EM&A report. 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 conducted weekly audit of relevant information, including Automatic Identification System (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 concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. 3-month rolling programmes for construction vessel activities were also received from contractors. ET reminded contractors that all vessels shall avoid entering the Brothers Marine Park, which has been designated since 30 December 2016.

# **Results of Impact Monitoring**

The monitoring works for construction dust, construction noise, water quality, construction waste, terrestrial ecology, CWD and 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, chromium, and nickel obtained during the reporting period were in compliance with their corresponding Action and/or Limit Levels. For turbidity and SS, some of the testing results exceeded the relevant Action or Limit Levels. Investigations were carried out immediately for each of the exceedance cases. The investigation findings concluded that the exceedances were not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau observed that HDD works were conducted at the daylighting location and there was no encroachment upon the egretry area nor any significant disturbance to the egrets foraging 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:

### Advanced Works:

# Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- HDD works;
- Pipeline supporting works; and
- Stockpiling of excavated materials from HDD operation.

# DCM Works:

# Contract 3201 to 3205 DCM Works

- Laying of geotextile and sand blanket;
- Site office establishment; and
- DCM works and trials.

### **Reclamation Works:**

# **Contract 3206 Main Reclamation Works**

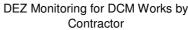
- Site office establishment; and
- Laying of geotextile and sand blanket.

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.



**Ecological Monitoring** 

oolbox Talk Training to Site Staf by Contractor



### Summary Table

The following table summarizes the key findings of the EM&A programme during the reporting period from 1 to 28 February 2017:

|  | Yes | No | Details  | Analysis /<br>Recommendation /<br>Remedial Actions |
|--|-----|----|--|--|
| Exceedance of Limit Level <sup>^</sup>                 |     | ~  | 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 |     | ~  | No notifications of summons or<br>prosecution were received.                   | Nil  |
| Changes that affect the EM&A                           |     | ✓  | There were no changes to the<br>construction works that may affect the<br>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 and the contract information was presented in Appendix A of the Construction Phase Monthly EM&A Report No.10.

# **1.2 Scope of this Report**

This is the 14<sup>th</sup> 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 28 February 2017.

# 1.3 **Project Organisation**

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

| Party   | Position                          | Name          | Telephone |  |
|---|-----------------------------------|---------------|-----------|--|
| Project Manager's<br>Representative<br>(Airport Authority Hong<br>Kong) | Principal Manager,<br>Environment | Lawrence Tsui | 2183 2734 |  |

### **Table 1.1: Contact Information of Key Personnel**

| Party   | Position                                    | Name             | Telephone |
|---|---|------------------|-----------|
| Environmental Team (ET)<br>(Mott MacDonald Hong<br>Kong Limited)                        | Environmental Team<br>Leader                | Terence Kong     | 2828 5919 |
|   | Deputy Environmental<br>Team Leader         | Heidi Yu         | 2828 5704 |
|   | Deputy Environmental<br>Team Leader         | Keith Chau       | 2972 1721 |
| Independent Environmental<br>Checker (IEC)<br>(AECOM Asia Company<br>Limited)           | Independent Environmental<br>Checker        | Jackel Law       | 3922 9376 |
|   | Deputy Independent<br>Environmental Checker | Joanne Tsoi      | 3922 9423 |
| Advanced Works:   |   |                  |           |
| Contract P560(R) Aviation<br>Fuel Pipeline Diversion<br>Works                           | Project Manager                             | Wei Shih         | 2117 0566 |
| (Langfang Huayuan<br>Mechanical and Electrical<br>Engineering Co., Ltd.)                |   |                  |           |
|   | Environmental Officer                       | Lyn Lau          | 5172 6543 |
| DCM Works:  |   |                  |           |
| Contract 3201 DCM<br>(Package 1)<br>(Penta-Ocean-China State-<br>Dong-Ah Joint Venture) | Project Director                            | Tsugunari Suzuki | 9178 9689 |
|   | Environmental Officer                       | Kanny Cho        | 9019 1962 |
| Contract 3202 DCM<br>(Package 2)  | Project Manager                             | llkwon Nam       | 9643 3117 |
| (Samsung-BuildKing Joint<br>Venture)  |   |                  |           |
|   | Environmental Officer                       | Dickson Mak      | 9525 8408 |
| Contract 3203 DCM<br>(Package 3)<br>(Sambo E&C Co.,Ltd)                                 | Project Manager                             | Seong Jae Park   | 9683 8693 |
| х   | Environmental Officer                       | Calvin Leung     | 9203 5820 |
| Contract 3204 DCM<br>(Package 4)<br>(CRBC-SAMBO Joint<br>Venture)                       | Project Manager                             | Kyung-Sik Yoo    | 9683 8697 |
|   | Environmental Officer                       | David Man        | 6421 3238 |
| Contract 3205 DCM<br>(Package 5)  | Deputy Project Director                     | Min Park         | 9683 0765 |
| (Bachy Soletanche - Sambo<br>Joint Venture)   |   |                  |           |
|   | Environmental Officer                       | Margaret Chung   | 9130 3696 |

| Party   | Position              | Name           | Telephone |  |
|---|-----------------------|----------------|-----------|--|
| Reclamation Works:                                |                       |                |           |  |
| Contract 3206<br>(ZHEC-CCCC-CDC Joint<br>Venture) | Project Manager       | Kim Chuan Lim  | 3693 2288 |  |
|   | Environmental Officer | Kwai Fung Wong | 3693 2252 |  |

### 1.4 Summary of Construction Works

The key activities of the Project carried out in the reported period included five DCM contracts, an advanced works contract and a reclamation contract. The DCM contracts involved DCM works and trials, site office establishment, laying of geotextile and sand blanket; the advanced works contract involved HDD works and pipeline supporting works; and the reclamation contract involved site office establishment 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**.

### 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 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 and submitted to EPD under EP Condition 3.4.                       |
| Impact Monitoring  | On-going  |
| Water Quality  |   |
| General Baseline Water Quality<br>Monitoring for reclamation, water<br>jetting and field joint works | The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4. |
| General Impact Water Quality<br>Monitoring for reclamation, water<br>jetting and field joint works   | On-going  |
| Initial Intensive Deep Cement Mixing<br>(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<br>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 Egretry Survey Plan   | The revised Egretry 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  | The coral translocation was completed.   |
| Post-Translocation Coral Monitoring  | On-going   |
| Chinese White Dolphins (CWD)   |  |
| Vessel Survey, Land-based<br>Theodolite Track and Passive<br>Acoustic Monitoring (PAM) |  |
| Baseline Monitoring  | Baseline CWD results were reported in the CWD Baseline Monitoring Report<br>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 and submitted to EPD under EP Condition 3.4. |
| Impact Monitoring  | On-going   |
| Environmental Auditing   |  |
| Regular site inspection  | On-going   |
| Marine Mammal Watching Plan<br>(MMWP) implementation measures                          | On-going   |
| Dolphin Exclusion Zone Plan (DEZP) implementation measures                             | On-going   |
| SkyPier High Speed Ferries (HSF) implementation measures                               | On-going   |
| Construction and Associated Vessels<br>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, ecologyand CWD were carried out in the reporting month.

The EM&A programme also involved weekly site inspections and related auditings 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, 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 A**.

# 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. 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 air quality monitoring schedule involved in the reporting period is provided in **Appendix B**.

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

| Monitoring Station | Action Level (μg/m <sup>3</sup> ) | Limit Level (μg/m <sup>3</sup> ) |
|--------------------|-----------------------------------|----------------------------------|
| 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) | SIBATA LD-3B-002<br>(Serial No. 974350) | 26 Oct 2016           |

### 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.11 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 C**.

#### Table 2.4: Summary of 1-hour TSP Monitoring Results

| Monitoring Station | 1-hr TSP Concentration<br>Range (μg/m <sup>3</sup> ) | Action Level (μg/m <sup>3</sup> ) | Limit Level (µg/m³) |
|--------------------|--|-----------------------------------|---------------------|
| AR1A               | 40 - 181   | 306                               | 500                 |
| AR2                | 25 - 171   | 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.

| Monitoring Station | Location                               | Type of measurement |
|--------------------|--|---------------------|
| NM1A               | Man Tung Road Park                     | Free field          |
| NM2 <sup>(1)</sup> | 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          |

#### Table 3.1: Locations of Impact Noise Monitoring Stations

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. 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 B**.

#### Table 3.2: Action and Limit Levels for Construction Noise

| Monitoring Stations                  | Time Period                           | Action Level   | Limit Level,<br>L <sub>eq(30mins)</sub> dB(A) |
|--------------------------------------|---------------------------------------|--|---|
| NM1A, NM2, NM3A, NM4,<br>NM5 and NM6 | 0700-1900 hours on normal<br>weekdays | When one documented<br>complaint is received from<br>any one of the sensitive<br>receivers | 75 dB(A) <sup>(i)</sup>                       |

Note: <sup>(i)</sup> 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**.

| 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            |
| coustic 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<sub>eq</sub>, L<sub>10</sub> and L<sub>90</sub> 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 C**.

| 4 | n |
|---|---|
| 1 | 4 |

| Monitoring Station  | Noise Level Range, dB(A) | Limit Level, dB(A) |  |
|---------------------|--------------------------|--------------------|--|
|                     | Leq (30 mins)            | Leq (30 mins)      |  |
| NM1A <sup>(i)</sup> | 71 - 72                  | 75                 |  |
| NM3A                | 57 - 62                  | 75                 |  |
| NM4 <sup>(i)</sup>  | 60 - 64                  | 70 <sup>(ii)</sup> |  |
| NM5 <sup>(i)</sup>  | 56 - 58                  | 75                 |  |
| NM6 <sup>(i)</sup>  | 62 - 71                  | 75                 |  |

**Table 3.4: Summary of Construction Noise Monitoring Results** 

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.

| Monitoring         | Description  | Coordina | tes      | Parameters   |
|--------------------|--|----------|----------|--|
| Stations           |  | Easting  | Northing |  |
| C1                 | Control  | 804247   | 815620   | DO, pH, Temperature,<br>Salinity, Turbidity, SS,<br>Total Alkalinity, Heavy<br>Metals <sup>(2)</sup> |
| C2                 | Control  | 806945   | 825682   |  |
| C3 <sup>(3)</sup>  | 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 <sup>(1)</sup> | Future Hong Kong-Zhuhai-Macao<br>Bridge Hong Kong Boundary Crossing<br>Facilities (HKBCF) Seawater Intake for<br>cooling | 812586   | 820069   | DO, pH, Temperature,<br>Salinity, Turbidity, SS  |
| SR2 <sup>(3)</sup> | Planned marine park / hard corals at<br>The Brothers / Tai Mo To   | 814166   | 821463   |  |
| SR3                | Sha Chau and Lung Kwu Chau Marine<br>Park / fishing and spawning grounds in<br>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<br>Kong International Airport (East)   | 811593   | 820417   | _  |

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

Notes:

<sup>(1)</sup> The seawater intakes of SR1 for the future HKBCF is not yet in operation, hence no water quality impact monitoring was conducted at this station. The future permanent location for SR1 during impact monitoring is subject to finalisation after the HKBCF seawater is commissioned.

<sup>(2)</sup> 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). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.

<sup>(3)</sup> According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. 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 calm to rough, and the weather conditions varied from sunny to rainy during the monitoring period.

The water quality monitoring schedule for the reporting period is provided in Appendix B.

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

Notes:

<sup>(1)</sup> For DO measurement, non-compliance occurs when monitoring result is lower than the limits.

<sup>(2)</sup>For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.

<sup>(3)</sup>Depth-averaged results are used unless specified otherwise.

<sup>(4)</sup>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 <u>http://env.threerunwaysystem.com/en/epsubmissions.html</u>)

<sup>(5)</sup>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

| <b>Control Station</b> | Impact Stations   |
|------------------------|---|
| Flood Tide             |   |
| C1                     | IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3   |
| SR2 <sup>^1</sup>      | 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 |

<sup>^1</sup> As per findings of Baseline Water Quality Monitoring 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 for monitoring of specific water quality parameters under the impact water quality monitoring programme.

#### **Table 4.4: Water Quality Monitoring Equipment**

| Equipment  | Brand and Model   | Last Calibration Date |
|--|---|-----------------------|
| Multifunctional Meter (measurement of DO,          | YSI 6920 V2 (serial no. 11F100014)                            | 4 Jan 2017            |
| pH, temperature, salinity and turbidity)           | YSI 6920 V2 (serial no. 16G104518)                            | 4 Jan 2017            |
|  | YSI 6920 V2 (serial no. 0001C6A7)                             | 4 Jan 2017            |
|  | YSI 6920 (serial no. 000109DF)                                | 4 Jan 2017            |
| Digital Titrator (measurement of total alkalinity) | Titrette Digital Burette 50ml Class A<br>(serial no.10N65665) | 5 Jan 2017            |

Other equipment used as part of the impact water quality monitoring programme are listed in **Table 4.5** 

### **Table 4.5: Other Monitoring Equipment**

| Equipment   | Brand and Model        |
|---|------------------------|
| Water Sampler   | Van Dorn Water Sampler |
| Positioning Device (measurement of GPS)                                     | Garmin eTrex Vista HCx |
| Current Meter (measurement of current speed and direction, and water depth) | Sontek HydroSurveyor   |

#### 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 22<sup>nd</sup> 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** and **Table 4.5**. 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 <sup>o</sup>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 was then 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 provided in Appendix B of the Construction Phase Monthly EM&A Report No.13 are still valid. Any updates of calibration certificates will be reported in the Monthly EM&A report if necessary.

#### 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 4.6.** The QA/QC procedures for laboratory measurement/ analysis of SS and heavy metals were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

| 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        |

Table 4.6: Laboratory Measurement/ Analysis of SS and Heavy Metals

# 4.5 Analysis and Interpretation of Monitoring Results

### 4.5.1 Summary of Monitoring Results

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

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

# 4.5.2 Summary of Findings for Investigation of Exceedances

During the reporting month, water quality monitoring was conducted at 12 impact stations (IM), seven sensitive receiver (SR) stations and three control stations in accordance with the Updated EM&A Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impacts from the Project before the impacts could become apparent at sensitive receivers (represented by the SR stations).

During the monitoring period in February 2017, testing results exceeding the corresponding Action or Limit Levels were recorded on five monitoring days. Details of the exceedance cases are presented below.

# Findings for Turbidity Exceedances (Mid-Ebb Tide)

**Table 4.7** presents a summary of the turbidity compliance status at IM and SR stations during mid-ebb tide for the reporting month.

| Date                               | IM1 | IM2 | IM3 | IM4 | IM5 | IM6 | IM7 | IM8 | IM9 | IM10 | IM11 | IM12 | SR2 | SR3 | SR4A | SR5A | SR6 | SR7 | SR8 |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-----|-----|------|------|-----|-----|-----|
| 02/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 04/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 07/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 09/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 11/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 14/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 16/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 18/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 21/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 24/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 26/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 28/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| No. of<br>Turbidity<br>Exceedances | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1    | 0    | 0    | 0   | 1   | 0    | 0    | 0   | 0   | 0   |

Table 4.7: Summary of Turbidity Compliance Status at IM and SR Stations (Mid-Ebb Tide)

Note: Detailed results are presented in Appendix C.

Legend:

No exceedance of Action Level and Limit Level

Exceedance of Action Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

Exceedance of Action Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Exceedance of Limit Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

Exceedance of Limit Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Upstream station with respect to 3RS Project during the respective tide based on dominant tidal flow

# IM Stations

As shown in **Table 4.7**, exceedances of Action or Limit Level at IM stations were recorded on 14 February 2017. All of the exceedances occurred at monitoring stations which were located upstream of the 3RS Project during ebb tide, hence would unlikely be affected by the Project. Nevertheless as a prudent measure, the Project's activities on this monitoring day were investigated and it was confirmed that silt curtains were deployed and maintained properly and no silt plumes were observed.

SR Stations

For SR stations, exceedance was recorded at SR3 on 2 February 2017. However, SR3 was located upstream of the project during ebb tide, and there were no turbidity exceedances at any IM stations on that day, hence the exceedance at SR3 was unlikely to be due to the Project. The single exceedance at SR3 might be due to natural fluctuation.

#### Findings for Turbidity Exceedances (Mid-Flood Tide)

**Table 4.8** presents a summary of the turbidity compliance status at IM and SR stations during mid-flood tide for the reporting month.

| Date                               | IM1 | IM2 | IM3 | IM4 | IM5 | IM6 | IM7 | IM8 | IM9 | IM10 | IM11 | IM12 | SR2 | SR3 | SR4A | SR5A | SR6 | SR7 | SR8 |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-----|-----|------|------|-----|-----|-----|
| 02/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 04/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 07/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 09/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 11/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 14/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 16/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 18/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 21/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 24/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 26/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 28/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| No. of<br>Turbidity<br>Exceedances | 0   | 0   | 0   | 1   | 2   | 0   | 1   | 0   | 0   | 1    | 0    | 0    | 0   | 0   | 0    | 0    | 1   | 0   | 0   |

# Table 4.8: Summary of Turbidity Compliance Status at IM and SR Stations (Mid-Flood Tide)

Note: Detailed results are presented in Appendix C.

Legend:



No exceedance of Action Level and Limit Level

Exceedance of Action Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

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Exceedance of Action Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Exceedance of Limit Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

Exceedance of Limit Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Upstream station with respect to 3RS Project during the respective tide based on dominant tidal flow

#### **IM Stations**

As shown in **Table 4.8**, exceedances of Action or Limit Level at IM stations were recorded on 2, 11 and 14 February 2017. Repeat turbidity measurement was conducted at IM4 and IM5 on 3 February 2017; IM5 and IM7 on 12 February 2017 as well as IM10 on 15 February 2017 during flood tide in accordance with the Event and Action Plan of the Updated EM&A Manual. The exceedance recorded at IM4 on 2 February 2017 was located upstream of the 3RS Project during flood tide. As such upstream station would unlikely be affected by the Project, the investigation focused on the exceedances at IM stations located downstream of the Project and hence might be affected by the Project's construction activities.

As part of the investigation on the downstream exceedance events, details of the Project's marine construction activities on these monitoring days were collected, as well as any observations during the monitoring. The findings are summarised in **Table 4.9**.

| Table 4.9: Summary of Findings from Investigations of Turbidity Exceedances during |  |
|--|--|
| Mid-Flood Tide   |  |

| Date       | Marine<br>construction<br>works nearby | Approximate<br>distance<br>from marine<br>construction<br>works* | Status of<br>water<br>quality<br>measures<br>(if<br>applicable) | Construction<br>vessels in<br>the vicinity | Turbidity /<br>Silt plume<br>observed<br>near the<br>monitoring<br>station | Exceedance<br>due to<br>Project |
|------------|--|--|---|--|--|---------------------------------|
| 02/02/2017 | DCM works                              | Around 2km   | Silt curtain deployed   | No   | No   | No                              |
| 11/02/2017 | DCM works                              | Around 1km   | Silt curtain deployed   | No   | No   | No                              |
| 14/02/2017 | DCM works                              | Around 1.5km   | Silt curtain deployed   | No   | Yes  | No                              |

Note:

\*This refers to the approximate distance between the DCM works and the nearest monitoring stations with exceedance

According to the investigation findings summarized in **Table 4.9**, it was confirmed that silt curtains were deployed for DCM works as additional measures and the silt curtains were maintained properly. Separately, the marine waters covering a wide area including C1, IM1 to IM7, IM10, and IM11 on 14 February 2017 was observed to be generally turbid during flood tide monitoring. As this was observed at both upstream and downstream stations, this suggests that the turbidity at IM10 might be the effect of natural fluctuation. No exceedance was recorded during the repeat turbidity measurements.

For the exceedance at IM5 on 2 February 2017, high level of turbidity was also recorded at nearby upstream station (IM4) on the same monitoring period. Given that IM4 is located upstream of the Project during flood tide, and high turbidity levels was recorded at IM4 (which would unlikely be affected by the Project), the exceedance at IM5 was possibly due to natural fluctuation in this area. Furthermore, no exceedance was recorded at other downstream monitoring stations, including IM6 and IM7, which were closer to the active DCM works during the same monitoring period. Based on these findings, this exceedance was considered not due to the Project.

For the exceedances at IM5 and IM7 on 11 February 2017, it is noted from **Table 4.8** that the exceedances appeared to be isolated cases with no temporal trend and no clear spatial trend to

indicate turbidity rising due to Project activities. The investigation results shown in **Table 4.9** also found that no construction vessel, DCM work, nor silt plume was observed in the vicinity of IM5 and IM7 on 11 February 2017. It is also noted that no exceedance was recorded at monitoring station IM6, which is located between IM5 and IM7 and is similarly downstream of the active DCM works on 11 February 2017 during flood tide, while no exceedances were identified in the repeat turbidity measurements. Based on the above, the exceedances were considered not due to the Project, and were possibly due to natural fluctuation in vicinity of IM5 and IM7.

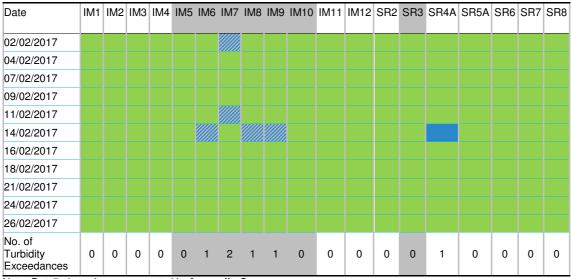
For the exceedance at IM10 on 14 February 2017, in addition to the investigation summary presented in **Table 4.9**, it is noted from **Table 4.8** that the exceedance at IM10 on 14 February 2017 appeared to be a single isolated case that day with neither temporal nor spatial trend to indicate any effect caused by Project activities. Furthermore, no exceedance was recorded at other downstream monitoring stations, including IM7 to IM9, which were located closer to the active DCM works during flood tide. Based on these findings, the exceedance was considered not due to the Project.

#### SR Stations

At SR stations, an exceedance was observed at SR6 on 16 February 2017. However, SR6 was located upstream of the project during flood tide, and there were no turbidity exceedances at any IM stations on that day, hence the exceedance at SR6 was unlikely to be due to the Project. The single exceedance at SR6 might be due to natural fluctuation.

#### Findings for SS Exceedances (Mid-Ebb Tide)

**Table 4.10** presents a summary of the SS compliance status at IM and SR stations during midebb tide for the reporting month.



#### Table 4.10: Summary of SS Compliance Status at IM and SR Stations (Mid-Ebb Tide)

Note: Detailed results are presented in Appendix C.

Legend:

No exceedance of Action Level and Limit Level

Exceedance of Action Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

Exceedance of Action Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Upstream station with respect to 3RS Project during the respective tide based on dominant tidal flow

**IM Stations** 

As shown in **Table 4.10**, exceedances of Action Levels at IM stations were recorded on three monitoring days. However, all of the exceedances occurred at monitoring stations which were located upstream of the 3RS Project during ebb tide and would unlikely be affected by the Project. Nevertheless as a prudent measure, the Project's activities on these monitoring days were investigated and it was confirmed that silt curtains were deployed and maintained properly.

#### SR Stations

At SR stations, an exceedance was observed at SR4A. It is noted from **Table 4.10** that the exceedance at SR4A on 14 February 2017 appeared to be isolated case with neither temporal nor spatial trend to indicate SS release due to Project activities. The investigation also found that no construction vessel, DCM work, nor silt plume was observed in the vicinity of SR4A. Considering no exceedance was recorded at downstream monitoring stations IM1 to IM3, which were closer to the active DCM works on 14 February 2017 during ebb tide, the exceedance was possibly due to natural fluctuation in vicinity of SR4A. Based on these findings, the exceedance was considered not due to the Project.

#### Findings for SS Exceedances (Mid-Flood Tide)

**Table 4.11** presents a summary of the SS compliance status at IM and SR stations during midflood tide for the reporting month.

| Date                               | IM1 | IM2 | IM3 | IM4 | IM5 | IM6 | IM7 | IM8 | IM9 | IM10 | IM11 | IM12 | SR2 | SR3 | SR4A | SR5A | SR6 | SR7 | SR8 |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-----|-----|------|------|-----|-----|-----|
| 02/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 04/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 07/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 09/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 11/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 14/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 16/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 18/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 21/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 24/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| 26/02/2017                         |     |     |     |     |     |     |     |     |     |      |      |      |     |     |      |      |     |     |     |
| No. of<br>Turbidity<br>Exceedances | 0   | 0   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 1    | 0    | 0    | 0   | 0   | 0    | 1    | 2   | 0   | 0   |

Table 4.11: Summary of SS Compliance Status at IM and SR Stations (Mid-Flood Tide)

Note: Detailed results are presented in Appendix C.

Legend:

No exceedance of Action Level and Limit Level

Exceedance of Action Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

Exceedance of Action Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Exceedance of Limit Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

Exceedance of Limit Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Upstream station with respect to 3RS Project during the respective tide based on dominant tidal flow

#### **IM Stations**

As shown in **Table 4.11**, exceedances of Action or Limit Level at IM stations were recorded on two monitoring days. Some exceedances occurred at monitoring stations which were located upstream of the 3RS Project during flood tide. As such upstream stations would unlikely be affected by the Project, the investigation focused on the exceedances at IM stations located downstream of the Project and hence might be affected by the Project's construction activities.

As part of the investigation on the downstream exceedance events, details of the Project's marine construction activities on these monitoring days were collected, as well as any observations during the monitoring. According to the investigation findings summarized in **Table 4.9**, it was confirmed that silt curtains were deployed for DCM works as additional measures and the silt curtains were maintained properly. Separately, the marine waters covering a wide area including C1, IM1 to IM7, IM10 and IM11 on 14 February 2017 was observed to be generally turbid during flood tide monitoring. As this was observed at both upstream and downstream stations, this suggests that the elevated SS at IM10 might be the effect of natural fluctuation.

For the exceedance at IM5 on 2 February 2017, it was found that IM3 and IM4 were located upstream of the Project during flood tide, and high SS levels were apparent at these locations (which would unlikely be affected by the Project), the exceedance at IM5 was possibly due to natural fluctuation in this area. Furthermore, no exceedance was recorded at other downstream monitoring stations, including IM6 and IM7, which were closer to active DCM works during the same monitoring period. Based on these findings, the exceedance was considered not due to the Project.

For the exceedance at IM10 on 14 February 2017, it is noted from **Table 4.11** that the exceedance appeared to be a single isolated case with neither temporal nor spatial trend to indicate any effect due to Project activities. Furthermore, no exceedance was recorded at other downstream monitoring stations, including IM7 to IM9, which were located closer to the active DCM works during flood tide. Based on these findings, the exceedance was considered not due to the Project.

#### SR Stations

At SR stations, exceedances were observed at SR5A and SR6. However, these stations are located upstream of the Project during flood tide, and there were no SS exceedances at any IM stations on those monitoring days, hence the exceedances at these stations were unlikely to be due to the Project. The exceedances at SR5A and SR6 might be due to natural fluctuation.

#### **Conclusions**

Based on the findings of the exceedance investigations, it is concluded that the exceedances were not due to the Project. Hence no SR stations were adversely affected by the Project. All required actions under the Event and Action Plan were followed. Exceedances appeared to be due to natural fluctuation (such as naturally high baseline SS levels at individual SR stations) or other sources not related to the Project.

Nevertheless, recognising that the IM stations represent a 'first line of defense', the non-project related exceedances identified at IM stations were attended to as a precautionary measure. As part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

In the meantime, the contractors were reminded to implement and maintain all mitigation measures during weekly site inspection and regular environmental management meetings. These

include maintaining mitigation measures for DCM works and sand blanket laying works properly as recommended in the EM&A manual.

# 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**.

| Monitoring<br>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.

Recommendations including provision and maintenance of spill kits and provision of chemical waste storage area for chemical waste. In addition, the relevant contractors were reminded to provide recycling bins for the segregation of recyclables from general refuse. The contractors had taken actions to implement the recommended measures.

Based on the Contractor's information, about 594m<sup>3</sup> of excavated materials were produced from the HDD launching site and Sheung Sha Chau under P560(R) in February 2017. The generated excavated materials were temporarily stored at storage and stockpiling area. The excavated material will be reused in the Project.

Around 45 tonnes of general refuse was disposed of to the WENT Landfill by advanced works contract and DCM contract in February 2017. Around 112m<sup>3</sup> of Construction and Demolition (C&D) material generated from the DCM contracts for site office establishment was disposed of as public fill in the reporting month. No chemical waste was disposed off-site during the reporting month.

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 implementation 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 February 2017, data from 1 December 2016 to 28 February 2017 will be used to calculate the running quarterly encounter rates STG & ANI;

<sup>^</sup>Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month January 2017 (calculated by data from November 2016 to January 2017) and the running quarterly encounter rates of this month (calculated by data from December 2016 to February 2017).

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 conduct along the transects covering Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) areas 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 and refined in the Updated EM&A Manual 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, in the previous reporting months the transect lines within the works area could largely followed the waypoints conducted for baseline monitoring. However, there was safety concern on the CWD survey vessel travelling within the 3RS works area. Therefore, the transect lines for the NWL area were revised to follow the waypoints set for construction phase monitoring as proposed in the approved updated EM&A Manual to avoid entering 3RS works area, with the total length being shorter than previous months. The planned vessel survey transect lines are depicted in **Figure 6.1** with the waypoint coordinates of all transect lines given in **Table 6.2**, which are subject to on-site refinement based on the actual survey conditions and constraints.

| Waypoint | Easting | Northing | Waypoint | Easting | Northing |
|----------|---------|----------|----------|---------|----------|
|          |         | NI       | EL       |         |          |
| 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   |
|          |         | NV       | VL       |         |          |
| 1S       | 804671  | 814577   | 5S       | 808504  | 821735   |
| 1N       | 804671  | 831404   | 5N       | 808504  | 828602   |
| 2Sb      | 805475  | 815457   | 6S       | 809490  | 822075   |
| 2Nb      | 805476  | 818571   | 6N       | 809490  | 825352   |
| 2Sa      | 805476  | 820770   | 7S       | 810499  | 822323   |
| 2Na      | 805476  | 830562   | 7N       | 810499  | 824613   |
| 3S       | 806464  | 821033   | 8S       | 811508  | 821839   |
| 3N       | 806464  | 829598   | 8N       | 811508  | 824254   |
| 4S       | 807518  | 821395   | 9S       | 812516  | 821356   |
| 4N       | 807518  | 829230   | 9N       | 812516  | 824254   |
|          |         | Α        | W        |         |          |
| 1W       | 804733  | 818205   | 2W       | 805045  | 816912   |
| 1E       | 806708  | 818017   | 2E       | 805960  | 816633   |
|          |         | W        | /L       |         |          |
| 1W       | 800600  | 805450   | 7W       | 800400  | 811450   |
| 1E       | 801760  | 805450   | 7E       | 802400  | 811450   |
| 2W       | 800300  | 806450   | 8W       | 800800  | 812450   |
| 2E       | 801750  | 806450   | 8E       | 802900  | 812450   |
| ЗW       | 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   |          |         |          |

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

| 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<br>Coordinates          | Station Height (m) | Approximate<br>Tracking Distance<br>(km) |
|----------|------------------------|--------------------------------------|--------------------|--|
| D        | Sha Chau (SC)          | 22° 20' 43.5" N<br>113° 53' 24.66" E | 45.66              | 2  |
| E        | Lung Kwu Chau<br>(LKC) | 22° 22' 44.83" N<br>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 NEL, NWL covering the AW, WL and SWL areas 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 data collected on both primary and secondary transect lines were used for analysis of sighting distribution, group size, activities including association with fishing boat, and mother-calf pair.

Only on-effort data collected under conditions of Beaufort 0-3 and visibility of approximately 1200 m or beyond were used for analysis of the CWD encounter rates.

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 this reporting month, two complete sets of small vessel line-transect surveys were conducted on the 6<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, 16<sup>th</sup>, 17<sup>th</sup>, 20<sup>th</sup> and 21<sup>st</sup> February 2017, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of 448.80 km of survey effort was collected from these surveys, with around 69.63% 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 C**.

#### **Sighting Distribution**

In February 2017, 21 groups of CWDs with 68 individuals were sighted. Amongst the sightings of CWD, 19 groups with 66 individuals were recorded 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 C**.

Distribution of all CWD sightings recorded in February 2017 is illustrated in **Figure 6.3**. In February 2017, CWDs were more frequently sighted in WL than in NWL and SWL. There were three sightings in NWL in this reporting month, two located at the northwestern corner of Lung Kwu Chau while another recorded at the western waters of the existing Hong Kong International Airport on AW transect. In WL survey area, CWD sightings scattered from waters north to the Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road to Fan Lau Sai Wan. While in SWL, CWDs were sighted in waters between Shek Pik, Lo Kei Wan and Soko Islands. No sightings of CWDs were recorded in the vicinity of or within the 3RS land-formation footprint.

#### Figure 6.3: Sightings Distribution of Chinese White Dolphins

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



#### **Encounter Rate**

Two types of dolphin encounter rates were calculated based on the data from February 2017. 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)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In February 2017, a total of 312.48 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 19 on-effort sightings with a total number of 66 dolphins from on-effort sightings were obtained under such condition. Calculation of the encounter rates in February 2017 are shown in **Appendix C**.

For the running quarter of the reporting month (i.e., from December 2016 to February 2017), a total of 1131.97 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 57 on-effort sightings and a total number of 196 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of February 2017 and during 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) |
|--|----------------------|----------------------|
| February 2017  | 6.08                 | 21.12                |
| Running Quarter from December 2016 to February 2017* | 5.04                 | 17.31                |
| 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 from December 2016 to February 2017, containing six sets of transect surveys for all monitoring areas.

#### **Group Size**

In February 2017, 21 groups of CWDs with 68 individuals were sighted, and the average group size of CWDs was 3.24 individuals per group. The numbers of small-sized (i.e. 1-2 individuals). and medium-sized (i.e. 3-9 individuals) were similar. A large CWD group with 14 individuals was sighted in this reporting month in WL.

#### Activities and Association with Fishing Boats

Four out of 21 sightings of CWDs were recorded engaging in feeding activities in February 2017. Three out of these four sightings were recorded in association with operating fishing boats. One of these sightings was associated with operating gill-netter in AW survey area. The remaining two sightings were associated with operating purse seiners in WL and SWL respectively. The CWD group sighted in WL has a large group size of 14 individuals associated with two operating purse seiners.

#### Mother-calf Pair

In February 2017, three sightings of CWDs were recorded with the presence of mother-andunspotted juvenile pairs. Two of these sightings occurred in WL while another was sighted in AW survey area.

#### 6.4.2 Photo Identification

In February 2017, a total number of 21 different CWD individuals were identified for totally 25 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

| Individual<br>ID | Date of sighting<br>(dd/mm/yyyy) | Sighting<br>Group No. | Area | Individual<br>ID | Date of sighting<br>(dd/mm/yyyy) | Sighting<br>Group No. | Area |
|------------------|----------------------------------|-----------------------|------|------------------|----------------------------------|-----------------------|------|
| SLMM007          | 06/02/2017                       | 3                     | WL   | SLMM049          | 16/02/2017                       | 3                     | WL   |
| SLMM010          | 16/02/2017                       | 10                    | WL   |                  |                                  | 10                    | WL   |
| SLMM011          | 17/02/2017                       | 2                     | SWL  | SLMM052          | 16/02/2017                       | 10                    | WL   |
| SLMM014          | 16/02/2017                       | 10                    | WL   | WLMM003          | 16/02/2017                       | 10                    | WL   |
| SLMM018          | 17/02/2017                       | 2                     | SWL  | WLMM007          | 16/02/2017                       | 10                    | WL   |
|                  |                                  | 3                     | SWL  | WLMM017          | 16/02/2017                       | 10                    | WL   |
| SLMM022          | 16/02/2017                       | 10                    | WL   | WLMM025          | 16/02/2017                       | 10                    | WL   |
| SLMM025          | 16/02/2017                       | 11                    | WL   | WLMM043          | 16/02/2017                       | 4                     | WL   |
| SLMM031          | 17/02/2017                       | 2                     | SWL  | WLMM056          | 16/02/2017                       | 10                    | WL   |
|                  |                                  | 3                     | SWL  | WLMM060          | 16/02/2017                       | 1                     | AW   |
| SLMM036          | 16/02/2017                       | 10                    | WL   | WLMM071          | 06/02/2017                       | 1                     | WL   |
| SLMM047          | 16/02/2017                       | 10                    | WL   |                  | 16/02/2017                       | 1                     | AW   |
|                  |                                  | •                     |      | WLMM073          | 16/02/2017                       | 10                    | WL   |

#### Table 6.5: Summary of Photo Identification

#### 6.4.3 Land-based Theodolite Tracking

#### Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 15<sup>th</sup>, 20<sup>th</sup> and 28<sup>th</sup> February 2017 and at SC on 14<sup>th</sup> and 27<sup>th</sup> February 2017, with a total of 5 days of land-based theodolite tracking survey effort accomplished in this reporting month. In total, 24 CWD groups were tracked at LKC station 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 C**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in February 2017 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

| Land-based<br>Station | No. of Survey<br>Sessions | Survey Effort<br>(hh:mm) | No. of CWD Groups<br>Sighted | CWD Group Sighting<br>per Survey Hour |
|-----------------------|---------------------------|--------------------------|------------------------------|---------------------------------------|
| Lung Kwu Chau         | 3                         | 18:15                    | 24                           | 1.32                                  |
| Sha Chau              | 2                         | 12:00                    | 0                            | 0                                     |
| TOTAL                 | 5                         | 30:15                    | 24                           | 0.79                                  |

#### 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 at a location to the northwest of LKC outside the HKSAR boundary and two CWD groups were sighted at the far north off LKC on 15 February 2017. These three groups of sighting were beyond the usual tracking distance due to the good visibility and sea state condition (Beaufort ranged 2-3) on that day whilst these CWD groups were spotted with surfacing for several times. Although these sightings were beyond the usual tracking distance and even outside the HKSAR boundary, they were 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 retrieved on 4 February 2017, re-deployed on 10 February 2017 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

During the reporting period, silt curtains were in place by the contractors for sand blanket laying works, in which at least two dolphin observers were deployed by each contractor in accordance with the Marine Mammal Watching Plan (MMWP). Teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the Dolphin Exclusion Zone (DEZ) for DCM works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 199 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring

records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there was one record of dolphin sighting within the DEZ of DCM works in this reporting month. According to contractors' site records, DCM works were suspended in this dolphin sighting event until the DEZ was clear of dolphin for a continuous period of 30 minutes. These contractors' records were also audited by the ET during site inspection. Details for the implementation of DEZ during the incident of dolphin sighting within the DEZ of DCM works are mentioned in **Section 7.4** 

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

Monitoring of CWD was conducted with two complete sets of small vessel line-transect surveys and five days of land-based theodolite tracking survey effort as scheduled. The running quarterly encounter rates STG and ANI in the reporting month did not trigger the Action Level for CWD monitoring.

### 7 Environmental Site Inspection and Audit

#### 7.1 Environmental Site Inspection

Weekly site inspections of the construction works for the advanced works contract 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 B**. 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 improvement of spill preventive and dust suppression measures, separation of recyclables from general refuse, and removal of oil stains at construction sites. In addition, recommendations were also provided during site inspection on barges. These included provision and maintenance of spill preventive measures and chemical waste storage area; provision of proper acoustic decoupling for noisy equipment; improvement of dust suppression measures; proper implementation of DEZ monitoring; installation and maintenance of silt curtains; provision of recycling bins for separating recyclables from general refuse as well as provision of suitable enclosed containers for general refuse collection.

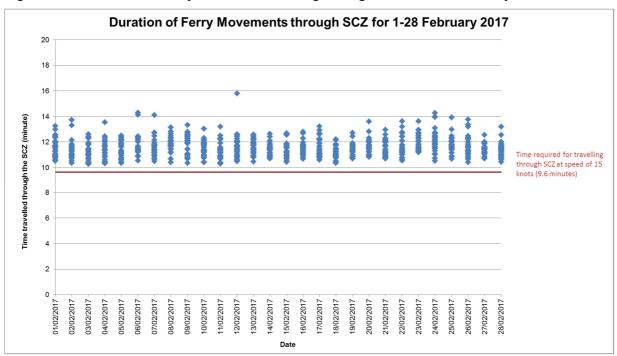
A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix A**.

#### 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) was 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 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 February 2017 (i.e., 89 to 93 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 783 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in February 2017 and the data are presented in **Appendix F**. The time spent by the SkyPier HSFs travelling through the SCZ in February 2017 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 February 2017

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.

One ferry was recorded with minor deviation from the diverted route on 25 February 2017. A notice was sent to the ferry operator (FO) and the case is under investigation by ET. The investigation result will be presented in the next monthly EM&A report.

The two cases in January 2017 was followed up after receiving further information from the FOs. For the cases with minor route deviation on 1 and 12 January 2017, ET's investigation found that the vessel captain had to give way to a vessel to ensure safety. After that, the HSF had returned to the normal route following the SkyPier Plan.

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

| Requirements in the SkyPier Plan                                    | 1 February to 28 February 2017  |
|---|---|
| Total number of ferry movements recorded and audited                | 783   |
| Use diverted route and enter / leave SCZ through Gate Access Points | 1 deviation, which is under investigation   |
| Speed control in speed control zone                                 | The average speeds taken within the SCZ of all HSFs were within 15 knots (6.4 knots to 14.1 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in <b>Figure 7-1</b> . |
| Daily Cap (including all SkyPier HSFs)                              | 89 to 93 daily movements (within the maximum daily cap - 125 daily movements).  |

#### 7.3 Audit of Construction and Associated Vessels

The updated Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV) was submitted and approved in November 2016 by EPD under EP Condition 2.9. The approved Plan is available on the dedicated website of the Project.

ET carried out the following actions during the reporting period:

- Four skipper training sessions were held for contractors' 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.
- One skipper training session was held by contractor's Environmental Officer. Competency test was subsequently conducted with the trained skippers by ET.
- 51 skippers were trained by ET / contractor's Environmental Officer in February 2017. In total, 485 skippers were trained from August 2016 to February 2017.
- ET conducted weekly audit of construction and associated vessel records as provided by the contractors. AIS data, vessel tracks, vessel speed and other relevant records were also 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 such as speeding in the works area, entry from nondesignated gates 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.
- 3-month rolling programmes (one month record and two months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.
- As the Brothers Marine Park was designated on 30 December 2016, ET reminded contractors that all vessels shall avoid entering the Brothers Marine Park according to the MTRMP-CAV.

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

#### 7.4 Implementation of Dolphin Exclusion Zone

The Dolphin Exclusion Zone (DEZ) Plan was submitted in accordance with EP Condition 3.1 (v) requirement and Section 10.3 of the Updated EM&A Manual, and approved in April 2016 by EPD. The 24-hour DEZs with a 250m radius for marine works were established and implemented by the contractors for DCM works in accordance with the DEZ Plan.

During the reporting period, ET has been notified on one record of dolphin sighting within the DEZ by the contractor. ET has checked the dolphin sighting record and the contractor's site record to audit the implementation of DEZ. The dolphin sighting was recorded on 17 February 2017 from a DCM barge working at Area A3 (geographical coordinates: 22°19'29.36"N, 113°53'44.78"E; refer to **Figure 1.2** for the location of works area). The dolphin was first sighted at 08:51 and last sighted at 08:53 within the DEZ. DCM installation works on the DCM barge was ceased in one minute (at 08:52) in accordance with the DEZ Plan, and not resumed until the DEZ was clear of dolphin for a continuous period of at least 30 minutes.

#### 7.5 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 observed that HDD works were conducted under the Contract P560(R) at the daylighting location and there was no encroachment upon the egretry area nor any significant disturbance to the egrets foraging at Sheung Sha Chau by the works. Sign of early breeding activities by Black-crowned Night Heron was observed on trees located at the previously identified egretry area. The site photos and location map regarding the monthly ecological monitoring for the egretry area on Sheung Sha Chau and the HDD works are provided in **Appendix C** for reference.

#### 7.6 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**.

| EP<br>Condition | Submission   | Status              |
|-----------------|--|---------------------|
| 2.1             | Complaint Management Plan  |                     |
| 2.4             | Management Organizations   |                     |
| 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  | Accepted / approved |
| 2.12            | Coral Translocation Plan   | by EPD              |
| 2.13            | Fisheries Management Plan  |                     |
| 2.14            | Egretry 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  |                     |

#### Table 7.2: Status of Submissions under Environmental Permit

#### 7.7 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 D**.

# 7.8 Analysis and Interpretation of Complaints, Notification of Summons and Status of Prosecutions

#### 7.8.1 Complaints

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

#### 7.8.2 Notifications of Summons or Status of Prosecution

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

#### 7.8.3 Cumulative Statistics

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

## 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:

#### **Advanced Works:**

#### Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- HDD works;
- Pipeline supporting works; and
- Stockpiling of excavated materials from HDD operation.

#### **DCM Works:**

#### Contract 3201 to 3205 Deep Cement Mixing Works

- Laying of geotextile and sand blanket;
- Site office establishment; and
- DCM works and trials.

#### **Reclamation Works:**

#### **Contract 3206 Main Reclamation Works**

 Site office establishment; and Laying of geotextile and sand blanket;

#### 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 and DCM trial works;
- 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 C**.

### 9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included five DCM contracts, an advanced works contract and a reclamation contract. The DCM contracts involved DCM works and trials, site office establishment, laying of geotextile and sand blanket; the advanced works contract involved HDD works and pipeline supporting works; and the reclamation contract involved site office establishment 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, chromium, and nickel obtained during the reporting period were in compliance with their corresponding Action and Limit Levels. For turbidity and SS, some of the testing results exceeded the relevant Action or Limit Levels during the reporting period. The investigation findings concluded that the exceedances were not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau Island observed that HDD works were conducted at the daylighting location and there was no encroachment upon the egretry 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, including the observations on the conditions of silt curtains, which have been provided to the contractors together with the appropriate follow-up actions where necessary.

On the implementation of Marine Mammal Watching Plan, silt curtains were in place by the contractors for sand blanket laying works and dolphin observers were deployed in accordance with the Plan. On the implementation of Dolphin Exclusion Zone Plan, dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there was one record of dolphin sighting within the DEZ of DCM works in this reporting month. According to contractors' site records, DCM works were suspended in the dolphin sighting event until the DEZ was clear of dolphin for a continuous period of 30 minutes. These contractors' records were checked by the ET during site inspection. Audits of acoustic decoupling for construction vessels were also carried out by the ET.

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 HSFs in February 2017 were in the range of 89 to 93 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 783 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the SCZ with average speeds under 15 knots (6.4 to 14.1

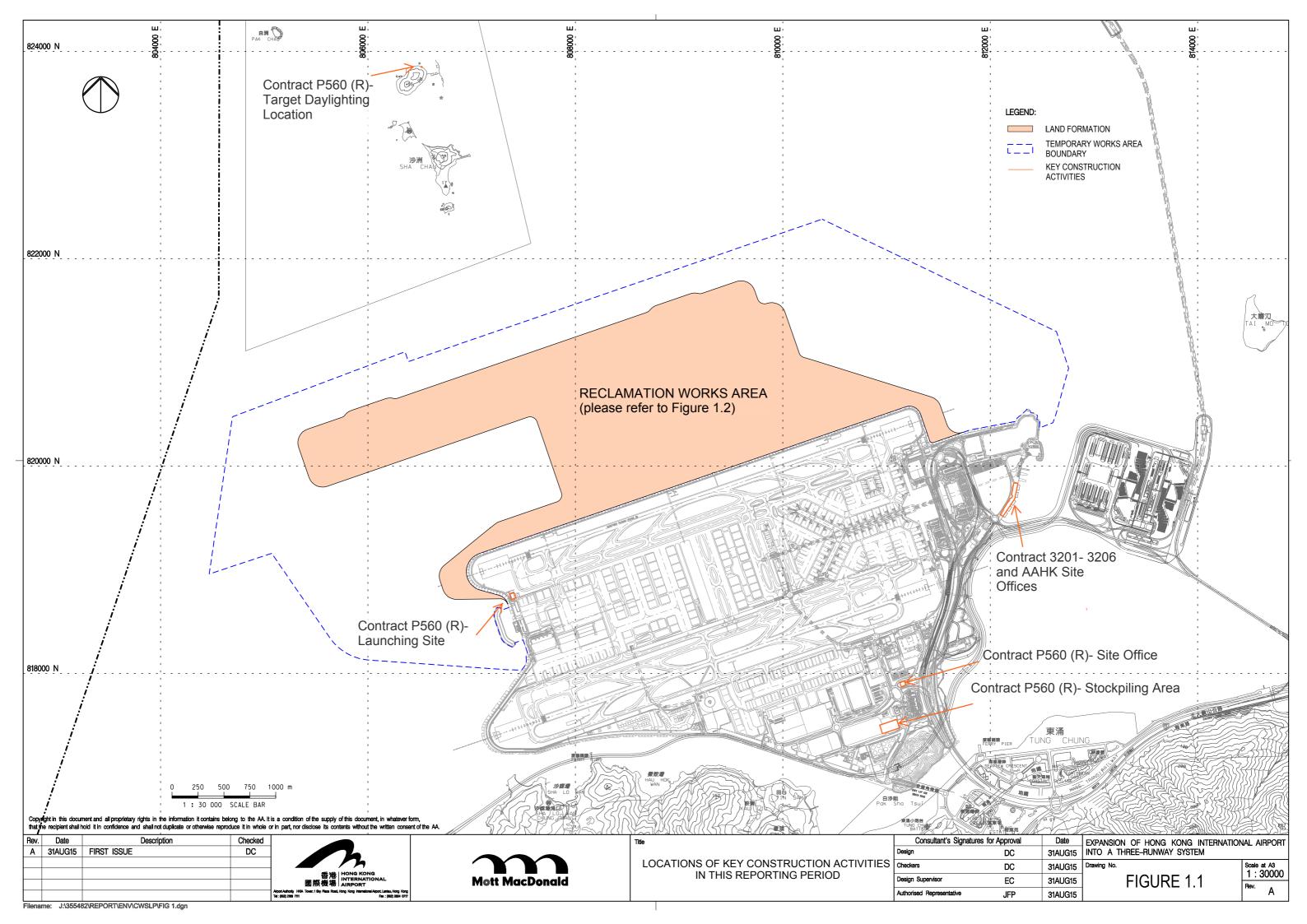
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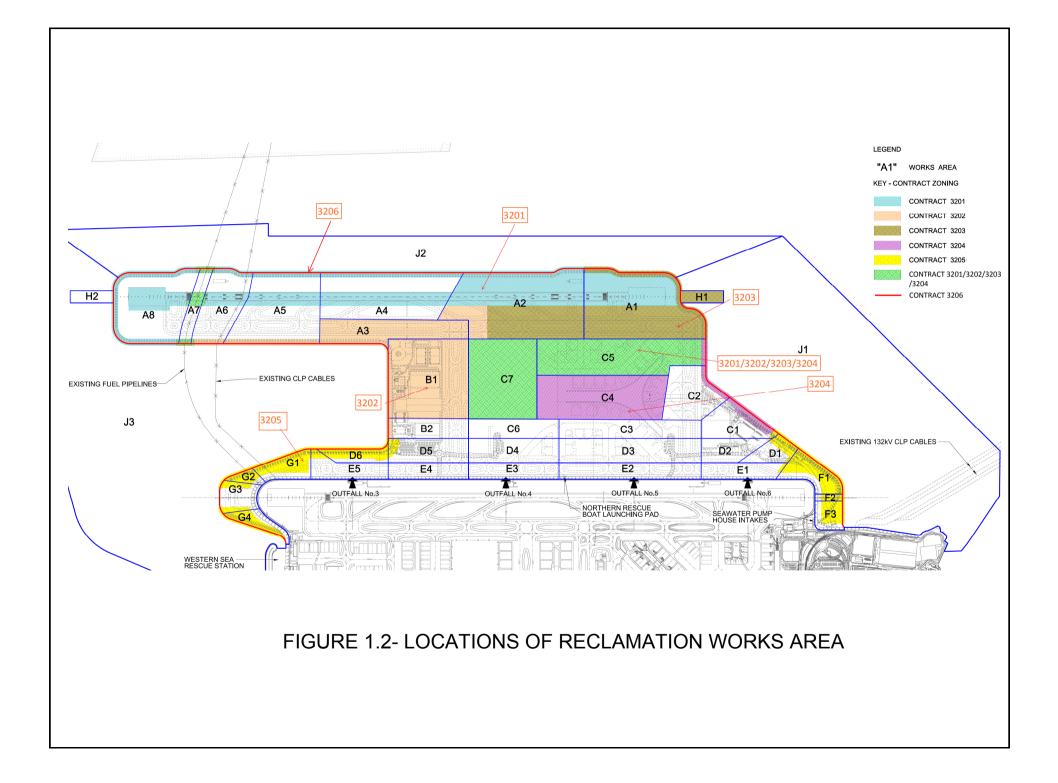
knots), which were in compliance with the SkyPier Plan. One ferry movements with minor deviation from the diverted route is under investigation by ET. The investigation result will be presented in the next monthly EM&A report. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

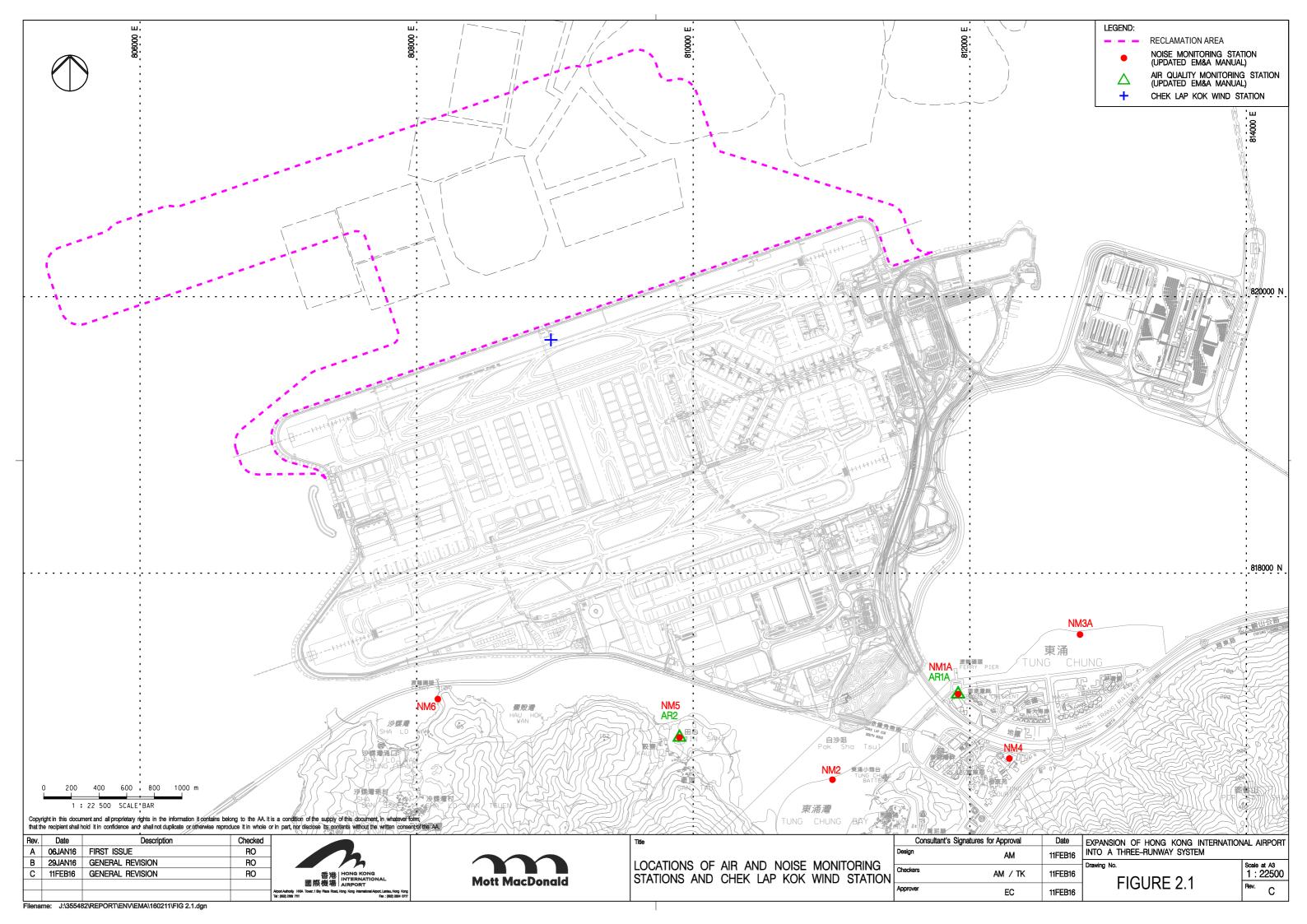
On the implementation of the MTRMP-CAV, ET conducted weekly audit of relevant information, including AIS data, vessel tracks and other relevant records to ensure the contractors complied with the requirements of the MTRMP-CAV. Training has been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. 3-month rolling programmes for construction vessel activities were also received from contractors. ET reminded contractors that all vessels shall avoid entering the Brothers Marine Park, which has been designated since 30 December 2016.

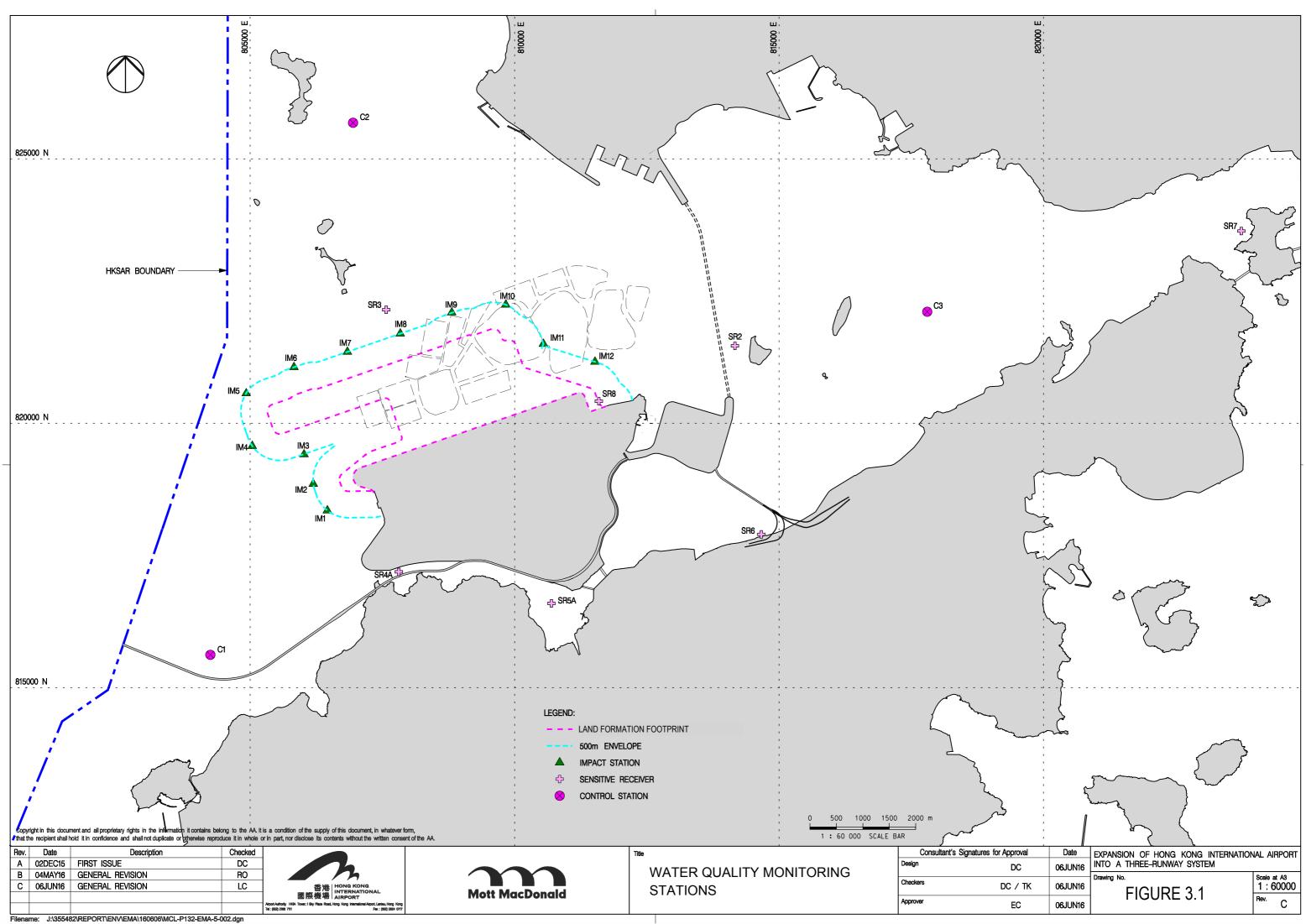
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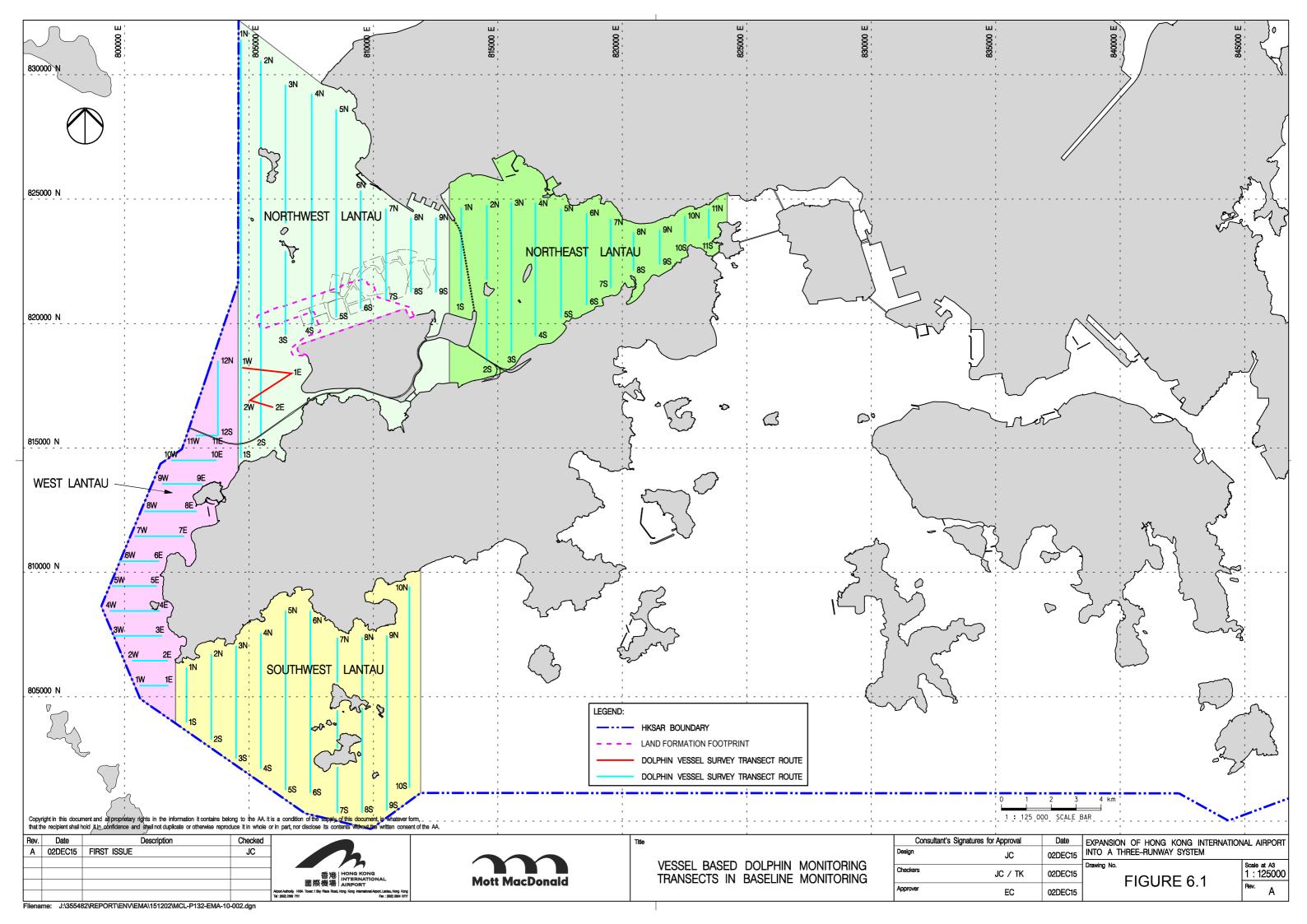
## **Figures**

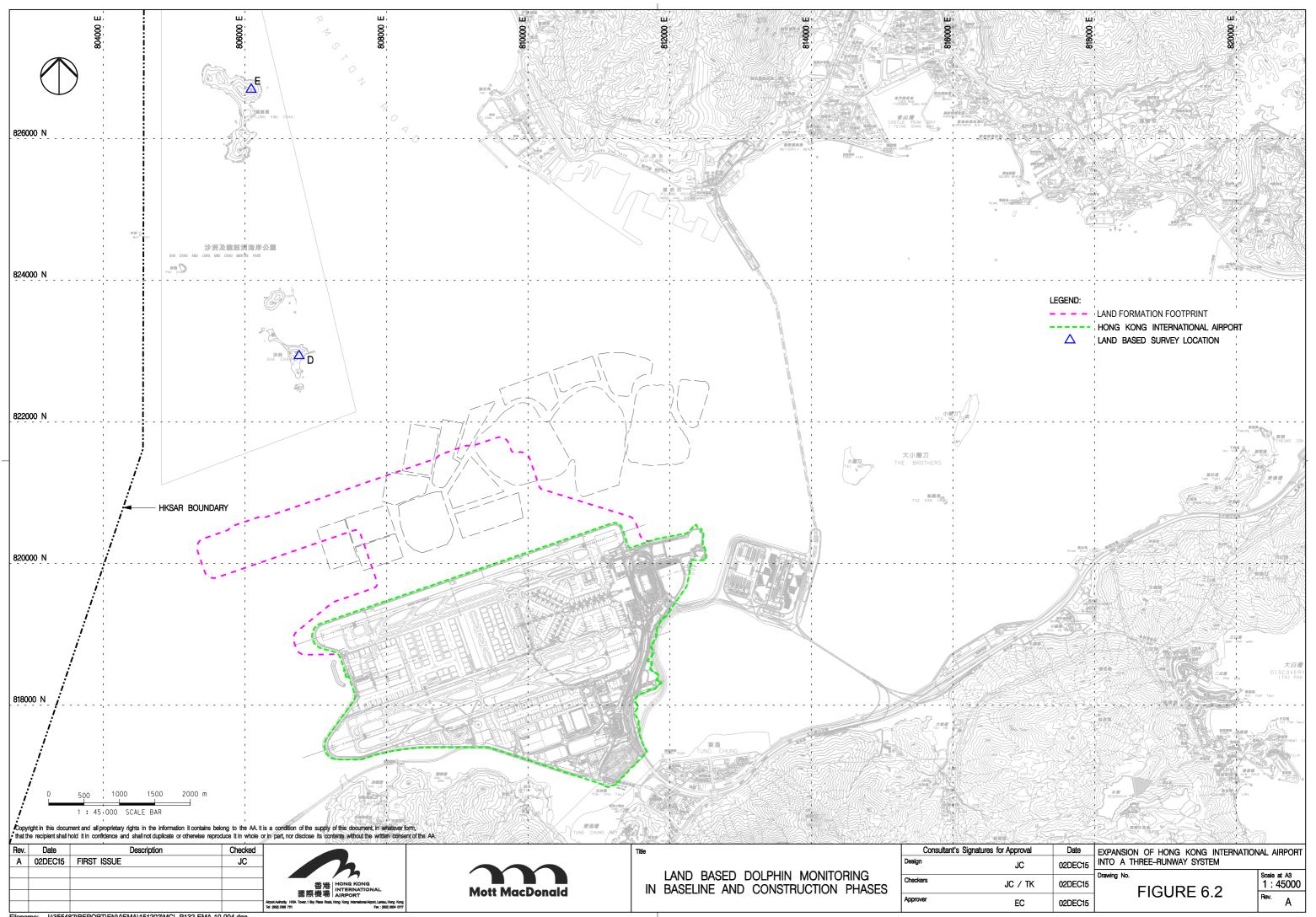




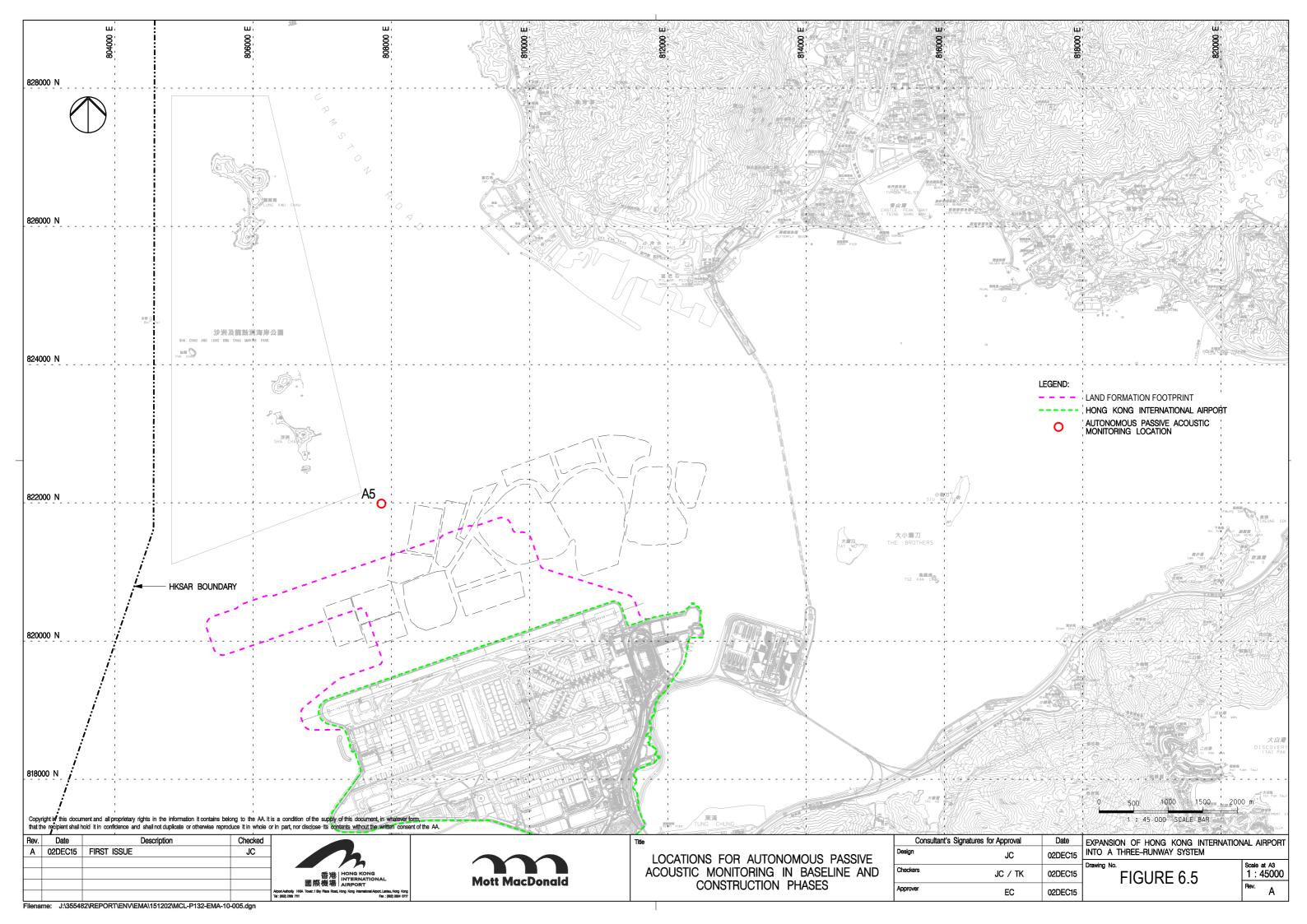








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## Appendix A. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase



# Appendix A Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration<br>of measures<br>Timing of completion          | Mitigation<br>Measures<br>Implemented?^ |
|----------|--------------|-----------------|--|---|---|
|          |              |                 |  | of measures   |   |
|          |              |                 | Air Quality Impact – Construction Phase  |   |   |
| 5.2.6.2  | 2.1          | -               | Dust Control Measures  | Within construction   | 1                                       |
|          |              |                 | <ul> <li>Water spraying for 12 times a day or once every two hours for 24-hour working at all active works area.</li> </ul>  | site / Duration of the<br>construction phase                        |   |
| 5.2.6.3  | 2.1          | -               | <ul> <li>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.</li> </ul>  | Within construction<br>site / Duration of the<br>construction phase | I                                       |
| 5.2.6.4  | 2.1          | -               | Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be<br>adopted. These practices include:  | Within construction site / Duration of the                          | I                                       |
|          |              |                 | Good Site Management   | construction phase  |   |
|          |              |                 | 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 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   | Within construction   | I                                       |
|          |              |                 | <ul> <li>Each and every main temporary access should be paved with concrete, bituminous hardcore materials<br/>or metal plates and kept clear of dusty materials; or</li> </ul>  | site / Duration of the<br>construction phase                        |   |
|          |              |                 | <ul> <li>Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep<br/>the entire road surface wet.</li> </ul>   |   |   |
|          |              |                 | Exposed Earth  | Within construction   | N/A                                     |
|          |              |                 | <ul> <li>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.</li> </ul>   | site / Duration of the construction phase                           |   |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration of measures              | Mitigation<br>Measures |
|----------|--------------|-----------------|--|--|------------------------|
|          |              |                 |  | Timing of completion of measures             | Implemented?           |
|          |              |                 | Loading, Unloading or Transfer of Dusty Materials  | Within construction                          | 1                      |
|          |              |                 | <ul> <li>All dusty materials should be sprayed with water immediately prior to any loading or transfer operation<br/>so as to keep the dusty material wet.</li> </ul>  | site / Duration of the<br>construction phase |                        |
|          |              |                 | Debris Handling  | Within construction                          | I                      |
|          |              |                 | <ul> <li>Any debris should be covered entirely by impervious sheeting or stored in a debris collection area<br/>sheltered on the top and the three sides; and</li> </ul>   | site / Duration of the<br>construction phase |                        |
|          |              |                 | <ul> <li>Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.</li> </ul>  |  |                        |
|          |              |                 | Transport of Dusty Materials   | Within construction                          | I                      |
|          |              |                 | <ul> <li>Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material.<br/>The cover should extend over the edges of the sides and tailboards.</li> </ul>   | site / Duration of the<br>construction phase |                        |
|          |              |                 | Wheel washing  | Within construction                          | 1                      |
|          |              |                 | <ul> <li>Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before<br/>leaving the construction site, every vehicle should be washed to remove any dusty materials from its<br/>body and wheels.</li> </ul>   | site / Duration of the construction phase    |                        |
|          |              |                 | Use of vehicles  | Within construction                          | I                      |
|          |              |                 | <ul> <li>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;</li> </ul>  | site / Duration of the<br>construction phase |                        |
|          |              |                 | <ul> <li>Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and</li> </ul>   |  |                        |
|          |              |                 | <ul> <li>Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be<br/>covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the<br/>vehicle.</li> </ul>   |  |                        |
|          |              |                 | Site hoarding  | Within construction                          | T                      |
|          |              |                 | <ul> <li>Where a site boundary adjoins a road, street, service lane or other area accessible to the public,<br/>hoarding of not less than 2.4m high from ground level should be provided along the entire length of that<br/>portion of the site boundary except for a site entrance or exit.</li> </ul>   | site / Duration of the<br>construction phase |                        |
| 5.2.6.5  | 2.1          | -               | Best Practices for Concrete Batching Plant   | Within Concrete                              | N/A                    |
|          |              |                 | The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable<br>Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process<br>licence should be adopted. The best practices are recommended to be applied to both the land based and<br>floating concrete batching plants. Best practices include: |  |                        |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|----------|--------------|-----------------|--|---|---|
|          |              |                 | <ul> <li>The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other<br/>equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden<br/>air or waste gas generated by the process operations shall be properly extracted and vented to fabric<br/>filtering system to meet the required emission limit;</li> </ul>                                      |   |   |
|          |              |                 | <ul> <li>Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high<br/>level alarms to warn of over-filling. The high-level alarm indicators shall be interlocked with the material<br/>filling line such that in the event of the silo approaching an overfilling condition, an audible alarm will<br/>operate, and after 1 minute or less the material filling line will be closed;</li> </ul> |   |   |
|          |              |                 | <ul> <li>Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit;</li> </ul>   |   |   |
|          |              |                 | <ul> <li>Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required<br/>emission limit; and</li> </ul>   |   |   |
|          |              |                 | <ul> <li>Seating of pressure relief values of all silos shall be checked, and the values re-seated if necessary,<br/>before each delivery.</li> </ul>  |   |   |
|          |              |                 | Other raw materials  | Within Concrete   | N/A                                     |
|          |              |                 | <ul> <li>The loading, unloading, handling, transfer or storage of other raw materials which may generate<br/>airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a<br/>manner to prevent or minimize dust emissions;</li> </ul>  | Batching Plant /<br>Duration of the<br>construction phase                 |   |
|          |              |                 | <ul> <li>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;</li> </ul>  |   |   |
|          |              |                 | <ul> <li>All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above<br/>the unloading point. In no case shall these hoppers be used as the material storage devices;</li> </ul>   |   |   |
|          |              |                 | <ul> <li>The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at<br/>the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also<br/>be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same<br/>performance;</li> </ul>  |   |   |
|          |              |                 | <ul> <li>All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be<br/>fitted with adequate flexible seals;</li> </ul>  |   |   |
|          |              |                 | <ul> <li>Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt<br/>surface;</li> </ul>  |   |   |
|          |              |                 | <ul> <li>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;</li> </ul>   |   |   |
|          |              |                 | <ul> <li>Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure<br/>such as storage bin and should not be handled in open area. Where there is sufficient buffer area<br/>surrounding the concrete batching plant, ground stockpiling may be used;</li> </ul>  |   |   |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented? |
|----------|--------------|-----------------|---|---|--|
|          |              |                 | <ul> <li>The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the<br/>entrance side;</li> </ul>   |   |  |
|          |              |                 | <ul> <li>Aggregates with a nominal size greater than 5 mm should preferably be stored in a totally enclosed<br/>structure. If open stockpiling is used, the stockpile shall be enclosed on three sides with the enclosure<br/>wall sufficiently higher than the top of the stockpile to prevent wind whipping; and</li> </ul>   |   |  |
|          |              |                 | The opening between the storage bin and weighing scale of the materials shall be fully enclosed.  |   |  |
|          |              |                 | Loading of materials for batching   | Within Concrete   | N/A                                    |
|          |              |                 | <ul> <li>Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following<br/>control measures shall be implemented:</li> </ul>   | Batching Plant /<br>Duration of the                                       |  |
|          |              |                 | (a) Pre-mixing the materials in a totally enclosed concrete mixer before loading the materials into the<br>concrete truck is recommended. All dust-laden air generated by the pre-mixing process as well as<br>the loading process shall be totally vented to fabric filtering system to meet the required emission<br>limit; and   | construction phase  |  |
|          |              |                 | (b) If truck mixing batching or other types of batching method is used, effective dust control measures<br>acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to<br>EPD that they are capable to collect and vent all dust-laden air generated by the material<br>loading/mixing to dust arrestment plant to meet the required emission limit. |   |  |
|          |              |                 | The loading bay shall be totally enclosed during the loading process.   |   |  |
|          |              |                 | Vehicles  | Within Concrete   | N/A                                    |
|          |              |                 | <ul> <li>All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle<br/>movement; and</li> </ul>  | Batching Plant /<br>Duration of the                                       |  |
|          |              |                 | <ul> <li>All access and route roads within the premises shall be paved and adequately wetted.</li> </ul>  | construction phase  |  |
|          |              |                 | Housekeeping  | Within Concrete   | N/A                                    |
|          |              |                 | <ul> <li>A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground,<br/>support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any<br/>dumping of materials at open area shall be prohibited.</li> </ul>  | Batching Plant /<br>Duration of the<br>construction phase                 |  |
| 5.2.6.6  | 2.1          | -               | Best Practices for Asphaltic Concrete Plant   | Within Concrete   | N/A                                    |
|          |              |                 | 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:   | Batching Plant /<br>Duration of the<br>construction phase                 |  |
|          |              |                 | Design of Chimney   |   |  |
|          |              |                 | <ul> <li>The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level,<br/>whichever is the greater;</li> </ul>  |   |  |
|          |              |                 | <ul> <li>The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition;</li> </ul>  |   |  |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration of measures  | Mitigation<br>Measures |  |
|----------|--------------|-----------------|---|--|------------------------|--|
|          |              |                 |   | Timing of completion of measures   | Implemented?^          |  |
|          |              |                 | 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.   |  |                        |  |
|          |              |                 | Cold feed side  | Within Concrete  | N/A                    |  |
|          |              |                 | <ul> <li>The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed<br/>structure such as storage bin and shall not be handled in open area;</li> </ul>  | Batching Plant /<br>Duration of the<br>construction phase                    | Duration of the        |  |
|          |              |                 | <ul> <li>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 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;</li> </ul>                             |  |                        |  |
|          |              |                 | <ul> <li>The aggregates with a nominal size greater than 5 mm should preferably be stored in totally enclosed<br/>structure. Aggregates stockpile that is above the feeding hopper shall be enclosed at least on top and<br/>three sides. If open stockpiling is used, the stockpiles shall be enclosed on three sides with the<br/>enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping;</li> </ul> |  |                        |  |
|          |              |                 | <ul> <li>Belt conveyors shall be enclosed on top and two sides and provided with a metal board at the bottom to<br/>eliminate any dust emission due to the wind-whipping effect. Other type of enclosure will also be<br/>accepted by EPD if it can be demonstrated that the proposed enclosure can be achieve the same<br/>performance;</li> </ul>   |  |                        |  |
|          |              |                 | <ul> <li>Scrapers shall be provided at the turning points of all belt conveyors inside the chute of the transfer<br/>points to remove dust adhered to the belt surface;</li> </ul>  |  |                        |  |
|          |              |                 | <ul> <li>All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be<br/>fitted with adequate flexible seals; and</li> </ul>  |  |                        |  |
|          |              |                 | <ul> <li>All materials returned from dust collection system shall be transferred in enclosed system and shall be<br/>stored inside bins or enclosures.</li> </ul>   |  |                        |  |
|          |              |                 | Hot feed side   | Within Concrete<br>Batching Plant /<br>Duration of the<br>construction phase | N/A                    |  |
|          |              |                 | <ul> <li>The inlet and outlet of the rotary dryer shall be enclosed and ducted to a dust extraction and collection<br/>system such as a fabric filter. The particulate and gaseous concentration at the exhaust outlet of the<br/>dust collector shall not exceed the required limiting values;</li> </ul>  |  |                        |  |
|          |              |                 | <ul> <li>The bucket elevator shall be totally enclosed and the air be extracted and ducted to a dust collection<br/>system to meet the required particulates limiting value;</li> </ul>   |  |                        |  |
|          |              |                 | <ul> <li>All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening.<br/>Gaskets shall be installed to seal off any cracks and edges of any inspection openings;</li> </ul>   |  |                        |  |
|          |              |                 | <ul> <li>Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside.<br/>They shall be inspected daily for leakages;</li> </ul>   |  |                        |  |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?/ |
|----------|--------------|-----------------|--|---|---|
|          |              |                 | <ul> <li>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</li> </ul> |   |   |
|          |              |                 | <ul> <li>Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as<br/>well as the ambient odour level (2 odour units).</li> </ul>   |   |   |
|          |              |                 | Material transportation  | Within Concrete   | N/A                                     |
|          |              |                 | <ul> <li>The loading, unloading, handling, transfer or storage of other raw materials which may generate<br/>airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried<br/>out in such a manner as to minimize dust emissions;</li> </ul>   | Batching Plant /<br>Duration of the<br>construction phase                 |   |
|          |              |                 | <ul> <li>Roadways from the entrance of the plant to the product loading points and/or any other working areas<br/>where there are regular movements of vehicles shall be paved or hard surfaced; and</li> </ul>  |   |   |
|          |              |                 | <ul> <li>Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by<br/>water trucks or water sprayers.</li> </ul>  |   |   |
|          |              |                 | Control of emissions from bitumen decanting  | Within Concrete   | N/A                                     |
|          |              |                 | <ul> <li>The heating temperature of the particular bitumen type and grade shall not exceed the corresponding<br/>temperature limit of the same type listed in Appendix 1 of the Guidance Note;</li> </ul>  | Batching Plant /<br>Duration of the                                       |   |
|          |              |                 | <ul> <li>Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in<br/>case the upper limit for bitumen temperature is reached;</li> </ul>   | construction phase  |   |
|          |              |                 | 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.   |   |   |
|          |              |                 | <ul> <li>Liquid fuel</li> <li>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.</li> </ul>   | Within Concrete<br>Batching Plant /<br>Duration of the                    | N/A                                     |
|          |              |                 |  | construction phase  |   |
|          |              | Housekeeping    | Housekeeping   | Within Concrete   | N/A                                     |
|          |              |                 | <ul> <li>A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles<br/>gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The<br/>minimum clearing frequency is on a weekly basis.</li> </ul>  | Batching Plant /<br>Duration of the<br>construction phase                 |   |
| 5.2.6.7  | 2.1          | -               | Best Practices for Rock Crushing Plants  | Within Concrete   | N/A                                     |
|          |              |                 | 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:  | Batching Plant /<br>Duration of the<br>construction phase                 |   |



| EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|--------------|-----------------|--|---|---|
|              |                 |  |   |   |
|              |                 | Crushers   |   |   |
|              |                 | <ul> <li>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;</li> </ul>  |   |   |
|              |                 | <ul> <li>The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions<br/>during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping;</li> </ul>   |   |   |
|              |                 | <ul> <li>Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and</li> </ul>  |   |   |
|              |                 | <ul> <li>Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and<br/>exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries<br/>and exits of the conveyors to the enclosure.</li> </ul>   |   |   |
|              |                 | Vibratory screens and grizzlies  | Within Concrete   | N/A                                     |
|              |                 | <ul> <li>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</li> </ul>  | Batching Plant /<br>Duration of the<br>construction phase                 |   |
|              |                 | <ul> <li>All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their<br/>feeding and outlet areas.</li> </ul>   |   |   |
|              |                 | Belt conveyors   | Within Concrete   | N/A                                     |
|              |                 | <ul> <li>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;</li> </ul>  | Batching Plant /<br>Duration of the<br>construction phase                 |   |
|              |                 | <ul> <li>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</li> </ul> |   |   |
|              |                 | <ul> <li>Except for those transfer points which are placed within a totally enclosed structure such as a<br/>screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust<br/>within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed<br/>structure for the passage of conveyors shall be fitted with flexible seals.</li> </ul>   |   |   |



|            | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|------------|--------------|-----------------|--|---|---|
|            |              |                 |  |   |   |
|            |              |                 | Storage piles and bins   | Within Concrete   | N/A                                     |
|            |              |                 | <ul> <li>Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible<br/>curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be<br/>used where required.</li> </ul>   | Batching Plant /<br>Duration of the<br>construction phase                 |   |
|            |              |                 | <ul> <li>The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet<br/>by water spraying wherever practicable;</li> </ul>  |   |   |
|            |              |                 | <ul> <li>All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water<br/>spraying where practicable; or</li> </ul>  |   |   |
|            |              |                 | <ul> <li>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.</li> </ul> |   |   |
|            |              |                 | <ul> <li>Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared<br/>regularly.</li> </ul>  |   |   |
|            |              |                 | Rock drilling equipment  | Within Concrete   | N/A                                     |
|            |              |                 | <ul> <li>Appropriate dust control equipment such as a dust extraction and collection system shall be used during<br/>rock drilling activities.</li> </ul>  | Batching Plant /<br>Duration of the<br>construction phase                 |   |
|            |              |                 | Hazard to Human Life – Construction Phase  |   |   |
| Table 6.40 | 3.2          | -               | <ul> <li>Precautionary measures should be established to request barges to move away during typhoons.</li> </ul>   | Construction Site /<br>Construction Period                                | I                                       |
| Table 6.40 | 3.2          | -               | <ul> <li>An appropriate marine traffic management system should be established to minimize risk of ship<br/>collision.</li> </ul>  | Construction Site /<br>Construction Period                                | Ι                                       |
| Table 6.40 | 3.2          | -               | <ul> <li>Location of all existing hydrant networks should be clearly identified prior to any construction works.</li> </ul>  | Construction Site /<br>Construction Period                                | N/A                                     |
|            |              |                 | Noise Impact – Construction Phase  |   |   |
| 7.5.6      | 4.3          | Good            | <b>Good Site Practice</b><br>Good site practice and noise management can significantly reduce the impact of construction site activities<br>on nearby NSRs. The following package of measures should be followed during each phase of construction:  | Within the Project site /<br>During construction<br>phase / Prior to      | I                                       |
|            |              |                 | <ul> <li>only well-maintained plant to be operated on-site and plant should be serviced regularly during the<br/>construction works;</li> </ul>  | commencement of operation   |   |
|            |              |                 | <ul> <li>machines and plant that may be in intermittent use to be shut down between work periods or should be<br/>throttled down to a minimum;</li> </ul>  |   |   |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|----------|--------------|-----------------|---|---|---|
|          |              |                 |   |   |   |
|          |              |                 | <ul> <li>mobile plant should be sited as far away from NSRs as possible; and</li> </ul>   |   |   |
|          |              |                 | <ul> <li>material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from<br/>on-site construction activities.</li> </ul>     |   |   |
| 7.5.6    | 4.3          | -               | Adoption of QPME  | Within the Project site /   |   |
|          |              |                 | <ul> <li>QPME should be adopted as far as applicable.</li> </ul>  | During construction<br>phase / Prior to<br>commencement of<br>operation   |   |
| 7.5.6    | 4.3          | -               | Use of Movable Noise Barriers   | Within the Project site /   | I                                       |
|          |              |                 | <ul> <li>Movable noise barriers should be placed along the active works area and mobile plants to block the<br/>direct line of sight between PME and the NSRs.</li> </ul> | During construction<br>phase / Prior to<br>commencement of<br>operation   |   |
| 7.5.6    | 4.3          | -               | Use of Noise Enclosure/ Acoustic Shed   | Within the Project site /   |   |
|          |              |                 | <ul> <li>Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and<br/>generator.</li> </ul>                                     | During construction<br>phase / Prior to<br>commencement of<br>operation   |   |
|          |              |                 | Water Quality Impact – Construction Phase   |   |   |



| EIA Ref.               | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^   |
|------------------------|--------------|-----------------|---|---|---|
| 8.8.1.2 and<br>8.8.1.3 | 5.1          | 2.26            | <ul> <li>Marine Construction Activities General Measures to be Applied to All Works Areas </li> <li>Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; </li> <li>Use of Lean Material Overboard (LMOB) systems shall be prohibited;</li> <li>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;</li></ul>   | Within construction<br>site / Duration of the<br>construction phase       | 1   |
|                        |              |                 | <ul> <li>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;</li> <li>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</li> <li>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.</li> </ul> |   |   |
|                        |              |                 | <ul> <li>Specific Measures to be Applied to All Works Areas</li> <li>The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report;</li> <li>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;</li> </ul>  | Within construction<br>site / Duration of the<br>construction phase       | 1   |
|                        |              |                 | <ul> <li>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;</li> <li>Closed grab dredger shall be used to excavate marine sediment;</li> <li>Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and</li> </ul>   |   | N/A<br>N/A<br>*(The arrangement<br>silt curtain has beer<br>modified. The detai |
|                        |              |                 | <ul> <li>The Silt Curtain Deployment Plan shall be implemented.</li> </ul>  |   | can be referred to s<br>Curtain Deploymer<br>Plan)                              |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration<br>of measures<br>Timing of completion<br>of measures  | Mitigation<br>Measures<br>Implemented?^   |
|----------|--------------|-----------------|---|--|---|
|          |              |                 |   |  |   |
|          |              |                 | <ul> <li>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling<br/>Works</li> <li>Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to<br/>commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS<br/>release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of<br/>the silt curtains;</li> </ul> | Within construction<br>site / Duration of the<br>construction phase<br>Within construction<br>site / Duration of the<br>construction phase | NA<br>*(The arrangement of<br>silt curtain has been<br>modified. The details<br>can be referred to Silt<br>Curtain Deployment<br>Plan)    |
|          |              |                 | <ul> <li>Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both<br/>WSR C7a and C8 prior to commencement of construction; and</li> </ul>   |  | For C7a, I<br>For C8, N/A   |
|          |              |                 |   |  | *(The requirement of<br>silt curtain / screen<br>has been modified.<br>The details can be<br>referred to Silt Curtain<br>Deployment Plan) |
|          |              |                 | The silt curtains and silt screens should be regularly checked and maintained.  |  | I   |
|          |              |                 | Specific Measures to be Applied to Land Formation Activities during Marine Filling Works  |  | N/A *(The   |
|          |              |                 | <ul> <li>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;</li> </ul>  |  | arrangement of silt<br>curtain has been<br>modified. The details<br>can be referred to Silt<br>Curtain Deployment<br>Plan)                |
|          |              |                 | <ul> <li>Double layer silt curtains to be applied at the south-western opening prior to commencement of marine<br/>filling activities;</li> </ul>   |  | N/A *(The<br>arrangement of silt<br>curtain has been<br>modified. The details<br>can be referred to Silt<br>Curtain Deployment<br>Plan)   |
|          |              |                 | <ul> <li>Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR</li> <li>C7a and C8 prior to commencement of marine filling activities; and</li> </ul>   |  | N/A   |
|          |              |                 | C7a and C8 prior to commencement of marine filling activities; and  |  | *(The requirement of<br>silt curtain / screen<br>has been modified.<br>The details can be<br>referred to Silt Curtain<br>Deployment Plan) |
|          |              |                 | The silt curtains and silt screens should be regularly checked and maintained.  |  | N/A   |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|----------|--------------|-----------------|--|---|---|
|          |              |                 |  |   |   |
|          |              |                 | Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion  | Within construction   | N/A                                     |
|          |              |                 | <ul> <li>Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when<br/>operated. Excavated materials shall be disposed at designated marine disposal area in accordance with<br/>the Dumping and Sea Ordinance (DASO) permit conditions; and</li> </ul>   | site / Duration of the<br>construction phase                              |   |
|          |              |                 | Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.   |   |   |
| 8.8.1.4  | 5.1          | -               | Modification of the Existing Seawall   | At the existing   | N/A                                     |
|          |              |                 | <ul> <li>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.</li> </ul> | northern seawall /<br>Duration of the<br>construction phase               |   |
| 8.8.1.5  | 5.1          | -               | Construction of New Stormwater Outfalls and Modifications to Existing Outfalls   | Within construction<br>site / Duration of the<br>construction phase       | N/A                                     |
|          |              |                 | <ul> <li>During operation of the temporary drainage channel, runoff control measures such as bunding or silt<br/>fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the<br/>temporary channel. Measures should also be taken to minimise the ingress of site drainage into the<br/>culvert excavations.</li> </ul>   |   |   |
| 8.8.1.6  | 5.1          | 2.27            | Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons   | Within construction   | N/A                                     |
| 8.8.1.7  |              |                 | 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.   | site / Duration of the<br>construction phase                              |   |
|          |              |                 | For construction of the eastern approach lights at the CMPs  |   |   |
|          |              |                 | <ul> <li>Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works;</li> </ul>   |   |   |
|          |              |                 | <ul> <li>Steel casings shall be installed to enclose the excavation area prior to commencement of excavation;</li> </ul>   |   |   |
|          |              |                 | <ul><li>The excavated materials shall be removed using a closed grab within the steel casings;</li></ul>   |   |   |
|          |              |                 | No discharge of the cement mixed materials into the marine environment will be allowed; and  |   |   |
|          |              |                 | <ul> <li>Excavated materials shall be treated and reused on-site.</li> </ul>   |   |   |
| 8.8.1.8  | 5.1          | -               | Construction of Site Runoff and Drainage   | Within construction   |   |
|          |              |                 | 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:  | site / Duration of the<br>construction phase                              |   |
|          |              |                 | <ul> <li>Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage,<br/>erosion and sedimentation control facilities. Channels, earth bunds or sand bag barriers should be<br/>provided on site to direct storm water to silt removal facilities. The design of the temporary on-site</li> </ul>   | -   | I                                       |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|----------|--------------|-----------------|---|---|---|
|          |              |                 | 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);   |   |   |
|          |              |                 | <ul> <li>Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove<br/>sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The<br/>design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of<br/>ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the<br/>sand/silt traps should be undertaken by the Contractors prior to the commencement of construction;</li> </ul>   |   | 1                                       |
|          |              |                 | <ul> <li>All drainage facilities and erosion and sediment control structures should be regularly inspected and<br/>maintained to ensure proper and efficient operation at all times and particularly during rainstorms.<br/>Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure<br/>that these facilities are functioning properly;</li> </ul>  |   | 1                                       |
|          |              |                 | <ul> <li>Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of<br/>trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever<br/>practicable. Water pumped out from foundation excavations should be discharged into storm drains via<br/>silt removal facilities;</li> </ul>   |   | N/A                                     |
|          |              |                 | <ul> <li>In the event that contaminated groundwater is identified at excavation areas, this should be treated on-<br/>site using a suitable wastewater treatment process. The effluent should be treated according to the<br/>requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected<br/>for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and</li> </ul>   |   | N/A                                     |
|          |              |                 | <ul> <li>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.</li> </ul> |   | 1                                       |
| 8.8.1.9  | 5.1          | -               | Sewage Effluent from Construction Workforce   | Within construction   | I                                       |
|          |              |                 | <ul> <li>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.</li> </ul>  | site / During<br>construction phase                                       |   |
| 8.8.1.10 | 5.1          |                 | General Construction Activities   | Within construction   | 1                                       |
| 8.8.1.11 |              |                 | <ul> <li>Construction solid waste, debris and refuse generated on-site should be collected, handled and<br/>disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other<br/>construction materials should be kept covered when not being used; and</li> </ul>   | site / During<br>construction phase                                       |   |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration of measures                                | Mitigation<br>Measures |
|----------|--------------|-----------------|--|--|------------------------|
|          |              |                 | Timing of completion of measures   | Implemented?^  |                        |
|          |              |                 | <ul> <li>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.</li> </ul> |  |                        |
| 8.8.1.12 | 5.1          | 2.28            | Drilling Activities for the Submarine Aviation Fuel Pipelines  | Within construction  | I                      |
| 3.8.1.13 |              |                 | To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:   | site / During  |                        |
|          |              |                 | <ul> <li>A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau;</li> </ul>   | construction phase   |                        |
|          |              |                 | <ul> <li>No bulk storage of chemicals shall be permitted; and</li> </ul>   |  |                        |
|          |              |                 | <ul> <li>A containment pit shall be constructed around the drill holes. This containment pit shall be lined with<br/>impermeable lining and bunded on the outside to prevent inflow from off-site areas.</li> </ul>  |  |                        |
|          |              |                 | At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:   | Within construction site / During                              | I                      |
|          |              |                 | <ul> <li>During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for<br/>treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank<br/>meet the WPCO/TM requirements before discharge; and</li> </ul>  | construction phase   |                        |
|          |              |                 | <ul> <li>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.</li> </ul>                    |  |                        |
|          |              |                 | Waste Management Implication – Construction Phase  |  |                        |
| 10.5.1.1 | 7.1          | -               | 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:   |  |                        |
|          |              |                 | <ul> <li>The relevant construction methods (particularly for the tunnel works) and construction programme have<br/>been carefully planned and developed to minimise the extent of excavation and to maximise the on-site<br/>reuse of inert C&amp;D materials generated by the project as far as practicable. Temporary stockpiling<br/>areas will also be provided to facilitate on-site reuse of inert C&amp;D materials;</li> </ul>             | Project Site Area /<br>During design and<br>construction phase | I                      |
|          |              |                 | <ul> <li>Priority should be given to collect and reuse suitable inert C&amp;D materials generated from other<br/>concurrent projects and the Government's PFRF as fill materials for the proposed land formation works;</li> </ul>   |  | I                      |
|          |              |                 | <ul> <li>Only non-dredged ground improvement methods should be adopted in order to completely avoid the<br/>need for dredging and disposal of marine sediment for the proposed land formation work;</li> </ul>   |  | I                      |
|          |              |                 | <ul> <li>Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to<br/>the CMPs beneath the fill materials in order to avoid excavating any sediments; and</li> </ul>  | -  | N/A                    |

| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|----------|--------------|-----------------|---|---|---|
|          |              |                 | <ul> <li>For the marine sediments expected to be excavated from the piling works of TRC, APM &amp; BHS tunnels,<br/>airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of<br/>the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and<br/>excavation works for the proposed APM depot should be treated and reused on-site as backfilling<br/>materials, although required treatment level / detail and the specific re-use mode are under<br/>development.</li> </ul> |   | N/A                                     |
| 10.5.1.1 | 7.1          | -               | The following good site practices should be performed during the construction activities include:   | Project Site Area /   | I                                       |
|          |              |                 | <ul> <li>Nomination of an approved person, such as a site manager, to be responsible for good site practices,<br/>arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at<br/>the site;</li> </ul>  | Construction Phase  |   |
|          |              |                 | <ul> <li>Training of site personnel in proper waste management and chemical waste handling procedures;</li> </ul>   |   |   |
|          |              |                 | <ul> <li>Provision of sufficient waste disposal points and regular collection for disposal;</li> </ul>  |   |   |
|          |              |                 | <ul> <li>Appropriate measures to minimise windblown litter and dust during transportation of waste by either<br/>covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover<br/>should be extended over the edges of the sides and tailboards;</li> </ul>   |   |   |
|          |              |                 | <ul> <li>Stockpiles of C&amp;D materials should be kept wet or covered by impervious sheets to avoid wind-blown<br/>dust;</li> </ul>  |   |   |
|          |              |                 | <ul> <li>All dusty materials including C&amp;D materials should be sprayed with water immediately prior to any<br/>loading transfer operation so as to keep the dusty material wet during material handling at the barging<br/>points/ stockpile areas;</li> </ul>  |   |   |
|          |              |                 | <ul> <li>C&amp;D materials to be delivered to and from the project site by barges or by trucks should be kept wet or<br/>covered to avoid wind-blown dust;</li> </ul>   |   |   |
|          |              |                 | <ul> <li>The speed of the trucks including dump trucks carrying C&amp;D or waste materials within the site should be<br/>controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe<br/>movement around the site; and</li> </ul>   |   |   |
|          |              |                 | <ul> <li>To avoid or minimise dust emission during transport of C&amp;D or waste materials within the site, each and<br/>every main temporary access should be paved with concrete, bituminous hardcore materials or metal<br/>plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a<br/>dust suppression chemical so as to keep the entire road surface wet.</li> </ul>  |   |   |
| 10.5.1.3 | 7.1          | -               | The following practices should be performed to achieve waste reduction include:   | Project Site Area /   | 1                                       |
|          |              |                 | <ul> <li>Use of steel or aluminium formworks and falseworks for temporary works as far as practicable;</li> </ul>   | Construction Phase  |   |
|          |              |                 | <ul> <li>Adoption of repetitive design to allow reuse of formworks as far as practicable;</li> </ul>  |   |   |
|          |              |                 | <ul> <li>Segregation and storage of different types of waste in different containers, skips or stockpiles to<br/>enhance reuse or recycling of materials and their proper disposal;</li> </ul>  |   |   |



| EIA Ref.  | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|-----------|--------------|-----------------|---|---|---|
|           |              |                 | <ul> <li>Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to<br/>enable these wastes to be segregated from other general refuse generated by the work force;</li> </ul>  |   |   |
|           |              |                 | <ul> <li>Any unused chemicals or those with remaining functional capacity should be collected for reused as far<br/>as practicable;</li> </ul>  |   |   |
|           |              |                 | <ul> <li>Proper storage and site practices to minimise the potential for damage or contamination of construction<br/>materials; and</li> </ul>  |   |   |
|           |              |                 | <ul> <li>Plan and stock construction materials carefully to minimise amount of waste generated and avoid<br/>unnecessary generation of waste.</li> </ul>  |   |   |
| 10.5.1.5  | 7.1          |                 | <ul> <li>Inert and non-inert C&amp;D materials should be handled and stored separately to avoid mixing the two<br/>types of materials.</li> </ul>   | Project Site Area /<br>Construction Phase                                 | I                                       |
| 10.5.1.5  | 7.1          | -               | <ul> <li>Any recyclable materials should be segregated from the non-inert C&amp;D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.</li> </ul> | Project Site Area /<br>Construction Phase                                 | I                                       |
| 10.5.1.6  | 7.1          | -               | <ul> <li>A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus<br/>inert C&amp;D materials that could not be reused on-site for the proposed land formation work at the PFRF<br/>and to control fly tipping.</li> </ul>                      | Project Site Area /<br>Construction Phase                                 | I                                       |
| 10.5.1.6  | 7.1          | 2.32            | <ul> <li>The Contractor should prepare and implement a Waste Management Plan detailing various waste<br/>arising and waste management practices.</li> </ul>   | Construction Phase  | Ι                                       |
| 10.5.1.16 | 7.1          | -               | The following mitigation measures are recommended during excavation and treatment of the sediments:   | Project Site Area /   | N/A                                     |
|           |              |                 | <ul> <li>On-site remediation should be carried out in an enclosed area in order to minimise odour/dust<br/>emissions;</li> </ul>  | Construction Phase  |   |
|           |              |                 | <ul> <li>The loading, unloading, handling, transfer or storage of treated and untreated sediment should be<br/>carried out in such a manner to prevent or minimise dust emissions;</li> </ul>   |   |   |
|           |              |                 | <ul> <li>All practical measures, including but not limited to speed control for vehicles, should be taken to<br/>minimise dust emission;</li> </ul>   |   |   |
|           |              |                 | <ul> <li>Good housekeeping should be maintained at all times at the sediment treatment facility and storage<br/>area;</li> </ul>  |   |   |
|           |              |                 | <ul> <li>Treated and untreated sediment should be clearly separated and stored separately; and</li> </ul>   |   |   |
|           |              |                 | <ul> <li>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.</li> </ul>               |   |   |
| 10.5.1.18 | 7.1          | -               | 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   | Project Site Area /<br>Construction Phase                                 | N/A                                     |



| EIA Ref.        | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration of measures  | Mitigation<br>Measures<br>Implemented?^ |
|-----------------|--------------|-----------------|---|--|---|
|                 |              |                 |   | Timing of completion of measures   | implemented ?**                         |
|                 |              |                 | followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal:   |  |   |
|                 |              |                 | <ul> <li>Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material;</li> </ul>   |  |   |
|                 |              |                 | <ul> <li>Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place<br/>during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring<br/>devices as specified by EPD; and</li> </ul>   |  |   |
|                 |              |                 | <ul> <li>Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or<br/>sediment laden water during loading or transportation.</li> </ul>   |  |   |
| 10.5.1.19       | 7.1          | -               | Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented:   | Project Site Area /<br>Construction Phase                                      | I                                       |
|                 |              |                 | <ul> <li>Good quality containers compatible with the chemical wastes should be used;</li> </ul>   |  |   |
|                 |              |                 | <ul> <li>Incompatible chemicals should be stored separately;</li> </ul>   |  |   |
|                 |              |                 | <ul> <li>Appropriate labels must be securely attached on each chemical waste container indicating the<br/>corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing,<br/>irritant, toxic, harmful, corrosive, etc.; and</li> </ul>  |  |   |
|                 |              |                 | <ul> <li>The contractor will use a licensed collector to transport and dispose of the chemical wastes at the<br/>approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the<br/>Waste Disposal (Chemical Waste) (General) Regulation.</li> </ul>   |  |   |
| 10.5.1.20       | 7.1          | -               | <ul> <li>General refuse should be stored in enclosed bins or compaction units separated from inert C&amp;D<br/>material. A reputable waste collector should be employed by the contractor to remove general refuse<br/>from the site for disposal at designated landfill sites. An enclosed and covered area should be provided<br/>to reduce the occurrence of 'wind blown' light material.</li> </ul> | Project Site Area /<br>Construction Phase                                      | I                                       |
| 10.5.1.21       | 7.1          | -               | <ul> <li>The construction contractors will be required to regularly check and clean any refuse trapped or<br/>accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of<br/>together with the general refuse.</li> </ul>   | Project Site Area /<br>Construction Phase                                      | N/A                                     |
|                 |              |                 | Land Contamination – Construction Phase   |  |   |
| 1.10.1.2        | 8.1          | 2.32            | For areas inaccessible during site reconnaissance survey  | Project Site Area  |   |
| to<br>11.10.1.3 |              |                 | <ul> <li>Further site reconnaissance would be conducted once the areas are accessible in order to identify any<br/>land contamination concern for the areas.</li> </ul>   | inaccessible during<br>site reconnaissance /<br>Prior to Construction<br>Phase | I                                       |
|                 |              |                 | <ul> <li>Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP)<br/>for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for<br/>endorsement prior to the commencement of SI at these areas.</li> </ul>   | -  | 1                                       |



| EIA Ref.  | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?/ |
|-----------|--------------|-----------------|---|---|---|
|           |              |                 | <ul> <li>After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to<br/>EPD for approval prior to start of the proposed construction works at the golf course, the underground<br/>and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling<br/>station and fuel tank room.</li> </ul> |   | N/A                                     |
|           |              |                 | <ul> <li>Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be<br/>prepared for EPD's approval prior to commencement of the proposed remediation and any construction<br/>works respectively.</li> </ul>  | _   | N/A                                     |
| 11.8.1.2  | 8.1          | -               | If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any):   | Project Site Area /<br>Construction Phase                                 | N/A                                     |
|           |              |                 | <ul> <li>To minimize the incidents of construction workers coming in contact with any contaminated materials,<br/>bulk earth-moving excavation equipment should be employed;</li> </ul>   |   |   |
|           |              |                 | <ul> <li>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;</li> </ul>   |   |   |
|           |              |                 | <ul> <li>Stockpiling of contaminated excavated materials on site should be avoided as far as possible;</li> </ul>   |   |   |
|           |              |                 | <ul> <li>The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was<br/>carried out;</li> </ul>  |   |   |
|           |              |                 | <ul> <li>Vehicles containing any excavated materials should be suitably covered to reduce dust emissions<br/>and/or release of contaminated wastewater;</li> </ul>  |   |   |
|           |              |                 | <ul> <li>Truck bodies and tailgates should be sealed to prevent any discharge;</li> </ul>   |   |   |
|           |              |                 | <ul> <li>Only licensed waste haulers should be used to collect and transport contaminated material to<br/>treatment/disposal site and should be equipped with tracking system to avoid fly tipping;</li> </ul>  |   |   |
|           |              |                 | <ul> <li>Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the<br/>recommended speed limit;</li> </ul>   |   |   |
|           |              |                 | <ul> <li>Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance<br/>(Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary<br/>permits where required; and</li> </ul>  |   |   |
|           |              |                 | <ul> <li>Maintain records of waste generation and disposal quantities and disposal arrangements.</li> </ul>   |   |   |
|           |              |                 | Terrestrial Ecological – Construction Phase   |   |   |
| 12.10.1.1 | 9.2          | 2.14            | Pre-construction Egretry Survey   | Breeding season (April  |   |
|           |              |                 | <ul> <li>Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.</li> </ul>  | - July) prior to<br>commencement of<br>HDD drilling works at<br>HKIA      |   |



| EIA Ref.         | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration of measures   | Mitigation<br>Measures |
|------------------|--------------|-----------------|---|---|------------------------|
|                  |              |                 |   | Timing of completion of measures  | Implemented?^          |
| 12.7.2.3         | 9.1          | 2.30            | Avoidance and Minimisation of Direct Impact to Egretry  | During construction   | I                      |
| and<br>12.7.2.6  |              |                 | <ul> <li>The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting<br/>location and mooring of flat top barge, if required, will be kept away from the egretry;</li> </ul>  | phase at Sheung Sha<br>Chau Island  |                        |
|                  |              |                 | <ul> <li>In any event, controls such as demarcation of construction site boundary and confining the lighting within<br/>the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and</li> </ul>  |   |                        |
|                  |              |                 | The containment pit at the daylighting location shall be covered or camouflaged.  |   |                        |
| 12.7.2.5         | 9.1          | 2.30            | Preservation of Nesting Vegetation  | During construction   | I                      |
|                  |              |                 | <ul> <li>The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree<br/>cutting, therefore the trees that are used by ardeids for nesting will be preserved.</li> </ul>   | phase at Sheung Sha<br>Chau Island  |                        |
| 12.7.2.4         | 9.1          | 2.30            | Timing the Pipe Connection Works outside Ardeid's Breeding Season   | During construction   | I                      |
| and<br>12.7.2.6  |              |                 | <ul> <li>All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids'<br/>breeding season (between April and July). No night-time construction work will be allowed on Sheung<br/>Sha Chau Island during all seasons.</li> </ul>   | phase at Sheung Sha<br>Chau Island  |                        |
| 12.10.1.1        | 9.3          | -               | Ecological Monitoring   | at Sheung Sha Chau  | I                      |
|                  |              |                 | <ul> <li>During the HDD construction works period from August to March, ecological monitoring will be undertaken<br/>monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts<br/>with appropriate actions taken as required to address and minimise any adverse impact found.</li> </ul> | Island  |                        |
|                  |              |                 | Marine Ecological Impact – Pre-construction Phase   |   |                        |
| 13.11.4.1        | 10.2.2       | -               | <ul> <li>Pre-construction phase Coral Dive Survey.</li> </ul>   | HKIAAA artificial seawall   | I                      |
|                  |              |                 | Marine Ecological Impact – Construction Phase   |   |                        |
| 13.11.1.3        | -            | -               | Minimisation of Land Formation Area   | Land formation  |                        |
| to<br>13.11.1.6  |              |                 | <ul> <li>Minimise the overall size of the land formation needed for the additional facilities to minimise the overall<br/>loss of habitat for marine resources, especially the CWD population.</li> </ul>   | footprint / during<br>detailed design phase<br>to completion of<br>construction |                        |
| 13.11.1.7        | -            | 2.31            | Use of Construction Methods with Minimal Risk/Disturbance   | During construction   |                        |
| to<br>13.11.1.10 |              |                 | <ul> <li>Use of non-dredge method for the main land formation and ancillary works including the diversion of the<br/>aviation fuel pipeline to the AFRF;</li> </ul>   | phase at marine works<br>area   | 1                      |
|                  |              |                 | <ul> <li>Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land<br/>formation works to reduce the risk of negative impacts through the elevation of suspended solids and<br/>contaminants on CWDs, fisheries and the marine environment;</li> </ul>  |   | I                      |
|                  |              |                 | formation works to reduce the risk of negative impacts through the elevation of suspended solids and  |   | I                      |



| EIA Ref.        | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|-----------------|--------------|-----------------|--|---|---|
|                 |              |                 | <ul> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new<br/>runway;</li> </ul>   |   | N/A                                     |
|                 |              |                 | <ul> <li>Avoid bored piling during CWD peak calving season (Mar to Jun);</li> </ul>  | -   | 1                                       |
|                 |              |                 | <ul> <li>Prohibition of underwater percussive piling; and</li> </ul>   | -   | 1                                       |
|                 |              |                 | <ul> <li>Use of horizontal directional drilling (HDD) method and water jetting methods for placement of<br/>submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological<br/>resources.</li> </ul>   | -   | I                                       |
| 13.11.2.1       | -            | -               | Mitigation for Indirect Disturbance due to Deterioration of Water Quality  | All works area during   |   |
| to<br>13.11.2.7 |              |                 | <ul> <li>Water quality mitigation measures during construction phases include consideration of alternative<br/>construction methods, deployment of silt curtain and good site practices;</li> </ul>  | the construction phase  | I                                       |
|                 |              |                 | <ul> <li>Alternative construction methods including use of non-dredge methods for ground improvement (e.g.<br/>Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone<br/>columns and vertical sand drains);</li> </ul>  |   | I                                       |
|                 |              |                 | <ul> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new<br/>runway; and</li> </ul>   | -   | N/A                                     |
|                 |              |                 | 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.  |   | I                                       |
| 13.11.1.12      | -            | -               | Strict Enforcement of No-Dumping Policy  | All works area during   | I                                       |
|                 |              |                 | <ul> <li>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;</li> </ul>  | the construction phase  |   |
|                 |              |                 | <ul> <li>Mandatory educational programme of the no-dumpling policy be made available to all construction site<br/>personnel for all project-related works;</li> </ul>  |   |   |
|                 |              |                 | <ul> <li>Fines for infractions should be implemented; and</li> </ul>   |   |   |
|                 |              |                 | <ul> <li>Unscheduled, on-site audits shall be implemented.</li> </ul>  |   |   |
| 13.11.1.13      | -            | -               | <ul> <li>Good Construction Site Practices</li> <li>Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines;</li> <li>Keep the number of working or stationary vessels present on-site to the minimum anytime; and</li> <li>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.</li> </ul> | All works area during the construction phase                              | I                                       |
| 13.11.1.3       | -            | -               | Minimisation of Land Formation Area  | Land formation  |   |
| to<br>13.11.1.6 |              |                 | <ul> <li>Minimise the overall size of the land formation needed for the additional facilities to minimise the overall<br/>loss of habitat for marine resources, especially the CWD population.</li> </ul>  | footprint / during<br>detailed design phase                               |   |

| EIA Ref.         | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration of measures                                 | Mitigation<br>Measures |
|------------------|--------------|-----------------|---|---|------------------------|
|                  |              |                 |   | Timing of completion of measures                                | Implemented?^          |
|                  |              |                 |   | to completion of<br>construction                                |                        |
| 13.11.5.4        | 10.3.1       | -               | SkyPier High Speed Ferries' Speed Restrictions and Route Diversions   | Area between the  | I                      |
| to<br>13.11.5.13 |              |                 | <ul> <li>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&amp;A data and taking reference to changes in total SkyPier HSF numbers; and</li> </ul> | footprint and SCLKC<br>Marine Park during<br>construction phase |                        |
|                  |              |                 | • A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.  |   |                        |
|                  |              |                 | Other mitigation measures   | Area between the  | 1                      |
|                  |              |                 | <ul> <li>The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-<br/>knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to /<br/>from Zhuhai and Macau; and</li> </ul>   | footprint and SCLKC<br>Marine Park during<br>construction phase |                        |
|                  |              |                 | <ul> <li>The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF<br/>diversion and speed restriction will be reviewed.</li> </ul>  |   |                        |
| 13.11.5.14       | 10.3.1       | 2.31            | Dolphin Exclusion Zone  | Marine waters around  |                        |
| to<br>13.11.5.18 |              |                 | <ul> <li>Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation<br/>works areas;</li> </ul>  | land formation works<br>area during<br>construction phase       | I                      |
|                  |              |                 | <ul> <li>A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works<br/>for submarine cables diversion, open trench dredging at the field joint locations and seawall<br/>construction; and</li> </ul>   |   | I                      |
|                  |              |                 | <ul> <li>A DEZ would also be implemented during bored piling work but as a precautionary measure only.</li> </ul>   |   | N/A                    |
| 13.11.5.19       | 10.4         | 2.31            | Acoustic Decoupling of Construction Equipment   | Around coastal works  | T                      |
|                  |              |                 | <ul> <li>Air compressors and other noisy equipment that must be mounted on steel barges should be<br/>acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and</li> </ul>  | area during<br>construction phase                               |                        |
|                  |              |                 | <ul> <li>Specific acoustic decoupling measures shall be specified during the detailed design of the project for<br/>use during the land formation works.</li> </ul>   |   |                        |
| 13.11.5.20       | 10.6.1       | 2.29            | Spill Response Plan   | Construction phase  | 1                      |
|                  |              |                 | <ul> <li>An oil and hazardous chemical spill response plan is proposed to be established during the construction<br/>phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can<br/>be undertaken in the event of an accidental spillage.</li> </ul>   |   |                        |



| EIA Ref.         | EM&A<br>Ref. | EP<br>Condition  | Environmental Protection Measures  | Location / Duration of measures              | Mitigation<br>Measures<br>Implemented? |
|------------------|--------------|--|--|--|--|
|                  |              |  |  | Timing of completion of measures             | implemented ?                          |
| 13.11.5.21       | 10.6.1       | -  | Construction Vessel Speed Limits and Skipper Training  | All areas north and                          | I                                      |
| to<br>13.11.5.23 |              |  | <ul> <li>A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest<br/>CWD densities; and</li> </ul>  | west of Lantau Island<br>during construction |  |
|                  |              |  | <ul> <li>Vessels traversing through the work areas should be required to use predefined and regular routes<br/>(which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due<br/>to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction<br/>commencing.</li> </ul> | phase  |  |
|                  |              |  | Fisheries Impact – Construction Phase  |  |  |
| 14.9.1.2 to      | -            |  | Minimisation of Land Formation Area  | Land formation                               | I                                      |
| 14.9.1.5         |              |  |  |  |  |
| 14.9.1.6         | -            | -  | Use of Construction Methods with Minimal Risk/Disturbance  | During construction                          |  |
|                  |              |  | <ul> <li>Use of non-dredge method for the main land formation and ancillary works including the diversion of the<br/>aviation fuel pipeline to the AFRF;</li> </ul>  | phase at marine works<br>area                | I                                      |
|                  |              | formation works to reduce the risk of negative impacts the contaminants on fisheries and the marine environment; | <ul> <li>Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land<br/>formation works to reduce the risk of negative impacts through the elevation of suspended solids and<br/>contaminants on fisheries and the marine environment;</li> </ul>   |  | I                                      |
|                  |              |  | <ul> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new<br/>runway; and</li> </ul>   |  | N/A                                    |
|                  |              |  | <ul> <li>Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea<br/>cables and pipelines to minimise the disturbance to fisheries resources.</li> </ul>   | _  | I                                      |
| 14.9.1.11        | -            |  | Strict Enforcement of No-Dumping Policy  | All works area during                        | I                                      |
|                  |              |  | <ul> <li>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;</li> </ul>  | the construction phase                       |  |
|                  |              |  | <ul> <li>Mandatory educational programme of the no-dumpling policy be made available to all construction site<br/>personnel for all project-related works;</li> </ul>  |  |  |
|                  |              | <ul> <li>Fines for infractions should be implemented; and</li> </ul>   | <ul> <li>Fines for infractions should be implemented; and</li> </ul>   |  |  |
|                  |              |  | <ul> <li>Unscheduled, on-site audits shall be implemented.</li> </ul>  |  |  |
| 14.9.1.12        | -            |  | <ul> <li>Good Construction Site Practices</li> <li>Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines;</li> <li>Keep the number of working or stationary vessels present on-site to the minimum anytime; and</li> </ul>           | All works area during the construction phase | I                                      |

| EIA Ref.        | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures   | Location / Duration<br>of measures<br>Timing of completion<br>of measures              | Mitigation<br>Measures<br>Implemented?/ |
|-----------------|--------------|-----------------|---|--|---|
|                 |              |                 | <ul> <li>Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or<br/>penalties sufficient to be an effective deterrent need to be levied against violators.</li> </ul>  |  |   |
| 14.9.1.13       | -            |                 | Mitigation for Indirect Disturbance due to Deterioration of Water Quality   | All works area during  |   |
| to<br>14.9.1.18 |              |                 | <ul> <li>Water quality mitigation measures during construction phases include consideration of alternative<br/>construction methods, deployment of silt curtain and good site practices;</li> </ul>   | the construction phase   | I                                       |
|                 |              |                 | <ul> <li>Alternative construction methods including use of non-dredge methods for ground improvement (e.g.<br/>Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells,<br/>stone columns and vertical sand drains);</li> </ul> |  | Ι                                       |
|                 |              |                 | <ul> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new<br/>runway; and</li> </ul>  |  | N/A                                     |
|                 |              |                 | <ul> <li>Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea<br/>cables and pipelines to minimise the disturbance to fisheries resources.</li> </ul>  |  | I                                       |
|                 |              |                 | Landscape and Visual Impact – Construction Phase  |  |   |
| Table 15.6      | 12.3         | -               | <b>CM1</b> - The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.   | All works areas for<br>duration of works;<br>Upon handover and<br>completion of works. | I                                       |
| Table 15.6      | 12.3         | -               | <b>CM2</b> - Reduction of construction period to practical minimum.   | All works areas for<br>duration of works;<br>Upon handover and<br>completion of works. | I                                       |
| Table 15.6      | 12.3         | -               | CM3 - Phasing of the construction stage to reduce visual impacts during the construction phase.   | All works areas for<br>duration of works;<br>Upon handover and                         | I                                       |
| Table 15.6      | 12.3         | -               | <b>CM4 -</b> 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;   | 1                                       |
|                 |              |                 |   | Upon handover and completion of works.   |   |
| Table 15.6      | 12.3         | -               | <b>CM5</b> - Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.  | All works areas for duration of works;   | l                                       |
|                 |              |                 |   | Upon handover and completion of works. –   |   |



| EIA Ref.        | EM&A<br>Ref. | EP<br>Condition  | Environmental Protection Measures  | Location / Duration<br>of measures<br>Timing of completion<br>of measures  | Mitigation<br>Measures<br>Implemented?/ |
|-----------------|--------------|--|--|--|---|
|                 |              |  |  | may be disassembled in phases  |   |
| Table 15.6 12.3 | 12.3         | -  | <b>CM6</b> - Avoidance of excessive height and bulk of site buildings and structures.  | New passenger<br>concourse, terminal 2<br>expansion and other<br>proposed airport<br>related buildings and<br>structures under the<br>project; | N/A                                     |
|                 |              |  |  | Upon handover and<br>completion of works.  |   |
| 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;   | I                                       |
|                 |              |  |  | Upon handover and<br>completion of works. –<br>may be disassembled<br>in phases  |   |
| Table 15.6      | 12.3         | Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall  | All existing trees to be retained;   | l  |   |
|                 |              |  | 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. | Upon handover and completion of works.   |   |
| Table 15.6      | 12.3         | 2.3 - <b>CM9 -</b> Trees unavoidably affected by the works shall be transplanted where practical. A detailed Trees Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for | All existing trees to be affected by the works;  | N/A  |   |
|                 |              |  | necessary tree root and crown preparation periods shall be allowed in the project programme.   | Upon handover and completion of works.   |   |
| Table 15.6      | 12.3         | -  | <b>CM10 -</b> Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.  | All affected existing<br>grass areas around<br>runways and<br>verges/Duration of<br>works;   | N/A                                     |
|                 |              |  |  | Upon handover and completion of works.   |   |
|                 |              |  | Cultural Heritage Impact – Construction Phase  |  |   |
|                 |              |  | Not applicable.  |  |   |



| EIA Ref. | EM&A<br>Ref. | EP<br>Condition | Environmental Protection Measures  | Location / Duration<br>of measures<br>Timing of completion<br>of measures | Mitigation<br>Measures<br>Implemented?^ |
|----------|--------------|-----------------|------------------------------------|---|---|
|          |              |                 | 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 B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

# FEBRUARY 2017

| Sunday         Monday         Tuesday         Workensday         Tuesday         Tuesday         Tuesday         Tuesday         Tuesday         Tuesday         Priday         Friday         Salurday         A           Image: Sunday         Image: Sunday <th>)CM<br/>19:1<br/>12:2</th>  | )CM<br>19:1<br>12:2 |
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| Image: Source     Imag  | 19:1                |
| Image: Constraint of the constr |                     |
| NM6<br>CWD Vessel Survey     NM1AAR1A<br>NM4<br>CWD Vessel Survey     NM1AAR1A<br>NM4<br>CWD Vessel Survey     NM5/AR2<br>NM3A     Site Inspection<br>CWD Vessel Survey     CWD Vessel Survey     CWD Vessel Survey       WQ General & Regular DCM<br>mid-boot     10:15<br>10:15     WQ General & Regular DCM<br>mid-boot   |                     |
| NM6<br>CWD Vessel Survey     NM1A/AR1A<br>NMA<br>CWD Vessel Survey     NM1A/AR1A<br>NMA<br>CWD Vessel Survey     NM1A/AR1A<br>NM3A     NM5/AR2<br>NM3A     CWD Vessel Survey     CWD Vessel Survey     WQ General & Regular DCM<br>mid-ebb:<br>mid-lood:     WQ General & Regular DCM<br>mid-ebb:<br>mid-lood:     WQ General & Regular DCM<br>mid-ebb:<br>mid-lood:     WQ General & Regular DCM<br>mid-lood:     WQ General & Regular DCM     WQ General & Regular DCM     WQ General & Regular DCM   |                     |
| CWD Vessel Survey     NM4<br>CWD Vessel Survey     NM3A     NM3A     WQ General & Regular DCM<br>mid-ebb:     WQ General & Regular DCM<br>mid-lood:     WQ General & Regular DCM<br>CWD Land-based Survey     WQ General & Regular DCM<br>mid-lobb:     WQ General & Regular DCM     WQ General & Regular DCM   |                     |
| 12     13     14     15     16     17     18       NM1A/AR1A<br>NM4     NM5/AR2<br>NM3A     Site Inspection<br>Site Inspection<br>Ecological Monitoring     Site Inspection<br>NM6<br>CWD Vessel Survey     Site Inspection<br>NM6<br>CWD Vessel Survey     AR1A<br>CWD Vessel Survey     AR1A<br>CWD Vessel Survey     WQ General & Regular DCM<br>mid-ebb:     WQ General & Regular DCM     WQ  |                     |
| mid-ebb:     10:15<br>mid-flood:     15:32     mid-ebb:     12:09<br>mid-flood:     mid-ebb:     nid-ebb:       12     13     14     15     16     17     18       NM1A/AR1A<br>NM4     NM5/AR2     Site Inspection<br>Ecological Monitoring     Site Inspection<br>Ecological Monitoring     NM6<br>CWD Vessel Survey     AR1A<br>CWD Vessel Survey     AR1A<br>CWD Vessel Survey     WQ General & Regular DCM<br>mid-ebb:     WQ General & Regular DCM     mid-ebb:     16:22     WQ General & Regular DCM  |                     |
| mid-ebb:     10:15<br>mid-flood:     15:32     mid-ebb:     12:09<br>mid-flood:     mid-ebb:     nid-ebb:       12     13     14     15     16     17     18       NM1A/AR1A<br>NM4     NM5/AR2     Site Inspection<br>Ecological Monitoring     Site Inspection<br>Ecological Monitoring     NM6<br>CWD Vessel Survey     AR1A<br>CWD Vessel Survey     AR1A<br>CWD Vessel Survey     WQ General & Regular DCM<br>mid-ebb:     WQ General & Regular DCM     mid-ebb:     16:22     WQ General & Regular DCM  |                     |
| mid-ebb:     10:15<br>mid-flood:     15:32     mid-ebb:     12:09<br>mid-flood:     mid-ebb:     nid-ebb:       12     13     14     15     16     17     18       NM1A/AR1A<br>NM4     NM5/AR2     Site Inspection<br>Ecological Monitoring     Site Inspection<br>Ecological Monitoring     NM6<br>CWD Vessel Survey     AR1A<br>CWD Vessel Survey     AR1A<br>CWD Vessel Survey     WQ General & Regular DCM<br>mid-ebb:     WQ General & Regular DCM     mid-ebb:     16:22     WQ General & Regular DCM  |                     |
| I2       I3       I4       I5       I6       I7       I8         NM1A/AR1A       NM5/AR2       Site Inspection       Site Inspection       Site Inspection       Site Inspection       CWD Land-based Survey       CWD Land-based Survey       CWD Land-based Survey       CWD Land-based Survey       WQ General & Regular DCM       mid-ebb:       16:22       WQ General & Regular DCM       WQ General & Regular DCM   | юм<br>13:3          |
| NM1A/AR1A       NM5/AR2       Site Inspection       NM6       AR1A         NM4       NM5/AR2       Ecological Monitoring       NM6       CWD Vessel Survey         CWD Land-based Survey       CWD Land-based Survey       CWD Land-based Survey       WQ General & Regular DCM       WQ General & Regular DCM       WQ General & Regular DCM       MQ General & Regular DCM       MI General & Regu  | 08:0                |
| NM1A/AR1A<br>NM4       NM5/AR2<br>NM3A       Ecological Monitoring       NM6<br>CWD Vessel Survey       AR1A<br>CWD Vessel Survey         CWD Land-based Survey       CWD Land-based Survey       CWD Land-based Survey       WQ General & Regular DCM<br>mid-ebb: 15:10       WQ General & Regular DCM<br>mid-ebb: 16:22       WQ General & Regular DCM<br>mid-ebb: 16:22       WQ General & Regular DCM<br>mid-ebb: 16:22   |                     |
| NM4     NM3A     CWD Vessel Survey     CWD Vessel Survey       CWD Land-based Survey     CWD Land-based Survey     CWD Land-based Survey       WQ General & Regular DCM<br>mid-ebb:     MQ General   |                     |
| CWD Land-based Survey     CWD Land-based Survey     WQ General & Regular DCM     WQ General & Regular DCM       mid-ebb:     15:10     mid-ebb:     16:22     mid-ebb:  |                     |
| WQ General & Regular DCM<br>mid-ebb: 15:10 mid-ebb: 16:22 mid-ebb:  |                     |
| mid-ebb: 15:10 mid-ebb: 16:22 mid-ebb:  |                     |
| mid-ebb: 15:10 mid-ebb: 16:22 mid-ebb:  |                     |
| mid-ebb: 15:10 mid-ebb: 16:22 mid-ebb:  | CM                  |
| mid flood: 00:21 mid flood: 10:22   | 18:1                |
|   | 11:2                |
| 19 20 21 22 23 24 25<br>Site Inspection Site Inspection Site Inspection Site Inspection   |                     |
| Site Inspection         Site Inspection         Site Inspection           NM5/AR2         CWD Vessel Survey         NM1A/AR1A         AR2   |                     |
| NM3A NM4  |                     |
| NM6<br>CWD Vessel Survey  |                     |
| CWD Land-based Survey   |                     |
| WQ General & Regular DCM WQ General & Regular DCM   |                     |
| mid-ebb: 09:52 mid-ebb: 12:04   |                     |
| Imid-flood:         14:20         mid-flood:         17:15           26         27         28         Imid-flood:         17:15   |                     |
| CWD Land-based Survey Site Inspection   |                     |
| NM6   |                     |
| CWD Land-based Survey   |                     |
|   |                     |
| WQ General & Regular DCM WQ General & Regular DCM   |                     |
| ebb: 13:12 mid-ebb: 14:18   |                     |
| Mode:         07:37         mid-flood:         08:27           Notes:   |                     |
|   |                     |
| NM1A/AR1A - Man Tung Road Park<br>NM3A - Site Office  |                     |
| Air quality and Noise Monitoring Station NM4 - Ching Chung Hau Po Woon Primary School   |                     |
| NM5/AR2 - Village House, Tin Sum<br>NM6 - House No. 1, Sha Lo Wan   |                     |
| CWD - Chinese White Dolphin   |                     |
| WQ - Water Quality<br>DCM - Deep Cemenet Mixing   |                     |
|   |                     |
|   |                     |
|   |                     |

## Tentative Monitoring Schedule of Next Reporting Period

# Mar-17

| Su | nday Monday                  | Tuesday                                    | Wednesday   | Thursday                                   | Friday                | Saturday                                   |
|----|------------------------------|--|---|--|-----------------------|--|
|    |                              |  | 1   | 2  | 3                     | 4  |
|    |                              |  | Site Inspection   | Site Inspection                            | Site Inspection       |  |
|    |                              |  | NM1A/AR1A<br>NM4  | NM5/AR2<br>NM3A                            |                       |  |
|    |                              |  | INIVI4  | NMSA                                       |                       |  |
|    |                              |  |   | WQ General & Regular DCM                   |                       | WQ General & Regular DCM                   |
|    |                              |  |   | mid-ebb: 15:34                             | 1                     | mid-ebb: 17:18                             |
| 5  | 6                            | 7  | 8   | mid-flood: 09:24                           | 10                    | mid-flood: 10:35                           |
| 5  | o                            | Site Inspection                            | •<br>Site Inspection  | Site Inspection                            | Site Inspection       |  |
|    | CWD Vessel Survey            | CWD Land-based Survey                      | CWD Land-based Survey   |  | CWD Vessel Survey     |  |
|    | NM6                          | NM1A/AR1A                                  | NM5/AR2   |  |                       |  |
|    |                              | NM4  | NM3A  |  |                       |  |
|    |                              | WQ General & Regular DCM                   |   | WQ General & Regular DCM                   |                       | WQ General & Regular DCM                   |
|    |                              | mid-ebb: 08:53                             |   | mid-ebb: 11:19                             | 9                     | mid-ebb: 12:40                             |
| 10 |                              | mid-flood: 13:59                           |   | mid-flood: 16:32                           | 2                     | mid-flood: 06:59                           |
| 12 | 13                           | 14<br>Site Inspection                      | 15<br>Site Inspection   | 16<br>Site Inspection                      | 17<br>Site Inspection | 18   |
|    | CWD Vessel Survey            | CWD Vessel Survey                          | CWD Vessel Survey   | CWD Land-based Survey                      | CWD Land-based Survey |  |
|    | NM1A/AR1A                    | NM5/AR2                                    | ,   | NM6  | AR1A                  |  |
|    | NM4                          | NM3A                                       |   |  | Ecological Monitoring |  |
|    |                              | WQ General & Regular DCM<br>mid-ebb: 14:02 | 7   | WQ General & Regular DCM<br>mid-ebb: 15:10 |                       | WQ General & Regular DCM<br>mid-ebb: 16:27 |
|    |                              | mid-flood: 08:10                           |   | mid-flood: 09:04                           | 4                     | mid-flood: 09:57                           |
| 19 | 20                           | 21   | 22  | 23   | 24                    | 25   |
|    |                              | Site Inspection                            | Site Inspection   | Site Inspection                            | Site Inspection       |  |
|    | CWD Vessel Survey<br>NM5/AR2 | CWD Vessel Survey                          | CWD Vessel Survey   | CWD Land-based Survey<br>NM1A/AR1A         | AR2                   |  |
|    | NM3A                         |  |   | NM4  |                       |  |
|    | NM6                          |  |   |  |                       |  |
|    |                              | WQ General & Regular DCM<br>mid-ebb: 19:4  | 5   | WQ General & Regular DCM<br>mid-ebb: 10:25 | 5                     | WQ General & Regular DCM<br>mid-ebb: 16:27 |
|    |                              | mid-flood: 06:55                           |   | mid-flood: 15:02                           | 2                     | mid-flood: 09:57                           |
| 26 | 27                           | 28   | 29  | 30   | 31                    |  |
|    |                              | Site Inspection                            | Site Inspection   | Site Inspection                            | Site Inspection       |  |
|    |                              | NM6  | NM1A/AR1A<br>NM4  | NM5/AR2<br>NM3A                            |                       |  |
|    |                              |  | 111114  | NWOA                                       |                       |  |
|    |                              | WQ General & Regular DCM                   |   | WQ General & Regular DCM                   |                       |  |
|    |                              | mid-ebb: 13:18<br>mid-flood: 07:12         |   | mid-ebb: 14:32<br>mid-flood: 08:15         | 2                     |  |
|    |                              | Notes:                                     | /   | mid-1000. 08.13                            |                       |  |
|    |                              |  | NM1A/AR1A - Man Tung Road Park                                    |  |                       |  |
|    |                              |  | NM3A - Site Office  |  |                       |  |
|    |                              | Air quality and Noise Monitoring Station   | NM4 - Ching Chung Hau Po Woon Pri                                 | mary School                                |                       |  |
|    |                              |  | NM5/AR2 - Village House, Tin Sum<br>NM6 - House No. 1. Sha Lo Wan |  |                       |  |
|    |                              | CWD - Chinese White Dolphin                |   |  |                       |  |
|    |                              | WQ - Water Quality                         |   |  |                       |  |
|    |                              | DCM - Deep Cemenet Mixing                  |   |  |                       |  |
|    |                              | * Rescheduled due to adverse weather       |   |  |                       |  |
|    |                              | ^ Cancelled due to adverse weather         |   |  |                       |  |

#### 1

## **Appendix C. Monitoring Results**

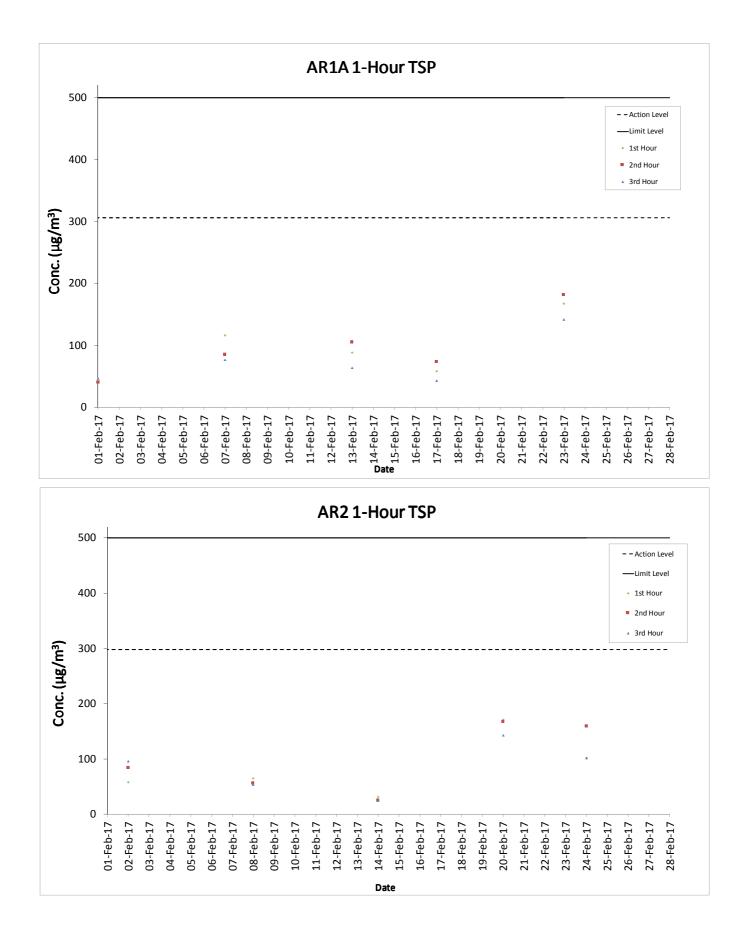
## **Air Quality Monitoring Results**

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

| Date      | Time  | Weather | Wind Speed<br>(m/s) | Wind Direction<br>(deg) | 1-hr TSP<br>(µg/m³) | Action Level<br>(μg/m³) | Limit Level<br>(µg/m³) |
|-----------|-------|---------|---------------------|-------------------------|---------------------|-------------------------|------------------------|
| 01-Feb-17 | 13:15 | Fine    | 2.9                 | 276                     | 42                  | 306                     | 500                    |
| 01-Feb-17 | 14:15 | Fine    | 3.3                 | 260                     | 40                  | 306                     | 500                    |
| 01-Feb-17 | 15:15 | Fine    | 3.0                 | 273                     | 47                  | 306                     | 500                    |
| 07-Feb-17 | 13:00 | Fine    | 8.5                 | 108                     | 116                 | 306                     | 500                    |
| 07-Feb-17 | 14:00 | Fine    | 7.0                 | 100                     | 85                  | 306                     | 500                    |
| 07-Feb-17 | 15:00 | Fine    | 5.1                 | 129                     | 77                  | 306                     | 500                    |
| 13-Feb-17 | 13:00 | Sunny   | 5.2                 | 265                     | 88                  | 306                     | 500                    |
| 13-Feb-17 | 14:00 | Sunny   | 4.7                 | 264                     | 105                 | 306                     | 500                    |
| 13-Feb-17 | 15:00 | Sunny   | 4.6                 | 259                     | 64                  | 306                     | 500                    |
| 17-Feb-17 | 13:00 | Sunny   | 4.4                 | 262                     | 58                  | 306                     | 500                    |
| 17-Feb-17 | 14:00 | Sunny   | 4.6                 | 268                     | 73                  | 306                     | 500                    |
| 17-Feb-17 | 15:00 | Sunny   | 3.7                 | 269                     | 43                  | 306                     | 500                    |
| 23-Feb-17 | 14:20 | Cloudy  | 8.5                 | 340                     | 167                 | 306                     | 500                    |
| 23-Feb-17 | 15:20 | Cloudy  | 8.9                 | 330                     | 181                 | 306                     | 500                    |
| 23-Feb-17 | 16:20 | Cloudy  | 6.9                 | 345                     | 142                 | 306                     | 500                    |

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

| Date      | Time  | Weather | Wind Speed<br>(m/s) | Wind Direction<br>(deg) | 1-hr TSP<br>(µg/m <sup>3</sup> ) | Action Level<br>(μg/m³) | Limit Level<br>(µg/m³) |
|-----------|-------|---------|---------------------|-------------------------|----------------------------------|-------------------------|------------------------|
| 02-Feb-17 | 8:57  | Cloudy  | 5.5                 | 51                      | 58                               | 298                     | 500                    |
| 02-Feb-17 | 9:57  | Cloudy  | 3.8                 | 104                     | 84                               | 298                     | 500                    |
| 02-Feb-17 | 10:57 | Cloudy  | 3.8                 | 66                      | 96                               | 298                     | 500                    |
| 08-Feb-17 | 08:58 | Cloudy  | 10.4                | 100                     | 65                               | 298                     | 500                    |
| 08-Feb-17 | 09:58 | Cloudy  | 7.7                 | 75                      | 56                               | 298                     | 500                    |
| 08-Feb-17 | 10:58 | Cloudy  | 4.7                 | 102                     | 54                               | 298                     | 500                    |
| 14-Feb-17 | 09:05 | Sunny   | 5.6                 | 71                      | 31                               | 298                     | 500                    |
| 14-Feb-17 | 10:05 | Sunny   | 4.2                 | 109                     | 25                               | 298                     | 500                    |
| 14-Feb-17 | 11:05 | Sunny   | 2.8                 | 19                      | 25                               | 298                     | 500                    |
| 20-Feb-17 | 09:02 | Cloudy  | 3.1                 | 13                      | 171                              | 298                     | 500                    |
| 20-Feb-17 | 10:02 | Cloudy  | 2.2                 | 335                     | 167                              | 298                     | 500                    |
| 20-Feb-17 | 11:02 | Cloudy  | 1.8                 | 300                     | 143                              | 298                     | 500                    |
| 24-Feb-17 | 09:05 | Rainy   | 6.6                 | 3                       | 102                              | 298                     | 500                    |
| 24-Feb-17 | 10:05 | Rainy   | 5.7                 | 17                      | 159                              | 298                     | 500                    |
| 24-Feb-17 | 11:05 | Rainy   | 7.4                 | 9                       | 102                              | 298                     | 500                    |



## **Noise Monitoring Results**

#### Noise Measurement Results Station: NM1A- Man Tung Road Park

| Date      | Weather | Time  | Measured<br>L <sub>10</sub> dB(A) | Measured<br>L <sub>90</sub> dB(A) | L <sub>eq(30mins)</sub> dB(A) |
|-----------|---------|-------|-----------------------------------|-----------------------------------|-------------------------------|
|           |         | 10.00 |                                   |                                   |                               |
| 01-Feb-17 | Fine    | 13:29 | 72.5                              | 54.0                              | _                             |
| 01-Feb-17 | Fine    | 13:34 | 73.0                              | 55.0                              | 4                             |
| 01-Feb-17 | Fine    | 13:39 | 70.5                              | 55.5                              | - 71                          |
| 01-Feb-17 | Fine    | 13:44 | 72.0                              | 54.5                              | , <u>,</u>                    |
| 01-Feb-17 | Fine    | 13:49 | 71.0                              | 55.0                              |                               |
| 01-Feb-17 | Fine    | 13:54 | 70.5                              | 55.0                              |                               |
| 07-Feb-17 | Cloudy  | 13:10 | 71.0                              | 55.5                              |                               |
| 07-Feb-17 | Cloudy  | 13:15 | 71.5                              | 56.5                              |                               |
| 07-Feb-17 | Cloudy  | 13:20 | 72.5                              | 57.0                              | 72                            |
| 07-Feb-17 | Cloudy  | 13:25 | 73.0                              | 57.5                              | /2                            |
| 07-Feb-17 | Cloudy  | 13:30 | 72.5                              | 57.5                              |                               |
| 07-Feb-17 | Cloudy  | 13:35 | 71.5                              | 55.5                              |                               |
| 13-Feb-17 | Sunny   | 13:06 | 72.5                              | 57.5                              |                               |
| 13-Feb-17 | Sunny   | 13:11 | 72.5                              | 55.5                              |                               |
| 13-Feb-17 | Sunny   | 13:16 | 71.5                              | 56.0                              | 72                            |
| 13-Feb-17 | Sunny   | 13:21 | 72.5                              | 58.0                              | /2                            |
| 13-Feb-17 | Sunny   | 13:26 | 72.5                              | 56.0                              |                               |
| 13-Feb-17 | Sunny   | 13:31 | 73.0                              | 57.5                              |                               |
| 23-Feb-17 | Cloudy  | 14:34 | 69.5                              | 59.0                              |                               |
| 23-Feb-17 | Cloudy  | 14:39 | 74.0                              | 58.5                              |                               |
| 23-Feb-17 | Cloudy  | 14:44 | 72.0                              | 59.5                              | 71                            |
| 23-Feb-17 | Cloudy  | 14:49 | 69.5                              | 57.5                              | /1                            |
| 23-Feb-17 | Cloudy  | 14:54 | 72.0                              | 57.5                              |                               |
| 23-Feb-17 | Cloudy  | 14:59 | 72.5                              | 60.5                              |                               |

Remarks:

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

#### Noise Measurement Results Station: NM3A- Site Office

| Date      | Weather | Time  | Measured<br>L <sub>10</sub> dB(A) | Measured<br>L <sub>90</sub> dB(A) | L <sub>eq(30mins)</sub> dB(A) |
|-----------|---------|-------|-----------------------------------|-----------------------------------|-------------------------------|
| 02-Feb-17 | Cloudy  | 13:09 | 68.5                              | 55.5                              |                               |
| 02-Feb-17 | Cloudy  | 13:14 | 68.5                              | 55.5                              |                               |
| 02-Feb-17 | Cloudy  | 13:19 | 68.5                              | 56.0                              | 57                            |
| 02-Feb-17 | Cloudy  | 13:24 | 68.0                              | 56.0                              | 57                            |
| 02-Feb-17 | Cloudy  | 13:29 | 66.0                              | 55.5                              |                               |
| 02-Feb-17 | Cloudy  | 13:34 | 65.5                              | 56.0                              |                               |
| 08-Feb-17 | Cloudy  | 14:03 | 68.5                              | 57.5                              |                               |
| 08-Feb-17 | Cloudy  | 14:08 | 69.5                              | 57.0                              |                               |
| 08-Feb-17 | Cloudy  | 14:13 | 65.0                              | 57.5                              | 57                            |
| 08-Feb-17 | Cloudy  | 14:18 | 68.5                              | 56.0                              | 57                            |
| 08-Feb-17 | Cloudy  | 14:23 | 66.0                              | 56.5                              |                               |
| 08-Feb-17 | Cloudy  | 14:28 | 69.0                              | 57.0                              |                               |
| 14-Feb-17 | Sunny   | 14:25 | 68.5                              | 57.0                              |                               |
| 14-Feb-17 | Sunny   | 14:30 | 67.5                              | 57.0                              |                               |
| 14-Feb-17 | Sunny   | 14:35 | 66.0                              | 56.5                              | 62                            |
| 14-Feb-17 | Sunny   | 14:40 | 59.5                              | 57.0                              | 02                            |
| 14-Feb-17 | Sunny   | 14:45 | 61.5                              | 56.5                              |                               |
| 14-Feb-17 | Sunny   | 14:50 | 61.0                              | 56.5                              |                               |
| 20-Feb-17 | Fine    | 14:09 | 70.5                              | 58.5                              |                               |
| 20-Feb-17 | Fine    | 14:14 | 68.5                              | 58.5                              |                               |
| 20-Feb-17 | Fine    | 14:19 | 67.0                              | 57.5                              | 61                            |
| 20-Feb-17 | Fine    | 14:24 | 67.5                              | 57.5                              | 01                            |
| 20-Feb-17 | Fine    | 14:29 | 68.0                              | 57.0                              |                               |
| 20-Feb-17 | Fine    | 14:34 | 67.0                              | 57.5                              |                               |

#### Noise Measurement Results Station: NM4- Ching Chung Hau Po Won Primary School

| Date      | Weather | Time  | Measured<br>L <sub>10</sub> dB(A) | Measured<br>L <sub>90</sub> dB(A) | L <sub>eq(30mins)</sub> dB(A) |
|-----------|---------|-------|-----------------------------------|-----------------------------------|-------------------------------|
| 01-Feb-17 | Fine    | 13:39 | 62.0                              | 55.5                              |                               |
| 01-Feb-17 | Fine    | 13:44 | 60.5                              | 55.5                              |                               |
| 01-Feb-17 | Fine    | 13:49 | 60.0                              | 55.5                              | 61                            |
| 01-Feb-17 | Fine    | 13:54 | 59.5                              | 55.0                              | 61                            |
| 01-Feb-17 | Fine    | 13:59 | 62.0                              | 55.5                              |                               |
| 01-Feb-17 | Fine    | 14:04 | 60.5                              | 55.5                              |                               |
| 07-Feb-17 | Cloudy  | 14:40 | 62.5                              | 59.0                              |                               |
| 07-Feb-17 | Cloudy  | 14:45 | 63.0                              | 59.5                              |                               |
| 07-Feb-17 | Cloudy  | 14:50 | 62.5                              | 58.5                              | 64                            |
| 07-Feb-17 | Cloudy  | 14:55 | 62.0                              | 58.5                              | 64                            |
| 07-Feb-17 | Cloudy  | 15:00 | 62.5                              | 58.0                              |                               |
| 07-Feb-17 | Cloudy  | 15:05 | 62.5                              | 58.5                              |                               |
| 13-Feb-17 | Sunny   | 14:08 | 67.5                              | 61.0                              |                               |
| 13-Feb-17 | Sunny   | 14:13 | 71.0                              | 62.0                              |                               |
| 13-Feb-17 | Sunny   | 14:18 | 66.5                              | 59.5                              | 60                            |
| 13-Feb-17 | Sunny   | 14:23 | 63.0                              | 58.5                              | 00                            |
| 13-Feb-17 | Sunny   | 14:28 | 63.0                              | 59.5                              |                               |
| 13-Feb-17 | Sunny   | 14:33 | 64.0                              | 58.5                              |                               |
| 23-Feb-17 | Cloudy  | 13:30 | 62.5                              | 58.5                              |                               |
| 23-Feb-17 | Cloudy  | 13:35 | 63.0                              | 58.5                              | ]                             |
| 23-Feb-17 | Cloudy  | 13:40 | 63.5                              | 59.0                              | - 64                          |
| 23-Feb-17 | Cloudy  | 13:45 | 63.5                              | 58.5                              | 04                            |
| 23-Feb-17 | Cloudy  | 13:50 | 63.0                              | 58.5                              |                               |
| 23-Feb-17 | Cloudy  | 13:55 | 62.5                              | 58.5                              |                               |

Remarks:

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

#### Noise Measurement Results Station: NM5- Village House, Tin Sum

| Date      | Weather | Time  | Measured<br>L <sub>10</sub> dB(A) | Measured<br>L <sub>90</sub> dB(A) | L <sub>eq(30mins)</sub> dB(A) |
|-----------|---------|-------|-----------------------------------|-----------------------------------|-------------------------------|
| 02-Feb-17 | Cloudy  | 09:31 | 56.5                              | 47.0                              |                               |
| 02-Feb-17 | Cloudy  | 09:36 | 56.0                              | 45.5                              |                               |
| 02-Feb-17 | Cloudy  | 09:41 | 57.0                              | 46.5                              | 56                            |
| 02-Feb-17 | Cloudy  | 09:46 | 55.5                              | 43.5                              | 50                            |
| 02-Feb-17 | Cloudy  | 09:51 | 57.0                              | 45.5                              |                               |
| 02-Feb-17 | Cloudy  | 09:56 | 55.0                              | 47.0                              |                               |
| 08-Feb-17 | Cloudy  | 09:20 | 57.5                              | 49.5                              |                               |
| 08-Feb-17 | Cloudy  | 09:25 | 58.0                              | 48.0                              |                               |
| 08-Feb-17 | Cloudy  | 09:30 | 60.0                              | 47.0                              | 58                            |
| 08-Feb-17 | Cloudy  | 09:35 | 56.0                              | 48.5                              | 50                            |
| 08-Feb-17 | Cloudy  | 09:40 | 55.5                              | 49.5                              |                               |
| 08-Feb-17 | Cloudy  | 09:45 | 54.0                              | 47.5                              |                               |
| 14-Feb-17 | Sunny   | 09:20 | 61.0                              | 51.0                              |                               |
| 14-Feb-17 | Sunny   | 09:25 | 58.5                              | 51.0                              |                               |
| 14-Feb-17 | Sunny   | 09:30 | 61.0                              | 51.0                              | 57                            |
| 14-Feb-17 | Sunny   | 09:35 | 60.0                              | 50.0                              | 57                            |
| 14-Feb-17 | Sunny   | 09:40 | 62.0                              | 48.5                              |                               |
| 14-Feb-17 | Sunny   | 09:45 | 56.0                              | 48.5                              |                               |
| 20-Feb-17 | Cloudy  | 09:20 | 57.5                              | 49.5                              |                               |
| 20-Feb-17 | Cloudy  | 09:25 | 58.0                              | 50.5                              |                               |
| 20-Feb-17 | Cloudy  | 09:30 | 60.5                              | 49.0                              | 58                            |
| 20-Feb-17 | Cloudy  | 09:35 | 57.0                              | 47.0                              | 50                            |
| 20-Feb-17 | Cloudy  | 09:40 | 55.0                              | 46.5                              |                               |
| 20-Feb-17 | Cloudy  | 09:45 | 56.0                              | 48.0                              |                               |

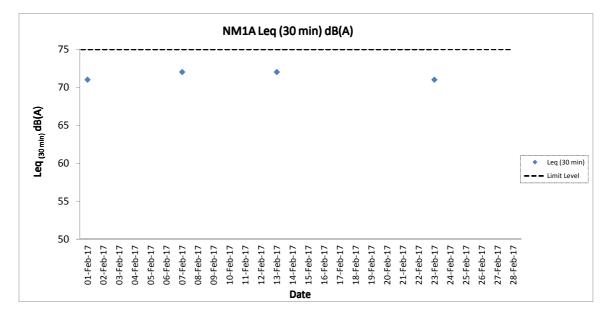
Remarks:

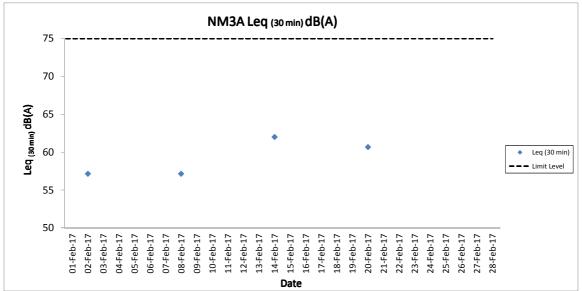
+3dB (A) correction was applied to free-field measurement

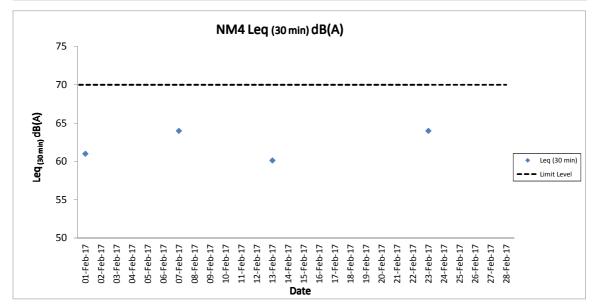
#### **Noise Measurement Results** Station: NM6- House No.1 Sha Lo Wan

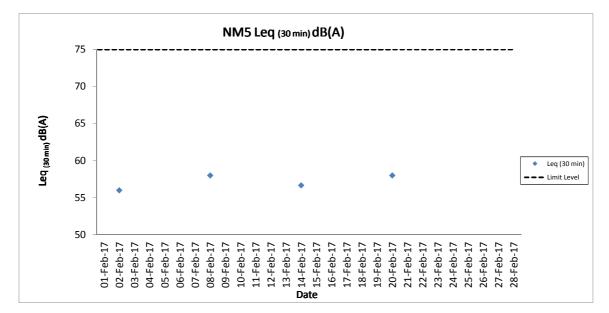
| Date      | Weather | Time  | Measured<br>L <sub>10</sub> dB(A) | Measured<br>L <sub>90</sub> dB(A) | L <sub>eq(30mins)</sub> dB(A) |
|-----------|---------|-------|-----------------------------------|-----------------------------------|-------------------------------|
| 01-Feb-17 | Fine    | 09:40 | 71.0                              | 58.5                              |                               |
| 01-Feb-17 | Fine    | 09:45 | 74.0                              | 58.0                              |                               |
| 01-Feb-17 | Fine    | 09:50 | 78.0                              | 59.5                              | 71                            |
| 01-Feb-17 | Fine    | 09:55 | 78.0                              | 56.0                              | /1                            |
| 01-Feb-17 | Fine    | 10:00 | 70.0                              | 54.5                              |                               |
| 01-Feb-17 | Fine    | 10:05 | 75.0                              | 55.0                              |                               |
| 06-Feb-17 | Sunny   | 09:40 | 67.5                              | 56.5                              |                               |
| 06-Feb-17 | Sunny   | 09:45 | 67.5                              | 56.0                              |                               |
| 06-Feb-17 | Sunny   | 09:50 | 67.5                              | 52.0                              | 63                            |
| 06-Feb-17 | Sunny   | 09:55 | 68.5                              | 55.5                              | - 62                          |
| 06-Feb-17 | Sunny   | 10:00 | 72.5                              | 56.0                              |                               |
| 06-Feb-17 | Sunny   | 10:05 | 67.5                              | 55.5                              |                               |
| 16-Feb-17 | Sunny   | 09:41 | 76.5                              | 54.0                              |                               |
| 16-Feb-17 | Sunny   | 09:46 | 75.5                              | 53.0                              |                               |
| 16-Feb-17 | Sunny   | 09:51 | 74.5                              | 51.0                              | 70                            |
| 16-Feb-17 | Sunny   | 09:56 | 68.0                              | 48.5                              | 70                            |
| 16-Feb-17 | Sunny   | 10:01 | 73.0                              | 51.0                              |                               |
| 16-Feb-17 | Sunny   | 10:06 | 72.5                              | 55.0                              |                               |
| 20-Feb-17 | Cloudy  | 09:37 | 71.5                              | 59.0                              |                               |
| 20-Feb-17 | Cloudy  | 09:42 | 62.0                              | 56.0                              |                               |
| 20-Feb-17 | Cloudy  | 09:47 | 72.0                              | 58.5                              | 62                            |
| 20-Feb-17 | Cloudy  | 09:52 | 67.5                              | 56.5                              | 02                            |
| 20-Feb-17 | Cloudy  | 09:57 | 67.0                              | 55.5                              |                               |
| 20-Feb-17 | Cloudy  | 10:02 | 65.0                              | 55.5                              | 7                             |
| 28-Feb-17 | Fine    | 09:36 | 68.5                              | 55.0                              |                               |
| 28-Feb-17 | Fine    | 09:41 | 72.5                              | 56.5                              | 7                             |
| 28-Feb-17 | Fine    | 09:46 | 68.0                              | 58.0                              | 62                            |
| 28-Feb-17 | Fine    | 09:51 | 71.5                              | 56.0                              | 02                            |
| 28-Feb-17 | Fine    | 09:56 | 65.5                              | 57.0                              |                               |
| 28-Feb-17 | Fine    | 10:01 | 71.0                              | 59.5                              |                               |

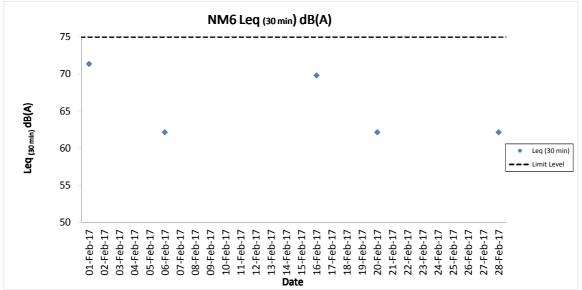
Remarks: +3dB (A) correction was applied to free-field measurement











## Water Quality Monitoring Results

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on02 February 17 02 February 17 during Mid-Flood Tide

| Water Qua     | lity Monite | oring Resu | lits on  |           | 02 February 17 | during Mid   |                  | de         |              |               |            |         |              |          |              | -               |                           |              |             |                  |           |                 |    |                       |                       |                              |                   |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|--------------|-----------------|---------------------------|--------------|-------------|------------------|-----------|-----------------|----|-----------------------|-----------------------|------------------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | nperature (°C | ;)         | pН      | Salini       | ty (ppt) |              | aturation<br>%) | Dissolved<br>Oxygen       | Turbidity(   | NTU)        | Suspende<br>(mg/ |           | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                | -            | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  | Value        | Average         | Value DA                  | Value        | DA          | Value            | DA        | Value           | DA | (Northing)            | (Easting)             | Value DA                     | Value DA          |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 62<br>65   | 18.9<br>18.8 | 18.9          | 8.0<br>8.0 | 8.0     | 29.3<br>29.3 | 29.3     | 93.1<br>93.1 | 93.1            | 7.3<br>7.3                | 8.6<br>8.6   | -           | 14<br>12         |           | 82<br>82        |    |                       |                       | <0.2<br><0.2                 | 0.7               |
| C1            | Cloudy      | Moderate   | 11:06    | 8.6       | Middle         | 4.3<br>4.3   | 0.6<br>0.6       | 55<br>60   | 18.8<br>18.9 | 18.9          | 8.0<br>8.0 | 8.0     | 29.3<br>29.3 | 29.3     | 93.2<br>93.2 | 93.2            | 7.3<br>7.3<br>7.3         | 12.5<br>12.5 | 13.7        | 26<br>28         | 26        | 83<br>83        | 83 | 815609                | 804233                | <0.2<br><0.2 <0.2            | 07                |
|               |             |            |          |           | Bottom         | 7.6          | 0.5              | 72         | 18.8         | 18.8          | 8.0        | 8.0     | 29.5         | 29.5     | 95.5         | 95.6            | 7.5 7.5                   | 20.1         | -           | 38               |           | 84              |    |                       |                       | <0.2                         | 0.6               |
|               |             |            |          |           | Surface        | 7.6          | 0.5              | 74<br>144  | 18.8<br>19.3 | 19.3          | 8.0<br>7.9 | 7.9     | 29.5<br>27.0 | 27.0     | 95.6<br>89.7 | 89.7            | 7.5                       | 20.0<br>6.9  |             | 38<br>6          |           | 84<br>83        |    |                       |                       | <0.2<br><0.2                 | 0.6               |
|               |             |            |          |           |                | 1.0<br>6.2   | 0.5<br>0.5       | 158<br>79  | 19.3<br>19.4 |               | 7.9<br>7.9 |         | 27.0<br>27.6 |          | 89.7<br>89.6 |                 | 7.0<br>7.0<br>7.0         | 6.9<br>9.9   |             | 5<br>5           | -         | 83<br>82        |    |                       |                       | <0.2<br><0.2                 | 2.0               |
| C2            | Cloudy      | Moderate   | 11:28    | 12.4      | Middle         | 6.2<br>11.4  | 0.5              | 80<br>111  | 19.4<br>19.4 | 19.4          | 7.9        | 7.9     | 27.6<br>27.7 | 27.6     | 89.6         | 89.6            | 7.0<br>7.3 7.0            | 9.9<br>14.1  | 10.3        | 5<br>12          | 8         | 82<br>84        | 83 | 825687                | 806952                | <0.2<br><0.2<br><0.2         | 1.8<br>2.0        |
|               |             |            |          |           | Bottom         | 11.4         | 0.5              | 119        | 19.4         | 19.4          | 7.9<br>7.9 | 7.9     | 27.7         | 27.7     | 93.1<br>93.2 | 93.2            | 7.3                       | 14.1         |             | 12               |           | 85              |    |                       |                       | <0.2                         | 1.8               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.6              | 259<br>284 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.9<br>28.9 | 28.9     | 89.4<br>89.3 | 89.4            | 7.0<br>6.9<br>6.9         | 9.3<br>9.4   | -           | 7<br>6           |           | 80<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.7<br>1.4        |
| C3            | Cloudy      | Moderate   | 09:49    | 11.6      | Middle         | 5.8<br>5.8   | 0.5<br>0.5       | 269<br>280 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 29.2<br>29.3 | 29.3     | 87.6<br>87.6 | 87.6            | 6.8<br>6.8                | 15.9<br>16.0 | 16.1        | 22<br>22         | 17        | 83<br>83        | 82 | 822122                | 817803                | <0.2<br><0.2<br><0.2         | 1.5<br>1.5        |
|               |             |            |          |           | Bottom         | 10.6<br>10.6 | 0.4              | 267<br>281 | 19.3<br>19.3 | 19.3          | 7.9        | 7.9     | 29.3<br>29.3 | 29.3     | 87.6<br>87.6 | 87.6            | 6.8<br>6.8<br>6.8         | 23.1<br>23.1 | -           | 21<br>21         |           | 84<br>83        |    |                       |                       | <0.2<br><0.2                 | 1.3<br>1.5        |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 66         | 19.0         | 19.0          | 8.0        | 8.0     | 28.7         | 28.7     | 91.0         | 91.0            | 7.1                       | 7.6          |             | 12               |           | 80              |    |                       |                       | <0.2                         | 1.2               |
| IM1           | Cloudy      | Madarata   | 11.24    | 7.8       |                | 1.0<br>3.9   | 0.6<br>0.5       | 71<br>118  | 19.0<br>19.0 |               | 8.0<br>8.0 |         | 28.7<br>28.8 | 28.8     | 91.0<br>91.3 | 91.3            | 7.1<br>7.1<br>7.1         | 7.6<br>11.1  | 14.2        | 11<br>12         | 21        | 81<br>82        | 82 | 818339                | 806459                | <0.2<br><0.2<br><0.2<br><0.2 | 1.2<br>1.4<br>1.3 |
|               | Cloudy      | Moderate   | 11:24    | 7.0       | Middle         | 3.9<br>6.8   | 0.5<br>0.4       | 119<br>132 | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 28.8<br>29.1 |          | 91.3<br>93.5 |                 | 7.1<br>7.3 7.0            | 11.0<br>23.9 | 14.2        | 12<br>39         | 21        | 82<br>83        | 02 | 010339                | 606459                | <0.2<br><0.2                 | 1.4<br>1.0        |
|               |             |            |          |           | Bottom         | 6.8<br>1.0   | 0.5              | 133        | 19.0<br>19.0 | 19.0          | 8.0        | 8.0     | 29.1<br>28.6 | 29.1     | 93.5         | 93.5            | 7.3                       | 23.9         |             | 40               |           | 83              |    |                       |                       | <0.2                         | 1.3               |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 120        | 19.0         | 19.0          | 8.0<br>8.0 | 8.0     | 28.6         | 28.6     | 90.8<br>90.8 | 90.8            | 7.1 7.1                   | 14.1<br>14.1 | -           | 22<br>23         |           | 82<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.6<br>1.4        |
| IM2           | Cloudy      | Moderate   | 11:30    | 8.5       | Middle         | 4.3<br>4.3   | 0.5              | 154<br>159 | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 28.6<br>28.6 | 28.6     | 91.4<br>91.4 | 91.4            | 7.1                       | 15.0<br>14.9 | 14.4        | 29<br>28         | 27        | 83<br>83        | 83 | 818843                | 806205                | <0.2<br><0.2 <0.2            | 1.5<br>1.4        |
|               |             |            |          |           | Bottom         | 7.5<br>7.5   | 0.5<br>0.5       | 143<br>153 | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 28.6<br>28.6 | 28.6     | 95.2<br>95.3 | 95.3            | 7.4 7.4                   | 14.2<br>14.0 | -           | 28<br>29         |           | 83<br>83        |    |                       |                       | <0.2<br><0.2                 | 1.4               |
|               |             |            |          |           | Surface        | 1.0          | 0.4              | 60<br>60   | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 28.6<br>28.6 | 28.6     | 90.3<br>90.4 | 90.4            | 7.1                       | 17.5<br>17.6 | _           | 31<br>31         |           | 82<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.4               |
| IM3           | Cloudy      | Moderate   | 11:37    | 8.7       | Middle         | 4.4          | 0.4              | 47         | 19.0         | 19.0          | 8.0<br>8.0 | 8.0     | 28.6<br>28.6 | 28.6     | 91.0<br>91.0 | 91.0            | 7.1                       | 20.2         | 19.7        | 29               | <u>32</u> | 83              | 83 | 819413                | 806000                | <0.2                         | 1.4 1.5           |
|               |             |            |          |           | Bottom         | 4.4<br>7.7   | 0.5<br>0.4       | 50<br>56   | 19.0<br>19.0 | 19.0          | 8.0        | 8.0     | 28.6         | 28.6     | 93.3         | 93.4            | 7.1<br>7.3<br>7.3         | 21.3         | -           | 30<br>34         |           | 83<br>84        |    |                       |                       | <0.2<br><0.2                 | 1.6<br>1.6        |
|               |             |            |          |           |                | 7.7          | 0.4              | 59<br>113  | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 28.6<br>28.7 | 28.7     | 93.4<br>90.2 | 90.2            | 7.3 <sup>7.3</sup><br>7.1 | 21.2<br>22.8 |             | 34<br>34         |           | 84<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.4<br>1.4        |
|               |             |            |          |           | Surface        | 1.0<br>4.1   | 0.6              | 116<br>104 | 19.0<br>19.0 |               | 8.0<br>8.0 |         | 28.7<br>28.7 |          | 90.2<br>90.2 |                 | 7.1 7.1                   | 22.8<br>27.3 |             | 34<br>37         |           | 82<br>83        |    |                       |                       | <0.2<br><0.2                 | 1.5<br>1.4        |
| IM4           | Cloudy      | Moderate   | 11:47    | 8.2       | Middle         | 4.1          | 0.6              | 113<br>125 | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 28.7<br>28.7 | 28.7     | 90.2<br>90.3 | 90.2            | 7.1<br>7.1 7.1            | 27.2<br>31.8 | <u>27.2</u> | 39<br>58         | <u>44</u> | 83<br>82<br>83  | 83 | 819564                | 805048                | <0.2<br><0.2<br><0.2         | 1.4<br>1.3<br>1.3 |
|               |             |            |          |           | Bottom         | 7.2          | 0.6              | 135        | 19.0         | 19.0          | 8.0        | 8.0     | 28.7         | 28.7     | 90.3         | 90.3            | 7.1                       | 31.5         |             | 63               |           | 83              |    |                       |                       | <0.2                         | 1.4               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.5              | 81<br>88   | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 28.5<br>28.5 | 28.5     | 88.9<br>88.9 | 88.9            | 6.9<br>7.0<br>6.9         | 16.2<br>16.2 |             | 25<br>26         |           | 78<br>78        |    |                       |                       | <0.2<br><0.2                 | 1.5<br>1.3        |
| IM5           | Cloudy      | Moderate   | 11:57    | 7.1       | Middle         | 3.6<br>3.6   | 0.5              | 86<br>94   | 19.1<br>19.1 | 19.1          | 8.0<br>8.0 | 8.0     | 28.5<br>28.5 | 28.5     | 88.7<br>88.7 | 88.7            | 6.9<br>6.9                | 22.3<br>22.4 | <u>22.7</u> | 40<br>39         | <u>35</u> | 79<br>79        | 79 | 820562                | 804915                | <0.2 <0.2 <0.2               | 1.5<br>1.6        |
|               |             |            |          |           | Bottom         | 6.1<br>6.1   | 0.5              | 84<br>91   | 19.1<br>19.1 | 19.1          | 8.0<br>8.0 | 8.0     | 28.5<br>28.5 | 28.5     | 88.4<br>88.4 | 88.4            | 6.9<br>6.9                | 29.4<br>29.5 | -           | 40<br>39         |           | 80<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.6<br>1.6        |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 88         | 19.1         | 19.1          | 7.9        | 7.9     | 28.3         | 28.3     | 89.1         | 89.2            | 7.0                       | 12.6         |             | 20               |           | 80              |    |                       |                       | <0.2                         | 1.0               |
| IM6           | Cloudy      | Moderate   | 12:08    | 7.1       | Middle         | 1.0<br>3.6   | 0.6              | 93<br>90   | 19.1<br>19.1 | 19.1          | 7.9<br>7.9 | 7.9     | 28.3<br>28.3 | 28.3     | 89.2<br>91.1 | 91.2            | 7.0<br>7.1<br>7.1         | 12.7<br>17.6 | 15.0        | 19<br>29         | 27        | 81<br>82        | 82 | 821075                | 805823                | <0.2<br><0.2<br><0.2<br><0.2 | 1.1<br>1.0<br>1.0 |
| INIO          | Cloudy      | Moderate   | 12.00    | 7.1       |                | 3.6<br>6.1   | 0.6<br>0.5       | 93<br>106  | 19.1<br>19.0 |               | 7.9<br>8.0 |         | 28.3<br>28.9 |          | 91.2<br>95.4 |                 | 7.1<br>7.5 7.5            | 17.5<br>14.9 | 10.0        | 31<br>32         | 27        | 81<br>82        | 02 | 021075                | 000020                | <0.2<br><0.2                 | 1.1<br>0.9        |
|               |             |            |          |           | Bottom         | 6.1<br>1.0   | 0.5              | 114<br>53  | 19.0<br>19.1 | 19.0          | 8.0<br>8.0 | 8.0     | 28.9<br>28.4 | 28.9     | 95.5<br>91.7 | 95.5            | 7.5<br>7.5<br>7.2         | 14.7<br>10.7 |             | 30<br>12         |           | 83<br>80        |    |                       |                       | <0.2<br><0.2                 | 0.8               |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 56         | 19.1         | 19.1          | 8.0        | 8.0     | 28.4         | 28.4     | 91.8         | 91.8            | 7.2 7.3                   | 10.7         | F           | 14               |           | 80              |    |                       |                       | <0.2                         | 1.0               |
| IM7           | Cloudy      | Moderate   | 12:15    | 8.8       | Middle         | 4.4          | 0.5<br>0.6       | 71<br>72   | 19.1<br>19.1 | 19.1          | 8.0<br>8.0 | 8.0     | 28.5<br>28.5 | 28.5     | 93.4<br>93.5 | 93.5            | 7.3<br>7.3                | 11.5<br>11.6 | 11.3        | 16<br>17         | 18        | 81<br>81        | 81 | 821334                | 806843                | <0.2<br><0.2 <0.2            | 1.1               |
|               |             |            |          |           | Bottom         | 7.8<br>7.8   | 0.4              | 88<br>89   | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 28.9<br>28.9 | 28.9     | 96.5<br>96.6 | 96.6            | 7.5<br>7.5<br>7.5         | 11.8<br>11.7 |             | 24<br>22         |           | 82<br>83        |    |                       |                       | <0.2<br><0.2                 | 0.8<br>0.8        |
|               |             |            |          |           | Surface        | 1.0          | 0.3              | 199<br>207 | 19.4<br>19.4 | 19.4          | 7.9<br>7.9 | 7.9     | 27.6<br>27.6 | 27.6     | 90.7<br>90.7 | 90.7            | 7.1                       | 8.3<br>8.4   |             | 7<br>6           |           | 80<br>79        |    |                       |                       | <0.2<br><0.2                 | 1.7<br>1.5        |
| IM8           | Cloudy      | Moderate   | 11:01    | 8.5       | Middle         | 4.3          | 0.3              | 181        | 19.4         | 19.4          | 7.9        | 7.9     | 27.7         | 27.7     | 91.0         | 91.0            | 7.1                       | 8.7          | 9.7         | 8                | 9         | 83              | 82 | 821683                | 807833                | <0.2                         | 1.4 1.5           |
|               |             |            |          |           | Bottom         | 4.3<br>7.5   | 0.3<br>0.4       | 181<br>152 | 19.4<br>19.4 | 19.4          | 7.9<br>7.9 | 7.9     | 28.0         | 28.0     | 91.0<br>94.4 | 94.4            | 7.1<br>7.4<br>7.4         | 8.8<br>11.9  | -           | 7<br>13          |           | 83<br>84        |    |                       |                       | <0.2                         | 1.4               |
| DA: Dopth Avo |             |            |          |           | Dottom         | 7.5          | 0.4              | 161        | 19.4         | 10.7          | 7.9        | 7.0     | 28.0         | 20.0     | 94.4         | U 7.T           | 7.4                       | 11.9         |             | 12               |           | 84              |    |                       |                       | <0.2                         | 1.3               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on02 February 17 02 February 17 during Mid-Flood Tide

| Water Qua             | lity Monit | oring Resu | ilts on  |           | 02 February 17    | during Mid-              | Flood I                  | ide                      |                              |              |                   |   |                  |                         |                   |   |                              |          |                      |          |                      |    |                       |                       |                                      |                                 |
|-----------------------|------------|------------|----------|-----------|-------------------|--------------------------|--------------------------|--------------------------|------------------------------|--------------|-------------------|---|------------------|-------------------------|-------------------|---|------------------------------|----------|----------------------|----------|----------------------|----|-----------------------|-----------------------|--------------------------------------|---------------------------------|
| Monitoring<br>Station | Weather    | Sea        | Sampling | Water     | Sampling De       | oth (m)                  | Current<br>Speed         | Current<br>Direction     | Water Tem                    | perature (°C | C) pH             |   | alinity (pp      | ot)                     | Saturation<br>(%) | Dissolved<br>Oxygen                                     | Turbidity                    | NTU)     | Suspended<br>(mg/L   |          | Total Alk<br>(ppn    | m) | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)                   | Nickel (µg/L)                   |
| Station               | Condition  | Condition  | Time     | Depth (m) |                   | -                        | (m/s)                    |                          | Value                        | Average      |                   | <u> </u>  | ue Aver          | 0                       | Average           | Value DA  |                              | DA       | Value                | DA       |                      | DA | (Northing)            | (Easting)             | Value DA                             | Value DA                        |
| IM9                   | Cloudy     | Moderate   | 10:54    | 7.3       | Surface<br>Middle | 1.0<br>1.0<br>3.7<br>3.7 | 0.5<br>0.5<br>0.6<br>0.6 | 235<br>242<br>226<br>238 | 19.3<br>19.3<br>19.4<br>19.4 | 19.3<br>19.4 | 7.9               | 7.9     28       7.9     28       7.9     28       7.9     28   | .4 28<br>.4 28   | 90.5                    | 90.5              | 7.1<br>7.1<br>7.1<br>7.1<br>7.1                         | 13.0<br>13.0<br>13.0<br>13.0 | 13.0     | 15<br>15<br>15<br>14 | 15       | 80<br>80<br>83<br>83 | 82 | 822105                | 808798                | <0.2<br><0.2<br><0.2<br><0.2<br><0.2 | 1.2<br>1.2<br>1.0<br>1.1<br>1.2 |
|                       |            |            |          |           | Bottom            | 6.3<br>6.3               | 0.5                      | 235<br>252               | 19.3<br>19.3                 | 19.3         | 7.9<br>7.9        | 7.9 28  | .4 28            | 92.6<br>92.6            | 92.6              | 7.2<br>7.2<br>7.2                                       | 13.0                         |          | 16<br>17             |          | 84<br>84             |    |                       |                       | <0.2<br><0.2                         | 1.4<br>1.2                      |
|                       |            |            |          |           | Surface           | 1.0<br>1.0<br>4.2        | 0.6<br>0.6<br>0.5        | 266<br>279<br>269        | 19.2<br>19.2<br>19.2         | 19.2         | 8.0<br>8.0<br>8.0 | 8.0 28<br>28<br>28<br>28  | .8 <sup>28</sup> | 92.0                    | 92.0              | 7.2<br>7.2<br>7.2<br>7.2                                | 17.8<br>17.8<br>19.6         | -        | 22<br>21<br>23       | -        | 79<br>79<br>83       |    |                       |                       | <0.2<br><0.2<br><0.2                 | 1.1<br>1.1<br>1.0               |
| IM10                  | Cloudy     | Moderate   | 10:46    | 8.4       | Bottom            | 4.2<br>7.4               | 0.5<br>0.5               | 277<br>263               | 19.2<br>19.2                 | 19.2<br>19.2 | 8.0<br>8.0        | 8.0<br>28<br>28   | .8 28<br>.8 29   | 92.0                    | 92.0              | 7.2<br>7.3 7.2  | 19.6<br>22.7                 | 20.0     | 21<br>27             | 24       | 84<br>84             | 82 | 822245                | 809850                | <0.2<br><0.2                         | 1.0<br>1.0                      |
|                       |            |            |          |           | Surface           | 7.4<br>1.0<br>1.0        | 0.5<br>0.5<br>0.5        | 264<br>284<br>307        | 19.2<br>19.3<br>19.3         | 19.3         | 8.0<br>8.0<br>8.0 | 8.0 28<br>8.0 28  | .8               | 93.7                    | 00.0              | 7.3<br>7.1<br>7.1<br>7.1                                | 22.7<br>18.9<br>18.8         |          | 27<br>21<br>20       |          | 84<br>80<br>79       |    |                       |                       | <0.2<br><0.2<br><0.2                 | 1.1<br>1.1<br>1.1               |
| IM11                  | Cloudy     | Moderate   | 10:37    | 8.9       | Middle            | 4.5<br>4.5               | 0.5<br>0.5               | 288<br>297               | 19.3<br>19.3                 | 19.3         | 8.0<br>8.0        | 8.0 28  | .9<br>.9 28      | 90.7 90.7 90.7          | 90.7              | 7.1<br>7.1  | 21.9<br>22.0                 | 20.6     | 20<br>21             | 22       | 84<br>84             | 83 | 821516                | 810528                | <0.2<br><0.2 <0.2                    | 1.0<br>1.0                      |
|                       |            |            |          |           | Bottom            | 7.9<br>7.9<br>1.0        | 0.5<br>0.5<br>0.8        | 285<br>285<br>277        | 19.3<br>19.3<br>19.2         | 19.3         | 8.0<br>8.0<br>8.0 | 8.0 29<br>29<br>20<br>28  | .0 29            | 90.9                    | 30.5              | 7.1<br>7.1<br>7.1                                       | 21.1<br>21.1<br>16.2         |          | 24<br>24<br>16       |          | 84<br>84<br>79       |    |                       |                       | <0.2<br><0.2<br><0.2                 | 1.2<br>1.0<br>1.1               |
| IM12                  | Cloudy     | Moderate   | 10:29    | 7.4       | Surface<br>Middle | 1.0<br>3.7               | 0.8<br>0.7               | 279<br>279               | 19.2<br>19.2                 | 19.2<br>19.2 | 8.0<br>8.0<br>8.0 | 8.0 28<br>8.0 29<br>8.0 29                                      | .9 28<br>.0 29   | 91.2                    | 91.2              | 7.1<br>7.1<br>7.1                                       | 16.3                         | 20.2     | 18<br>16             | 20       | 79<br>83             | 82 | 821148                | 811509                | <0.2<br><0.2                         | 1.0<br>1.3<br>1.2               |
|                       |            |            |          |           | Bottom            | 3.7<br>6.4<br>6.4        | 0.7<br>0.6<br>0.6        | 305<br>275<br>293        | 19.2<br>19.2<br>19.2         | 19.2         | 7.9<br>7.9        | 7.9 29<br>29  | .1               | 92.4                    | 00.4              | 7.1           7.2         7.2           7.2         7.2 | 24.7<br>24.6                 | -        | 18<br>27<br>27       | -        | 82<br>84<br>84       |    |                       |                       | <0.2<br><0.2<br><0.2                 | 1.3<br>1.1<br>1.1               |
|                       |            |            |          |           | Surface           | 1.0<br>1.0<br>2.3        | 0.2<br>0.2               | 231<br>240<br>-          | 19.2<br>19.2                 | 19.2         | 8.0<br>8.0        | 8.0 29  |                  | 0.0 91.5<br>91.5        | 91.5              | 7.1<br>7.1<br>- 7.1                                     | 19.9<br>19.9                 | -        | 24<br>23<br>-        | -        | 80<br>79<br>-        |    |                       |                       | <0.2                                 | 1.3<br>1.0                      |
| SR2                   | Cloudy     | Moderate   | 10:09    | 4.6       | Bottom            | 2.3<br>3.6               | -<br>0.2                 | -<br>259                 | -<br>19.2                    | -<br>19.2    | - 8.0             | - 29  | .0 20            | 92.5                    | <br>92.5          | -<br>7.2 7.2  | - 21.4                       | 20.7     | -<br>25              | 24       | -<br>84              | 82 | 821454                | 814152                | - <0.2<br><0.2                       | - 1.1<br>1.0                    |
|                       |            |            |          |           | Surface           | 3.6<br>1.0<br>1.0        | 0.2<br>0.6<br>0.7        | 272<br>119<br>125        | 19.2<br>19.4<br>19.4         | 19.4         | 8.0<br>7.9<br>7.9 | 0.0         29           7.9         27           27         27 | .0               | 92.5                    | 89.7              | 7.2   | 12.6                         |          | 25<br>8<br>8         |          | 84<br>-<br>-         |    |                       |                       | <0.2<br>-                            | 1.1<br>-<br>-                   |
| SR3                   | Cloudy     | Moderate   | 11:06    | 9.9       | Middle            | 5.0<br>5.0               | 0.7<br>0.7               | 118<br>127               | 19.4<br>19.4                 | 19.4         | 7.9<br>7.9        | 7.9 27<br>27  | .6<br>.6 27      | 7.6 <u>89.8</u><br>89.8 | 09.0              | 7.0<br>7.0<br>7.0                                       | 15.2<br>15.1                 | 15.5     | 8<br>9               | 12       | -                    | -  | 822162                | 807585                |                                      |                                 |
|                       |            |            |          |           | Bottom            | 8.9<br>8.9<br>1.0        | 0.7<br>0.8<br>0.3        | 111<br>117<br>203        | 19.4<br>19.4<br>19.1         | 19.4         | 7.9<br>7.9<br>7.9 | 7.9 27<br>27<br>27  | .7 27            | 95.6                    | 95.0              | 7.5<br>7.5<br>7.0                                       | 18.6<br>18.6<br>12.8         |          | 19<br>20<br>21       |          | -                    |    |                       |                       | -                                    | -                               |
| SR4A                  | Cloudy     | Moderate   | 10:43    | 8.1       | Surface           | 1.0<br>4.1<br>4.1        | 0.3<br>0.3<br>0.3        | 209<br>194<br>201        | 19.1<br>19.1<br>19.1         | 19.1<br>19.1 | 7.9               | 7.9     28       7.9     28       7.9     28       7.9     28   | .9               | 90.4                    | 01 7              | 7.0<br>7.1<br>7.1                                       | 12.8<br>13.5<br>13.5         | 13.6     | 21<br>21<br>21       | 22       | -                    | -  | 817183                | 807815                |                                      |                                 |
|                       |            |            |          |           | Bottom            | 7.1                      | 0.3                      | 183<br>184               | 19.1<br>19.1                 | 19.1         | 7.9<br>7.9        | 7.9 29  | .0<br>.0 29      | 0.0 <u>94.2</u><br>94.3 | 94.3              | 7.3<br>7.3<br>7.3                                       | 1/1 3                        | -        | 23<br>24             | -        | -                    |    |                       |                       | -                                    | -                               |
|                       |            |            |          |           | Surface           | 1.0<br>1.0<br>2.1        | 0.2                      | 293<br>321               | 19.1<br>19.1                 | 19.1         | 7.9 7.9           | 7.9 28  | .8 20            | 8.8 <u>90.5</u><br>90.5 | 90.5              | 7.1<br>7.1<br>- 7.1                                     | 8.7<br>8.3                   | -        | 13<br>15<br>-        | -        | -                    |    |                       |                       | -                                    | -                               |
| SR5A                  | Cloudy     | Calm       | 10:25    | 4.2       | Bottom            | 2.1<br>3.2               | -<br>0.2                 | -<br>299                 | -<br>19.1                    | - 19.1       | -<br>7.9          |   | .8 28            | 93.2                    |                   | -<br>7.3 7.3  | - 8.5                        | 8.5      | -<br>16              | 15       | -                    | -  | 816588                | 810704                |                                      |                                 |
|                       |            |            |          |           | Surface           | 3.2<br>1.0<br>1.0        | 0.2<br>0.2<br>0.2        | 310<br>228<br>239        | 19.1<br>19.1<br>19.1         | 19.1         | 7.9<br>7.8<br>7.8 | 7.8 28<br>7.8 28  | .8<br>.5 28      | 93.3                    | 91.0              | 7.3   | 8.5<br>6.6<br>6.7            | <u> </u> | 16<br>11<br>10       | <u> </u> | -                    |    |                       |                       | -                                    | -                               |
| SR6                   | Cloudy     | Calm       | 10:01    | 3.9       | Middle            | 2.0<br>2.0               | -                        | -                        | -                            | -            | -                 |   | -                | -                       |                   | - 7.1   | -                            | 7.1      | -                    | 16       | -                    | -  | 817899                | 814648                |                                      |                                 |
|                       |            |            |          |           | Bottom            | 2.9<br>2.9<br>1.0        | 0.2<br>0.2<br>0.2        | 222<br>227<br>234        | 19.1<br>19.1<br>19.3         | 19.1         | 7.8               | 7.8 28  | .4 28            | 96.0                    | 95.9              | 7.5<br>7.5<br>6.8                                       | 7.6<br>7.6<br>8.1            | <u> </u> | 21<br>21<br>6        | <u> </u> | -                    |    |                       |                       | -                                    | -                               |
| SR7                   | Cloudy     | Moderate   | 09:12    | 17.2      | Surface           | 1.0<br>8.6               | 0.2<br>0.2               | 241<br>226               | 19.3<br>19.3                 | 19.3<br>19.3 | 7.9<br>7.9        | 7.9 29<br>7.9 29  | .2 29<br>.3 20   | 88.1<br>88.1            | - 88.1<br>- 88.1  | 6.8<br>6.8  | 8.1<br>8.3                   | 8.4      | 6<br>7               | 7        | -                    | -  | 823653                | 823741                | -                                    |                                 |
|                       | -          |            |          |           | Bottom            | 8.6<br>16.2<br>16.2      | 0.3<br>0.3<br>0.3        | 231<br>239<br>247        | 19.3<br>19.3<br>19.3         | 19.3         | 7.9<br>7.9<br>7.9 | 7.9 29<br>7.9 29  | .3<br>.4 29      | 88.1                    | 88.5              | 6.8<br>6.9<br>6.9<br>6.9                                | 8.1<br>9.0<br>9.0            | -        | 6<br>8<br>8          | -        | -                    |    |                       |                       | -                                    | -                               |
|                       |            |            |          |           | Surface           | 1.0<br>1.0               | 0.3<br>0.3               | 230<br>231               | 19.7<br>19.7                 | 19.7         | 7.9               | 7.9 28  | .7<br>.7 28      | 93.9<br>93.9            | 02.0              | 7.3<br>7.3<br>7.3                                       | 12.3<br>12.3                 |          | 12<br>12             |          | -                    |    |                       |                       | -                                    | -                               |
| SR8                   | Cloudy     | Moderate   | 10:23    | 5.0       | Middle            | 2.5<br>2.5<br>4.0        | -<br>-<br>0.2            | -<br>-<br>270            | -<br>-<br>19.3               | -            | -<br>-<br>7.9     | - 28  | -<br>0           |                         |                   |   | 13.0                         | 13.1     | -<br>-<br>14         | 13       | -                    | -  | 820431                | 811582                |                                      |                                 |
| DA: Depth-Aver        |            |            |          |           | Bottom            | 4.0                      | 0.3                      | 294                      | 19.3                         | 19.3         | 7.9               | 7.9 28  |                  | 95.0                    |                   | 7.4 7.4   | 13.9                         |          | 14                   |          | -                    |    |                       |                       | -                                    | <u> </u>                        |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on02 February 17 02 February 17 during Mid-Ebb tide

| Water Qua     | ality Monit | oring Res | ults on  |           | 02 February 17 | during Mid   |                  |                   |              |                |            |         |              |          |              |                  |                     |              |      |                  |           |                 |    |                       |                       |                              |                  |
|---------------|-------------|-----------|----------|-----------|----------------|--------------|------------------|-------------------|--------------|----------------|------------|---------|--------------|----------|--------------|------------------|---------------------|--------------|------|------------------|-----------|-----------------|----|-----------------------|-----------------------|------------------------------|------------------|
| Monitoring    | Weather     | Sea       | Sampling | Water     | Sampling De    | epth (m)     | Current<br>Speed | Current           | Water Te     | mperature (°C) |            | pН      | Salinit      | ty (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(   | NTU) | Suspende<br>(mg/ |           | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)    |
| Station       | Condition   | Condition | Time     | Depth (m) |                |              | (m/s)            | Direction         | Value        | Average        | Value      | Average | e Value      | Average  | Value        | Average          | Value DA            | Value        | DA   | Value            | DA        | Value           | DA | (Northing)            | (Easting)             | Value DA                     | Value DA         |
|               |             |           |          |           | Surface        | 1.0          | 0.5              | 206<br>208        | 15.7<br>15.7 | 15.7           | 8.2<br>8.2 | 8.2     | 30.4<br>30.4 | 30.4     | 94.6<br>94.7 | 94.7             | 7.8<br>7.8 7.9      | 9.3<br>9.4   | -    | 14<br>14         |           | 83<br>83        |    | ł                     |                       | <0.2<br><0.2                 | 0.8              |
| C1            | Cloudy      | Moderate  | 17:10    | 8.7       | Middle         | 4.4          | 0.5              | 205               | 15.6         | 15.6           | 8.2        | 8.2     | 30.4         | 30.4     | 94.6         | 94.6             | 7.8                 | 13.5         | 13.5 | 18               | 25        | 84              | 84 | 815635                | 804260                | <0.2                         | 2 0.6 0.7        |
|               |             |           |          |           | Pottom         | 4.4          | 0.5              | 206<br>208        | 15.6<br>15.6 | 15.6           | 8.2<br>8.2 | 0.0     | 30.4<br>30.4 | 30.4     | 94.6<br>96.5 | 96.6             | 7.8<br>8.0<br>8.0   | 13.5<br>17.5 | -    | 20<br>42         |           | 84<br>84        |    | ł                     |                       | <0.2                         | 0.7              |
|               |             |           |          |           | Bottom         | 7.7          | 0.5              | 208<br>150        | 15.6<br>19.4 |                | 8.2<br>7.9 | 8.2     | 30.4<br>27.4 |          | 96.6<br>90.1 |                  | 8.0 8.0<br>7.0      | 17.5<br>11.8 |      | 41<br>12         |           | 85<br>80        |    |                       |                       | <0.2<br><0.2                 | 0.5 2.0          |
|               |             |           |          |           | Surface        | 1.0          | 0.4              | 155               | 19.4         | 19.4           | 7.9        | 7.9     | 27.4         | 27.4     | 90.1         | 90.1             | 7.0 7.0             | 11.8         |      | 11               |           | 79              |    |                       |                       | <0.2                         | 1.9              |
| C2            | Cloudy      | Moderate  | 15:16    | 11.2      | Middle         | 5.6<br>5.6   | 0.4              | 127<br>132        | 19.4<br>19.4 | 19.4           | 7.9<br>7.9 | 7.9     | 27.8<br>27.8 | 27.8     | 89.5<br>89.5 | 89.5             | 7.0<br>7.0          | 21.6<br>21.5 | 20.5 | 13<br>11         | 16        | 81<br>82        | 82 | 825700                | 806960                | <0.2 <0.2 <0.2               | 2 2.1 2.0        |
|               |             |           |          |           | Bottom         | 10.2<br>10.2 | 0.2              | 190<br>192        | 19.3<br>19.3 | 19.3           | 7.9<br>7.9 | 7.9     | 28.5<br>28.5 | 28.5     | 91.0<br>91.0 | 91.0             | 7.1 7.1             | 28.6<br>27.9 | -    | 25<br>26         |           | 84<br>84        |    |                       |                       | <0.2<br><0.2                 | 2.1<br>2.2       |
|               |             |           |          |           | Surface        | 1.0          | 0.3              | 94                | 19.3         | 19.3           | 7.9        | 7.9     | 29.2         | 29.2     | 88.3         | 88.3             | 6.9                 | 8.9          |      | 26<br>7          |           | 80              |    |                       |                       | <0.2                         | 0.9              |
|               |             |           |          |           |                | 1.0<br>6.3   | 0.6              | 96<br>94          | 19.3<br>19.3 |                | 7.9<br>7.9 |         | 29.2<br>29.4 |          | 88.3<br>87.4 |                  | 6.9<br>6.8 6.9      | 8.9<br>10.1  | -    | 9<br>7           |           | 81<br>82        |    | ł                     |                       | <0.2                         | 0.8              |
| C3            | Cloudy      | Moderate  | 16:55    | 12.6      | Middle         | 6.3          | 0.5              | 94                | 19.3         | 19.3           | 7.9        | 7.9     | 29.4         | 29.4     | 87.4         | 87.4             | 6.8                 | 10.2         | 12.7 | 9                | 9         | 83              | 83 | 822100                | 817815                | <0.2                         | 1.0              |
|               |             |           |          |           | Bottom         | 11.6<br>11.6 | 0.4              | 138<br>144        | 19.2<br>19.2 | 19.2           | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.6     | 87.4<br>87.4 | 87.4             | 6.8<br>6.8<br>6.8   | 19.0<br>19.0 | -    | 10<br>12         |           | 84<br>85        |    |                       |                       | <0.2<br><0.2                 | 1.2              |
|               |             |           |          |           | Surface        | 1.0<br>1.0   | 0.5<br>0.5       | 176<br>187        | 15.9<br>15.9 | 15.9           | 8.2<br>8.2 | 8.2     | 29.6<br>29.6 | 29.6     | 93.7<br>93.7 | 93.7             | 7.8<br>7.8          | 7.8<br>7.8   | -    | 12<br>14         |           | 83<br>83        |    |                       |                       | <0.2<br><0.2                 | 0.7              |
| IM1           | Cloudy      | Moderate  | 16:51    | 7.7       | Middle         | 3.9          | 0.4              | 177               | 15.8         | 15.8           | 8.2        | 8.2     | 29.9         | 29.9     | 94.2         | 94.2             | 7.8                 | 10.2         | 11.7 | 17               | 21        | 84              | 84 | 818365                | 806450                | <0.2                         | 0.6 0.7          |
|               | cloudy      | modorato  | 10.01    |           |                | 3.9<br>6.7   | 0.4              | 192<br>183        | 15.8<br>15.7 |                | 8.2<br>8.2 |         | 29.9<br>30.0 |          | 94.2<br>95.4 |                  | 7.8<br>7.9<br>7.0   | 10.2<br>17.1 |      | 18<br>30         |           | 83<br>84        |    | 010000                | 000100                | <0.2<br><0.2                 | 0.8              |
|               |             |           |          |           | Bottom         | 6.7          | 0.4              | 193               | 15.7         | 15.7           | 8.2        | 8.2     | 30.0         | 30.0     | 95.5         | 95.5             | 7.9                 | 17.2         |      | 32               |           | 85              |    |                       |                       | <0.2                         | 0.7              |
|               |             |           |          |           | Surface        | 1.0<br>1.0   | 0.4              | 194<br>204        | 15.9<br>15.9 | 15.9           | 8.2<br>8.2 | 8.2     | 29.4<br>29.4 | 29.4     | 93.1<br>93.1 | 93.1             | 7.7<br>7.7<br>7.8   | 7.5<br>7.5   |      | 13<br>13         |           | 82<br>83        |    |                       |                       | <0.2<br><0.2                 | 1.1<br>0.9       |
| IM2           | Cloudy      | Moderate  | 16:45    | 8.5       | Middle         | 4.3<br>4.3   | 0.4              | 179<br>179        | 15.8<br>15.8 | 15.8           | 8.2<br>8.2 | 8.2     | 29.6<br>29.6 | 29.6     | 93.8<br>93.9 | 93.9             | 7.8<br>7.8          | 9.8<br>9.9   | 10.5 | 18<br>16         | 20        | 83<br>83        | 83 | 818841                | 806191                | <0.2<br><0.2<br><0.2         | 2 0.7 0.9        |
|               |             |           |          |           | Bottom         | 7.5          | 0.4              | 161               | 15.7         | 15.7           | 8.2        | 8.2     | 29.8         | 29.8     | 94.3         | 94.4             | 7.8 7.8             | 14.0         | _    | 31               |           | 84              |    |                       |                       | <0.2                         | 0.7              |
|               |             |           |          |           |                | 7.5          | 0.4              | 175<br>205        | 15.7<br>16.0 |                | 8.2<br>8.2 |         | 29.8<br>28.8 |          | 94.4<br>94.1 |                  | 7.8 7.0<br>7.8      | 14.1<br>4.5  |      | 31<br>10         |           | 84<br>83        |    |                       |                       | <0.2<br><0.2                 | 0.8              |
|               |             |           |          |           | Surface        | 1.0<br>4.4   | 0.4              | 211<br>175        | 16.0<br>15.9 | 16.0           | 8.2<br>8.2 | 8.2     | 28.8<br>29.0 | 28.8     | 94.1<br>94.6 | 94.1             | 7.8<br>7.8<br>7.8   | 4.5<br>5.6   | -    | 11<br>12         |           | 83<br>83        |    |                       |                       | <0.2<br><0.2                 | 1.2              |
| IM3           | Cloudy      | Moderate  | 16:36    | 8.8       | Middle         | 4.4          | 0.4              | 188               | 15.9         | 15.9           | 8.2        | 8.2     | 29.0         | 29.0     | 94.6         | 94.6             | 7.8                 | 5.6          | 6.7  | 12               | 16        | 84              | 84 | 819425                | 806008                | <0.2                         | 1.0              |
|               |             |           |          |           | Bottom         | 7.8<br>7.8   | 0.5              | 158<br>165        | 15.8<br>15.8 | 15.8           | 8.2<br>8.2 | 8.2     | 29.4<br>29.4 | 29.4     | 95.3<br>95.3 | 95.3             | 7.9 7.9             | 9.8<br>9.9   | -    | 23<br>25         |           | 84<br>84        |    |                       |                       | <0.2<br><0.2                 | 1.0              |
|               |             |           |          |           | Surface        | 1.0          | 0.4              | 166<br>180        | 15.9<br>15.9 | 15.9           | 8.2<br>8.2 | 8.2     | 28.8<br>28.8 | 28.8     | 93.6<br>93.6 | 93.6             | 7.8                 | 7.6<br>7.7   | ŀ    | 15               |           | 82<br>82        |    | i                     |                       | <0.2                         | 0.8              |
| IM4           | Cloudy      | Moderate  | 16:28    | 8.2       | Middle         | 4.1          | 0.4              | 171               | 15.8         | 15.8           | 8.2        | 8.2     | 29.0         | 29.0     | 93.4         | 93.4             | 7.8<br>7.8<br>7.8   | 11.0         | 11.3 | 14<br>14         | 20        | 83              | 83 | 819582                | 805032                | <0.2<br><0.2<br><0.2<br><0.2 | 0.9<br>2 1.0 0.9 |
| 1101-7        | Cloudy      | Moderate  | 10.20    | 0.2       |                | 4.1          | 0.4              | 173<br>184        | 15.8<br>15.8 |                | 8.2<br>8.2 |         | 29.0<br>29.3 |          | 93.4<br>94.7 |                  | 7.8<br>7.9 7.0      | 11.1<br>15.4 | 11.0 | 14<br>29         | 20        | 83<br>84        | 00 | 010002                | 000002                | <0.2<br><0.2                 | 0.9              |
|               |             |           |          |           | Bottom         | 7.2          | 0.3              | 192               | 15.7         | 15.8           | 8.2        | 8.2     | 29.3         | 29.3     | 94.9         | 94.8             | 7.9                 | 15.2         |      | 31               |           | 84              |    |                       |                       | <0.2                         | 1.0              |
|               |             |           |          |           | Surface        | 1.0<br>1.0   | 0.4              | 174<br>179        | 15.9<br>15.9 | 15.9           | 8.2<br>8.2 | 8.2     | 28.6<br>28.6 | 28.6     | 93.7<br>93.7 | 93.7             | 7.8<br>7.8<br>7.8   | 6.8<br>6.8   | -    | 15<br>15         |           | 81<br>81        |    |                       |                       | <0.2<br><0.2                 | 1.0<br>1.3       |
| IM5           | Cloudy      | Moderate  | 16:21    | 7.2       | Middle         | 3.6<br>3.6   | 0.4              | 175<br>178        | 15.8<br>15.8 | 15.8           | 8.2<br>8.2 | 8.2     | 28.7<br>28.7 | 28.7     | 93.3<br>93.3 | 93.3             | 7.8<br>7.8          | 11.9<br>11.9 | 13.6 | 21<br>20         | 22        | 81<br>82        | 82 | 820557                | 804913                | <0.2 <0.2 <0.2               | 2 0.8 0.9        |
|               |             |           |          |           | Bottom         | 6.2          | 0.4              | 179               | 15.8         | 15.8           | 8.2        | 8.2     | 28.8         | 28.8     | 95.4         | 95.4             | 7.9 7.9             | 22.2         | ļ    | 30               |           | 83              |    | ł                     |                       | <0.2                         | 0.9              |
|               |             |           |          |           | Surface        | 6.2          | 0.4              | <u>192</u><br>163 | 15.8<br>15.9 |                | 8.2<br>8.2 | 0.0     | 28.8<br>28.5 | 29 E     | 95.4<br>94.0 |                  | 7.9<br>7.8          | 22.2<br>9.1  |      | 30<br>15         |           | 83<br>82        |    |                       |                       | <0.2<br><0.2                 | 0.7              |
|               |             |           |          |           | Surface        | 1.0<br>3.6   | 0.4              | 175<br>146        | 15.9<br>15.8 | 15.9           | 8.2<br>8.2 | 8.2     | 28.5<br>28.6 | 28.5     | 94.0<br>93.6 | 94.0             | 7.8<br>7.8<br>7.8   | 9.1<br>14.8  | F    | 14<br>16         |           | 82<br>83        |    |                       |                       | <0.2<br><0.2                 | 0.8              |
| IM6           | Cloudy      | Moderate  | 16:12    | 7.2       | Middle         | 3.6          | 0.4              | 155               | 15.8         | 15.8           | 8.2        | 8.2     | 28.6         | 28.6     | 93.6         | 93.6             | 7.8                 | 14.8         | 15.3 | 16               | 23        | 83              | 83 | 821063                | 805826                | <0.2                         | 0.9              |
|               |             |           |          |           | Bottom         | 6.2<br>6.2   | 0.3              | 147<br>155        | 15.8<br>15.8 | 15.8           | 8.2<br>8.2 | 8.2     | 28.5<br>28.5 | 28.5     | 95.6<br>95.6 | 95.6             | 8.0<br>8.0          | 22.0<br>22.0 | -    | 39<br>39         |           | 84<br>84        |    | ł                     |                       | <0.2<br><0.2                 | 1.0              |
|               |             |           |          |           | Surface        | 1.0          | 0.4              | 96                | 15.9         | 15.9           | 8.3<br>8.3 | 8.3     | 28.0<br>28.0 | 28.0     | 92.8<br>92.8 | 92.8             | 7.8                 | 10.3         |      | 15               |           | 80<br>80        |    | ·                     |                       | <0.2<br><0.2                 | 1.1              |
| IM7           | Cloudy      | Moderate  | 16:00    | 8.6       | Middle         | 4.3          | 0.4              | 102<br>102        | 15.9<br>15.9 | 15.9           | 8.3        | 8.3     | 27.9         | 27.9     | 92.8         | 92.8             | 7.8<br>7.8<br>7.8   | 10.3<br>15.0 | 15.2 | 15<br>25         | <u>26</u> | 81              | 81 | 821358                | 806839                | <0.2                         | 2 1.0 1.0        |
|               | Cidddy      | moderale  | 10.00    | 0.0       |                | 4.3          | 0.4              | 105<br>113        | 15.9<br>15.8 |                | 8.3<br>8.3 |         | 27.9<br>27.7 |          | 92.8<br>93.1 |                  | 7.8<br>7.8 7.8      | 15.1<br>20.2 |      | 27<br>36         | <u></u>   | 81<br>81        |    | 021000                | 000000                | <0.2<br><0.2                 | 0.7              |
| ļ             |             |           |          |           | Bottom         | 7.6          | 0.4              | 113               | 15.8         | 15.8           | 8.3        | 8.3     | 27.7         | 27.7     | 93.1         | 93.1             | 7.8                 | 20.3         |      | 39               |           | 82              |    |                       |                       | <0.2                         | 0.9              |
|               |             |           |          |           | Surface        | 1.0<br>1.0   | 0.4              | 122<br>123        | 19.1<br>19.1 | 19.1           | 8.0<br>8.0 | 8.0     | 29.1<br>29.1 | 29.1     | 94.7<br>94.7 | 94.7             | 7.4<br>7.4<br>7.4   | 19.2<br>19.2 | -    | 20<br>21         |           | 79<br>79        |    | ľ                     |                       | <0.2<br><0.2                 | 1.2              |
| IM8           | Cloudy      | Moderate  | 15:44    | 8.4       | Middle         | 4.2          | 0.4              | 116<br>122        | 19.1<br>19.1 | 19.1           | 8.0<br>8.0 | 8.0     | 29.4<br>29.4 | 29.4     | 94.5<br>94.6 | 94.6             | 7.4<br>7.4          | 19.1<br>19.0 | 20.7 | 20<br>20         | 21        | 82<br>82        | 82 | 821700                | 807825                | <0.2<br><0.2 <0.2            | 2 0.9 1.1        |
|               |             |           |          |           | Bottom         | 7.4          | 0.4              | 99                | 19.0         | 19.0           | 8.0        | 8.0     | 29.5         | 29.5     | 94.3         | 94.3             | 7.3 7.3             | 23.7         | Ē    | 23               |           | 84              |    | ľ                     |                       | <0.2                         | 1.1              |
| DA: Depth-Ave |             |           | 1        |           | 200.011        | 7.4          | 0.5              | 100               | 19.0         |                | 8.0        | 0.0     | 29.5         | _0.0     | 94.3         | 50               | 7.3                 | 23.7         |      | 22               |           | 84              |    |                       |                       | <0.2                         | 1.2              |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on02 February 17 02 February 17 during Mid-Ebb tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 02 February 17 | during Mid  | -Ebb tide        |            |              |               |            |         |              |         |              |                  |                     |              |             |                  |     |                 |    |                       |                       | <u> </u>             |                   |
|---------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|--------------|------------------|---------------------|--------------|-------------|------------------|-----|-----------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)     | Current<br>Speed | Current    | Water Ter    | mperature (°C | ;)         | pН      | Salinit      | y (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(   | NTU)        | Suspende<br>(mg/ |     | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average | Value        | Average          | Value DA            | Value        | DA          | Value            | DA  | Value           | DA | (Northing)            | (Easting)             | Value DA             | Value DA          |
|               |             |            |          |           | Surface        | 1.0         | 0.5<br>0.5       | 128<br>138 | 19.2<br>19.2 | 19.2          | 8.0<br>8.0 | 8.0     | 29.0<br>29.0 | 29.0    | 93.8<br>93.8 | 93.8             | 7.3<br>7.3          | 15.7<br>15.8 |             | 17<br>18         |     | 78<br>80        |    |                       |                       | <0.2<br><0.2         | 1.0               |
| IM9           | Cloudy      | Moderate   | 15:53    | 7.6       | Middle         | 3.8<br>3.8  | 0.5<br>0.5       | 123<br>124 | 19.2<br>19.2 | 19.2          | 8.0<br>8.0 | 8.0     | 29.0<br>29.0 | 29.0    | 93.7<br>93.7 | 93.7             | 7.3<br>7.3<br>7.3   | 17.5<br>17.5 | 20.3        | 18<br>19         | 18  | 82<br>83        | 82 | 822108                | 808792                | <0.2<br><0.2 <0.2    | 1.2<br>1.1        |
|               |             |            |          |           | Bottom         | 6.6         | 0.5              | 117        | 19.1         | 19.1          | 8.0        | 8.0     | 29.4         | 29.4    | 93.7         | 93.7             | 7.3 7.3             | 27.5         | -           | 18               |     | 83              |    |                       |                       | <0.2                 | 1.1               |
|               |             |            |          |           | Surface        | 6.6<br>1.0  | 0.5              | 125<br>123 | 19.1<br>19.3 | 19.3          | 8.0<br>8.0 | 8.0     | 29.4<br>28.8 | 28.8    | 93.7<br>93.3 | 93.3             | 7.3                 | 27.5<br>11.8 |             | 18<br>10         |     | 84<br>79        |    |                       |                       | <0.2<br><0.2         | 1.0<br>1.2        |
|               |             |            |          |           |                | 1.0<br>4.0  | 0.5              | 130<br>117 | 19.3<br>19.2 |               | 8.0<br>8.0 |         | 28.8<br>28.9 |         | 93.3<br>92.8 |                  | 7.3<br>7.2<br>7.3   | 11.9<br>18.7 |             | 8<br>15          | . – | 78<br>82        |    |                       |                       | <0.2<br><0.2         | 1.2<br>1.3        |
| IM10          | Cloudy      | Moderate   | 16:00    | 8.0       | Middle         | 4.0         | 0.6              | 126<br>124 | 19.2<br>19.1 | 19.2          | 8.0        | 8.0     | 28.9<br>29.1 | 28.9    | 92.8<br>93.0 | 92.8             | 7.2<br>7.2 7.0      | 18.7<br>29.9 | 20.2        | 13<br>27         | 17  | 82<br>84        | 82 | 822224                | 809842                | <0.2<br><0.2<br><0.2 | 1.0<br>1.3<br>1.0 |
|               |             |            |          |           | Bottom         | 7.0         | 0.5              | 129        | 19.1         | 19.1          | 8.0<br>8.0 | 8.0     | 29.1         | 29.1    | 93.0         | 93.0             | 7.2                 | 29.9         |             | 28               |     | 84              |    |                       |                       | <0.2                 | 0.9               |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.5       | 131<br>134 | 19.3<br>19.3 | 19.3          | 8.0<br>8.0 | 8.0     | 28.7<br>28.8 | 28.8    | 92.0<br>92.0 | 92.0             | 7.2<br>7.2<br>7.2   | 12.1<br>12.1 | -           | 11<br>11         |     | 78<br>78        |    |                       |                       | <0.2<br><0.2         | 1.3<br>1.2        |
| IM11          | Cloudy      | Moderate   | 16:07    | 8.2       | Middle         | 4.1         | 0.5              | 132<br>141 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.9<br>28.9 | 28.9    | 91.8<br>91.8 | 91.8             | 7.1                 | 15.0<br>15.0 | 14.6        | 14<br>13         | 15  | 82<br>82        | 81 | 821483                | 810533                | <0.2<br><0.2<br><0.2 | 1.2<br>1.0        |
|               |             |            |          |           | Bottom         | 7.2         | 0.4              | 132<br>140 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.9<br>28.9 | 28.9    | 92.9<br>92.9 | 92.9             | 7.2<br>7.2<br>7.2   | 16.7<br>16.7 | -           | 20<br>19         |     | 84<br>84        |    |                       |                       | <0.2<br><0.2         | 1.2<br>1.3        |
|               |             |            |          |           | Surface        | 1.0         | 0.6              | 105        | 19.3         | 19.3          | 7.9        | 7.9     | 28.7         | 28.7    | 91.9         | 91.9             | 7.1                 | 9.4          | _           | 7                |     | 79              |    |                       |                       | <0.2                 | 1.2               |
| IM12          | Cloudy      | Moderate   | 16:15    | 9.8       | Middle         | 1.0<br>4.9  | 0.6<br>0.6       | 112<br>110 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.7<br>28.9 | 28.9    | 91.8<br>91.5 | 91.5             | 7.1<br>7.1<br>7.1   | 9.4<br>12.5  | 12.0        | 9<br>8           | 10  | 78<br>83        | 82 | 821156                | 811516                | <0.2<br><0.2<br><0.2 | 1.3<br>1.2<br>1.2 |
| INTE          | Cloudy      | Woderate   | 10.15    | 5.6       |                | 4.9<br>8.8  | 0.6              | 110<br>115 | 19.3<br>19.3 |               | 7.9<br>7.9 |         | 28.9<br>28.9 |         | 91.5<br>93.8 |                  | 7.1<br>7.3 7.0      | 12.5<br>14.1 | 12.0        | 9<br>12          | 10  | 83<br>84        | 02 | 021100                | 011010                | <0.2<br><0.2         | 1.2               |
|               |             |            |          |           | Bottom         | 8.8<br>1.0  | 0.5<br>0.4       | 117<br>93  | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.9<br>29.0 | 28.9    | 93.8<br>91.5 | 93.8             | 7.3<br>7.3<br>7.1   | 14.1<br>13.4 |             | 12<br>8          |     | 84<br>80        |    |                       |                       | <0.2<br><0.2         | 1.0<br>0.9        |
|               |             |            |          |           | Surface        | 1.0         | 0.4              | 97         | 19.3         | 19.3          | 7.9        | 7.9     | 29.0         | 29.0    | 91.5         | 91.5             | 7.1 7.1             | 13.4         | -           | 9                |     | 81              |    |                       |                       | <0.2                 | 1.0               |
| SR2           | Cloudy      | Moderate   | 16:35    | 4.5       | Middle         | 2.3<br>2.3  | -                | -          | -            | -             | -          | -       | -            | -       | -            | -                | -                   | -            | 15.9        | -                | 12  | -               | 83 | 821459                | 814164                | - <0.2               | -                 |
|               |             |            |          |           | Bottom         | 3.5<br>3.5  | 0.3              | 78<br>80   | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 29.0<br>29.0 | 29.0    | 93.3<br>93.3 | 93.3             | 7.2<br>7.2<br>7.2   | 18.4<br>18.4 | _           | 15<br>17         |     | 85<br>84        |    |                       |                       | <0.2<br><0.2         | 0.9<br>0.8        |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 118<br>126 | 19.1<br>19.1 | 19.1          | 8.0<br>8.0 | 8.0     | 29.1<br>29.1 | 29.1    | 94.0<br>94.0 | 94.0             | 7.3<br>7.3          | 19.0<br>18.9 | -           | 21<br>20         |     | -               |    |                       |                       | -                    | -                 |
| SR3           | Cloudy      | Moderate   | 15:38    | 9.5       | Middle         | 4.8         | 0.5<br>0.6       | 103<br>110 | 19.1<br>19.1 | 19.1          | 8.0<br>8.0 | 8.0     | 29.1<br>29.1 | 29.1    | 93.8<br>93.8 | 93.8             | 7.3<br>7.3<br>7.3   | 19.9<br>20.0 | <u>26.9</u> | 20<br>21         | 23  | -               | -  | 822157                | 807573                |                      |                   |
|               |             |            |          |           | Bottom         | 8.5         | 0.5              | 108<br>115 | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 29.3<br>29.3 | 29.3    | 93.7<br>93.7 | 93.7             | 7.3<br>7.3<br>7.3   | 41.9<br>41.9 | -           | 28<br>26         |     | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.3              | 112        | 15.8         | 15.8          | 8.2        | 8.2     | 30.1         | 30.1    | 93.6         | 93.6             | 7.7                 | 12.9         |             | 21               |     | -               |    |                       |                       | -                    | -                 |
| SR4A          | Cloudy      | Moderate   | 17:33    | 8.2       | Middle         | 1.0<br>4.1  | 0.4              | 121<br>106 | 15.8<br>15.8 | 15.8          | 8.2<br>8.2 | 8.2     | 30.1<br>30.1 | 30.1    | 93.6<br>93.9 | 93.9             | 7.7<br>7.7<br>7.7   | 12.9<br>14.4 | 15.5        | 19<br>22         | 24  | -               |    | 817175                | 807822                | -                    | -                 |
| 011477        | Cloudy      | Moderate   | 17.00    | 0.2       |                | 4.1         | 0.3              | 115<br>118 | 15.8<br>15.7 |               | 8.2<br>8.2 |         | 30.1<br>30.4 |         | 93.9<br>95.6 |                  | 7.8<br>7.9 7.0      | 14.3<br>19.3 | 10.0        | 23<br>28         | 24  | -               |    | 017170                | 007022                | -                    | -                 |
|               |             |            |          |           | Bottom         | 7.2         | 0.3<br>0.1       | 125<br>270 | 15.7<br>16.2 | 15.7          | 8.2<br>8.2 | 8.2     | 30.4<br>29.6 | 30.4    | 95.6<br>92.4 | 95.6             | 7.9<br>7.9<br>7.6   | 19.4<br>6.0  |             | 28<br>10         |     | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.1              | 271        | 16.2         | 16.2          | 8.2        | 8.2     | 29.6         | 29.6    | 92.4         | 92.4             | 7.6 7.6             | 6.0          | -           | 9                |     | -               |    |                       |                       | -                    | -                 |
| SR5A          | Cloudy      | Calm       | 17:50    | 4.2       | Middle         | 2.1<br>2.1  | -                | -          | -            | -             | -          | -       | -            | -       | -            | -                | -                   | -            | 7.4         | -                | 9   | -               | -  | 816584                | 810709                |                      |                   |
|               |             |            |          |           | Bottom         | 3.2<br>3.2  | 0.1              | 249<br>255 | 16.2<br>16.2 | 16.2          | 8.2<br>8.2 | 8.2     | 29.6<br>29.6 | 29.6    | 98.1<br>98.2 | 98.2             | 8.1<br>8.1          | 8.7<br>8.9   | -           | 9<br>9           |     | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.2              | 170<br>171 | 16.1<br>16.1 | 16.1          | 8.1<br>8.1 | 8.1     | 29.6<br>29.6 | 29.6    | 93.2<br>93.2 | 93.2             | 7.7                 | 11.5<br>11.6 |             | 16<br>15         |     | -               |    |                       |                       | -                    | -                 |
| SR6           | Cloudy      | Moderate   | 18:14    | 4.2       | Middle         | 2.1         | -                | -          | -            | -             | -          | -       | -            | -       | -            | -                | - 7.7               | -            | 12.0        | -                | 22  | -               | -  | 817897                | 814663                |                      |                   |
|               |             |            |          |           | Bottom         | 3.2         | - 0.2            | - 172      | 16.1         | 16.1          | 8.1        | 8.1     | 29.6         | 29.6    | 96.7         | 96.8             | 8.0 8.0             | 12.5         | -           | 28               |     | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 3.2         | 0.2              | 180<br>127 | 16.1<br>19.2 | 19.2          | 8.1<br>7.9 | 7.9     | 29.6<br>29.6 |         | 96.8<br>87.4 | 87.4             | 8.0<br>6.8          | 12.5<br>8.4  |             | 27<br>6          |     | -               |    |                       |                       | -                    | -                 |
| 0.07          |             | Martin     | 17.00    | 47 F      |                | 1.0<br>8.8  | 0.3              | 134<br>145 | 19.2<br>19.2 |               | 7.9<br>7.9 |         | 29.6<br>29.6 |         | 87.4<br>87.2 |                  | 6.8<br>6.8          | 8.4<br>8.6   |             | 7<br>8           | ~   | -               |    | 000000                | 00070 /               | -                    | -                 |
| SR7           | Cloudy      | Moderate   | 17:22    | 17.5      | Middle         | 8.8<br>16.5 | 0.2              | 146<br>154 | 19.2<br>19.2 | 19.2          | 7.9        | 7.9     | 29.6<br>29.6 | 29.6    | 87.2<br>88.6 | 87.2             | 6.8                 | 8.7<br>8.6   | 8.6         | 9<br>10          | 9   | -               | -  | 823638                | 823724                |                      | -                 |
|               | ļ ļ         |            |          |           | Bottom         | 16.5        | 0.3              | 157        | 19.2         | 19.2          | 7.9        | 7.9     | 29.6         | 29.6    | 88.6         | 88.6             | 6.9 0.9             | 8.6          |             | 11               |     | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.3<br>0.3       | 191<br>198 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.9<br>28.9 | 28.9    | 90.4<br>90.4 | 90.4             | 7.0<br>7.0<br>7.0   | 14.1<br>14.2 | -           | 8<br>8           |     | -               |    |                       |                       | -                    | -                 |
| SR8           | Cloudy      | Moderate   | 16:21    | 5.7       | Middle         | 2.9<br>2.9  | -                | -          | -            | -             | -          | -       | -            | -       | -            | -                | - 7.0               | -            | 16.4        | -                | 10  | -               | -  | 820420                | 811584                |                      |                   |
|               |             |            |          |           | Bottom         | 4.7         | 0.3<br>0.3       | 180<br>197 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.9<br>28.9 | 28.9    | 90.4<br>90.4 | 90.4             | 7.0<br>7.0<br>7.0   | 18.6<br>18.6 | -           | 12<br>12         |     | -               |    |                       |                       | -                    | -                 |
| DA: Depth-Ave | <u> </u>    |            |          |           | 1              | 4./         | 0.3              | 197        | 13.3         |               | 1.9        |         | 20.3         |         | 30.4         |                  | 1.0                 | 10.0         |             | 14               |     | -               |    |                       |                       |                      |                   |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on04 February 17during 04 February 17 during Mid-Flood Tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 04 February 17 | during Mid   | -Flood Ti        | de         |              |               | -          |         |              |          |              |                  |                           | •            |      |                  |     |                   |     |                       | •                     | <b></b>            |                           |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|--------------|------------------|---------------------------|--------------|------|------------------|-----|-------------------|-----|-----------------------|-----------------------|--------------------|---------------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | nperature (°C | ;)         | рН      | Salini       | ty (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity(   | NTU) | Suspende<br>(mg/ |     | Total All<br>(ppr | -   | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L) | Nickel (µg/L)             |
| Station       | Condition   | Condition  | Time     | Depth (m) | Camping 20     |              | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  | Value        | Average          | Value DA                  | Value        | DA   | Value            | DA  | Value             | DA  | (Northing)            | (Easting)             | Value DA           | Value DA                  |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 43<br>46   | 16.0<br>15.9 | 16.0          | 7.8<br>7.8 | 7.8     | 30.8<br>30.9 | 30.9     | 93.7<br>93.7 | 93.7             | 7.7                       | 13.6<br>14.0 |      | 19<br>19         |     | 106<br>103        |     |                       |                       | <0.2<br><0.2       | 0.7                       |
| C1            | Cloudy      | Moderate   | 12:40    | 8.8       | Middle         | 4.4          | 0.5              | 45<br>48   | 15.8<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 31.1<br>31.0 | 31.1     | 93.1<br>93.1 | 93.1             | 7.6<br>7.6<br>7.6         | 28.9<br>29.0 | 26.4 | 34<br>36         | 30  | 98<br>102         | 101 | 815617                | 804254                | <0.2<br><0.2 <0.2  | 0.5                       |
|               |             |            |          |           | Bottom         | 7.8          | 0.5              | 41         | 15.7         | 15.7          | 7.8        | 7.8     | 30.9         | 30.9     | 92.9         | 92.9             | 7.6 7.6                   | 36.9         | F    | 35               | -   | 97                |     |                       |                       | <0.2               | 0.7                       |
|               |             |            |          |           |                | 7.8          | 0.5              | 44<br>176  | 15.7<br>19.6 |               | 7.8<br>7.9 |         | 30.8<br>26.2 |          | 92.9<br>90.0 |                  | 7.6 7.0<br>7.1            | 36.0<br>6.3  |      | 37<br>3          |     | 100<br>80         |     |                       |                       | <0.2<br><0.2       | 0.4 2.2                   |
|               |             |            |          |           | Surface        | 1.0<br>6.5   | 0.4              | 179<br>213 | 19.6<br>19.3 | 19.6          | 7.9<br>7.9 | 7.9     | 26.2<br>27.1 |          | 90.0<br>88.8 | 90.0             | 7.1<br>7.0<br>7.1         | 6.4<br>11.3  | F    | 2<br>5           |     | 81<br>83          |     |                       |                       | <0.2<br><0.2       | 2.1<br>2.0                |
| C2            | Cloudy      | Moderate   | 13:06    | 13.0      | Middle         | 6.5          | 0.5              | 229        | 19.3         | 19.3          | 7.9        | 7.9     | 27.1         | 27.1     | 88.8         | 88.8             | 7.0                       | 11.3         | 14.8 | 3                | 5   | 84                | 83  | 825674                | 806936                | <0.2               | 2.2 2.1                   |
|               |             |            |          |           | Bottom         | 12.0<br>12.0 | 0.5<br>0.5       | 101<br>109 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 27.8<br>27.8 | 27.8     | 88.7<br>88.7 | 88.7             | 6.9<br>6.9                | 26.7<br>26.7 |      | 7<br>9           |     | 85<br>86          |     |                       |                       | <0.2<br><0.2       | 1.8<br>2.2                |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 263<br>288 | 19.5<br>19.5 | 19.5          | 7.9<br>7.9 | 7.9     | 28.6<br>28.6 | 28.6     | 90.4<br>90.3 | 90.4             | 7.0<br>7.0                | 6.0<br>6.0   | _    | 4<br>3           |     | 81<br>82          |     |                       |                       | <0.2<br><0.2       | 1.2<br>1.1                |
| C3            | Sunny       | Moderate   | 11:24    | 12.0      | Middle         | 6.0          | 0.5              | 266        | 19.1         | 19.1          | 7.9        | 7.9     | 29.4<br>29.4 | 29.4     | 87.8         | 87.8             | 6.8 0.9                   | 9.1          | 8.9  | 5                | 6   | 83<br>84          | 83  | 822102                | 817821                | <0.2               | 11                        |
|               |             |            |          |           | Bottom         | 6.0<br>11.0  | 0.6              | 270<br>262 | 19.1<br>19.1 | 19.1          | 7.9        | 7.9     | 29.5         | 29.5     | 87.8<br>89.9 | 89.9             | 6.8<br>7.0<br>7.0         | 9.3<br>11.5  | -    | 8                |     | 85                |     |                       |                       | <0.2<br><0.2       | 0.8                       |
|               |             |            |          |           |                | 11.0         | 0.5              | 280<br>41  | 19.1<br>16.1 |               | 7.9<br>7.8 |         | 29.5<br>29.9 |          | 89.9<br>93.7 |                  | 7.0 7.0<br>7.7            | 11.5<br>6.1  |      | 10<br>9          |     | 85<br>96          |     |                       |                       | <0.2<br><0.2       | 1.1<br>1.3                |
|               |             |            |          |           | Surface        | 1.0<br>3.8   | 0.5              | 44         | 16.1         | 16.1          | 7.8        | 7.8     | 29.9         | 29.9     | 93.7         | 93.7             | 7.7<br>7.7<br>7.7         | 6.2          | Ē    | 8                | ļ   | 96                |     |                       |                       | <0.2               | 1.0                       |
| IM1           | Cloudy      | Moderate   | 12:58    | 7.6       | Middle         | 3.8          | 0.4              | 81<br>85   | 15.9<br>15.9 | 15.9          | 7.8<br>7.8 | 7.8     | 30.4<br>30.4 | 30.4     | 93.5<br>93.5 | 93.5             | 7.7                       | 11.4<br>11.5 | 11.4 | 14<br>15         | 15  | 94<br>94          | 96  | 818350                | 806457                | <0.2<br><0.2 <0.2  | 1.0                       |
|               |             |            |          |           | Bottom         | 6.6<br>6.6   | 0.4              | 122<br>126 | 15.9<br>15.9 | 15.9          | 7.8        | 7.8     | 29.7<br>29.7 | 29.7     | 95.0<br>95.0 | 95.0             | 7.8<br>7.8<br>7.8         | 16.9<br>16.5 | ŀ    | 22<br>24         |     | 98<br>97          |     |                       |                       | <0.2<br><0.2       | 0.8                       |
|               |             |            |          |           | Surface        | 1.0          | 0.5<br>0.6       | 33<br>34   | 16.4<br>16.4 | 16.4          | 7.8<br>7.8 | 7.8     | 30.0<br>30.0 | 30.0     | 93.4<br>93.4 | 93.4             | 7.6<br>7.6 7.6            | 5.8<br>5.9   | -    | 8<br>8           |     | 93<br>94          |     |                       |                       | <0.2<br><0.2       | 1.2<br>1.1                |
| IM2           | Cloudy      | Moderate   | 13:05    | 8.7       | Middle         | 4.4          | 0.4              | 57         | 16.4         | 16.4          | 7.8        | 7.8     | 30.0         | 30.0     | 93.5         | 93.5             | 7.6                       | 7.0          | 15.7 | 8                | 9   | 94                | 95  | 818853                | 806180                | <0.2               | 1.0 1.1                   |
|               | ,           |            |          |           | Bottom         | 4.4          | 0.4              | 62<br>67   | 16.4<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 30.0<br>30.4 | 20.4     | 93.4<br>93.7 | 93.8             | 7.6<br>7.7<br>7.7         | 7.3<br>34.3  | ŀ    | 6<br>13          | ,   | 95<br>96          |     |                       |                       | <0.2               | 1.0                       |
|               |             |            |          |           |                | 7.7          | 0.4              | 73<br>44   | 15.8<br>16.3 |               | 7.8<br>7.8 |         | 30.3<br>30.2 |          | 93.8<br>93.2 |                  | 7.7 <sup>7.7</sup><br>7.6 | 33.9<br>5.6  |      | 11<br>6          |     | 97<br>93          |     |                       |                       | <0.2<br><0.2       | 1.1                       |
|               |             |            |          |           | Surface        | 1.0<br>4.4   | 0.6              | 48<br>43   | 16.3         | 16.3          | 7.8        | 7.8     | 30.2<br>30.8 | 30.2     | 93.2<br>92.7 | 93.2             | 7.6<br>7.6<br>7.6         | 5.6<br>22.5  | F    | 4 8              | ļ   | 91                |     |                       |                       | <0.2               | 1.3                       |
| IM3           | Cloudy      | Moderate   | 13:13    | 8.8       | Middle         | 4.4          | 0.5              | 46         | 15.8<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 30.8         | 30.0     | 92.7         | 92.7             | 7.6                       | 22.6         | 18.1 | 7                | 15  | 100<br>97         | 96  | 819422                | 806030                | <0.2<br><0.2 <0.2  | 1.3                       |
|               |             |            |          |           | Bottom         | 7.8<br>7.8   | 0.5              | 43<br>45   | 15.8<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 30.4<br>30.4 | 30.4     | 94.2<br>94.2 | 94.2             | 7.8<br>7.8<br>7.8         | 26.1<br>26.1 | -    | 34<br>33         | ,   | 96<br>96          |     |                       |                       | <0.2<br><0.2       | 0.5 0.7                   |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 29<br>29   | 16.3<br>16.3 | 16.3          | 7.8<br>7.8 | 7.8     | 30.3<br>30.3 | 30.3     | 93.7<br>93.7 | 93.7             | 7.6<br>7.6 7.6            | 5.3<br>5.4   | _    | 6<br>6           | ,   | 96<br>96          |     |                       |                       | <0.2<br><0.2       | 1.3                       |
| IM4           | Cloudy      | Moderate   | 13:22    | 8.2       | Middle         | 4.1          | 0.5              | 32         | 16.3         | 16.3          | 7.8        | 7.8     | 30.2         | 30.2     | 93.5         | 93.6             | 7.6                       | 7.4          | 15.4 | 7                | 11  | 87                | 93  | 819588                | 805047                | <0.2               | 1.2 1.2                   |
|               |             |            |          |           | Bottom         | 4.1<br>7.2   | 0.5              | 34<br>28   | 16.2<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 30.2<br>30.1 | 30.1     | 93.6<br>95.0 | 95.1             | 7.6<br>7.8<br>7.9         | 8.0<br>33.4  |      | 8<br>18          |     | 89<br>95          |     |                       |                       | <0.2<br><0.2       | 1.1 <sup>1.2</sup><br>0.9 |
|               |             |            |          |           |                | 7.2          | 0.4              | 29<br>27   | 15.8<br>16.3 |               | 7.8<br>7.8 |         | 30.1<br>30.4 |          | 95.1<br>92.4 |                  | 7.9 <sup>7.3</sup><br>7.5 | 32.9<br>5.6  |      | 19<br>6          |     | 94<br>95          |     |                       |                       | <0.2<br><0.2       | 1.0<br>1.2                |
|               |             |            |          |           | Surface        | 1.0<br>3.7   | 0.5<br>0.4       | 28<br>38   | 16.3         | 16.3          | 7.8        | 7.8     | 30.4         | 30.4     | 92.4         | 92.4             | 7.5<br>7.5<br>7.5         | 5.6          | Ē    | 7                | ļ   | 93                |     |                       |                       | <0.2               | 1.4                       |
| IM5           | Cloudy      | Moderate   | 13:29    | 7.3       | Middle         | 3.7          | 0.5              | 40         | 16.0<br>16.0 | 16.0          | 7.8<br>7.8 | 7.8     | 30.5<br>30.5 | 30.5     | 92.1<br>92.1 | 92.1             | 7.5                       | 7.6<br>7.7   | 16.5 | 5<br>6           | 10  | 94<br>97          | 96  | 820546                | 804913                | <0.2<br><0.2 <0.2  | 1.3                       |
|               |             |            |          |           | Bottom         | 6.3<br>6.3   | 0.4              | 52<br>52   | 15.8<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 30.4<br>30.4 |          | 94.4<br>94.5 | 94.5             | 7.8<br>7.8<br>7.8         | 36.2<br>36.2 | -    | 17<br>16         |     | 97<br>98          |     |                       |                       | <0.2<br><0.2       | 1.2                       |
|               |             |            |          |           | Surface        | 1.0          | 0.5<br>0.5       | 36<br>36   | 16.2<br>16.3 | 16.3          | 7.8<br>7.8 | 7.8     | 30.6<br>30.6 | 30.6     | 92.4<br>92.4 | 92.4             | 7.5<br>7.5                | 5.7<br>5.5   |      | 8                |     | 98<br>97          |     |                       |                       | <0.2<br><0.2       | 1.3                       |
| IM6           | Cloudy      | Moderate   | 13:37    | 7.2       | Middle         | 3.6          | 0.4              | 37         | 16.0         | 16.0          | 7.8        | 7.8     | 30.7         | 30.7     | 91.6         | 91.6             | 7.5                       | 15.7         | 15.5 | 16               | 18  | 95                | 96  | 821052                | 805836                | <0.2               | 1.0                       |
|               |             |            |          |           | Bottom         | 3.6<br>6.2   | 0.4              | 39<br>37   | 16.0<br>15.9 | 15.9          | 7.8<br>7.8 | 7.8     | 30.7<br>30.4 |          | 91.6<br>93.6 | 93.6             | 7.5<br>7.7<br>7.7         | 15.7<br>25.4 |      | 15<br>29         | -   | 97<br>92          |     |                       |                       | <0.2<br><0.2       | 1.0<br>0.9                |
|               |             |            |          |           |                | 6.2          | 0.4              | 40<br>48   | 15.9<br>16.3 |               | 7.8<br>7.8 |         | 30.3<br>30.7 |          | 93.6<br>92.3 |                  | 7.7 7.7                   | 25.2<br>6.0  |      | 31<br>6          |     | 95<br>98          |     |                       |                       | <0.2<br><0.2       | 1.1                       |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 50         | 16.3         | 16.3          | 7.8        | 7.8     | 30.7         | 30.7     | 92.3         | 92.3             | 7.5 7.5                   | 6.3          | þ    | 8                | l l | 97                |     |                       |                       | <0.2               | 1.1                       |
| IM7           | Cloudy      | Moderate   | 13:46    | 8.5       | Middle         | 4.3<br>4.3   | 0.4              | 46<br>46   | 15.8<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 31.3<br>31.3 |          | 91.5<br>91.5 | 91.5             | 7.5<br>7.5                | 16.1<br>16.2 | 14.0 | 16<br>15         | 15  | 98<br>96          | 97  | 821356                | 806827                | <0.2<br><0.2 <0.2  | 1.1                       |
|               |             |            |          |           | Bottom         | 7.5<br>7.5   | 0.3              | 77<br>83   | 15.8<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 31.2<br>31.1 | 31.2     | 92.3<br>92.5 | 92.4             | 7.6<br>7.6<br>7.6         | 19.6<br>19.6 | ŀ    | 21<br>23         | ,   | 97<br>95          |     |                       |                       | <0.2<br><0.2       | 1.0<br>0.9                |
|               |             |            |          |           | Surface        | 1.0          | 0.4              | 207<br>223 | 19.7<br>19.7 | 19.7          | 7.9<br>7.9 | 7.9     | 27.6<br>27.6 | 27.6     | 92.2<br>92.2 | 92.2             | 7.2<br>7.2                | 6.3<br>6.3   | -    | 8<br>9           |     | 78<br>80          |     |                       |                       | <0.2<br><0.2       | 1.3<br>1.4                |
| IM8           | Cloudy      | Moderate   | 12:39    | 8.7       | Middle         | 4.4          | 0.4              | 186        | 19.4         | 19.4          | 7.9        | 7.9     | 27.8         | 27.8     | 92.0         | 92.0             | 7.2                       | 7.1          | 7.2  | 8                | 8   | 84                | 83  | 821703                | 807847                | <0.2               | 1.5                       |
|               |             |            |          | -         |                | 4.4          | 0.4              | 188<br>156 | 19.4<br>19.3 |               | 7.9<br>7.9 |         | 27.8<br>27.9 |          | 92.0<br>93.2 |                  | 7.2<br>7.3 7.3            | 7.1<br>8.2   | F    | 7<br>8           | -   | 84<br>86          |     |                       |                       | <0.2<br><0.2       | 1.6                       |
| DA: Dopth Avo |             |            |          |           | Bottom         | 7.7          | 0.4              | 156        | 19.3         | 19.3          | 7.9        | 7.9     | 27.9         | 27.9     | 93.3         | 93.3             | 7.3 7.3                   | 8.1          |      | 7                |     | 85                |     |                       |                       | <0.2               | 1.3                       |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on04 February 17during 04 February 17 during Mid-Flood Tide

| Water Qua      | lity Monite | oring Resu | ults on  |           | 04 February 17 | during Mid  | -Flood Ti        | ide        |              |               |            |         |              |          |              |                  |                           |              |      |                  |    |                 |    |                       |                       | <u> </u>                     |                         |
|----------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|--------------|------------------|---------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|------------------------------|-------------------------|
| Monitoring     | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)     | Current<br>Speed | Current    | Water Ter    | mperature (°C | C)         | рН      | Salini       | ty (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity    | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)           |
| Station        | Condition   | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  |              | Average          | Value DA                  | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA                     | Value DA                |
|                |             |            |          |           | Surface        | 1.0         | 0.4              | 225<br>245 | 19.4<br>19.4 | 19.4          | 7.9<br>7.9 | 7.9     | 28.0<br>28.0 | 28.0     | 92.1<br>92.1 | 92.1             | 7.2                       | 8.5<br>8.5   | -    | 8<br>10          |    | 79<br>79        |    |                       |                       | <0.2<br><0.2                 | 1.2                     |
| IM9            | Cloudy      | Moderate   | 12:31    | 7.6       | Middle         | 3.8<br>3.8  | 0.4              | 235<br>253 | 19.4<br>19.4 | 19.4          | 7.9<br>7.9 | 7.9     | 28.0<br>28.0 | 28.0     | 92.4<br>92.4 | 92.4             | 7.2<br>7.2<br>7.2         | 8.7<br>8.7   | 8.5  | 10<br>11         | 10 | 84<br>84        | 83 | 822102                | 808819                | <0.2<br><0.2 <0.2            | 2 1.3 1.2               |
|                |             |            |          |           | Bottom         | 6.6         | 0.4              | 222        | 19.4         | 19.4          | 7.9        | 7.9     | 28.0         | 28.0     | 94.1         | 94.1             | 7.3 7.2                   | 8.2          | -    | 9                |    | 85              |    |                       |                       | <0.2                         | 1.1                     |
|                |             |            |          |           | Surface        | 6.6<br>1.0  | 0.4              | 226<br>295 | 19.4<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.0<br>28.3 | 28.3     | 94.1<br>92.1 | 92.1             | 7.3 <sup>7.3</sup><br>7.2 | 8.2<br>10.0  |      | 9<br>9           |    | 85<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.2                     |
|                |             |            | 10.01    |           |                | 1.0<br>4.0  | 0.7              | 300<br>289 | 19.3<br>19.2 |               | 7.9<br>7.9 |         | 28.3<br>28.4 |          | 92.1<br>91.5 |                  | 7.2<br>7.2<br>7.2         | 10.0<br>10.8 |      | 9<br>10          |    | 79<br>84        |    |                       |                       | <0.2<br><0.2                 | 1.0                     |
| IM10           | Cloudy      | Moderate   | 12:24    | 8.0       | Middle         | 4.0<br>7.0  | 0.6<br>0.5       | 315<br>274 | 19.2<br>19.1 | 19.2          | 7.9<br>7.9 | 7.9     | 28.4<br>28.4 | 28.4     | 91.5<br>91.7 | 91.5             | 7.2                       | 10.8<br>11.0 | 10.6 | 12<br>13         | 11 | 84<br>85        | 83 | 822244                | 809851                | <0.2<br><0.2<br><0.2         | 2 <u>1.0</u> 1.1<br>1.2 |
|                |             |            |          |           | Bottom         | 7.0         | 0.5              | 283        | 19.1         | 19.1          | 7.9        | 7.9     | 28.4         | 28.4     | 91.7         | 91.7             | 7.2                       | 11.0         | -    | 13               |    | 85              |    |                       |                       | <0.2                         | 1.1                     |
|                |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.6       | 283<br>283 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.5<br>28.5 | 28.5     | 91.2<br>91.2 | 91.2             | 7.1 7.1 7.1               | 13.9<br>14.1 | _    | 10<br>10         |    | 81<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.1<br>0.9              |
| IM11           | Cloudy      | Moderate   | 12:16    | 9.1       | Middle         | 4.6         | 0.5              | 285<br>287 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.6<br>28.6 | 28.6     | 90.9<br>90.9 | 90.9             | 7.1                       | 16.7<br>16.7 | 16.3 | 15<br>13         | 15 | 85<br>84        | 83 | 821520                | 810525                | <0.2<br><0.2 <0.2            | 2 1.0 1.1               |
|                |             |            |          |           | Bottom         | 8.1<br>8.1  | 0.5<br>0.5       | 283<br>305 | 19.1<br>19.1 | 19.1          | 7.9<br>7.9 | 7.9     | 28.6<br>28.6 | 28.6     | 90.9<br>90.9 | 90.9             | 7.1 7.1                   | 18.3<br>18.3 | -    | 20<br>19         |    | 85<br>85        |    |                       |                       | <0.2<br><0.2                 | 1.0                     |
|                |             |            |          |           | Surface        | 1.0         | 0.7              | 275        | 19.4         | 19.4          | 7.9        | 7.9     | 28.4         | 28.4     | 91.4         | 91.4             | 7.1                       | 12.5         |      | 11               |    | 81              |    |                       |                       | <0.2                         | 1.3                     |
| IM12           | Cloudy      | Moderate   | 12:09    | 9.4       | Middle         | 1.0<br>4.7  | 0.7              | 279<br>274 | 19.4<br>19.0 | 19.0          | 7.9<br>7.9 | 7.9     | 28.4<br>28.8 | 28.8     | 91.3<br>90.2 | 90.2             | 7.1<br>7.1<br>7.1         | 12.6<br>20.9 | 18.4 | 11<br>18         | 17 | 80<br>84        | 84 | 821164                | 811524                | <0.2<br><0.2<br><0.2<br><0.2 | 1.3<br>1.4<br>1.2       |
|                | cloudy      | mouorato   | 12100    | 0.1       |                | 4.7<br>8.4  | 0.6              | 281<br>275 | 19.0<br>19.0 | 19.0          | 7.9<br>7.9 |         | 28.8<br>28.8 |          | 90.2<br>90.8 | 90.8             | 7.1                       | 20.7<br>21.7 |      | 16<br>21         |    | 85<br>85        |    | 021101                | 011021                | <0.2                         | 1.2                     |
|                |             |            |          |           | Bottom         | 8.4<br>1.0  | 0.5              | 281<br>270 | 19.0<br>19.3 |               | 7.9<br>7.9 | 7.9     | 28.8<br>28.7 | 28.8     | 90.8<br>91.5 |                  | 7.1 7.1                   | 21.7<br>14.2 |      | 22<br>12         |    | 86<br>81        |    |                       |                       | <0.2<br><0.2                 | 0.9                     |
|                |             |            |          |           | Surface        | 1.0<br>2.3  | 0.3              | 277        | 19.3         | 19.3          | 7.9        | 7.9     | 28.7         | 28.7     | 91.6         | 91.6             | 7.1 7.1                   | 14.2         | -    | 13               |    | 82              |    |                       |                       | <0.2                         | 0.9                     |
| SR2            | Sunny       | Moderate   | 11:46    | 4.5       | Middle         | 2.3         | -                | -          | -            | -             | -          | -       | -            | -        | -            | -                | -                         | -            | 15.7 | -                | 13 | -               | 83 | 821457                | 814180                | - <0.2                       | -                       |
|                |             |            |          |           | Bottom         | 3.5<br>3.5  | 0.3              | 274<br>293 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.7<br>28.7 | 28.7     | 92.8<br>92.8 | 92.8             | 7.2<br>7.2<br>7.2         | 17.2<br>17.2 | -    | 14<br>12         |    | 85<br>85        |    |                       |                       | <0.2<br><0.2                 | 0.9                     |
|                |             |            |          |           | Surface        | 1.0<br>1.0  | 0.3              | 191<br>207 | 19.9<br>19.9 | 19.9          | 7.9<br>7.9 | 7.9     | 26.5<br>26.5 | 26.5     | 92.7<br>92.7 | 92.7             | 7.2<br>7.2<br>7.2         | 5.4<br>5.4   | -    | 4 4              |    | -               |    |                       |                       | -                            | -                       |
| SR3            | Cloudy      | Moderate   | 12:45    | 9.1       | Middle         | 4.6         | 0.4              | 157<br>165 | 19.4<br>19.4 | 19.4          | 7.9<br>7.9 | 7.9     | 27.7<br>27.7 | 27.7     | 90.8<br>90.8 | 90.8             | 7.1                       | 9.1<br>9.2   | 9.2  | 4                | 4  | -               | -  | 822163                | 807555                |                              |                         |
|                |             |            |          |           | Bottom         | 8.1<br>8.1  | 0.4              | 149<br>149 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.1<br>28.1 | 28.1     | 91.0<br>91.0 | 91.0             | 7.1 7.1                   | 13.0<br>13.0 | -    | 5<br>4           |    | -               |    |                       |                       | -                            | -                       |
|                |             |            |          |           | Surface        | 1.0         | 0.1              | 240        | 15.9         | 15.9          | 7.7        | 7.7     | 29.6         | 29.6     | 91.7         | 91.7             | 7.6                       | 15.9         |      | 21               |    | -               |    |                       |                       | -                            | -                       |
| SR4A           | Sunny       | Calm       | 12:14    | 9.2       | Middle         | 1.0<br>4.6  | 0.2              | 257<br>228 | 15.9<br>15.9 | 15.9          | 7.7        | 7.7     | 29.6<br>29.3 | 29.3     | 91.7<br>91.9 | 91.9             | 7.6<br>7.6<br>7.6         | 15.9<br>16.1 | 15.8 | 19<br>19         | 20 | -               | -  | 817195                | 807792                | -                            | -                       |
| -              | ,           |            |          |           | Bottom         | 4.6<br>8.2  | 0.1              | 229<br>229 | 15.9<br>15.9 | 15.9          | 7.7        | 7.7     | 29.3<br>28.6 | 28.5     | 91.9<br>93.3 | 93.5             | 7.6<br>7.8<br>7.8         | 16.1<br>15.5 |      | 19<br>19         | -  | -               |    |                       |                       | -                            | -                       |
|                |             |            |          |           |                | 8.2         | 0.1              | 248<br>300 | 15.8<br>15.8 |               | 7.7        |         | 28.4<br>29.4 |          | 93.6<br>92.1 |                  | 7.8<br>7.6                | 15.3<br>14.3 |      | 21<br>22         |    | -               |    |                       |                       | -                            | -                       |
|                |             |            |          |           | Surface        | 1.0<br>2.8  | 0.4              | 327        | 15.8         | 15.8          | 7.7        | 7.7     | 29.4         | 29.4     | 92.1         | 92.1             | 7.6 7.6                   | - 14.3       | -    | 20               |    | -               |    |                       |                       | -                            | -                       |
| SR5A           | Sunny       | Calm       | 11:57    | 5.5       | Middle         | 2.8         | -                | -          | -            | -             | -          | -       | -            | -        | -            | -                | -                         | -            | 15.3 | -                | 21 | -               | -  | 816576                | 810704                | -                            | -                       |
|                |             |            |          |           | Bottom         | 4.5<br>4.5  | 0.3<br>0.3       | 299<br>319 | 15.8<br>15.8 | 15.8          | 7.7        | 7.7     | 28.9<br>28.8 | 28.9     | 93.0<br>93.1 | 93.1             | 7.7<br>7.8<br>7.8         | 16.3<br>16.3 |      | 21<br>20         |    | -               |    |                       |                       | -                            | -                       |
|                |             |            |          |           | Surface        | 1.0<br>1.0  | 0.2              | 218<br>219 | 16.0<br>16.0 | 16.0          | 7.6<br>7.6 | 7.6     | 29.4<br>29.3 | 29.4     | 91.0<br>91.0 | 91.0             | 7.5<br>7.5<br>7.5         | 11.0<br>11.5 | -    | 14<br>14         |    | -               |    |                       |                       | -                            | -                       |
| SR6            | Sunny       | Moderate   | 11:33    | 4.6       | Middle         | 2.3<br>2.3  | -                | -          | -            | -             | -          |         | -            | -        | -            | -                | - 7.5                     | -            | 13.0 | -                | 14 | -               | -  | 817909                | 814654                |                              |                         |
|                |             |            |          |           | Bottom         | 3.6<br>3.6  | 0.2              | 230<br>232 | 16.0<br>16.0 | 16.0          | 7.6<br>7.6 | 7.6     | 28.9<br>28.9 | 28.9     | 93.7<br>93.8 | 93.8             | 7.8<br>7.8<br>7.8         | 14.7<br>14.9 | -    | 12<br>14         |    | -               |    |                       |                       | -                            | -                       |
|                |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5              | 85         | 19.1         | 19.1          | 7.9        | 7.9     | 29.3<br>29.3 | 29.3     | 89.1<br>89.1 | 89.1             | 6.9                       | 5.1          |      | 8                |    | -               |    |                       |                       | -                            | -                       |
| SR7            | Sunny       | Moderate   | 10:42    | 17.2      | Middle         | 8.6         | 0.5              | 86<br>91   | 19.1<br>19.1 | 19.1          | 7.9        | 7.9     | 29.4         | 29.4     | 88.9         | 88.9             | 6.9<br>6.9                | 5.1<br>5.2   | 5.3  | 10<br>9          | 9  | -               | -  | 823635                | 823734                |                              |                         |
|                | ,           |            |          |           | Bottom         | 8.6<br>16.2 | 0.6              | 96<br>79   | 19.1<br>19.1 |               | 7.9<br>7.9 |         | 29.4<br>29.5 |          | 88.9<br>89.8 |                  | 6.9<br>7.0<br>7.0         | 5.3<br>5.6   |      | 10<br>9          |    | -               |    |                       |                       | -                            | -                       |
|                |             |            |          |           |                | 16.2<br>1.0 | 0.4              | 79<br>211  | 19.1<br>19.5 | 19.1          | 7.9<br>7.9 | 7.9     | 29.5<br>27.9 | 29.5     | 89.8<br>92.1 | 89.8             | 7.0<br>7.2                | 5.6<br>13.0  |      | 8<br>9           |    | -               |    |                       |                       | -                            | -                       |
|                |             |            |          |           | Surface        | 1.0         | 0.2              | 214        | 19.5         | 19.5          | 7.9        | 7.9     | 27.9         | 27.9     | 92.2         | 92.2             | 7.2 7.2                   | 13.2         | -    | 9                |    | -               |    |                       |                       | -                            | -                       |
| SR8            | Cloudy      | Moderate   | 12:01    | 5.0       | Middle         | 2.5         | -                | -          | -            | -             | -          |         | -            | -        | -            | -                | -                         | -            | 15.2 | -                | 9  | -               | -  | 820411                | 811612                |                              |                         |
|                |             |            |          |           | Bottom         | 4.0<br>4.0  | 0.2              | 241<br>247 | 19.1<br>19.1 | 19.1          | 7.9<br>7.9 | 7.9     | 28.6<br>28.6 | 28.6     | 92.4<br>92.4 | 92.4             | 7.2<br>7.2<br>7.2         | 17.3<br>17.3 | -    | 8<br>9           |    | -               |    |                       |                       | -                            | -                       |
| DA: Denth-Aver |             |            |          |           |                |             |                  |            |              |               |            |         |              |          |              |                  |                           |              |      |                  |    |                 |    |                       |                       |                              |                         |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on04 February 17during 04 February 17 during Mid-Ebb tide

| Water Qua     | lity Monite | oring Resi | ilts on  |           | 04 February 17 | during Mid   |                  |            |              |               |            |         |              |         |              |                  |                     |              |      | _                |    |                   |    |                       | 1                     |                              |                                |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|--------------|------------------|---------------------|--------------|------|------------------|----|-------------------|----|-----------------------|-----------------------|------------------------------|--------------------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | mperature (°C | <b>;</b> ) | рН      | Salinit      | y (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total All<br>(ppi | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(μg/L)           | Nickel (µg/L)                  |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average       | Value      | Average |              | Average |              | Average          |                     | Value        | DA   | Value            | DA | Value             | DA | (Northing)            | (Easting)             | Value DA                     | Value DA                       |
|               |             |            |          |           | Surface        | 1.0          | 0.2              | 71<br>77   | 16.2<br>16.1 | 16.2          | 7.9<br>7.9 | 7.9     | 33.1<br>33.1 | 33.1    | 97.3<br>97.2 | 97.3             | 7.8                 | 7.0          | ŀ    | 6<br>5           |    | 92<br>94          |    |                       |                       | <0.2<br><0.2                 | 0.7                            |
| C1            | Cloudy      | Moderate   | 18:32    | 8.8       | Middle         | 4.4          | 0.2              | 109<br>119 | 16.0<br>16.0 | 16.0          | 7.8<br>7.8 | 7.8     | 33.5<br>33.5 | 33.5    | 95.7<br>95.7 | 95.7             | 7.7<br>7.7<br>7.7   | 9.5<br>9.5   | 9.6  | 6<br>8           | 6  | 98<br>100         | 95 | 815604                | 804233                | <0.2<br><0.2 <0.2            | 2 0.6 0.7                      |
|               |             |            |          |           | Bottom         | 7.8          | 0.1              | 136        | 15.7         | 15.7          | 7.8        | 7.8     | 34.0         | 34.0    | 95.0         | 95.1             | 7.7 77              | 12.2         | ŀ    | 7                |    | 92                |    |                       |                       | <0.2                         | 0.7                            |
|               |             |            |          |           | Surface        | 7.8          | 0.1              | 137<br>162 | 15.7<br>19.5 | 19.5          | 7.8<br>7.9 | 7.9     | 34.0<br>27.3 |         | 95.1<br>90.1 | 90.1             | 7.7 7.1<br>7.0      | 12.2<br>11.8 |      | 6<br>7           |    | 94<br>81          |    |                       |                       | <0.2<br><0.2                 | 0.6                            |
|               |             |            |          |           |                | 1.0<br>6.4   | 0.3              | 171<br>112 | 19.5<br>19.3 |               | 7.9<br>7.9 |         | 27.3<br>27.7 |         | 90.1<br>89.5 |                  | 7.0<br>7.0<br>7.0   | 11.8<br>16.1 |      | 6<br>8           |    | 80<br>83          |    |                       |                       | <0.2<br><0.2                 | 1.7<br>1.8                     |
| C2            | Cloudy      | Moderate   | 17:31    | 12.7      | Middle         | 6.4<br>11.7  | 0.3              | 117<br>231 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 27.7<br>28.6 | 21.1    | 89.5<br>90.7 | 89.5             | 7.0<br>7.1 7.1      | 16.1<br>14.8 | 14.2 | 6<br>18          | 11 | 82<br>85          | 83 | 825664                | 806958                | <0.2<br><0.2<br><0.2         | 2 <u>1.7</u> 1.8<br><u>1.8</u> |
|               |             |            |          |           | Bottom         | 11.7         | 0.3              | 237        | 19.3         | 19.3          | 7.9        | 7.9     | 28.6         | 28.6    | 90.7         | 90.7             | 7.1                 | 14.8         |      | 18               |    | 85                |    |                       |                       | <0.2                         | 1.8                            |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.7              | 88<br>95   | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 29.3<br>29.3 | 29.3    | 88.7<br>88.7 | 88.7             | 6.9<br>6.9<br>6.9   | 5.5<br>5.5   | ŀ    | 4 3              |    | 82<br>81          |    |                       |                       | <0.2<br><0.2                 | 0.9                            |
| C3            | Cloudy      | Moderate   | 19:13    | 12.4      | Middle         | 6.2<br>6.2   | 0.5<br>0.5       | 95<br>99   | 19.1<br>19.1 | 19.1          | 7.9<br>7.9 | 7.9     | 29.5<br>29.5 | 29.5    | 88.0<br>88.0 | 88.0             | 6.8<br>6.8          | 5.4<br>5.4   | 5.5  | 4<br>5           | 4  | 84<br>84          | 84 | 822101                | 817815                | <0.2<br><0.2 <0.2            | 2 0.9 0.9<br>0.9               |
|               |             |            |          |           | Bottom         | 11.4<br>11.4 | 0.4              | 113<br>120 | 19.0<br>19.0 | 19.0          | 7.9<br>7.9 | 7.9     | 29.8<br>29.8 | 29.8    | 88.9<br>88.9 | 88.9             | 6.9<br>6.9 6.9      | 5.6<br>5.6   | F    | 4                |    | 86<br>85          |    |                       |                       | <0.2<br><0.2                 | 0.8                            |
|               |             |            |          |           | Surface        | 1.0          | 0.3              | 169        | 16.3         | 16.3          | 7.8        | 7.8     | 33.1         |         | 95.6         | 95.6             | 7.7                 | 9.6          |      | 11               |    | 98                |    |                       |                       | <0.2                         | 0.8                            |
| IM1           | Cloudy      | Moderate   | 18:12    | 7.9       | Middle         | 1.0<br>4.0   | 0.3              | 184<br>174 | 16.3<br>16.3 | 16.3          | 7.8<br>7.8 | 7.8     | 33.1<br>33.1 | 33.1    | 95.6<br>95.2 | 95.2             | 7.7<br>7.6<br>7.7   | 9.6<br>10.7  | 12.0 | 12<br>10         | 13 | 98<br>90          | 95 | 818347                | 806438                | <0.2<br><0.2<br><0.2         | 0.8                            |
|               | cloudy      | modorato   | 10.12    | 7.0       |                | 4.0<br>6.9   | 0.3              | 187<br>134 | 16.3<br>16.0 |               | 7.8<br>7.8 |         | 33.1<br>33.2 |         | 95.2<br>94.7 |                  | 7.6<br>7.6 7.6      | 10.7<br>15.7 |      | 10<br>19         | 10 | 92<br>94          |    | 010017                | 000100                | <0.2<br><0.2                 | 0.8                            |
|               |             |            |          |           | Bottom         | 6.9<br>1.0   | 0.2              | 142<br>162 | 16.0<br>16.2 | 16.0          | 7.8<br>7.9 | 7.8     | 33.2<br>34.0 | 33.2    | 94.7<br>95.3 | 94.7             | 7.6<br>7.6<br>7.6   | 15.5<br>11.6 |      | 18<br>12         |    | 95<br>96          |    |                       |                       | <0.2<br><0.2                 | 0.8                            |
|               |             |            |          |           | Surface        | 1.0          | 0.3              | 168        | 16.2         | 16.2          | 7.9        | 7.9     | 34.0         | 34.0    | 95.3         | 95.3             | 7.6 7.6             | 11.7         | F    | 10               |    | 96                |    |                       |                       | <0.2                         | 0.7                            |
| IM2           | Cloudy      | Moderate   | 18:06    | 8.8       | Middle         | 4.4<br>4.4   | 0.2              | 124<br>125 | 16.1<br>16.1 | 16.1          | 7.9<br>7.9 | 7.9     | 34.0<br>34.0 | 34.0    | 94.8<br>94.8 | 94.8             | 7.6<br>7.6          | 13.3<br>13.3 | 14.6 | 14<br>15         | 16 | 93<br>92          | 95 | 818834                | 806194                | <0.2<br><0.2 <0.2            | 0.7                            |
|               |             |            |          |           | Bottom         | 7.8<br>7.8   | 0.2              | 119<br>129 | 15.8<br>15.8 | 15.8          | 7.9<br>7.9 | 7.9     | 34.1<br>34.1 | 34.1    | 94.3<br>94.4 | 94.4             | 7.6<br>7.6<br>7.6   | 18.9<br>18.9 |      | 21<br>22         |    | 98<br>96          |    |                       |                       | <0.2<br><0.2                 | 0.6                            |
|               |             |            |          |           | Surface        | 1.0          | 0.3              | 58<br>58   | 16.2<br>16.2 | 16.2          | 7.9<br>7.9 | 7.9     | 33.9<br>33.9 | 33.9    | 95.4<br>95.3 | 95.4             | 7.6<br>7.6 7.6      | 11.3<br>11.3 | -    | 11<br>13         |    | 97<br>95          |    |                       |                       | <0.2<br><0.2                 | 0.8                            |
| IM3           | Cloudy      | Moderate   | 17:59    | 9.1       | Middle         | 4.6          | 0.2              | 85<br>88   | 15.9<br>15.9 | 15.9          | 7.9<br>7.9 | 7.9     | 34.0<br>34.0 | 34.0    | 93.9<br>93.9 | 93.9             | 7.5<br>7.5<br>7.5   | 17.4<br>17.3 | 16.4 | 17<br>19         | 18 | 97<br>98          | 96 | 819403                | 806022                | <0.2<br><0.2 <0.2            | 0.7                            |
|               |             |            |          |           | Bottom         | 8.1          | 0.2              | 98         | 15.8         | 15.8          | 7.9<br>7.9 | 7.9     | 34.0<br>34.0 | 34.0    | 94.0         | 94.1             | 7.6 7.6             | 20.5         | ļ    | 25               |    | 95                |    |                       |                       | <0.2                         | 0.8                            |
|               |             |            |          |           | Surface        | 8.1          | 0.2              | 104<br>69  | 15.8<br>16.4 | 16.4          | 7.8        | 7.8     | 33.3         | 33.3    | 94.1<br>94.6 | 94.7             | 7.6<br>7.6          | 20.4<br>8.6  |      | 24<br>9          |    | 96<br>100         |    |                       |                       | <0.2<br><0.2                 | 0.7                            |
| IM4           | Cloudy      | Madarata   | 17:51    | 8.5       | Middle         | 1.0<br>4.3   | 0.3              | 73<br>102  | 16.4<br>15.7 | 15.7          | 7.8<br>7.8 | 7.8     | 33.3<br>33.8 | 33.8    | 94.7<br>93.1 | 93.1             | 7.6<br>7.5<br>7.6   | 8.6<br>19.3  | 16.6 | 8<br>10          | 16 | 100<br>95         | 95 | 819571                | 805029                | <0.2<br><0.2<br><0.2<br><0.2 | 1.1<br>1.1<br>1.0              |
| 11114         | Cloudy      | Moderate   | 17.51    | 0.5       |                | 4.3<br>7.5   | 0.2              | 104<br>117 | 15.7<br>15.7 |               | 7.8<br>7.9 |         | 33.8<br>33.8 |         | 93.1<br>93.4 |                  | 7.5<br>7.5          | 19.3<br>22.0 | 10.0 | 12<br>27         | 10 | 97<br>88          | 90 | 019371                | 803029                | <0.2<br><0.2                 | 1.1<br>0.8                     |
|               |             |            |          |           | Bottom         | 7.5          | 0.2              | 125<br>110 | 15.7<br>16.4 | 15.7          | 7.9<br>7.8 | 7.9     | 33.8<br>32.9 | 33.0    | 93.4<br>94.2 | 93.4             | 7.5<br>7.5<br>7.6   | 21.9<br>8.1  |      | 27<br>11         |    | 89<br>102         |    |                       |                       | <0.2<br><0.2                 | 0.7                            |
|               |             |            |          |           | Surface        | 1.0          | 0.4              | 111        | 16.4         | 16.4          | 7.8        | 7.8     | 32.9         | 32.9    | 94.2         | 94.2             | 7.5 7.5             | 8.2          | E    | 10               |    | 100               |    |                       |                       | <0.2                         | 1.1                            |
| IM5           | Cloudy      | Moderate   | 17:43    | 7.2       | Middle         | 3.6<br>3.6   | 0.3              | 127<br>136 | 15.8<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 33.4<br>33.4 | 33.4    | 93.1<br>93.1 | 93.1             | 7.5<br>7.5          | 19.1<br>19.1 | 16.4 | 10<br>9          | 15 | 98<br>100         | 99 | 820567                | 804927                | <0.2<br><0.2 <0.2            | 1.4                            |
|               |             |            |          |           | Bottom         | 6.2<br>6.2   | 0.3              | 122<br>132 | 15.8<br>15.8 | 15.8          | 7.8<br>7.8 | 7.8     | 33.4<br>33.4 |         | 93.3<br>93.4 | 93.4             | 7.5<br>7.6<br>7.6   | 22.2<br>21.8 | ŀ    | 25<br>25         |    | 97<br>97          |    |                       |                       | <0.2<br><0.2                 | 0.9                            |
|               |             |            |          |           | Surface        | 1.0          | 0.3              | 114<br>123 | 17.0<br>17.0 | 17.0          | 7.8<br>7.8 | 7.8     | 32.2<br>32.2 |         | 95.2<br>95.2 | 95.2             | 7.6                 | 5.6<br>5.7   |      | 5<br>5           |    | 89<br>88          |    |                       |                       | <0.2<br><0.2                 | 1.3<br>1.4                     |
| IM6           | Cloudy      | Moderate   | 17:35    | 7.2       | Middle         | 3.6          | 0.3              | 90         | 15.8         | 15.8          | 7.8        | 7.8     | 33.0<br>33.0 | 33.0    | 92.8         | 92.9             | 7.5                 | 17.9<br>17.9 | 15.1 | 16               | 15 | 93<br>91          | 94 | 821051                | 805845                | <0.2<br><0.2<br><0.2<br><0.2 | 1.1 1.2                        |
|               |             |            |          |           | Bottom         | 3.6<br>6.2   | 0.3<br>0.3       | 98<br>80   | 15.8         | 15.8          | 7.8        | 7.8     | 33.0         |         | 92.9<br>93.3 | 93.4             | 7.5<br>7.6<br>7.6   | 21.7         | F    | 14<br>26         |    | 102               |    |                       |                       | <0.2                         | 1.1                            |
|               |             |            |          |           |                | 6.2          | 0.3              | 82<br>92   | 15.8<br>17.0 |               | 7.8<br>7.7 | 7.7     | 33.0<br>32.1 | 20.1    | 93.4<br>95.1 |                  | 7.6                 | 21.8<br>7.2  |      | 25<br>4          |    | 100<br>97         |    |                       |                       | <0.2<br><0.2                 | 1.0<br>1.2                     |
|               |             |            |          |           | Surface        | 1.0<br>4.1   | 0.6              | 92<br>94   | 17.0<br>15.9 | 17.0          | 7.7<br>7.7 |         | 32.1<br>32.8 | 52.1    | 95.0<br>92.9 | 95.1             | 7.6<br>7.5<br>7.6   | 7.3<br>15.0  | F    | 6<br>14          |    | 96<br>101         |    | 00 · 5 · -            |                       | <0.2<br><0.2                 | 1.3                            |
| IM7           | Cloudy      | Moderate   | 17:26    | 8.2       | Middle         | 4.1          | 0.6              | 100        | 15.9         | 15.9          | 7.7        | 7.7     | 32.8         | 32.0    | 92.9         | 92.9             | 7.5                 | 15.1         | 15.4 | 14               | 16 | 100               | 97 | 821345                | 806817                | <0.2                         | 1.0                            |
|               |             |            |          |           | Bottom         | 7.2          | 0.5              | 95<br>101  | 15.8<br>15.8 | 15.8          | 7.7        | 7.7     | 32.9<br>32.9 | 32.9    | 92.9<br>92.9 | 92.9             | 7.5<br>7.5<br>7.5   | 23.9<br>23.8 |      | 29<br>28         |    | 92<br>94          |    |                       |                       | <0.2<br><0.2                 | 1.0<br>1.0                     |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.5              | 147<br>157 | 19.5<br>19.5 | 19.5          | 7.9<br>7.9 | 7.9     | 28.8<br>28.8 | 28.8    | 95.6<br>95.6 | 95.6             | 7.4 7.4 7.4         | 9.5<br>9.5   | ŀ    | 9<br>9           |    | 81<br>80          |    |                       |                       | <0.2<br><0.2                 | 1.1<br>1.2                     |
| IM8           | Cloudy      | Moderate   | 17:57    | 8.8       | Middle         | 4.4          | 0.6              | 148<br>156 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.9<br>28.9 | 28.9    | 94.3<br>94.3 | 94.3             | 7.3<br>7.3          | 13.2<br>13.2 | 13.1 | 10<br>9          | 11 | 83<br>83          | 83 | 821684                | 807828                | <0.2<br><0.2 <0.2            | 2 1.2 1.2                      |
|               |             |            |          |           | Bottom         | 7.8          | 0.5              | 122<br>129 | 19.0<br>19.0 | 19.0          | 8.0<br>8.0 | 8.0     | 29.2<br>29.2 | 29.2    | 94.4<br>94.4 | 94.4             | 7.4<br>7.4<br>7.4   | 16.5<br>16.5 | F    | 15<br>16         |    | 85<br>85          |    |                       |                       | <0.2<br><0.2                 | 1.2                            |
| DA: Depth-Ave | <u> </u>    |            |          |           | 1              | 0. /         | 0.6              | 129        | 19.0         |               | 0.0        |         | 29.2         |         | 94.4         |                  | 1.4                 | 10.0         |      | 01               |    | 00                |    |                       |                       | <0.2                         | 1.2                            |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on04 February 17during 04 February 17 during Mid-Ebb tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 04 February 17 | during Mid  | -Ebb tide        |            |              |               | -          |         |              |           |              |                  |                     |              |      |                  |    |                 |    |                       |                       | <u> </u>                     |                   |
|---------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|-----------|--------------|------------------|---------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|------------------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)     | Current<br>Speed | Current    | Water Ter    | mperature (°C | ;)         | рН      | Salini       | ity (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                | -           | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average   |              | Average          | Value DA            | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA                     | Value DA          |
|               |             |            |          |           | Surface        | 1.0         | 0.6              | 83<br>83   | 19.6<br>19.5 | 19.6          | 7.9<br>7.9 | 7.9     | 28.8<br>28.9 | 28.9      | 95.4<br>95.0 | 95.2             | 7.4                 | 9.3<br>10.5  |      | 4<br>5           |    | 78<br>79        |    |                       |                       | <0.2<br><0.2                 | 1.3<br>1.3        |
| IM9           | Cloudy      | Moderate   | 18:05    | 7.7       | Middle         | 3.9<br>3.9  | 0.5<br>0.5       | 102<br>109 | 19.1<br>19.1 | 19.1          | 8.0<br>8.0 | 8.0     | 29.1<br>29.1 | 29.1      | 93.8<br>93.8 | 93.8             | 7.3<br>7.3<br>7.3   | 14.1<br>14.1 | 12.9 | 6<br>8           | 9  | 83<br>83        | 82 | 822103                | 808827                | <0.2<br><0.2 <0.2            | 14                |
|               |             |            |          |           | Bottom         | 6.7         | 0.4              | 135        | 19.0         | 19.0          | 7.9        | 7.9     | 29.1         | 29.1      | 94.5         | 94.5             | 7.4 7.4             | 14.6         | -    | 15               |    | 85              |    |                       |                       | <0.2                         | 1.0               |
|               |             |            |          |           | Surface        | 6.7<br>1.0  | 0.4              | 138<br>113 | 19.0<br>19.4 | 19.4          | 7.9<br>7.9 | 7.9     | 29.1<br>28.3 | 28.3      | 94.5<br>93.5 | 93.5             | 7.4<br>7.3          | 14.6<br>9.6  |      | 15<br>6          |    | 85<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.0<br>1.3        |
|               |             |            |          |           |                | 1.0<br>3.9  | 0.5              | 122<br>124 | 19.4<br>19.3 |               | 7.9<br>7.9 |         | 28.3<br>28.6 |           | 93.5<br>92.7 |                  | 7.3<br>7.2<br>7.3   | 9.6<br>14.5  |      | 6<br>7           |    | 81<br>85        |    |                       |                       | <0.2<br><0.2                 | 1.4<br>1.4        |
| IM10          | Cloudy      | Moderate   | 18:14    | 7.8       | Middle         | 3.9<br>6.8  | 0.4              | 128<br>141 | 19.3<br>19.2 | 19.3          | 7.9        | 7.9     | 28.6<br>28.6 | 28.6      | 92.7<br>93.2 | 92.7             | 7.2<br>7.3 7.0      | 14.5<br>16.7 | 13.6 | 7<br>16          | 10 | 84<br>85        | 83 | 822249                | 809841                | <0.2<br><0.2<br><0.2         | 1.4<br>1.3        |
|               |             |            |          |           | Bottom         | 6.8         | 0.5              | 150        | 19.2         | 19.2          | 7.9<br>7.9 | 7.9     | 28.6         | 28.6      | 93.2         | 93.2             | 7.3                 | 16.7         |      | 16               |    | 85              |    |                       |                       | <0.2                         | 1.3               |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5              | 114<br>117 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.4<br>28.4 | 28.4      | 92.2<br>92.2 | 92.2             | 7.2<br>7.2<br>7.2   | 10.2<br>10.2 | -    | 8<br>8           |    | 80<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.3<br>1.4        |
| IM11          | Cloudy      | Moderate   | 18:21    | 9.2       | Middle         | 4.6         | 0.6              | 116<br>122 | 19.3<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.6<br>28.6 | 28.6      | 91.6<br>91.7 | 91.7             | 7.1                 | 13.0<br>13.0 | 12.6 | 7<br>8           | 11 | 83<br>83        | 83 | 821495                | 810546                | <0.2<br><0.2 <0.2            | 1.3<br>1.3        |
|               |             |            |          |           | Bottom         | 8.2<br>8.2  | 0.6              | 123<br>124 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.7<br>28.7 | 28.7      | 92.1<br>92.1 | 92.1             | 7.2<br>7.2<br>7.2   | 14.5<br>14.5 | -    | 16<br>17         |    | 85<br>85        |    |                       |                       | <0.2<br><0.2                 | 1.2               |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 97         | 19.4         | 19.4          | 7.9        | 7.9     | 28.2         | 28.2      | 92.4         | 92.4             | 7.2                 | 8.0          | _    | 6                |    | 80              |    |                       |                       | <0.2                         | 1.4               |
| IM12          | Cloudy      | Moderate   | 18:29    | 9.3       | Middle         | 1.0<br>4.7  | 0.6<br>0.5       | 102<br>110 | 19.4<br>19.3 | 19.3          | 7.9<br>7.9 | 7.9     | 28.2<br>28.6 | 28.6      | 92.4<br>91.3 | 91.3             | 7.2<br>7.1<br>7.2   | 8.0<br>9.8   | 9.5  | 6<br>7           | 8  | 80<br>83        | 83 | 821171                | 811517                | <0.2<br><0.2<br><0.2<br><0.2 | 1.5<br>1.5<br>1.5 |
| IWITZ         | Cloudy      | Moderate   | 10.20    | 5.5       |                | 4.7<br>8.3  | 0.5              | 117<br>120 | 19.3<br>19.2 |               | 7.9<br>7.9 |         | 28.6<br>28.8 |           | 91.3<br>93.0 |                  | 7.1<br>7.2 7.0      | 9.8<br>10.8  | 0.0  | 7<br>13          | Ū  | 83<br>85        | 00 | 021171                | 011017                | <0.2                         | 1.4<br>1.4        |
|               |             |            |          |           | Bottom         | 8.3<br>1.0  | 0.4              | 131<br>93  | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.8<br>28.7 | 28.8      | 93.0<br>91.8 | 93.0             | 7.2<br>7.2<br>7.2   | 10.8<br>9.9  |      | 11<br>8          |    | 85<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.5<br>1.2        |
|               |             |            |          |           | Surface        | 1.0         | 0.4              | 95         | 19.2         | 19.2          | 7.9        | 7.9     | 28.7         | 28.7      | 91.8         | 91.8             | 7.2 7.2             | 9.9          | -    | 8                |    | 81              |    |                       |                       | <0.2                         | 1.2               |
| SR2           | Cloudy      | Moderate   | 18:53    | 4.4       | Middle         | 2.2         | -                | -          | -            | -             | -          | -       | -            | -         | -            | -                | -                   | -            | 10.4 | -                | 8  | -               | 84 | 821444                | 814168                | - <0.2                       | -                 |
|               |             |            |          |           | Bottom         | 3.4<br>3.4  | 0.3              | 99<br>104  | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.9<br>28.9 | 28.9      | 93.6<br>93.6 | 93.6             | 7.3<br>7.3<br>7.3   | 10.8<br>10.8 | _    | 9<br>7           |    | 86<br>86        |    |                       |                       | <0.2<br><0.2                 | <u>1.1</u><br>1.1 |
|               |             |            |          |           | Surface        | 1.0         | 0.6              | 118<br>128 | 19.4<br>19.4 | 19.4          | 7.9<br>7.9 | 7.9     | 28.7<br>28.7 | 28.7      | 94.2<br>94.2 | 94.2             | 7.3<br>7.3<br>7.3   | 13.0<br>13.0 | -    | 11<br>10         |    | -               |    |                       |                       | -                            | -                 |
| SR3           | Cloudy      | Moderate   | 17:52    | 9.1       | Middle         | 4.6         | 0.5              | 100<br>106 | 19.1<br>19.1 | 19.1          | 7.9<br>7.9 | 7.9     | 28.8<br>28.8 | 28.8      | 92.5<br>92.5 | 92.5             | 7.2<br>7.2          | 21.3<br>21.2 | 18.9 | 14<br>13         | 17 | -               | -  | 822161                | 807566                |                              |                   |
|               |             |            |          |           | Bottom         | 8.1<br>8.1  | 0.5              | 114<br>123 | 19.1<br>19.1 | 19.1          | 7.9        | 7.9     | 28.9<br>28.9 | 28.9      | 94.2<br>94.2 | 94.2             | 7.4<br>7.4<br>7.4   | 22.4<br>22.4 | -    | 27<br>26         |    | -               |    |                       |                       | -                            | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.4              | 79         | 16.4         | 16.4          | 7.8        | 7.8     | 33.3         | 33.3      | 96.0         | 96.0             | 7.7                 | 11.8         |      | 13               |    | -               |    |                       |                       | -                            | -                 |
| SR4A          | Cloudy      | Moderate   | 18:53    | 8.4       | Middle         | 1.0<br>4.2  | 0.4              | 83<br>88   | 16.4<br>16.2 | 16.2          | 7.8<br>7.8 | 7.8     | 33.3<br>33.3 | 33.3      | 96.0<br>95.6 | 95.6             | 7.7<br>7.7<br>7.7   | 11.8<br>12.1 | 12.2 | 15<br>14         | 16 | -               | -  | 817183                | 807817                | -                            | -                 |
|               | ,           |            |          | •••       |                | 4.2         | 0.3              | 91<br>109  | 16.2<br>16.2 | 16.2          | 7.8<br>7.8 | 7.8     | 33.3<br>33.3 | 33.3      | 95.6<br>95.6 | 95.6             | 7.7<br>7.7<br>7.7   | 12.1<br>12.7 |      | 14<br>18         |    | -               |    |                       |                       | -                            | -                 |
|               |             |            |          |           | Bottom         | 7.4         | 0.2              | 117<br>112 | 16.2<br>16.4 |               | 7.8<br>7.8 |         | 33.3<br>33.0 |           | 95.6<br>94.5 |                  | 7.7 7.7<br>7.6      | 12.8<br>8.6  |      | 20<br>9          |    | -               |    |                       |                       |                              | -                 |
|               |             |            |          |           | Surface        | 1.0<br>2.8  | 0.2              | 118        | 16.4         | 16.4          | 7.8        | 7.8     | 33.0         | 33.0      | 94.5         | 94.5             | 7.6 7.6             | 8.7          | -    | 10               |    | -               |    |                       |                       | -                            | -                 |
| SR5A          | Cloudy      | Moderate   | 19:08    | 5.6       | Middle         | 2.8         | -                | -          | -            | -             | -          |         | -            | -         | -            | -                | -                   | -            | 9.2  | -                | 9  | -               | -  | 816586                | 810679                | -                            | -                 |
|               |             |            |          |           | Bottom         | 4.6<br>4.6  | 0.1              | 99<br>105  | 16.2<br>16.2 | 16.2          | 7.8<br>7.8 | 7.8     | 33.0<br>33.0 | 33.0      | 94.6<br>94.6 | 94.6             | 7.6<br>7.6<br>7.6   | 9.7<br>9.6   | -    | 8<br>10          |    | -               |    |                       |                       | -                            | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.2              | 103<br>112 | 16.3<br>16.3 | 16.3          | 7.7        | 7.7     | 32.9<br>32.9 | 32.9      | 92.9<br>92.9 | 92.9             | 7.5<br>7.5<br>7.5   | 9.8<br>9.8   | -    | 11<br>9          |    | -               |    |                       |                       | -                            | -                 |
| SR6           | Cloudy      | Calm       | 19:31    | 4.5       | Middle         | 2.3<br>2.3  | -                | -          | -            | -             | -          |         | -            | -         | -            | -                | - 7.5               | -            | 9.8  | -                | 10 | -               | -  | 817906                | 814644                |                              |                   |
|               |             |            |          |           | Bottom         | 3.5         | 0.1              | 119<br>127 | 16.2<br>16.2 | 16.2          | 7.7        | 7.7     | 33.0<br>33.0 | 33.0      | 94.1<br>94.1 | 94.1             | 7.6<br>7.6<br>7.6   | 9.7<br>9.7   | -    | 10<br>10         |    | -               |    |                       |                       | -                            | -                 |
| <u> </u>      |             |            |          |           | Surface        | 1.0         | 0.6              | 90         | 19.1         | 19.1          | 7.9        | 7.9     | 29.6         | 29.6      | 87.9         | 87.9             | 6.8                 | 5.7          |      | 3                |    | -               |    |                       |                       | -                            | -                 |
| SR7           | Cloudy      | Moderate   | 19:40    | 16.2      | Middle         | 1.0<br>8.1  | 0.6<br>0.4       | 95<br>107  | 19.1<br>19.1 | 19.1          | 7.9<br>7.9 | 7.9     | 29.6<br>29.7 | 29.7      | 87.9<br>87.5 | 87.5             | 6.8<br>6.8          | 5.7<br>5.8   | 5.8  | 4                | 4  | -               | _  | 823626                | 823729                | -                            | -                 |
| 0.17          | Cloudy      | moderate   | 10.70    | 10.2      |                | 8.1<br>15.2 | 0.4              | 113<br>112 | 19.1<br>19.1 |               | 7.9<br>7.9 |         | 29.7<br>29.7 |           | 87.5<br>87.6 |                  | 6.8<br>6.8          | 5.8<br>5.9   | 5.0  | 4<br>6           | 7  | -               |    | 020020                | 520723                | -                            | -                 |
| ┣────         | ├           |            |          |           | Bottom         | 15.2<br>1.0 | 0.4              | 115<br>161 | 19.1<br>19.4 | 19.1          | 7.9<br>7.9 | 7.9     | 29.7<br>28.3 | 29.7      | 87.6<br>92.1 | 87.6             | 6.8<br>6.8<br>7.2   | 5.9<br>9.6   |      | 5                |    | -               |    |                       |                       | -                            | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.3              | 161        | 19.4         | 19.4          | 7.9        | 7.9     | 28.3         | 28.3      | 92.1         | 92.1             | 7.2 7.2             | 9.6          | F    | 9                |    | -               |    |                       |                       | -                            | -                 |
| SR8           | Cloudy      | Moderate   | 18:39    | 5.3       | Middle         | 2.7<br>2.7  | -                | -          | -            | -             | -          | -       | -            | -         | -            | -                | -                   | -            | 10.2 | -                | 8  | -               | -  | 820435                | 811576                |                              |                   |
|               |             |            |          |           | Bottom         | 4.3<br>4.3  | 0.3              | 157<br>171 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.7<br>28.7 | 28.7      | 91.4<br>91.4 | 91.4             | 7.1 7.1             | 10.8<br>10.8 |      | 8<br>8           |    | -               |    |                       |                       | -                            | -                 |
| DA: Denth-Ave |             |            |          |           |                |             |                  |            |              |               |            |         |              |           |              |                  |                     |              |      |                  |    |                 | _  |                       |                       |                              |                   |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on07 February 17during 07 February 17 during Mid-Flood Tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 07 February 17 | during Mid   |                  | de         | -            |               |            |         |              |          |              |                  |                     | -          |      | _                |              |                   |    |                       |                       |                      |                   |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|--------------|------------------|---------------------|------------|------|------------------|--------------|-------------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | mperature (°C | C)         | рН      | Salini       | ty (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity  | NTU) | Suspende<br>(mg/ |              | Total All<br>(ppr | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  | Value        | Average          | Value DA            | Value      | DA   | Value            | DA           | Value             | DA | (Northing)            | (Easting)             | Value DA             | Value DA          |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 144<br>152 | 15.4<br>15.4 | 15.4          | 7.8<br>7.8 | 7.8     | 34.3<br>34.3 | 34.3     | 97.7<br>97.7 | 97.7             | 7.9<br>7.9          | 6.4<br>6.4 | -    | 9<br>10          |              | 83<br>83          |    |                       |                       | <0.2<br><0.2         | 0.4               |
| C1            | Sunny       | Moderate   | 14:50    | 8.3       | Middle         | 4.2          | 0.5<br>0.6       | 158<br>160 | 15.4<br>15.4 | 15.4          | 7.8<br>7.8 | 7.8     | 34.3<br>34.3 | 34.3     | 98.0<br>98.0 | 98.0             | 7.9<br>7.9<br>7.9   | 6.6<br>6.6 | 6.5  | 8<br>10          | 9            | 84<br>84          | 84 | 815631                | 804235                | <0.2<br><0.2 <0.2    | 0.4               |
|               |             |            |          |           | Bottom         | 7.3          | 0.5              | 135        | 15.4         | 15.4          | 7.8        | 7.8     | 34.3         | 34.3     | 98.7         | 98.7             | 8.0 8.0             | 6.4        | -    | 8                |              | 85                |    |                       |                       | <0.2                 | 0.3               |
|               |             |            |          |           | Surface        | 7.3          | 0.6              | 137<br>231 | 15.4<br>19.4 | 19.4          | 7.8<br>7.8 | 7.8     | 34.3<br>26.6 | 00.0     | 98.7<br>94.9 | 94.9             | 8.0<br>7.5          | 6.3<br>6.1 |      | 9<br>5           | ļ            | 85<br>75          |    | ļ                     |                       | <0.2<br><0.2         | 0.4               |
|               |             |            |          |           |                | 1.0<br>6.2   | 0.5              | 233<br>190 | 19.4<br>19.4 |               | 7.8<br>7.8 |         | 26.6<br>27.0 |          | 94.8<br>92.4 |                  | 7.5<br>7.3<br>7.4   | 6.1<br>6.9 |      | 6<br>4           | [            | 76<br>81          |    |                       |                       | <0.2<br><0.2         | 1.8<br>2.0        |
| C2            | Cloudy      | Moderate   | 13:50    | 12.4      | Middle         | 6.2<br>11.4  | 0.4              | 203<br>186 | 19.4<br>19.4 | 19.4          | 7.8        | 7.8     | 27.0<br>28.3 | 27.0     | 92.4<br>92.6 | 92.4             | 7.3<br>7.2 7.0      | 6.9<br>7.4 | 6.8  | 4<br>5           | 5            | 81<br>84          | 80 | 825671                | 806963                | <0.2<br><0.2<br><0.2 | 2.0<br>1.9        |
|               |             |            |          |           | Bottom         | 11.4         | 0.4              | 200        | 19.4         | 19.4          | 7.8<br>7.8 | 7.8     | 28.3         | 28.3     | 92.6         | 92.6             | 7.2                 | 7.4        |      | 5                | <u> </u>     | 84                |    |                       |                       | <0.2                 | 1.9               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.4              | 287<br>299 | 19.0<br>19.0 | 19.0          | 7.9<br>7.9 | 7.9     | 29.9<br>29.9 | 29.9     | 90.6<br>90.5 | 90.6             | 7.0<br>7.0<br>7.0   | 4.0<br>4.0 | -    | 4 3              |              | 80<br>80          |    |                       |                       | <0.2<br><0.2         | 0.7               |
| C3            | Cloudy      | Moderate   | 15:48    | 12.7      | Middle         | 6.4<br>6.4   | 0.3              | 281<br>287 | 18.9<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9     | 30.0<br>30.0 | 30.0     | 89.4<br>89.5 | 89.5             | 7.0<br>7.0          | 4.4<br>4.4 | 4.4  | 3                | 4            | 82<br>81          | 82 | 822121                | 817821                | <0.2<br><0.2 <0.2    | 0.7<br>0.6        |
|               |             |            |          |           | Bottom         | 11.7<br>11.7 | 0.3              | 266<br>290 | 18.9<br>18.9 | 18.9          | 7.8<br>7.8 | 7.8     | 30.0<br>30.0 | 30.0     | 90.9<br>90.9 | 90.9             | 7.1 7.1             | 4.7<br>4.7 | -    | 3                |              | 85<br>85          |    |                       |                       | <0.2<br><0.2         | 0.6               |
|               |             |            |          |           | Surface        | 1.0          | 0.3              | 171        | 16.0         | 16.0          | 7.7        | 7.7     | 32.4         | 32.4     | 96.8         | 96.8             | 7.8                 | 4.5        |      | 6                | <del> </del> | 82                |    |                       |                       | <0.2                 | 0.9               |
| IM1           | Suppy       | Pouch      | 14.22    | 7.6       |                | 1.0<br>3.8   | 0.3              | 187<br>162 | 16.0<br>15.9 |               | 7.7        |         | 32.4<br>32.5 |          | 96.8<br>97.9 | 97.9             | 7.8<br>7.9<br>7.9   | 4.5<br>5.1 | 5.2  | 6<br>6           | 7            | 82<br>83          | 83 | 818354                | 806468                | <0.2<br><0.2<br><0.2 | 1.0<br>1.0<br>1.0 |
|               | Sunny       | Rough      | 14:33    | 7.0       | Middle         | 3.8<br>6.6   | 0.3              | 171<br>155 | 15.9<br>15.7 | 15.9          | 7.7        | 7.7     | 32.5<br>32.7 |          | 97.9<br>99.2 |                  | 7.9<br>8.1          | 5.1<br>5.9 | 5.2  | 7                | ,            | 83<br>84          | 03 | 010334                | 000400                | <0.2<br><0.2         | 0.9<br>0.9        |
|               |             |            |          |           | Bottom         | 6.6<br>1.0   | 0.3              | 167<br>206 | 15.7<br>16.0 | 15.7          | 7.7        | 7.7     | 32.7<br>32.3 | 32.7     | 99.3         | 99.3             | 8.1 8.1             | 5.8        |      | 10<br>6          |              | 84                |    |                       |                       | <0.2                 | 1.0               |
|               |             |            |          |           | Surface        | 1.0          | 0.4              | 212        | 16.0         | 16.0          | 7.7        | 7.7     | 32.3         | 32.3     | 96.2<br>96.2 | 96.2             | 7.8<br>7.8<br>7.9   | 4.3<br>4.3 |      | 8                |              | 82<br>82          |    |                       |                       | <0.2<br><0.2         | 1.1<br>1.2        |
| IM2           | Sunny       | Moderate   | 14:26    | 7.5       | Middle         | 3.8<br>3.8   | 0.3              | 202<br>210 | 16.0<br>16.0 | 16.0          | 7.7<br>7.7 | 7.7     | 32.3<br>32.3 | 32.3     | 96.8<br>96.9 | 96.9             | 7.9<br>7.9          | 4.3<br>4.2 | 4.4  | 9<br>7           | 8            | 83<br>83          | 83 | 818832                | 806208                | <0.2<br><0.2 <0.2    | 1.3<br>1.0        |
|               |             |            |          |           | Bottom         | 6.5<br>6.5   | 0.3              | 182<br>198 | 15.9<br>15.9 | 15.9          | 7.7        | 7.7     | 32.3<br>32.3 | 32.3     | 98.7<br>98.8 | 98.8             | 8.0<br>8.0          | 4.6<br>4.6 | -    | 7                |              | 83<br>84          |    |                       |                       | <0.2<br><0.2         | 1.1<br>1.3        |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 243<br>245 | 16.0<br>16.0 | 16.0          | 7.7        | 7.7     | 32.2<br>32.2 | 32.2     | 97.0<br>97.0 | 97.0             | 7.9<br>7.9<br>7.0   | 4.0<br>4.0 | -    | 7                | i i          | 81<br>81          |    |                       |                       | <0.2<br>0.2          | 1.1<br>1.2        |
| IM3           | Sunny       | Rough      | 14:16    | 8.3       | Middle         | 4.2          | 0.5              | 217        | 16.0         | 16.0          | 7.7        | 7.7     | 32.3<br>32.3 |          | 97.5<br>97.5 | 97.5             | 7.9                 | 4.2        | 4.3  | 7                | 7            | 82                | 82 | 819426                | 806030                | <0.2                 | 1.2 1.2           |
|               |             |            |          |           | Bottom         | 4.2<br>7.3   | 0.5              | 231<br>226 | 16.0<br>15.9 | 15.9          | 7.7        | 7.7     | 32.3         | 32.3     | 98.9         | 99.0             | 7.9<br>8.0<br>8.0   | 4.3        |      | 6<br>7           |              | 82<br>83          |    |                       |                       | <0.2<br><0.2         | 1.1               |
|               |             |            |          |           |                | 7.3          | 0.5              | 239<br>216 | 15.9<br>15.9 | 15.9          | 7.7        | 7.7     | 32.3<br>32.3 | 32.3     | 99.1<br>96.8 | 96.9             | 8.0 0.0<br>7.9      | 4.8<br>8.7 |      | 7<br>12          |              | 83<br>83          |    |                       |                       | <0.2<br><0.2         | 1.3<br>1.2        |
|               |             |            |          |           | Surface        | 1.0<br>4.0   | 0.5              | 219<br>223 | 15.9<br>15.9 |               | 7.7        |         | 32.3<br>32.3 |          | 96.9<br>97.4 |                  | 7.9<br>7.9<br>7.9   | 8.7<br>8.4 |      | 10<br>10         |              | 83<br>84          |    |                       |                       | <0.2<br><0.2         | 1.0<br>1.1 1.0    |
| IM4           | Sunny       | Rough      | 14:07    | 7.9       | Middle         | 4.0          | 0.6              | 243<br>199 | 15.9<br>15.8 | 15.9          | 7.7        | 7.7     | 32.3<br>32.3 | 32.3     | 97.4<br>99.1 | 97.4             | 7.9<br>8.1          | 8.4<br>8.9 | 8.7  | 10<br>11         | 11           | 84<br>85          | 84 | 819576                | 805048                | <0.2<br><0.2<br><0.2 | 1.0<br>1.0<br>0.9 |
|               |             |            |          |           | Bottom         | 6.9          | 0.5              | 204        | 15.8         | 15.8          | 7.7        | 7.7     | 32.4         | 32.4     | 99.1         | 99.1             | 8.1 8.1             | 8.9        |      | 11               |              | 85                |    |                       |                       | <0.2                 | 1.0               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.7<br>0.8       | 232<br>245 | 16.3<br>16.3 | 16.3          | 7.7        | 7.7     | 31.3<br>31.3 | 31.3     | 96.8<br>96.8 | 96.8             | 7.9<br>7.9<br>7.9   | 4.4<br>4.5 | -    | 10<br>11         |              | 80<br>80          |    |                       |                       | <0.2<br><0.2         | 0.9 0.8           |
| IM5           | Sunny       | Rough      | 14:00    | 6.9       | Middle         | 3.5<br>3.5   | 0.6              | 213<br>217 | 16.2<br>16.2 | 16.2          | 7.7        | 7.7     | 31.4<br>31.5 | 31.5     | 97.1<br>97.1 | 97.1             | 7.9<br>7.9          | 6.9<br>6.9 | 6.5  | 11<br>11         | 11           | 81<br>81          | 81 | 820575                | 804914                | <0.2<br><0.2 <0.2    | 1.0<br>1.1        |
|               |             |            |          |           | Bottom         | 5.9<br>5.9   | 0.6<br>0.6       | 205<br>215 | 16.0<br>16.0 | 16.0          | 7.7        | 7.7     | 31.9<br>31.9 |          | 97.7<br>97.8 | 97.8             | 7.9<br>7.9<br>7.9   | 8.0<br>8.1 | -    | 12<br>12         |              | 81<br>82          |    |                       |                       | <0.2<br><0.2         | 1.3<br>1.2        |
|               |             |            |          |           | Surface        | 1.0          | 0.4              | 236        | 16.4         | 16.4          | 7.7        | 7.7     | 30.9         | 30.9     | 95.2         | 95.2             | 7.7                 | 4.9        |      | 6                | <del> </del> | 80                |    |                       |                       | <0.2                 | 1.6               |
| IM6           | Sunny       | Rough      | 13:52    | 6.2       | Middle         | 1.0<br>3.1   | 0.4<br>0.4       | 254<br>234 | 16.4<br>16.3 | 16.3          | 7.7<br>7.7 | 7.7     | 30.9<br>31.1 | 31.1     | 95.2<br>96.1 | 96.1             | 7.7<br>7.8<br>7.8   | 4.9<br>7.1 | 6.1  | 6<br>5           | 6            | 81<br>81          | 81 | 821052                | 805828                | <0.2<br><0.2<br><0.2 | 1.4<br>1.6<br>1.5 |
| inio          | Cunny       | riougn     | 10.52    | 0.2       |                | 3.1<br>5.2   | 0.4              | 246<br>226 | 16.3<br>16.1 |               | 7.7        |         | 31.1<br>31.6 |          | 96.1<br>96.9 |                  | 7.8<br>7.9 7.0      | 7.2<br>6.4 | 0.1  | 4 7              | Ĭ            | 81<br>82          | 01 | 021002                | 000020                | <0.2<br><0.2         | 1.5<br>1.3        |
|               |             |            |          |           | Bottom         | 5.2<br>1.0   | 0.4              | 236<br>237 | 16.1<br>16.4 | 16.1          | 7.7        | 7.7     | 31.6<br>30.9 |          | 97.0<br>94.2 | 97.0             | 7.9<br>7.9<br>7.6   | 6.2<br>3.8 |      | 6<br>6           | <u> </u>     | 82<br>82          |    |                       |                       | <0.2<br><0.2         | 1.6<br>1.4        |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 260        | 16.4         | 16.4          | 7.6        | 7.6     | 30.9         |          | 94.2         | 94.2             | 7.6 7.7             | 3.8        | ļ    | 5                |              | 82                |    |                       |                       | <0.2                 | 1.4               |
| IM7           | Sunny       | Rough      | 13:48    | 6.3       | Middle         | 3.2<br>3.2   | 0.4              | 229<br>233 | 16.3<br>16.3 | 16.3          | 7.6        | 7.6     | 30.9<br>30.9 |          | 94.4<br>94.4 | 94.4             | 7.7                 | 4.4        | 4.7  | 5<br>7           | 7            | 83<br>84          | 83 | 821356                | 806838                | <0.2<br><0.2<br><0.2 | 1.6               |
|               |             |            |          |           | Bottom         | 5.3<br>5.3   | 0.4              | 217<br>231 | 16.0<br>16.0 | 16.0          | 7.7        | 7.7     | 31.6<br>31.6 |          | 94.7<br>94.7 | 94.7             | 7.7 7.7             | 6.0<br>6.0 |      | 9<br>9           |              | 84<br>85          |    |                       |                       | <0.2<br><0.2         | 1.6<br>1.3        |
|               |             |            |          |           | Surface        | 1.0          | 0.4              | 230<br>242 | 19.4<br>19.4 | 19.4          | 7.9<br>7.9 | 7.9     | 28.3<br>28.3 | 28.3     | 97.2<br>97.2 | 97.2             | 7.6<br>7.6 7.0      | 6.4<br>6.4 |      | 4                | Ţ            | 77<br>77          |    |                       |                       | <0.2<br><0.2         | 1.4               |
| IM8           | Cloudy      | Moderate   | 14:27    | 8.4       | Middle         | 4.2          | 0.4              | 208        | 19.3<br>19.3 | 19.3          | 7.9        | 7.9     | 28.3<br>28.3 | 28.3     | 95.8<br>95.8 | 95.8             | 7.5<br>7.5<br>7.5   | 8.1<br>8.1 | 8.0  | 6<br>7           | 6            | 81<br>82          | 81 | 821705                | 807833                | <0.2<br><0.2<br><0.2 | 13                |
|               |             |            |          |           | Bottom         | 7.4          | 0.4              | 217<br>189 | 19.2         | 19.2          | 7.9        | 7.9     | 28.4         | 28.4     | 95.6         | 95.6             | 7.5 7.5             | 9.5        | ŀ    | 6                | ↓            | 84                |    |                       |                       | <0.2                 | 1.5               |
| DA: Dopth Avo |             |            |          |           |                | 7.4          | 0.3              | 200        | 19.2         |               | 7.9        |         | 28.4         |          | 95.6         |                  | 7.5                 | 9.4        |      | 6                |              | 84                |    | ]                     |                       | <0.2                 | 1.3               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on07 February 17during 07 February 17 during Mid-Flood Tide

| Water Qua             | lity Monit | oring Resu | ilts on  |           | 07 February 17    | during Mid-              | Flood I                  | ide                      |                              |              |                          |         |                              |              |                              |                  |                             |                          |      |                    |      |                   |    |                       |                       |                              |                          |
|-----------------------|------------|------------|----------|-----------|-------------------|--------------------------|--------------------------|--------------------------|------------------------------|--------------|--------------------------|---------|------------------------------|--------------|------------------------------|------------------|-----------------------------|--------------------------|------|--------------------|------|-------------------|----|-----------------------|-----------------------|------------------------------|--------------------------|
| Monitoring<br>Station | Weather    | Sea        | Sampling | Water     | Sampling Dep      | th (m)                   | Current<br>Speed         | Current<br>Direction     | Water Tem                    | perature (°C | C) p                     | н       | Salin                        | ity (ppt)    | (                            | aturation<br>(%) | Dissolved<br>Oxygen         | I urbidity               | NTU) | Suspendeo<br>(mg/l |      | Total Alk<br>(ppn | n) | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)            |
| Station               | Condition  | Condition  | Time     | Depth (m) |                   |                          | (m/s)                    |                          | Value                        | Average      | Value                    | Average | Value                        | Average      |                              | Average          | Value DA                    | Value                    | DA   | Value              | DA   | Value             | DA | (Northing)            | (Easting)             | Value DA                     | Value DA                 |
| IM9                   | Claudu     | Madarata   | 14:37    | 7.9       | Surface           | 1.0<br>1.0<br>4.0        | 0.7<br>0.7<br>0.6        | 254<br>267<br>255        | 19.5<br>19.5<br>19.4         | 19.5<br>19.4 | 7.9<br>7.9<br>7.9        |         | 28.3<br>28.3<br>28.4         | 28.3<br>28.4 | 98.0<br>98.0<br>96.5         | 98.0<br>96.5     | 7.6<br>7.6<br>7.5<br>7.6    | 6.2<br>6.2<br>8.0        | 8.1  | 2<br>3<br>4        | 4    | 78<br>78<br>82    | 81 | 822098                | 808825                | <0.2<br><0.2<br><0.2         | 1.2<br>1.2<br>1.4<br>1.3 |
| 1019                  | Cloudy     | Moderate   | 14.57    | 7.9       | Bottom            | 4.0<br>6.9<br>6.9        | 0.6<br>0.5<br>0.5        | 267<br>212<br>213        | 19.4<br>19.2<br>19.2         | 19.4         | 7.9<br>7.9<br>7.9        | 7.0     | 28.4<br>28.6<br>28.6         | 28.6         | 96.5<br>96.6<br>96.6         | 96.6             | 7.5<br>7.5<br>7.5           | 8.0<br>10.1<br>10.1      | 0.1  | 5<br>5<br>3        | 4    | 81<br>83<br>84    | 01 | 822098                | 000023                | <0.2<br><0.2<br><0.2<br><0.2 | 1.2<br>1.3<br>1.5        |
|                       |            |            |          |           | Surface           | 1.0<br>1.0<br>4.3        | 0.4<br>0.5<br>0.4        | 259<br>273<br>252        | 19.5<br>19.5                 | 19.5         | 7.9<br>7.9               | 7.9     | 28.4<br>28.4<br>28.8         | 28.4         | 95.8<br>95.8<br>94.8         | 95.8             | 7.4<br>7.4<br>7.4<br>7.4    | 6.4                      |      | 6<br>5<br>8        |      | 77<br>78          |    |                       |                       | <0.2<br><0.2                 | 1.3<br>1.3<br>1.3<br>1.3 |
| IM10                  | Cloudy     | Moderate   | 14:43    | 8.5       | Middle            | 4.3<br>7.5               | 0.4<br>0.4               | 257<br>251               | 19.3<br>19.3<br>19.2         | 19.3<br>19.2 | 7.9<br>7.9<br>7.9        | 7.9     | 28.8<br>28.8                 | 28.8<br>28.8 | 94.8<br>95.7                 | 94.8<br>95.7     | 7.4<br>7.4                  | 7.6<br>9.7               | 7.9  | 6<br>6             | 6    | 81<br>82<br>84    | 81 | 822257                | 809848                | <0.2<br><0.2<br><0.2         | 1.3<br>1.2               |
|                       |            |            |          |           | Surface           | 7.5<br>1.0<br>1.0        | 0.4<br>0.5<br>0.5        | 253<br>280<br>302        | 19.2<br>19.2<br>19.2         | 19.2         | 7.9<br>7.9<br>7.9        | 7.0     | 28.8<br>29.0<br>29.0         | 29.0         | 95.7<br>94.9<br>94.9         | 94.9             | 7.4<br>7.4<br>7.4           | 9.7<br>7.7<br>7.7        |      | 6<br>6<br>6        |      | 84<br>77<br>78    |    |                       |                       | <0.2<br><0.2<br><0.2         | 1.1<br>1.0<br>1.0        |
| IM11                  | Cloudy     | Moderate   | 14:51    | 8.8       | Middle            | 4.4<br>4.4               | 0.4<br>0.4               | 259<br>278               | 19.2<br>19.2                 | 19.2         | 7.9<br>7.9               | 7.9     | 29.0<br>29.0                 | 29.0         | 94.9<br>94.9                 | 94.9             | 7.4<br>7.4                  | 8.0<br>8.0               | 8.3  | 8<br>6             | 7    | 82<br>81          | 81 | 821499                | 810540                | <0.2<br><0.2 <0.2            | 1.1<br>0.9               |
|                       |            |            |          |           | Bottom            | 7.8<br>7.8<br>1.0        | 0.4<br>0.4<br>0.4        | 263<br>272<br>247        | 19.1<br>19.1<br>19.2         | 19.1         | 7.9<br>7.9<br>7.9        | 7.9     | 29.0<br>29.0<br>29.0         |              | 96.3<br>96.3<br>93.8         | 96.3             | 7.5<br>7.5<br>7.3           | 9.1<br>7.5               |      | 6<br>8<br>5        |      | 84<br>84<br>77    |    |                       |                       | <0.2<br><0.2<br><0.2         | 1.0<br>1.1<br>0.9        |
| IM12                  | Cloudy     | Moderate   | 15:01    | 9.0       | Surface<br>Middle | 1.0<br>4.5<br>4.5        | 0.5<br>0.4<br>0.5        | 256<br>243<br>255        | 19.2<br>19.2<br>19.2         | 19.2<br>19.2 | 7.9<br>7.9<br>7.9        | 7.9     | 29.0<br>29.0<br>29.0         | 29.0<br>29.0 | 93.8<br>93.5<br>93.5         | 93.8<br>93.5     | 7.3<br>7.3<br>7.3           | 7.5<br>9.0<br>9.0        | 9.3  | 4<br>6<br>5        | 5    | 78<br>82<br>81    | 81 | 821171                | 811519                | <0.2<br><0.2<br><0.2<br><0.2 | 0.9<br>0.9<br>1.1<br>1.0 |
|                       |            |            |          |           | Bottom            | 8.0<br>8.0<br>1.0        | 0.4<br>0.4<br>0.2        | 238<br>261<br>171        | 19.2<br>19.2<br>19.2         | 19.2         | 7.9<br>7.9<br>7.8        | 7.9     | 29.1<br>29.1<br>29.1         | 29.1         | 93.6<br>93.6<br>97.3         | 93.6             | 7.3<br>7.3<br>7.6           | 11.3<br>11.3<br>8.5      |      | 6<br>5<br>7        |      | 84<br>84<br>80    |    |                       |                       | <0.2<br><0.2<br><0.2         | 1.0<br>1.1<br>1.0        |
| SR2                   | Cloudy     | Moderate   | 15:24    | 5.1       | Surface<br>Middle | 1.0<br>2.6<br>2.6        | 0.2<br>-<br>-            | 182<br>-<br>-            | 19.2<br>-<br>-               | - 19.2       | 7.8<br>-<br>-            | 7.8     | 29.1<br>-                    | - 29.1       | 97.3<br>-<br>-               | 97.3             | 7.6<br>- 7.6                | 85                       | 8.6  | 4<br>-<br>-        | 5    | 80<br>-<br>-      | 82 | 821470                | 814170                | <0.2<br>- <0.2               | 1.3                      |
|                       |            |            |          |           | Bottom            | 4.1<br>4.1<br>1.0        | 0.2<br>0.2<br>0.4        | 159<br>173<br>219        | 19.2<br>19.2<br>19.4         | 19.2         | 7.8                      | 7.8     | 29.1<br>29.1                 | 29.1         | 99.3<br>99.3                 | 99.3             | 7.7 7.7                     | 8.6                      |      | 4<br>5<br>4        |      | 85<br>84          |    |                       |                       | <0.2<br><0.2                 | 1.0<br>1.0               |
| SR3                   | Cloudy     | Moderate   | 14:22    | 9.2       | Surface<br>Middle | 1.0<br>1.0<br>4.6<br>4.6 | 0.4<br>0.5<br>0.4<br>0.4 | 213<br>238<br>213<br>224 | 19.4<br>19.4<br>19.2<br>19.2 | 19.4<br>19.2 | 7.9<br>7.9<br>7.8<br>7.8 | 7.9     | 27.9<br>27.9<br>28.3<br>28.3 | 27.9<br>28.3 | 96.7<br>96.6<br>95.6<br>95.6 | 96.7<br>95.6     | 7.5<br>7.5<br>7.5<br>7.5    | 6.4<br>6.4<br>8.3<br>8.3 | 7.9  | 4<br>4<br>4<br>5   | 5    | -                 | -  | 822164                | 807572                | -<br>-<br>-<br>-             |                          |
|                       |            |            |          |           | Bottom            | 8.2<br>8.2               | 0.4<br>0.4               | 208<br>228               | 19.1<br>19.1                 | 19.1         | 7.8<br>7.8               | 79      | 28.5<br>28.5                 | 28.5         | 96.5<br>96.5                 | 96.5             | 7.5<br>7.5<br>7.5           | 9.1<br>9.1               | -    | 6<br>5             | -    | -                 |    |                       |                       | -                            | -                        |
| SR4A                  | Sunny      | Rough      | 15:13    | 8.4       | Surface<br>Middle | 1.0<br>1.0<br>4.2        | 0.3<br>0.3<br>0.3        | 229<br>251<br>233        | 16.1<br>16.1<br>16.1         | 16.1<br>16.1 | 7.6<br>7.6<br>7.6        | 7.0     | 32.5<br>32.5<br>32.5         | 32.5<br>32.5 | 96.7<br>96.8<br>97.3         | 96.8<br>97.3     | 7.8<br>7.8<br>7.9<br>7.9    | 12.2                     | 12.2 | 17<br>17<br>19     | 18   | -                 | -  | 817178                | 807819                | -<br>-                       | -<br>-<br>-              |
| Grint                 | Cullity    | nough      | 10.10    | 0.1       | Bottom            | 4.2<br>7.4<br>7.4        | 0.3<br>0.3<br>0.3        | 235<br>228<br>246        | 16.1<br>16.0<br>16.0         | 16.0         | 7.6<br>7.6<br>7.6        | 7.6     | 32.5<br>32.5<br>32.5         | 32.5         | 97.3<br>98.9<br>98.9         | 98.9             | 7.9<br>8.0<br>8.0<br>8.0    | 12.3<br>12.0<br>12.0     |      | 17<br>18<br>18     | -    | -                 |    | 011110                | 007010                | -                            | -                        |
|                       |            |            |          |           | Surface           | 1.0<br>1.0<br>2.8        | 0.3<br>0.3               | 223<br>229               | 16.1<br>16.1                 | 16.1         | 7.6<br>7.6               | 7.6     | 32.5<br>32.5<br>-            | 32.5         | 98.2<br>98.2                 | 98.2             | 7.9<br>7.9<br>- 7.9         | 9.4<br>9.5               |      | 12<br>12<br>-      | -    | -                 |    |                       |                       | -                            | -                        |
| SR5A                  | Sunny      | Moderate   | 15:33    | 5.6       | Bottom            | 2.8<br>4.6<br>4.6        | -<br>0.3<br>0.3          | -<br>211<br>226          | -<br>16.0<br>16.0            | - 16.0       | -<br>7.6<br>7.6          |         | -<br>32.5<br>32.5            | 32.5         | -<br>99.3<br>99.3            | 99.3             | -<br>8.0<br>8.0             | -<br>9.6<br>9.6          | 9.5  | -<br>16<br>15      | 14   | -                 | -  | 816575                | 810679                |                              |                          |
|                       |            |            |          |           | Surface           | 1.0<br>1.0               | 0.2<br>0.2               | 155<br>159               | 16.1<br>16.1                 | 16.1         | 7.6<br>7.6               | 7.6     | 33.1<br>33.1                 | 33.1         | 95.3<br>95.3                 | 95.3             | 7.7<br>7.7<br>7.7           | 6.6<br>, 6.6             |      | 10<br>8            |      | -                 |    |                       |                       | -                            | -                        |
| SR6                   | Sunny      | Moderate   | 16:04    | 4.8       | Middle            | 2.4<br>2.4<br>3.8        | - 0.2                    | -<br>-<br>158            | - 16.1                       | - 16.1       | - 7.6                    |         | - 33.1                       | -<br>33.1    | -<br>-<br>97.0               | -<br>97.1        | -<br>-<br>7.8<br>7.8<br>7.8 | -<br>-<br>6.9            | 6.8  | - 10               | 10   | -                 | -  | 817899                | 814681                | -<br>-                       | -<br>-<br>-              |
| <u> </u>              |            |            |          |           | Surface           | 3.8<br>1.0<br>1.0        | 0.2<br>0.3<br>0.3        | 159<br>283<br>288        | 16.1<br>18.9<br>18.9         | 18.9         | 7.6<br>7.8<br>7.8        | 7.8     | 33.1<br>30.1<br>30.1         | 30.1         | 97.1<br>90.1<br>90.1         | 90.1             | 7.8                         | 6.9<br>4.5<br>4.5        |      | 10<br>4<br>3       | <br> | -                 |    |                       |                       | -                            | -                        |
| SR7                   | Cloudy     | Moderate   | 16:22    | 16.5      | Middle            | 8.3<br>8.3<br>15.5       | 0.3<br>0.4<br>0.3        | 287<br>303<br>290        | 18.9<br>18.9<br>18.8         | 18.9         | 7.8<br>7.8<br>7.8        | 7.8     | 30.1<br>30.1<br>30.1         | 30.1         | 90.2<br>90.2<br>91.5         | 90.2             | 7.0<br>7.0<br>7.1<br>7.1    | 4.8<br>4.8<br>5.0        | 4.8  | 4<br>5<br>5        | 5    | -                 | -  | 823644                | 823735                |                              |                          |
|                       |            |            |          |           | Bottom<br>Surface | 15.5<br>1.0<br>1.0       | 0.3<br>0.5<br>0.5        | 297<br>207<br>221        | 18.8<br>19.2<br>19.2         | 18.8<br>19.2 | 7.8<br>7.8<br>7.8        | 7.8     | 30.1<br>29.0<br>29.0         | 30.1<br>29.0 | 91.5<br>96.4<br>96.4         | 91.5<br>96.4     | 7.1 7.1 7.5                 | 5.0<br>11.1              |      | 6<br>11<br>12      |      | -                 |    |                       |                       | -                            | -                        |
| SR8                   | Cloudy     | Moderate   | 15:09    | 5.4       | Middle            | 2.7<br>2.7               | -                        | -                        | -                            | -            | -                        |         | -                            | -            | -                            | -                | - 7.5                       | ' -<br>-                 | 11.2 | -                  | 11   | -                 | -  | 820410                | 811591                |                              |                          |
| DA: Denth-Aver        |            |            |          |           | Bottom            | 4.4                      | 0.4                      | 204<br>211               | 19.1<br>19.1                 | 19.1         | 7.8<br>7.8               |         | 29.0<br>29.0                 | 29.0         | 100.3<br>100.3               | 100.3            | 7.8<br>7.8<br>7.8           | <u>11.3</u><br>11.3      | -    | 10<br>12           | -    | -                 |    |                       |                       | -                            | -                        |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on07 February 17during 07 February 17 during Mid-Ebb tide

| Water Qua     | ility Monit | oring Res | ults on  |           | 07 February 17 | during Mid   |                  |            |              |                | -          |         | -            |          |              |                  |                          |              |      |                  |    |                   |    |                       |                       |                      |                   |
|---------------|-------------|-----------|----------|-----------|----------------|--------------|------------------|------------|--------------|----------------|------------|---------|--------------|----------|--------------|------------------|--------------------------|--------------|------|------------------|----|-------------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring    | Weather     | Sea       | Sampling | Water     | Sampling De    | epth (m)     | Current<br>Speed | Current    | Water Te     | mperature (°C) |            | pН      | Salinit      | ty (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen      | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total All<br>(ppi | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| Station       | Condition   | Condition | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average        |            | Average |              | Average  |              | Average          | Value DA                 | Value        | DA   | Value            | DA | Value             | DA | (Northing)            | (Easting)             | Value DA             |                   |
|               |             |           |          |           | Surface        | 1.0<br>1.0   | 0.8              | 209<br>210 | 15.3<br>15.3 | 15.3           | 7.8<br>7.8 | 7.8     | 32.8<br>32.8 | 32.8     | 96.5<br>96.5 | 96.5             | 7.9<br>7.9               | 11.3<br>11.3 | -    | 14<br>14         |    | 83<br>83          |    |                       |                       | <0.2<br><0.2         | 0.6               |
| C1            | Cloudy      | Rough     | 10:14    | 7.8       | Middle         | 3.9<br>3.9   | 0.7<br>0.8       | 206<br>220 | 15.3<br>15.3 | 15.3           | 7.8<br>7.8 | 7.8     | 32.8<br>32.8 | 32.8     | 96.3<br>96.3 | 96.3             | 7.9<br>7.9<br>7.9        | 11.6<br>11.6 | 11.6 | 16<br>15         | 17 | 83<br>83          | 83 | 815605                | 804265                | <0.2<br><0.2 <0.2    | 0.5 0.5           |
|               |             |           |          |           | Bottom         | 6.8          | 0.7              | 192        | 15.3         | 15.3           | 7.8<br>7.8 | 7.8     | 32.7         | 32.7     | 96.2         | 96.2             | 7.9 7.9                  | 11.8         | -    | 22               |    | 84                |    |                       |                       | <0.2                 | 0.6               |
|               |             |           |          |           | Surface        | 6.8<br>1.0   | 0.8              | 204<br>227 | 15.3<br>19.3 | 19.3           | 7.8        | 7.8     | 32.7<br>26.8 | 26.8     | 96.2<br>94.8 | 94.8             | 7.9<br>7.5               | 11.8<br>6.4  |      | 20<br>6          |    | 84<br>79          |    |                       |                       | <0.2<br><0.2         | 1.6               |
|               |             |           |          |           |                | 1.0<br>6.2   | 0.8              | 244<br>192 | 19.3<br>19.3 |                | 7.8<br>7.8 |         | 26.8<br>28.8 |          | 94.8<br>90.6 |                  | 7.5<br>7.0<br>7.3        | 6.4<br>8.2   |      | 5<br>12          |    | 78<br>82          |    |                       |                       | <0.2<br><0.2         | 1.6<br>2.0        |
| C2            | Cloudy      | Rough     | 11:20    | 12.3      | Middle         | 6.2<br>11.3  | 0.6<br>0.5       | 195<br>160 | 19.3<br>19.3 | 19.3           | 7.8        | 7.8     | 28.8<br>28.9 | 28.8     | 90.6<br>91.0 | 90.6             | 7.0<br>7.1               | 8.2<br>8.3   | 7.6  | 12<br>11         | 10 | 81<br>84          | 81 | 825681                | 806925                | <0.2<br><0.2<br><0.2 | 1.8 1.8 1.8       |
|               |             |           |          |           | Bottom         | 11.3         | 0.5              | 168        | 19.3         | 19.3           | 7.8<br>7.8 | 7.8     | 28.9         | 28.9     | 91.0         | 91.0             | 7.1                      | 8.3          |      | 11               |    | 84                |    |                       |                       | <0.2                 | 1.9               |
|               |             |           |          |           | Surface        | 1.0<br>1.0   | 0.4              | 152<br>155 | 18.9<br>18.9 | 18.9           | 7.9<br>7.9 | 7.9     | 29.9<br>29.9 | 29.9     | 89.7<br>89.7 | 89.7             | 7.0 7.0 7.0              | 5.2<br>5.1   | -    | 7<br>6           |    | 80<br>79          |    |                       |                       | <0.2<br><0.2         | 0.7               |
| C3            | Cloudy      | Moderate  | 09:18    | 12.2      | Middle         | 6.1<br>6.1   | 0.4              | 132<br>142 | 18.9<br>18.9 | 18.9           | 7.8        | 7.8     | 29.9<br>29.9 | 29.9     | 89.4<br>89.4 | 89.4             | 7.0<br>7.0               | 5.5<br>5.5   | 5.4  | 8                | 8  | 82<br>81          | 82 | 822118                | 817816                | <0.2<br><0.2 <0.2    | 1.2<br>0.8<br>1.0 |
|               |             |           |          |           | Bottom         | 11.2<br>11.2 | 0.5              | 125<br>133 | 18.9<br>18.9 | 18.9           | 7.8<br>7.8 | 7.8     | 30.0<br>30.0 | 30.0     | 89.8<br>89.8 | 89.8             | 7.0<br>7.0<br>7.0        | 5.4<br>5.4   | -    | 12<br>10         |    | 83<br>84          |    |                       |                       | <0.2<br><0.2         | 0.9               |
|               |             |           |          |           | Surface        | 1.0          | 0.3              | 191        | 15.8         | 15.8           | 7.8        | 7.8     | 31.8         | 31.8     | 95.0         | 95.0             | 7.8                      | 5.9          |      | 8                |    | 81                |    |                       |                       | <0.2                 | 1.2               |
| IM1           | Cloudy      | Rough     | 10:38    | 7.5       | Middle         | 1.0<br>3.8   | 0.3              | 202<br>186 | 15.8<br>15.8 | 15.8           | 7.8<br>7.7 | 7.7     | 31.8<br>31.9 | 31.9     | 95.0<br>95.0 | 95.0             | 7.8<br>7.8<br>7.8        | 5.9<br>6.5   | 6.3  | 8<br>10          | 9  | 82<br>82          | 82 | 818348                | 806455                | <0.2<br><0.2<br><0.2 | 1.4<br>1.0<br>1.1 |
|               | Cloudy      | Hough     | 10.56    | 7.5       |                | 3.8<br>6.5   | 0.3              | 201<br>168 | 15.8<br>15.7 |                | 7.7<br>7.7 |         | 31.9<br>31.9 |          | 95.0<br>95.7 |                  | 7.8<br>7.8 7.9           | 6.5<br>6.4   | 0.5  | 10<br>10         | 5  | 82<br>83          | 02 | 010340                | 800433                | <0.2<br><0.2         | 1.0<br>1.0        |
|               |             |           |          |           | Bottom         | 6.5          | 0.3              | 174<br>190 | 15.7         | 15.7           | 7.7        | 7.7     | 31.9<br>31.9 | 31.9     | 95.8         | 95.8             | 7.8<br>7.8<br>7.8        | 6.4<br>5.9   |      | 10<br>10         |    | 83<br>80          |    |                       |                       | <0.2                 | 0.9               |
|               |             |           |          |           | Surface        | 1.0          | 0.3              | 208        | 15.8<br>15.8 | 15.8           | 7.8<br>7.8 | 7.8     | 31.9         | 31.9     | 95.2<br>95.2 | 95.2             | 7.8 7.8                  | 5.9          | Ē    | 11               |    | 81                |    |                       |                       | <0.2<br><0.2         | 0.8               |
| IM2           | Cloudy      | Rough     | 10:46    | 7.4       | Middle         | 3.7<br>3.7   | 0.3<br>0.3       | 184<br>197 | 15.8<br>15.8 | 15.8           | 7.8<br>7.8 | 7.8     | 31.9<br>31.9 | 31.9     | 95.5<br>95.5 | 95.5             | 7.8<br>7.8               | 6.0<br>6.0   | 6.1  | 11<br>9          | 10 | 82<br>82          | 82 | 818855                | 806173                | <0.2<br><0.2 <0.2    | 1.2               |
|               |             |           |          |           | Bottom         | 6.4<br>6.4   | 0.2              | 178<br>180 | 15.7<br>15.7 | 15.7           | 7.8        | 7.8     | 31.9<br>31.9 | 31.9     | 96.1<br>96.2 | 96.2             | 7.8 7.9                  | 6.4<br>6.4   | -    | 11<br>10         |    | 84<br>83          |    |                       |                       | <0.2<br><0.2         | 0.9               |
|               |             |           |          |           | Surface        | 1.0          | 0.5<br>0.5       | 223<br>227 | 15.8<br>15.8 | 15.8           | 7.8<br>7.8 | 7.8     | 32.0<br>32.0 | 32.0     | 95.8<br>95.8 | 95.8             | 7.8<br>7.8 7.0           | 6.3<br>6.2   |      | 9<br>10          |    | 82<br>82          |    |                       |                       | <0.2<br><0.2         | 1.1<br>1.2        |
| IM3           | Cloudy      | Rough     | 10:58    | 8.3       | Middle         | 4.2          | 0.4              | 219        | 15.8         | 15.8           | 7.8        | 7.8     | 32.0         | 32.0     | 96.1         | 96.1             | 7.8                      | 6.5          | 6.5  | 12               | 11 | 83                | 83 | 819425                | 806000                | <0.2                 | 1.1 1.1           |
|               |             |           |          |           | Bottom         | 4.2<br>7.3   | 0.5<br>0.5       | 226<br>204 | 15.8<br>15.8 | 15.8           | 7.8<br>7.8 | 7.8     | 32.0<br>32.0 | 32.0     | 96.1<br>97.0 | 97.0             | 7.8<br>7.9<br>7.9        | 6.5<br>6.9   | Ē    | 10<br>12         |    | 83<br>84          |    |                       |                       | <0.2<br><0.2         | 1.0<br>0.9        |
|               |             |           |          |           |                | 7.3          | 0.5              | 216<br>223 | 15.8<br>15.8 |                | 7.8<br>7.8 |         | 31.9<br>32.1 |          | 97.0<br>96.6 |                  | 7.9<br>7.9               | 6.8<br>9.6   |      | 12<br>14         |    | 84<br>82          |    |                       |                       | <0.2<br><0.2         | 1.2<br>0.9        |
|               |             |           |          |           | Surface        | 1.0<br>3.9   | 0.8              | 226<br>219 | 15.8<br>15.8 | 15.8           | 7.8<br>7.8 | 7.8     | 32.1<br>32.1 | 32.1     | 96.6<br>96.8 | 96.6             | 7.9<br>7.9<br>7.9        | 9.6<br>9.8   | -    | 13<br>14         |    | 82<br>83          |    |                       |                       | <0.2                 | 1.0               |
| IM4           | Cloudy      | Rough     | 11:06    | 7.8       | Middle         | 3.9<br>6.8   | 0.8              | 223<br>211 | 15.8<br>15.8 | 15.8           | 7.8        | 7.8     | 32.1<br>32.0 | 32.1     | 96.8<br>97.2 | 96.8             | 7.9<br>7.9<br>7.9        | 9.9<br>10.0  | 9.8  | 15<br>15         | 14 | 83<br>84          | 83 | 819565                | 805031                | <0.2<br><0.2<br><0.2 | 1.0<br>1.2        |
|               |             |           |          |           | Bottom         | 6.8          | 1.1              | 224        | 15.8         | 15.8           | 7.8<br>7.8 | 7.8     | 32.0         | 32.0     | 97.2         | 97.2             | 7.9                      | 10.0         | -    | 15               |    | 84                |    |                       |                       | <0.2                 | 0.9               |
|               |             |           |          |           | Surface        | 1.0<br>1.0   | 0.7              | 214<br>228 | 16.0<br>16.0 | 16.0           | 7.7<br>7.7 | 7.7     | 31.5<br>31.5 | 31.5     | 96.2<br>96.2 | 96.2             | 7.8 7.8 7.9              | 5.5<br>5.5   |      | 11<br>10         |    | 80<br>81          |    |                       |                       | <0.2<br><0.2         | 1.3<br>1.1        |
| IM5           | Cloudy      | Rough     | 11:14    | 7.0       | Middle         | 3.5<br>3.5   | 0.6              | 223<br>237 | 16.0<br>16.0 | 16.0           | 7.7        | 7.7     | 31.5<br>31.5 | 31.5     | 96.6<br>96.6 | 96.6             | 7.9<br>7.9               | 6.0<br>6.1   | 6.6  | 11<br>10         | 11 | 81<br>81          | 81 | 820568                | 804919                | <0.2<br><0.2 <0.2    | 1.1<br>1.1        |
|               |             |           |          |           | Bottom         | 6.0<br>6.0   | 0.6<br>0.6       | 202<br>222 | 15.9<br>15.9 | 15.9           | 7.7<br>7.7 |         | 31.6<br>31.6 | 31.6     | 97.6<br>97.6 | 97.6             | 8.0<br>8.0<br>8.0        | 8.1<br>8.1   | F    | 12<br>11         |    | 82<br>82          |    |                       |                       | <0.2<br><0.2         | 1.2<br>0.8        |
|               |             |           |          |           | Surface        | 1.0          | 0.8              | 206        | 16.3<br>16.3 | 16.3           | 7.7        |         | 30.8<br>30.8 | 30.8     | 95.2<br>95.3 | 95.3             | 7.8                      | 4.5          |      | 9                |    | 82<br>82          |    |                       |                       | <0.2                 | 1.3<br>1.5        |
| IM6           | Cloudy      | Rough     | 11:24    | 6.8       | Middle         | 1.0<br>3.4   | 0.9<br>0.7       | 214<br>197 | 16.2         | 16.2           | 7.7        | 7.7     | 30.9         | 30.9     | 95.9         | 96.0             | 7.8<br>7.8<br>7.8        | 4.5<br>5.7   | 5.4  | 8<br>9           | 9  | 83                | 83 | 821059                | 805840                | <0.2<br><0.2<br><0.2 | 1.4               |
|               | ,           |           |          |           |                | 3.4 5.8      | 0.7              | 208<br>188 | 16.2<br>16.0 |                | 7.7<br>7.7 | 7.7     | 30.9<br>31.5 | 31.5     | 96.0<br>97.3 | 97.3             | 7.8<br>7.9<br>7.9<br>7.9 | 5.7<br>5.9   |      | 8<br>10          | -  | 83<br>84          |    |                       |                       | <0.2<br><0.2         | 1.4<br>1.3        |
|               |             |           |          |           | Bottom         | 5.8<br>1.0   | 0.8              | 195<br>226 | 16.0<br>16.3 | 16.0           | 7.7<br>7.7 | 1       | 31.5<br>30.8 |          | 97.3<br>95.7 |                  | 7.9<br>7.8               | 5.8<br>3.6   |      | 10<br>8          |    | 84<br>83          |    |                       |                       | <0.2<br><0.2         | 1.1               |
|               |             |           |          |           | Surface        | 1.0          | 0.4              | 234<br>210 | 16.3<br>16.2 | 16.3           | 7.7        | 7.7     | 30.8         | 30.8     | 95.8         | 95.8             | 7.8<br>7.8<br>7.8        | 3.6<br>4.8   | F    | 7 8              |    | 83                |    |                       |                       | <0.2                 | 1.3               |
| IM7           | Cloudy      | Rough     | 11:33    | 7.6       | Middle         | 3.8          | 0.4              | 211        | 16.2         | 16.2           | 7.7        | 7.7     | 31.0<br>31.1 | 31.1     | 96.5<br>96.5 | 96.5             | 7.8                      | 4.9          | 4.9  | 8                | 8  | 84<br>84          | 84 | 821344                | 806816                | <0.2<br><0.2<br><0.2 | 1.3               |
|               |             |           |          |           | Bottom         | 6.6<br>6.6   | 0.3              | 203<br>223 | 15.9<br>16.0 | 16.0           | 7.7<br>7.7 | 7.7     | 31.8<br>31.8 | 31.8     | 97.0<br>97.1 | 97.1             | 7.9<br>7.9<br>7.9        | 6.2<br>6.2   |      | 8<br>9           |    | 85<br>85          |    |                       |                       | <0.2<br><0.2         | 1.2<br>1.5        |
|               |             |           |          |           | Surface        | 1.0<br>1.0   | 0.9              | 220<br>228 | 19.1<br>19.1 | 19.1           | 7.9<br>7.9 | 7.9     | 28.4<br>28.4 | 28.4     | 96.9<br>96.9 | 96.9             | 7.6                      | 7.0<br>7.0   |      | 6<br>7           |    | 77<br>78          |    |                       |                       | <0.2<br><0.2         | 1.3<br>1.2        |
| IM8           | Cloudy      | Rough     | 10:45    | 8.1       | Middle         | 4.1          | 0.7              | 216<br>224 | 19.1<br>19.1 | 19.1           | 7.9<br>7.9 | 7.9     | 28.5<br>28.5 | 28.5     | 97.2<br>97.2 | 97.2             | 7.6<br>7.6<br>7.6        | 7.4          | 7.4  | 5                | 7  | 81<br>81          | 81 | 821695                | 807841                | <0.2<br><0.2<br><0.2 | 13                |
|               |             |           |          |           | Bottom         | 7.1          | 0.7              | 193        | 19.0         | 19.0           | 7.9        | 7.9     | 28.5         | 28.5     | 97.8         | 97.8             | 7.7 7.7                  | 7.7          | ŀ    | 11               |    | 84                |    |                       |                       | <0.2                 | 1.1               |
| DA: Depth-Ave | 1 . 1       |           |          |           |                | 7.1          | 0.8              | 209        | 19.0         |                | 7.9        | 1       | 28.5         |          | 97.8         |                  | 7.7                      | 7.7          |      | 9                |    | 83                |    |                       |                       | <0.2                 | 1.3               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on07 February 17during 07 February 17 during Mid-Ebb tide

| Water Qua      | lity Monito | oring Resi | lits on  |           | 07 February 17 | during Mid  |                  |            |              |               |            |         |              |         |              |                  |                     |              |      |                  |    |                 |    |                       |                       |                    |                   |
|----------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|--------------|------------------|---------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|--------------------|-------------------|
| Monitoring     | Weather     | Sea        | Sampling | Water     | Sampling Dep   | th (m)      | Current<br>Speed | Current    | Water Ter    | mperature (°C | C)         | рН      | Salinit      | y (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity    | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L) | Nickel (µg/L)     |
| Station        | Condition   | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average | Value        | Average          | Value DA            | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA           | Value DA          |
|                |             |            |          |           | Surface        | 1.0         | 0.6              | 200<br>214 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.3<br>28.3 | 28.3    | 95.6<br>95.6 | 95.6             | 7.5<br>7.5          | 7.4<br>7.4   | -    | 5<br>5           |    | 79<br>78        |    |                       |                       | <0.2<br><0.2       | 1.3<br>1.3        |
| IM9            | Cloudy      | Rough      | 10:37    | 7.1       | Middle         | 3.6         | 0.7              | 191        | 19.2         | 19.2          | 7.9        | 7.9     | 28.3         | 28.3    | 95.6         | 95.6             | 7.5                 | 7.6          | 8.6  | 6                | 6  | 82              | 82 | 822080                | 808800                | <0.2               | 1.2 1.3           |
|                |             |            |          |           |                | 3.6<br>6.1  | 0.8              | 191<br>186 | 19.2<br>19.1 |               | 7.9<br>7.8 |         | 28.3<br>28.6 |         | 95.6<br>96.8 |                  | 7.5<br>7.6 7.0      | 7.6<br>10.7  |      | 5<br>8           | -  | 82<br>84        |    |                       |                       | <0.2               | 1.4               |
|                |             |            |          |           | Bottom         | 6.1         | 0.8              | 189        | 19.1         | 19.1          | 7.8        | 7.8     | 28.6         | 28.6    | 96.8         | 96.8             | 7.6                 | 10.7         |      | 6                |    | 84              |    |                       |                       | <0.2               | 1.2               |
|                |             |            |          |           | Surface        | 1.0         | 0.9              | 195<br>206 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 | 7.9     | 28.4<br>28.4 | 28.4    | 96.1<br>96.1 | 96.1             | 7.5<br>7.5<br>7.5   | 6.8<br>6.8   | ŀ    | 5<br>4           |    | 79<br>78        |    |                       |                       | <0.2<br><0.2       | 1.2<br>1.2        |
| IM10           | Cloudy      | Rough      | 10:29    | 7.5       | Middle         | 3.8<br>3.8  | 0.9              | 188<br>194 | 19.1<br>19.1 | 19.1          | 7.9<br>7.9 | 7.9     | 28.5<br>28.5 | 28.5    | 95.3<br>95.3 | 95.3             | 7.5<br>7.5          | 8.3<br>8.4   | 8.2  | 3<br>5           | 5  | 82<br>82        | 82 | 822226                | 809847                | <0.2<br><0.2 <0.2  | 1.2<br>1.2<br>1.2 |
|                |             |            |          |           | Bottom         | 6.5         | 1.1              | 189        | 19.1         | 19.1          | 7.9        | 7.9     | 28.7         | 28.7    | 95.9         | 95.9             | 7.5 7.5             | 9.5          |      | 6                |    | 84              |    |                       |                       | <0.2               | 1.2               |
|                |             |            |          |           |                | 6.5<br>1.0  | 1.2<br>0.8       | 206<br>189 | 19.1<br>19.1 |               | 7.9<br>7.8 |         | 28.7<br>28.9 |         | 95.9<br>94.5 |                  | 7.5                 | 9.5<br>8.5   |      | 4                |    | 84<br>77        |    |                       |                       | <0.2<br><0.2       | 1.0<br>1.0        |
|                |             |            |          |           | Surface        | 1.0         | 0.9              | 198        | 19.1         | 19.1          | 7.8        | 7.8     | 28.9         | 28.9    | 94.5         | 94.5             | 7.4 7.4             | 8.5          | -    | 7                |    | 77              |    |                       |                       | <0.2               | 1.0               |
| IM11           | Cloudy      | Rough      | 10:20    | 8.9       | Middle         | 4.5<br>4.5  | 0.8              | 200<br>209 | 19.1<br>19.1 | 19.1          | 7.8<br>7.8 | 7.8     | 28.9<br>28.9 | 28.9    | 94.6<br>94.6 | 94.6             | 7.4                 | 8.8<br>8.8   | 9.0  | 7<br>7           | 7  | 81<br>82        | 81 | 821501                | 810539                | <0.2<br><0.2 <0.2  | 1.1<br>1.0        |
|                |             |            |          |           | Bottom         | 7.9         | 0.8              | 183        | 19.1         | 19.1          | 7.8        | 7.8     | 29.0         | 29.0    | 95.4         | 95.4             | 7.4 7.4             | 9.7          |      | 6                |    | 84              |    |                       |                       | <0.2               | 1.1               |
|                |             |            |          |           | Surface        | 7.9<br>1.0  | 0.9              | 193<br>206 | 19.1<br>19.1 | 19.1          | 7.8<br>7.9 | 7.9     | 29.0<br>29.0 | 29.0    | 95.4<br>93.4 | 93.4             | 7.4 7.4<br>7.3      | 9.7<br>7.4   |      | 8<br>7           |    | 84<br>78        |    |                       |                       | <0.2<br><0.2       | 1.0<br>0.8        |
|                |             |            |          |           |                | 1.0<br>4.5  | 0.9              | 213<br>165 | 19.1<br>19.1 |               | 7.9<br>7.8 |         | 29.0<br>29.0 |         | 93.4<br>93.3 |                  | 7.3<br>7.3<br>7.3   | 7.4<br>7.4   | -    | 6<br>7           |    | 77<br>81        |    |                       |                       | <0.2<br><0.2       | 0.9               |
| IM12           | Cloudy      | Rough      | 10:08    | 9.0       | Middle         | 4.5         | 0.8              | 169        | 19.1         | 19.1          | 7.8        | 7.8     | 29.0         | 29.0    | 93.3         | 93.3             | 7.3                 | 7.4          | 7.5  | 6                | 6  | 82              | 81 | 821177                | 811510                | <0.2               | 0.8               |
|                |             |            |          |           | Bottom         | 8.0<br>8.0  | 0.8              | 180<br>181 | 19.1<br>19.1 | 19.1          | 7.8        | 7.8     | 29.0<br>29.0 | 29.0    | 93.5<br>93.5 | 93.5             | 7.3 7.3             | 7.6          | -    | 6<br>6           |    | 84<br>84        |    |                       |                       | <0.2<br><0.2       | 1.0               |
|                |             |            |          |           | Surface        | 1.0         | 0.2              | 174        | 19.1         | 19.1          | 7.8        | 7.8     | 29.0         | 29.0    | 94.4         | 94.4             | 7.4                 | 7.9          |      | 8                |    | 79              |    |                       |                       | <0.2               | 1.1               |
| 000            | Olaudu      | Madausta   | 00:44    | 4.5       | Mistal -       | 1.0<br>2.3  | 0.2              | 178        | 19.1<br>-    |               | 7.8        |         | 29.0         |         | 94.4         |                  | 7.4 7.4             | 7.9          | 7.0  | 7                | 0  | 80<br>-         | 00 | 001445                | 014151                | <0.2               | 0.9               |
| SR2            | Cloudy      | Moderate   | 09:44    | 4.5       | Middle         | 2.3<br>3.5  | - 0.2            | - 130      | -<br>19.1    | -             | -          | -       | - 20.0       | -       | - 05.7       | -                | - 7.5               | -<br>7.7     | 7.8  | - 8              | 8  | -               | 82 | 821445                | 814151                | - <0.2<br><0.2     | - 1.0<br>0.9      |
|                |             |            |          |           | Bottom         | 3.5         | 0.2              | 130        | 19.1         | 19.1          | 7.8<br>7.8 | 7.8     | 29.0<br>29.0 | 29.0    | 95.7<br>95.7 | 95.7             | 7.5<br>7.5<br>7.5   | 7.7          |      | 7                |    | 85<br>84        |    |                       |                       | <0.2               | 1.1               |
|                |             |            |          |           | Surface        | 1.0         | 0.9              | 225<br>244 | 19.4<br>19.4 | 19.4          | 7.8<br>7.8 | 7.8     | 27.5<br>27.5 | 27.5    | 95.7<br>95.7 | 95.7             | 7.5<br>7.5          | 6.6<br>6.6   | -    | 5<br>7           |    | -               |    |                       |                       | -                  | -                 |
| SR3            | Cloudy      | Rough      | 10:52    | 9.0       | Middle         | 4.5         | 0.9              | 211        | 19.2         | 19.2          | 7.9        | 7.9     | 27.9         | 27.9    | 95.7         | 95.7             | 7.5                 | 6.6          | 6.7  | 7                | 7  | -               | -  | 822144                | 807587                |                    |                   |
|                |             | 5          |          |           |                | 4.5<br>8.0  | 1.0<br>0.8       | 212<br>215 | 19.2<br>19.1 |               | 7.9<br>7.9 |         | 27.9<br>28.3 |         | 95.7<br>95.6 |                  | 7.5<br>7.5          | 6.6<br>6.8   | -    | 7 8              |    | -               |    | -                     |                       | -                  | -                 |
|                |             |            |          |           | Bottom         | 8.0         | 0.9              | 223        | 19.1         | 19.1          | 7.9        | 7.9     | 28.3         | 28.3    | 95.6         | 95.6             | 7.5                 | 6.8          |      | 7                |    | -               |    |                       |                       | <u> </u>           |                   |
|                |             |            |          |           | Surface        | 1.0<br>1.0  | 0.3              | 199<br>215 | 15.7<br>15.7 | 15.7          | 7.7        | 7.7     | 30.8<br>30.8 | 30.8    | 94.7<br>94.7 | 94.7             | 7.8<br>7.8<br>7.8   | 11.4<br>11.5 | -    | 10<br>11         |    | -               |    |                       |                       | -                  | -                 |
| SR4A           | Cloudy      | Moderate   | 09:55    | 8.2       | Middle         | 4.1         | 0.3              | 186<br>201 | 15.7<br>15.7 | 15.7          | 7.7        | 7.7     | 30.8<br>30.8 | 30.8    | 94.8<br>94.8 | 94.8             | 7.8                 | 11.7<br>11.7 | 11.4 | 11<br>11         | 11 | -               | -  | 817185                | 807825                |                    |                   |
|                |             |            |          |           | Bottom         | 7.2         | 0.3              | 160        | 15.7         | 15.7          | 7.8        | 7.8     | 30.8         | 30.8    | 94.9         | 95.0             | 7.8 7.8             | 11.1         | -    | 11               |    | -               |    |                       |                       | -                  | -                 |
|                |             |            |          |           |                | 7.2         | 0.3              | 163<br>208 | 15.7<br>15.9 |               | 7.8        | 1       | 30.8<br>29.8 |         | 95.0<br>94.4 |                  | 7.8 7.8<br>7.8      | 11.2<br>7.8  |      | 12<br>8          |    | -               |    |                       |                       | -                  | -                 |
|                |             |            |          |           | Surface        | 1.0         | 0.2              | 210        | 15.9         | 15.9          | 7.7        | 7.7     | 29.8         | 29.8    | 94.4         | 94.4             | 7.8 7.8             | 7.9          |      | 6                |    | -               |    |                       |                       | -                  | -                 |
| SR5A           | Cloudy      | Moderate   | 09:37    | 4.5       | Middle         | 2.3<br>2.3  | -                | -          | -            | -             | -          | -       | -            | -       | -            | -                | -                   | -            | 8.2  | -                | 8  | -               | -  | 816604                | 810703                |                    |                   |
|                |             |            |          |           | Bottom         | 3.5<br>3.5  | 0.1              | 197<br>210 | 15.9<br>15.9 | 15.9          | 7.6<br>7.6 | 7.6     | 29.8<br>29.8 | 29.8    | 95.1<br>95.1 | 95.1             | 7.8<br>7.8<br>7.8   | 8.6<br>8.6   | -    | 8<br>10          |    | -               |    |                       |                       | -                  | -                 |
|                |             |            |          |           | Surface        | 1.0         | 0.2              | 156        | 15.8         | 15.8          | 7.4        | 7.4     | 25.0         | 25.0    | 94.7         | 94.8             | 8.1                 | 9.3          |      | 10               |    | -               |    |                       |                       | -                  | -                 |
|                |             |            |          |           |                | 1.0<br>2.1  | 0.2              | - 169      | 15.8         |               | 7.4        |         | 24.9         | 2010    | 94.8         |                  | 8.1 8.1             | 9.2          | -    | -                |    | -               |    |                       |                       | -                  | -                 |
| SR6            | Cloudy      | Moderate   | 09:12    | 4.2       | Middle         | 2.1         | -                | -          | -            | -             | -          | -       | -            | -       | -            | -                | -                   | -            | 9.3  | -                | 11 | -               | -  | 817902                | 814676                |                    | -                 |
|                |             |            |          |           | Bottom         | 3.2<br>3.2  | 0.2              | 136<br>136 | 15.8<br>15.8 | 15.8          | 7.4<br>7.4 | 7.4     | 23.4<br>23.3 | 23.4    | 98.0<br>98.1 | 98.1             | 8.4 8.4             | 9.4<br>9.4   | -    | 13<br>11         |    | -               |    |                       |                       | -                  | -                 |
|                |             |            |          |           | Surface        | 1.0<br>1.0  | 0.3              | 115<br>115 | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 30.1<br>30.1 | 30.1    | 89.6<br>89.6 | 89.6             | 7.0                 | 5.0<br>5.0   |      | 5<br>3           |    | -               |    |                       |                       | -                  | -                 |
| SR7            | Cloudy      | Moderate   | 08:33    | 16.2      | Middle         | 8.1         | 0.3              | 100        | 18.8         | 18.8          | 7.9        | 7.9     | 30.1         | 30.1    | 90.0         | 90.0             | 7.0                 | 5.6          | 5.3  | 4                | 6  | -               |    | 823616                | 823747                |                    | -                 |
| 0.17           | cloudy      |            | 0.00     | 10.2      |                | 8.1<br>15.2 | 0.3              | 102<br>146 | 18.8<br>18.8 |               | 7.9<br>7.9 |         | 30.1<br>30.1 |         | 90.0<br>91.5 |                  | 7.0                 | 5.6<br>5.3   | 5.5  | 4<br>10          | v  | -               |    | 0_0070                | 0_01 71               | -                  | -                 |
|                |             |            |          |           | Bottom         | 15.2        | 1.1              | 157        | 18.8         | 18.8          | 7.9        | 7.9     | 30.1         | 30.1    | 91.6         | 91.6             | 7.1                 | 5.3          |      | 12               |    | -               |    |                       |                       | -                  | -                 |
|                |             |            |          |           | Surface        | 1.0         | 0.4              | 227<br>247 | 19.3<br>19.3 | 19.3          | 7.8        | 7.8     | 28.9<br>28.9 | 28.9    | 94.7<br>94.7 | 94.7             | 7.4                 | 8.9<br>8.9   | ŀ    | 8<br>9           |    | -               |    |                       |                       | -                  | -                 |
| SR8            | Cloudy      | Moderate   | 09:59    | 5.2       | Middle         | 2.6         | -                | -          | -            | -             | -          |         | -            | -       | -            | -                | - 7.4               | -            | 8.7  | -                | 9  | -               | -  | 820415                | 811594                |                    |                   |
|                |             |            |          |           | Bottom         | 2.6<br>4.2  | - 0.4            | - 185      | -<br>19.1    | 19.1          | -<br>7.8   | 7.8     | - 28.9       | 28.9    | -<br>95.1    | 95.1             | 7.4 7.4             | -<br>8.5     | ŀ    | - 8              |    | -               |    |                       |                       | -                  | -                 |
| DA: Denth-Aver |             |            |          |           | Bottom         | 4.2         | 0.4              | 195        | 19.1         | 19.1          | 7.8        | ٥. /    | 28.9         | 20.9    | 95.1         | 95.1             | 7.4                 | 8.5          |      | 9                |    | -               |    |                       |                       | -                  | -                 |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on09 February 17 during 09 February 17 during Mid-Flood Tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 09 February 17 | during Mid   |                  | de         | -            |               | -          |         |              |           |                |                  |                           |              |      | _                |         |                   |           |                       |                       |                      |                  |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|-----------|----------------|------------------|---------------------------|--------------|------|------------------|---------|-------------------|-----------|-----------------------|-----------------------|----------------------|------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | nperature (°C | <b>;</b> ) | pН      | Salini       | ity (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity(   | NTU) | Suspende<br>(mg/ |         | Total All<br>(ppr | -         | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(μg/L)   | Nickel (µg/L)    |
| Station       | Condition   | Condition  | Time     | Depth (m) |                | -            | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average   |                | Average          | Value DA                  | Value        | DA   | Value            | DA      | Value             | DA        | (Northing)            | (Easting)             | Value DA             | Value DA         |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 88<br>95   | 15.6<br>15.6 | 15.6          | 7.6        | 7.6     | 30.4<br>30.4 | 30.4      | 99.5<br>99.5   | 99.5             | 8.2<br>8.2                | 11.2<br>11.2 | -    | 13<br>14         |         | 83<br>83          |           |                       |                       | <0.2<br><0.2         | 0.9              |
| C1            | Sunny       | Rough      | 16:50    | 6.7       | Middle         | 3.4<br>3.4   | 0.6              | 78         | 15.6<br>15.6 | 15.6          | 7.6<br>7.6 | 7.6     | 30.2<br>30.2 | 30.2      | 100.1<br>100.1 | 100.1            | 8.3<br>8.3                | 11.2<br>11.2 | 11.4 | 14<br>13         | 14      | 84<br>84          | 84        | 815618                | 804239                | <0.2 <0.2            | 2 1.0 1.0        |
|               |             |            |          |           | Bottom         | 5.7          | 0.7              | 84<br>90   | 15.6         | 15.6          | 7.6        | 7.6     | 29.8         | 29.8      | 100.9          | 101.0            | 8.4 8.4                   | 11.7         | -    | 14               |         | 85                |           |                       |                       | <0.2                 | 0.9              |
|               |             |            |          |           |                | 5.7          | 0.6              | 90<br>180  | 15.6<br>19.0 |               | 7.6<br>7.9 |         | 29.8<br>27.8 |           | 101.0<br>97.8  |                  | 8.4 <sup>0.4</sup><br>7.7 | 11.7<br>5.8  |      | 13<br>7          | ļ       | 85<br>76          | ┢───┤     |                       | <u> </u>              | <0.2<br><0.2         | 1.2              |
|               |             |            |          |           | Surface        | 1.0<br>5.9   | 0.7<br>0.5       | 187<br>188 | 19.0<br>18.9 | 19.0          | 7.9<br>7.9 | 7.9     | 27.8<br>28.1 | 27.8      | 97.8<br>96.4   | 97.8             | 7.7<br>7.6<br>7.7         | 5.9<br>6.1   | -    | 7<br>8           | l İ     | 75<br>81          |           |                       |                       | <0.2<br><0.2         | 1.1              |
| C2            | Cloudy      | Rough      | 15:45    | 11.7      | Middle         | 5.9          | 0.5              | 199        | 18.9         | 18.9          | 7.9        | 7.9     | 28.1         | 28.1      | 96.4           | 96.4             | 7.6                       | 6.1          | 6.3  | 6                | 7       | 81                | 80        | 825674                | 806925                | <0.2                 | 1.2              |
|               |             |            |          |           | Bottom         | 10.7<br>10.7 | 0.5              | 157<br>158 | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 29.2<br>29.2 | 29.2      | 97.7<br>97.8   | 97.8             | 7.6<br>7.7<br>7.7         | 7.0<br>7.0   | -    | 6<br>6           |         | 84<br>84          |           |                       |                       | <0.2<br><0.2         | 1.0<br>1.0       |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 256<br>270 | 18.9<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.6      | 95.4<br>95.4   | 95.4             | 7.4                       | 5.2<br>5.2   | -    | 5<br>7           |         | 79<br>80          |           |                       |                       | <0.2<br><0.2         | 0.3 0.3          |
| C3            | Cloudy      | Moderate   | 17:34    | 11.4      | Middle         | 5.7          | 0.5              | 266        | 18.8         | 18.8          | 7.9        | 7.9     | 29.8         | 29.8      | 94.3           | 94.3             | 7.4                       | 6.8          | 7.5  | 5                | 6       | 82                | 82        | 822096                | 817819                | <0.2                 | 0.6              |
|               |             |            |          |           | Bottom         | 5.7<br>10.4  | 0.6              | 283<br>264 | 18.8<br>18.7 | 18.7          | 7.9<br>7.9 | 7.9     | 29.8<br>30.0 | 30.0      | 94.3<br>95.9   | 95.9             | 7.4<br>7.5<br>7.5         | 6.8<br>10.4  | -    | 6<br>6           |         | 81<br>84          |           |                       |                       | <0.2<br><0.2         | 2 0.6 0.5<br>0.6 |
|               |             |            |          |           |                | 10.4         | 0.4              | 264<br>144 | 18.7<br>15.8 |               | 7.9<br>7.6 |         | 30.0<br>30.3 |           | 95.9<br>100.6  |                  | 7.5 <sup>7.3</sup><br>8.3 | 10.4<br>4.7  |      | 7<br>5           | ┍───┤   | 85<br>83          | ┝──┥      |                       | <u> </u>              | <0.2<br><0.2         | 0.6<br>0.9       |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 152        | 15.8         | 15.8          | 7.6        | 7.6     | 30.3         | 30.3      | 100.6          | 100.6            | 8.3<br>8.3                | 4.7          | -    | 5                |         | 83                | 4         |                       |                       | <0.2                 | 1.0              |
| IM1           | Sunny       | Rough      | 16:32    | 6.8       | Middle         | 3.4<br>3.4   | 0.5<br>0.6       | 133<br>134 | 15.7<br>15.7 | 15.7          | 7.6<br>7.6 | 7.6     | 30.3<br>30.3 | 30.3      | 100.9<br>100.9 | 100.9            | 8.3                       | 6.1<br>6.1   | 6.1  | 5<br>5           | 6       | 83<br>84          | 84        | 818332                | 806461                | <0.2<br><0.2<br><0.2 | 0.8              |
|               |             |            |          |           | Bottom         | 5.8<br>5.8   | 0.6              | 138<br>141 | 15.6<br>15.6 | 15.6          | 7.6        | 7.6     | 30.1<br>30.1 | 30.1      | 103.1<br>103.2 | 103.2            | 8.5<br>8.5<br>8.5         | 7.5<br>7.4   | -    | 8<br>7           |         | 84<br>85          |           |                       |                       | <0.2<br><0.2         | 0.8              |
|               |             |            |          |           | Surface        | 1.0          | 0.6<br>0.7       | 156<br>167 | 15.8<br>15.8 | 15.8          | 7.6<br>7.6 | 7.6     | 30.4<br>30.4 | 30.4      | 100.0<br>100.1 | 100.1            | 8.2<br>8.3                | 5.9<br>6.0   |      | 7<br>6           |         | 81<br>81          |           |                       |                       | <0.2<br><0.2         | 1.3<br>1.4       |
| IM2           | Sunny       | Rough      | 16:24    | 8.2       | Middle         | 4.1          | 0.6              | 162        | 15.8         | 15.8          | 7.6        | 7.6     | 30.3         | 30.3      | 100.1          | 100.1            | 8.3 0.5                   | 5.4          | 5.8  | 6                | 6       | 82                | 82        | 818845                | 806203                | <0.2                 | 2 1.0 1.1        |
|               | ,           | U          |          |           | Bottom         | 4.1          | 0.6              | 165<br>158 | 15.8<br>15.7 | 15.7          | 7.6<br>7.6 | 7.6     | 30.3<br>28.9 | 20 0      | 100.1<br>105.0 | 105.0            | 8.3<br>8.7<br>8.7<br>8.7  | 5.5<br>5.8   | -    | 6<br>7           |         | 81<br>82          |           |                       |                       | <0.2                 | 1.1              |
|               |             |            |          |           |                | 7.2          | 0.5              | 169<br>164 | 15.7<br>15.8 |               | 7.5<br>7.6 |         | 28.9<br>29.8 |           | 105.0<br>100.6 |                  | 8.7 <sup>0.7</sup><br>8.3 | 5.9<br>6.1   |      | 6                | ļ       | 82<br>80          | ┝──┥      |                       | <u> </u>              | <0.2<br><0.2         | 1.0              |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 178        | 15.8         | 15.8          | 7.6        | 7.6     | 29.7         | 29.6      | 100.7<br>101.4 | 100.7            | 8.3<br>8.4<br>8.4         | 6.1          | -    | 6<br>7           |         | 80                |           |                       |                       | <0.2                 | 1.2              |
| IM3           | Sunny       | Rough      | 16:17    | 8.4       | Middle         | 4.2          | 0.6<br>0.7       | 166<br>181 | 15.8<br>15.7 | 15.8          | 7.6<br>7.6 | 7.6     | 29.6<br>29.6 | 29.6      | 101.5          | 101.5            | 8.4                       | 6.6<br>6.6   | 6.3  | 7                | 7       | 81<br>81          | 81        | 819415                | 806012                | <0.2<br><0.2<br><0.2 | 1.0              |
|               |             |            |          |           | Bottom         | 7.4          | 0.5              | 166<br>174 | 15.7<br>15.7 | 15.7          | 7.6<br>7.6 | 7.6     | 29.3<br>29.3 | 29.3      | 103.5<br>103.5 | 103.5            | 8.6<br>8.6                | 6.1<br>6.2   | -    | 7 7              |         | 81<br>82          |           |                       |                       | <0.2<br><0.2         | 1.1<br>1.2       |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 155<br>158 | 15.8<br>15.8 | 15.8          | 7.6<br>7.6 | 7.6     | 29.8<br>29.7 | 29.8      | 99.9<br>99.9   | 99.9             | 8.3<br>8.3                | 7.7<br>7.7   | -    | 9<br>10          |         | 81<br>80          | · · · · · | I                     |                       | <0.2<br><0.2         | 1.2              |
| IM4           | Sunny       | Rough      | 16:08    | 7.3       | Middle         | 3.7          | 0.6              | 158        | 15.8         | 15.8          | 7.6        | 7.6     | 29.5         |           | 101.1          | 101.1            | 8.4 8.4                   | 8.0          | 8.1  | 9                | 9       | 81                | 81        | 819557                | 805038                | <0.2                 | 0.9 1.0          |
|               |             |            |          |           | Bottom         | 3.7<br>6.3   | 0.7              | 158<br>155 | 15.8<br>15.7 | 15.7          | 7.6<br>7.5 | 7.5     | 29.5<br>28.9 | 20.0      | 101.1<br>104.4 | 104.4            | 8.4<br>8.7<br>8.7<br>8.7  | 8.0<br>8.6   |      | 8<br>8           |         | 81<br>82          |           |                       |                       | <0.2<br><0.2         | 1.1<br>1.0       |
|               |             |            |          |           |                | 6.3<br>1.0   | 0.6<br>0.5       | 163<br>138 | 15.7<br>15.8 |               | 7.5<br>7.6 |         | 28.8<br>29.4 |           | 104.4<br>98.2  |                  | 8.7 <sup>0.7</sup><br>8.1 | 8.5<br>10.5  |      | 8<br>12          | <b></b> | 82<br>79          | ┝───┝     |                       | <u> </u>              | <0.2<br><0.2         | 0.8              |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 150        | 15.8         | 15.8          | 7.6        | 7.6     | 29.4         | 29.4      | 98.3           | 98.3             | 8.1 8.1                   | 10.5         | -    | 11               |         | 80                | 4         |                       |                       | <0.2                 | 1.0              |
| IM5           | Sunny       | Rough      | 16:01    | 6.8       | Middle         | 3.4<br>3.4   | 0.5<br>0.5       | 139<br>139 | 15.8<br>15.7 | 15.8          | 7.6<br>7.6 | 7.6     | 29.3<br>29.3 | 29.3      | 97.7<br>97.7   | 97.7             | 8.1<br>8.1                | 11.6<br>11.7 | 11.7 | 11<br>10         | 11      | 80<br>81          | 80        | 820559                | 804912                | <0.2<br><0.2<br><0.2 | 1.0              |
|               |             |            |          |           | Bottom         | 5.8<br>5.8   | 0.6              | 138<br>144 | 15.6<br>15.6 | 15.6          | 7.6<br>7.6 | 7.6     | 29.9<br>29.8 | 29.9      | 97.9<br>98.0   | 98.0             | 8.1<br>8.1                | 13.0<br>12.9 | -    | 11<br>11         |         | 81<br>81          |           |                       |                       | <0.2<br><0.2         | 1.5<br>1.4       |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 112<br>114 | 15.9<br>15.9 | 15.9          | 7.6<br>7.6 | 7.6     | 28.4<br>28.4 | 28.4      | 98.5<br>98.5   | 98.5             | 8.2<br>8.2                | 11.4<br>11.4 | -    | 11<br>10         |         | 80<br>80          |           |                       |                       | <0.2<br><0.2         | 1.5<br>1.6       |
| IM6           | Sunny       | Rough      | 15:51    | 6.7       | Middle         | 3.4          | 0.5              | 121        | 15.8         | 15.8          | 7.5        | 7.5     | 27.5         | 27.5      | 102.1          | 102.1            | 8.5 0.4                   | 13.8         | 12.7 | 11               | 12      | 81                | 81        | 821047                | 805844                | <0.2                 | 1.2              |
|               |             | Ū          |          |           | Bottom         | 3.4<br>5.7   | 0.5<br>0.5       | 128<br>118 | 15.8<br>15.8 | 15.8          | 7.5<br>7.5 | 7.5     | 27.4<br>26.3 | 26.3      | 102.1<br>104.3 | 104.4            | 8.6<br>8.8<br>8.8<br>8.8  | 13.9<br>12.8 | -    | 12<br>14         |         | 81<br>82          |           |                       |                       | <0.2                 | 1.4              |
|               |             |            |          |           |                | 5.7          | 0.5              | 120<br>111 | 15.8<br>15.9 |               | 7.5<br>7.6 |         | 26.3<br>28.5 |           | 104.4<br>98.8  |                  | 8.8 0.0<br>8.2            | 12.7<br>7.3  |      | 13<br>8          | ļ       | 82<br>82          | ┝──┥      |                       | <u> </u>              | <0.2<br><0.2         | 1.2              |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 112        | 15.9         | 15.9          | 7.6        | 7.6     | 28.5         | 28.5      | 98.9           | 98.9             | 8.2 8.3                   | 7.3          |      | 8                | 1 İ     | 83                | 4         |                       |                       | <0.2                 | 1.1              |
| IM7           | Sunny       | Rough      | 15:40    | 8.2       | Middle         | 4.1          | 0.6<br>0.7       | 118<br>128 | 15.9<br>15.9 | 15.9          | 7.6<br>7.6 | 7.6     | 27.9<br>27.9 |           | 100.2<br>100.3 | 100.3            | 8.4<br>8.4                | 7.8<br>7.8   | 7.8  | 9<br>9           | 9       | 83<br>83          | 83        | 821353                | 806825                | <0.2<br><0.2<br><0.2 | 1.2              |
|               |             |            |          |           | Bottom         | 7.2          | 0.6              | 120<br>130 | 15.8<br>15.8 | 15.8          | 7.5<br>7.5 | 7.5     | 27.1<br>27.0 | 27.1      | 102.6<br>102.7 | 102.7            | 8.6<br>8.6                | 8.3<br>8.3   | ŀ    | 10<br>10         |         | 84<br>84          |           |                       |                       | <0.2<br><0.2         | 1.2              |
|               |             |            |          |           | Surface        | 1.0          | 0.6<br>0.6       | 185<br>190 | 18.9<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9     | 27.3<br>27.3 | 27.3      | 99.1<br>99.1   | 99.1             | 7.8<br>7.8<br>7.0         | 8.5<br>8.5   |      | 7<br>7           |         | 77<br>77          |           |                       |                       | <0.2<br><0.2         | 1.4              |
| IM8           | Cloudy      | Rough      | 16:11    | 8.1       | Middle         | 4.1          | 0.6              | 180        | 18.9         | 18.9          | 7.9        | 7.9     | 27.4         | 27.4      | 99.4           | 99.4             | 7.9                       | 9.0          | 8.9  | 7                | 7       | 82<br>82          | 81        | 821675                | 807855                | <0.2                 | 1.4 1.2          |
|               |             | 3**        |          | -         |                | 4.1          | 0.7              | 192<br>186 | 18.9<br>18.8 |               | 7.9<br>7.9 |         | 27.4<br>27.7 |           | 99.4<br>100.2  |                  | 7.9<br>7.9<br>7.9         | 9.0<br>9.3   | -    | 7 7              |         | 82<br>83          |           |                       |                       | <0.2                 | 1.4<br>0.9       |
| DA: Dopth Avo |             |            |          |           | Bottom         | 7.1          | 0.5              | 190        | 18.8         | 18.8          | 7.9        | 7.9     | 27.7         | 27.7      | 100.2          | 100.2            | 7.9 7.9                   | 9.3          |      | 6                | ا       | 84                |           |                       | <u> </u>              | <0.2                 | 1.0              |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on09 February 17 during 09 February 17 during Mid-Flood Tide

| Water Qua     | lity Monite | oring Resi | ults on  |           | 09 February 17 | during Mid   |                  | de                | ·            |               |            |         |              |          |                |                  |                           |              |      |                  |    |                 |    |                       |                       |                    |                         |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|-------------------|--------------|---------------|------------|---------|--------------|----------|----------------|------------------|---------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|--------------------|-------------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current           | Water Ter    | nperature (°C | C)         | рН      | Salinit      | ty (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity    | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L) | Nickel (µg/L)           |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |              | (m/s)            | Direction         | Value        | Average       | Value      | Average |              | Average  |                | Average          | Value DA                  | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA           | Value DA                |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 185<br>199        | 18.9<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9     | 27.2<br>27.2 | 27.2     | 100.0<br>100.0 | 100.0            | 7.9                       | 6.9<br>6.9   | -    | 6<br>4           |    | 78<br>78        |    |                       |                       | <0.2<br><0.2       | 1.3<br>1.5              |
| IM9           | Cloudy      | Rough      | 16:19    | 7.3       | Middle         | 3.7<br>3.7   | 0.6              | 200               | 18.9         | 18.9          | 7.9<br>7.9 | 7.9     | 27.2<br>27.2 | 27.2     | 101.2<br>101.2 | 101.2            | 8.0                       | 7.6          | 7.6  | 6                | 6  | 82              | 81 | 822099                | 808813                | <0.2               | 1.3 1.4                 |
|               |             |            |          |           | Bottom         | 6.3          | 0.6              | 202<br>233        | 18.9<br>18.9 | 18.9          | 7.8        | 7.8     | 27.4         | 27.4     | 106.9          | 106.9            | 8.0<br>8.5<br>8.5         | 7.6<br>8.3   | -    | 5<br>8           |    | 81<br>83        |    |                       |                       | <0.2<br><0.2       | 1.3                     |
|               |             |            |          |           |                | 6.3<br>1.0   | 0.7              | <u>252</u><br>199 | 18.9<br>18.9 |               | 7.8<br>7.9 |         | 27.4<br>27.6 |          | 106.9<br>100.0 |                  | 8.5 0.3<br>7.9            | 8.3<br>6.8   |      | 7                |    | 84<br>77        |    |                       |                       | <0.2<br><0.2       | 1.3<br>1.6              |
|               |             |            |          |           | Surface        | 1.0<br>4.0   | 0.6<br>0.5       | 206<br>198        | 18.9         | 18.9          | 7.9        | 7.9     | 27.6<br>27.8 | 27.6     | 100.0          | 100.0            | 7.9<br>8.0                | 6.8<br>9.5   | -    | 5<br>6           |    | 78              |    |                       |                       | <0.2               | 1.5                     |
| IM10          | Cloudy      | Rough      | 16:26    | 8.0       | Middle         | 4.0          | 0.5              | 216               | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 27.8         | 27.8     | 100.8<br>100.8 | 100.8            | 8.0                       | 9.5          | 9.7  | 5                | 8  | 82<br>81        | 81 | 822258                | 809840                | <0.2<br><0.2 <0.2  | 1.3                     |
|               |             |            |          |           | Bottom         | 7.0<br>7.0   | 0.6              | 219<br>224        | 18.7<br>18.7 | 18.7          | 7.9<br>7.9 | 7.9     | 28.2<br>28.2 | 28.2     | 104.3<br>104.3 | 104.3            | 8.2<br>8.2<br>8.2         | 12.9<br>12.9 | -    | 12<br>12         |    | 83<br>84        |    |                       |                       | <0.2<br><0.2       | 1.1<br>1.3              |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.5              | 191<br>191        | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 28.2<br>28.2 | 28.2     | 100.4<br>100.4 | 100.4            | 7.9<br>7.9<br>7.9         | 8.1<br>8.1   | -    | 8                |    | 78<br>78        |    |                       |                       | <0.2<br><0.2       | 1.0                     |
| IM11          | Cloudy      | Rough      | 16:33    | 8.2       | Middle         | 4.1          | 0.6              | 202               | 18.8         | 18.8          | 7.9        | 7.9     | 28.2         | 28.2     | 100.3          | 100.3            | 7.9                       | 9.3          | 8.5  | 7                | 8  | 82              | 81 | 821509                | 810544                | <0.2               | 1.3 1.2                 |
|               |             | 5          |          | -         |                | 4.1<br>7.2   | 0.6              | 214<br>217        | 18.8<br>18.7 | 18.7          | 7.9<br>8.0 | -       | 28.2<br>28.3 |          | 100.3<br>101.3 |                  | 7.9<br>8.0                | 9.3<br>8.0   |      | 8                |    | 82<br>83        | _  |                       |                       | <0.2<br><0.2       | 1.1                     |
|               |             |            |          |           | Bottom         | 7.2          | 0.6              | 231<br>224        | 18.7<br>18.9 |               | 8.0<br>7.9 | 8.0     | 28.3<br>28.4 | 28.3     | 101.4<br>98.3  | 101.4            | 8.0<br>8.0<br>7.7         | 7.9<br>6.9   |      | 10<br>5          |    | 84<br>77        |    |                       |                       | <0.2<br><0.2       | 1.3<br>1.2              |
|               |             |            |          |           | Surface        | 1.0          | 0.8              | 240               | 18.9         | 18.9          | 7.9        | 7.9     | 28.4         | 28.4     | 98.3           | 98.3             | 7.7 7.7                   | 6.9          |      | 7                |    | 77              |    |                       |                       | <0.2               | 1.1                     |
| IM12          | Cloudy      | Rough      | 16:41    | 8.8       | Middle         | 4.4          | 0.8              | 242<br>261        | 18.9<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9     | 28.4<br>28.4 | 28.4     | 97.0<br>97.0   | 97.0             | 7.6<br>7.6                | 8.1<br>8.1   | 9.7  | 6<br>5           | 6  | 81<br>82        | 81 | 821143                | 811523                | <0.2<br><0.2 <0.2  | 2 <u>1.2</u> 1.2<br>1.3 |
|               |             |            |          |           | Bottom         | 7.8<br>7.8   | 0.7              | 255<br>266        | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 29.2<br>29.2 | 29.2     | 95.8<br>95.8   | 95.8             | 7.5 7.5                   | 14.1<br>14.1 | -    | 5<br>5           |    | 83<br>84        |    |                       |                       | <0.2<br><0.2       | 1.1                     |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.2              | 165<br>167        | 19.0<br>19.0 | 19.0          | 7.9        | 7.9     | 28.8<br>28.8 | 28.8     | 98.6<br>98.6   | 98.6             | 7.7                       | 6.8<br>6.8   |      | 6                |    | 78<br>79        |    |                       |                       | <0.2<br><0.2       | 0.8                     |
| SR2           | Cloudy      | Moderate   | 17:09    | 3.8       | Middle         | 1.9          |                  | -                 | -            |               | -          | _       | -            | -        | - 90.0         | _                | - 7.7                     | -            | 7.7  | -                | 6  | -               | 81 | 821475                | 814167                | - <0.2             | -                       |
|               | ,           |            |          |           |                | 1.9<br>2.8   | - 0.2            | - 144             | -<br>18.9    | 18.0          | -<br>7.9   | 7.0     | - 29.0       | 20.0     | -<br>100.9     | 100.0            | -<br>7.9 7.0              | -<br>8.6     |      | - 5              |    | -<br>84         |    |                       |                       | <0.2               | 0.6                     |
|               |             |            |          |           | Bottom         | 2.8          | 0.3              | 150<br>177        | 18.9<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9     | 29.0<br>27.4 | 29.0     | 100.9<br>99.2  | 100.9            | 7.9<br>7.9<br>7.8         | 8.6<br>8.1   |      | 6<br>8           |    | 84              |    |                       |                       | <0.2               | 0.7                     |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 183               | 18.9         | 18.9          | 7.9        | 7.9     | 27.4         | 27.4     | 99.2           | 99.2             | 7.8 7.9                   | 8.1          | ļ    | 7                |    | -               |    |                       |                       | -                  | -                       |
| SR3           | Cloudy      | Rough      | 16:06    | 8.9       | Middle         | 4.5<br>4.5   | 0.5              | 188<br>197        | 18.9<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9     | 27.5<br>27.5 | 27.5     | 99.7<br>99.7   | 99.7             | 7.9<br>7.9                | 8.3<br>8.3   | 8.3  | 8<br>7           | 7  | -               | -  | 822136                | 807567                |                    |                         |
|               |             |            |          |           | Bottom         | 7.9<br>7.9   | 0.5              | 196<br>199        | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 27.6<br>27.6 | 27.6     | 100.4<br>100.4 | 100.4            | 7.9<br>7.9<br>7.9         | 8.4<br>8.4   | -    | 6<br>8           |    | -               |    |                       |                       | -                  | -                       |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.4              | 222<br>226        | 15.6<br>15.6 | 15.6          | 7.5<br>7.5 | 7.5     | 30.3<br>30.2 | 30.3     | 98.3<br>98.3   | 98.3             | 8.1<br>8.1                | 13.3<br>13.3 |      | 12<br>12         |    | -               |    |                       |                       | -                  | -                       |
| SR4A          | Sunny       | Moderate   | 17:10    | 9.1       | Middle         | 4.6          | 0.4              | 238               | 15.6         | 15.6          | 7.5        | 7.5     | 30.1         | 30.1     | 99.0           | 99.1             | 8.2 8.2                   | 14.6         | 14.1 | 14               | 13 | -               | -  | 817186                | 807813                |                    | -                       |
|               |             |            |          |           | Bottom         | 4.6<br>8.1   | 0.4              | 250<br>241        | 15.6<br>15.5 | 15.5          | 7.5<br>7.5 | 7.5     | 30.1<br>29.5 | 29.5     | 99.1<br>100.8  | 100.8            | 8.2<br>8.4<br>8.4         | 14.6<br>14.3 | ŀ    | 14<br>14         |    | -               |    |                       |                       | -                  | -                       |
|               |             |            |          |           |                | 8.1<br>1.0   | 0.5              | 250<br>238        | 15.5<br>15.8 |               | 7.5<br>7.5 | 1       | 29.5<br>29.6 |          | 100.8<br>101.7 |                  | 8.4 0.4<br>8.4            | 14.3<br>8.4  |      | 12<br>7          |    | -               |    |                       |                       | -                  | -                       |
|               |             |            |          |           | Surface        | 1.0          | 0.3              | 254               | 15.8         | 15.8          | 7.5        | 7.5     | 29.6         | 29.6     | 101.8          | 101.8            | 8.4 8.4                   | 8.4          | -    | 8                |    | -               |    |                       |                       | -                  | -                       |
| SR5A          | Sunny       | Moderate   | 17:27    | 5.2       | Middle         | 2.6<br>2.6   | -                | -                 | -            | -             | -          | -       | -            | -        | -              | -                | -                         | -            | 8.7  | -                | 7  | -               | -  | 816585                | 810700                |                    |                         |
|               |             |            |          |           | Bottom         | 4.2          | 0.5              | 244<br>247        | 15.8<br>15.8 | 15.8          | 7.5<br>7.4 | 7.5     | 28.7<br>28.7 | 28.7     | 104.1<br>104.2 | 104.2            | 8.7<br>8.7<br>8.7         | 8.9<br>9.0   | -    | 7 7              |    | -               |    |                       |                       | -                  | -                       |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.3              | 254<br>277        | 16.0<br>16.0 | 16.0          | 7.6<br>7.6 | 7.6     | 29.1<br>29.1 | 29.1     | 101.7<br>101.8 | 101.8            | 8.4                       | 6.4<br>6.5   |      | 8                |    | -               |    |                       |                       | -                  | -                       |
| SR6           | Sunny       | Moderate   | 17:58    | 4.4       | Middle         | 2.2          | -                | -                 | -            | -             | -          | -       | -            | -        | -              | -                | - 8.4                     | -            | 8.3  | -                | 7  | -               | -  | 817896                | 814675                |                    |                         |
|               |             |            |          |           |                | 2.2<br>3.4   | - 0.4            | - 256             | - 16.0       | 16.0          | - 7.5      | 7.5     | - 27.8       | 27.8     | -<br>104.6     | 104.6            | -<br>8.7<br>8.7           | - 10.0       |      | - 6              |    | -               |    |                       |                       | -                  | -                       |
|               |             |            |          |           | Bottom         | 3.4          | 0.4              | 278<br>108        | 16.0<br>18.5 |               | 7.5<br>7.9 |         | 27.8<br>30.2 |          | 104.6<br>93.7  |                  | 8.7 <sup>8.7</sup><br>7.3 | 10.2<br>6.5  | [    | 7<br>7           |    | -               |    |                       |                       | -                  | -                       |
|               |             |            |          |           | Surface        | 1.0          | 0.4              | 108               | 18.5         | 18.5          | 7.9        | 7.9     | 30.2         | 30.2     | 93.7           | 93.7             | 7.3 7.4                   | 6.5          | ŀ    | 8                |    | -               |    |                       |                       | -                  | -                       |
| SR7           | Cloudy      | Moderate   | 18:10    | 16.2      | Middle         | 8.1<br>8.1   | 0.3              | 109<br>112        | 18.5<br>18.5 | 18.5          | 7.9<br>7.9 | 7.9     | 30.2<br>30.2 | 30.2     | 95.3<br>95.3   | 95.3             | 7.5<br>7.5                | 7.0<br>7.0   | 7.1  | 8<br>6           | 7  | -               | -  | 823646                | 823742                |                    |                         |
|               |             |            |          |           | Bottom         | 15.2<br>15.2 | 0.3              | 111<br>120        | 18.5<br>18.5 | 18.5          | 7.9<br>7.9 | 7.9     | 30.2<br>30.2 | 30.2     | 99.2<br>99.2   | 99.2             | 7.8<br>7.8<br>7.8         | 7.7<br>7.7   | -    | 7<br>7           |    | -               |    |                       |                       | -                  | -                       |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.4              | 235<br>248        | 18.9<br>18.9 | 18.9          | 7.9        | 7.9     | 28.1<br>28.1 | 28.1     | 101.3<br>101.3 | 101.3            | 8.0                       | 7.1          |      | 6                |    | -               |    |                       |                       | -                  | -                       |
| SR8           | Cloudy      | Moderate   | 16:48    | 4.5       | Middle         | 2.3          |                  | - 248             | -            | _             | -          | -       | -            | -        | -              | -                | 8.0 8.0                   | -            | 7.4  | 6<br>-           | 6  | -               | _  | 820406                | 811574                |                    |                         |
| 2.10          |             |            |          |           |                | 2.3<br>3.5   | - 0.4            | - 256             | -<br>18.9    | 10.0          | -<br>7.9   | 7.0     | -<br>28.1    | 00.4     | -<br>102.5     | 100.0            | -<br>8.1 <sub>0.1</sub>   | -<br>7.7     |      | - 4              | -  | -               |    |                       |                       | -                  | -                       |
| DA: Denth-Ave |             |            |          |           | Bottom         | 3.5          | 0.5              | 269               | 18.9         | 18.9          | 7.9        | 7.9     | 28.1         | 28.1     | 102.7          | 102.6            | 8.1 8.1                   | 7.8          | -    | 6                |    | -               |    |                       |                       | -                  | -                       |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on09 February 17 during 09 February 17 during Mid-Ebb tide

| Water Qua     | lity Monito | oring Resi | lits on  |           | 09 February 17 | during Mid   | 1 1              |                   | 1            |               |            |         | -            |         |                |                  |                           |              |      |                  |    |                 |    |                       | 1                     |                              | <b></b>           |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|-------------------|--------------|---------------|------------|---------|--------------|---------|----------------|------------------|---------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|------------------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current           | Water Ter    | nperature (°C | ;)         | pН      | Salinit      | y (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |              | (m/s)            | Direction         | Value        | Average       | Value      | Average | Value        | Average | Value          | Average          | Value DA                  | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA                     | Value DA          |
|               |             |            |          |           | Surface        | 1.0          | 0.6<br>0.6       | 122<br>127        | 15.5<br>15.5 | 15.5          | 7.6<br>7.6 | 7.6     | 27.2<br>27.1 | 27.2    | 99.7<br>99.7   | 99.7             | 8.4<br>8.4                | 8.0<br>8.0   |      | 8                |    | 83<br>83        |    |                       |                       | <0.2<br><0.2                 | 1.1               |
| C1            | Cloudy      | Rough      | 12:15    | 7.6       | Middle         | 3.8          | 0.6              | 120               | 15.5         | 15.5          | 7.6        | 7.6     | 26.1         | 26.1    | 100.3          | 100.3            | 8.5                       | 8.5          | 9.4  | 8                | 10 | 84              | 84 | 815609                | 804256                | <0.2                         | 1.3 1.2           |
|               |             | Ū          |          |           | Pottom         | 3.8<br>6.6   | 0.6              | 128<br>122        | 15.5<br>15.4 | 15.4          | 7.6<br>7.5 | 7.5     | 26.1<br>24.7 |         | 100.3<br>102.6 | 102.7            | 8.5<br>8.8<br>8.8         | 8.6<br>11.6  | ·    | 10<br>13         |    | 84<br>84        |    |                       |                       | <0.2                         | 1.2               |
|               |             |            |          |           | Bottom         | 6.6<br>1.0   | 0.6              | 124<br>166        | 15.4<br>18.9 |               | 7.5<br>7.9 |         | 24.6<br>27.7 |         | 102.7<br>97.1  |                  | 8.8 <sup>0.0</sup><br>7.7 | 11.6<br>7.0  |      | 11<br>8          |    | 85<br>77        |    |                       |                       | <0.2<br><0.2                 | 1.2               |
|               |             |            |          |           | Surface        | 1.0          | 0.8              | 170               | 18.9         | 18.9          | 7.9        | 7.9     | 27.7         | 21.1    | 97.1           | 97.1             | 7.7 7.7                   | 7.0          |      | 9                |    | 76              |    |                       |                       | <0.2                         | 1.3               |
| C2            | Cloudy      | Rough      | 13:35    | 11.6      | Middle         | 5.8<br>5.8   | 0.6              | 204<br>219        | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 29.1<br>29.1 | 29.1    | 97.0<br>97.0   | 97.0             | 7.6                       | 7.2<br>7.2   | 7.1  | 11<br>9          | 9  | 82<br>81        | 81 | 825664                | 806963                | <0.2 <0.2 <0.2               | 1.6<br>1.6        |
|               |             |            |          |           | Bottom         | 10.6<br>10.6 | 0.6              | 204<br>221        | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 29.3<br>29.3 |         | 101.5<br>101.5 | 101.5            | 7.9<br>7.9<br>7.9         | 7.1<br>7.1   | ľ    | 9<br>9           |    | 84<br>83        |    |                       |                       | <0.2<br><0.2                 | 0.8               |
|               |             |            |          |           | Surface        | 1.0          | 0.0              | 208               | 18.7         | 18.7          | 7.9        | 7.9     | 30.1         | 30.1    | 93.5           | 93.6             | 7.3                       | 6.2          |      | 9<br>6           |    | 80              |    |                       |                       | <0.2                         | 0.5               |
|               |             |            |          |           |                | 1.0<br>6.2   | 0.2              | 222<br>204        | 18.7<br>18.6 |               | 7.9<br>7.9 |         | 30.1<br>30.1 |         | 93.6<br>95.1   |                  | 7.3<br>7.4<br>7.4         | 6.2<br>6.5   |      | 8                |    | 79<br>81        |    |                       |                       | <0.2                         | 0.6               |
| C3            | Cloudy      | Moderate   | 11:18    | 12.4      | Middle         | 6.2          | 0.2              | 212               | 18.6         | 18.6          | 7.9        | 7.9     | 30.1         | 30.1    | 95.2           | 95.2             | 7.4                       | 6.6          | 6.4  | 11               | 9  | 82              | 82 | 822099                | 817822                | <0.2                         | 0.4               |
|               |             |            |          |           | Bottom         | 11.4<br>11.4 | 0.2              | 226<br>234        | 18.6<br>18.6 | 18.6          | 7.9<br>7.9 | 7.9     | 30.1<br>30.1 |         | 97.9<br>97.9   | 97.9             | 7.7 7.7                   | 6.4<br>6.4   |      | 9<br>8           |    | 83<br>84        |    |                       |                       | <0.2<br><0.2                 | 0.5               |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 168<br>171        | 15.7<br>15.7 | 15.7          | 7.6<br>7.6 | 7.6     | 28.3<br>28.3 | 28.3    | 99.3<br>99.3   | 99.3             | 8.3<br>8.3                | 5.7<br>5.7   | -    | 8                |    | 82<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.4               |
| IM1           | Sunny       | Rough      | 12:46    | 6.6       | Middle         | 3.3          | 0.7              | 166               | 15.6         | 15.6          | 7.6        | 7.6     | 27.3         |         | 100.4          | 100.4            | 8.5 8.4                   | 6.4          | 7.0  | 9                | 9  | 82              | 83 | 818362                | 806468                | <0.2                         | 1.1 1.2           |
|               | Curriy      | riougn     | 12.10    | 0.0       |                | 3.3<br>5.6   | 0.7<br>0.7       | 169<br>170        | 15.6<br>15.5 |               | 7.6<br>7.5 |         | 27.3<br>25.6 |         | 100.4<br>103.0 |                  | 8.5<br>8.8                | 6.5<br>8.8   | 7.0  | 10<br>12         | Ū  | 83<br>83        |    | 010002                | 000100                | <0.2<br><0.2                 | 1.2<br>1.0        |
|               |             |            |          |           | Bottom         | 5.6          | 0.8              | 180               | 15.5         | 15.5          | 7.5        | 7.5     | 25.5         | 25.6    | 103.0          | 103.0            | 8.8 0.0                   | 8.6          |      | 10               |    | 83              |    |                       |                       | <0.2                         | 1.2               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.7              | <u>177</u><br>191 | 15.8<br>15.8 | 15.8          | 7.6<br>7.6 | 7.6     | 28.4<br>28.4 | 28.4    | 100.3<br>100.3 | 100.3            | 8.4<br>8.4<br>8.5         | 4.7<br>4.8   | ·    | 6<br>7           |    | 82<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.0               |
| IM2           | Sunny       | Rough      | 12:59    | 8.2       | Middle         | 4.1          | 0.7              | 178<br>183        | 15.7<br>15.7 | 15.7          | 7.6<br>7.6 | 7.6     | 27.9<br>27.8 |         | 101.6<br>101.7 | 101.7            | 8.5<br>8.5                | 6.6<br>6.7   | 6.4  | 6<br>7           | 7  | 83<br>83        | 83 | 818848                | 806187                | <0.2<br><0.2 <0.2            | 0.9<br>1.2<br>1.0 |
|               |             |            |          |           | Bottom         | 7.2          | 0.7              | 178               | 15.6         | 15.6          | 7.5        | 7.5     | 27.2         | 27.2    | 102.9          | 103.0            | 8.7 8.7                   | 7.7          | -    | 8                |    | 84              |    |                       |                       | <0.2                         | 0.9               |
|               |             |            |          |           |                | 7.2          | 0.8              | 188<br>179        | 15.6<br>15.7 |               | 7.5<br>7.6 |         | 27.2<br>29.3 |         | 103.0<br>99.2  |                  | 8.7 <sup>0.7</sup><br>8.3 | 7.7<br>7.7   |      | 9<br>9           |    | 83<br>81        |    |                       |                       | <0.2<br><0.2                 | 1.2<br>0.8        |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 180               | 15.7         | 15.7          | 7.6        | 7.6     | 29.3         | 29.3    | 99.2           | 99.2             | 8.3 8.3                   | 7.7          |      | 10<br>9          |    | 81              |    |                       |                       | <0.2                         | 1.0               |
| IM3           | Sunny       | Rough      | 13:14    | 8.3       | Middle         | 4.2          | 0.7              | 180<br>187        | 15.6<br>15.6 | 15.6          | 7.6<br>7.6 | 7.6     | 28.7<br>28.7 | 28.7    | 99.9<br>99.9   | 99.9             | 8.3<br>8.3                | 7.9<br>7.9   | 8.1  | 9<br>10          | 10 | 82<br>82        | 82 | 819396                | 806012                | <0.2<br><0.2 <0.2            | 0.9               |
|               |             |            |          |           | Bottom         | 7.3<br>7.3   | 0.7              | 188<br>203        | 15.6<br>15.6 | 15.6          | 7.6<br>7.6 | 7.6     | 28.0<br>28.0 | 28.0    | 101.6<br>101.6 | 101.6            | 8.5<br>8.5                | 8.6<br>8.6   | -    | 11<br>10         |    | 83<br>83        |    |                       |                       | <0.2<br><0.2                 | 1.5<br>1.6        |
|               |             |            |          |           | Surface        | 1.0          | 0.8              | 181               | 15.8         | 15.8          | 7.6        | 7.6     | 29.2         | 29.2    | 99.9           | 99.9             | 8.3                       | 9.1          |      | 11               |    | 81              |    |                       |                       | <0.2                         | 1.5               |
| IM4           | Suppy       | Pouch      | 13:25    | 7.6       | Middle         | 1.0<br>3.8   | 0.8              | 185<br>180        | 15.8<br>15.8 | 15.8          | 7.6<br>7.6 | 7.6     | 29.2<br>28.9 | 28.9    | 99.9<br>100.6  | 100.7            | 8.3<br>8.4<br>8.4         | 9.1<br>9.8   | 10.6 | 12<br>11         | 12 | 80<br>81        | 82 | 819579                | 805028                | <0.2<br><0.2<br><0.2<br><0.2 | 1.6<br>1.4<br>1.4 |
| 11114         | Sunny       | Rough      | 13.25    | 7.0       | IMIQUE         | 3.8<br>6.6   | 0.9              | 187<br>181        | 15.8<br>15.7 |               | 7.6<br>7.5 |         | 28.9<br>27.3 |         | 100.7<br>104.1 |                  | 8.4<br>8.8                | 9.8<br>12.8  | 10.0 | 13<br>12         | 12 | 82<br>83        | 02 | 019379                | 803028                | <0.2<br><0.2                 | 1.5<br>0.9        |
|               |             |            |          |           | Bottom         | 6.6          | 0.8              | 194               | 15.7         | 15.7          | 7.5        | 7.5     | 27.3         | 27.3    | 104.1          | 104.1            | 8.8 8.8                   | 12.8         |      | 12               |    | 83              |    |                       |                       | <0.2                         | 1.2               |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 168<br>184        | 15.8<br>15.8 | 15.8          | 7.6<br>7.6 | 7.6     | 28.9<br>28.8 | 28.9    | 99.2<br>99.2   | 99.2             | 8.3<br>8.3                | 8.2<br>8.2   | -    | 8<br>10          |    | 80<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.4<br>1.5        |
| IM5           | Sunny       | Rough      | 13:38    | 6.2       | Middle         | 3.1<br>3.1   | 0.8              | 171<br>181        | 15.8<br>15.8 | 15.8          | 7.6<br>7.6 | 7.6     | 28.2<br>28.2 | 28.2    | 100.7<br>100.8 | 100.8            | 8.4<br>8.4<br>8.4         | 10.4<br>10.5 | 10.4 | 11<br>9          | 10 | 81<br>81        | 81 | 820545                | 804931                | <0.2<br><0.2 <0.2            | 1.0               |
|               |             |            |          |           | Bottom         | 5.2          | 0.7              | 172               | 15.7         | 15.7          | 7.6        | 7.6     | 27.7         | 27.7    | 102.7          | 102.8            | 8.6 8.6                   | 12.5         |      | 11               |    | 82              |    |                       |                       | <0.2                         | 0.9               |
|               |             |            |          |           |                | 5.2          | 0.7              | 173<br>188        | 15.7<br>15.8 |               | 7.6        |         | 27.6<br>28.7 |         | 102.8<br>98.2  |                  | 8.6 8.2                   | 12.5<br>14.2 |      | 13<br>15         |    | 82<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.2               |
|               |             |            |          |           | Surface        | 1.0          | 0.8              | 193               | 15.8         | 15.8          | 7.6        | 7.6     | 28.7         | 28.7    | 98.3           | 98.3             | 8.2 8.2                   | 14.3         | -    | 15               |    | 82              |    |                       |                       | <0.2                         | 1.6               |
| IM6           | Sunny       | Rough      | 13:53    | 6.5       | Middle         | 3.3<br>3.3   | 0.8              | 192<br>205        | 15.8<br>15.8 | 15.8          | 7.6<br>7.6 | 7.6     | 28.5<br>28.5 | 28.5    | 98.7<br>98.8   | 98.8             | 8.2 0.2<br>8.2            | 13.3<br>13.3 | 15.8 | 13<br>15         | 15 | 83<br>84        | 83 | 821059                | 805838                | <0.2 <0.2 <0.2               | 1.3<br>1.1        |
|               |             |            |          |           | Bottom         | 5.5<br>5.5   | 0.8<br>0.8       | 189<br>195        | 15.8<br>15.8 | 15.8          | 7.6<br>7.6 | 7.6     | 28.2<br>28.1 | 28.2    | 99.9<br>100.0  | 100.0            | 8.3<br>8.3<br>8.3         | 19.7<br>19.8 | -    | 16<br>16         |    | 84<br>84        |    |                       |                       | <0.2<br><0.2                 | 1.5<br>1.6        |
|               |             |            |          |           | Surface        | 1.0          | 0.8              | 191               | 15.9         | 15.9          | 7.6        | 7.6     | 28.7         | 20.7    | 99.1           | 99.1             | 8.2                       | 14.6         |      | 14               |    | 83              |    |                       |                       | <0.2                         | 1.5               |
| 15.47         | Ours        | David      | 10.50    | 7.0       |                | 1.0<br>3.8   | 0.8<br>0.8       | 201<br>188        | 15.9<br>15.9 |               | 7.6<br>7.6 |         | 28.7<br>28.2 |         | 99.1<br>101.6  |                  | 8.2<br>8.5<br>8.4         | 14.8<br>13.6 | 14.0 | 14<br>14         | 15 | 83<br>84        |    | 001050                | 000004                | <0.2<br><0.2                 | 1.5<br>1.4        |
| IM7           | Sunny       | Rough      | 13:50    | 7.6       | Middle         | 3.8          | 0.8              | 196               | 15.9         | 15.9          | 7.6        | 7.6     | 28.2         | 28.2    | 101.7          | 101.7            | 8.5                       | 13.7         | 14.3 | 15               | 15 | 84              | 84 | 821352                | 806824                | <0.2                         | 1.3               |
|               |             |            |          |           | Bottom         | 6.6<br>6.6   | 0.8              | 192<br>209        | 15.8<br>15.8 | 15.8          | 7.5<br>7.5 | 7.5     | 27.9<br>27.8 | 27.9    | 103.7<br>103.8 | 103.8            | 8.7<br>8.7<br>8.7         | 14.7<br>14.6 | -    | 17<br>16         |    | 85<br>85        |    |                       |                       | <0.2<br><0.2                 | 1.2<br>1.4        |
|               |             |            |          |           | Surface        | 1.0          | 0.8              | 157<br>163        | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 27.6<br>27.6 | 27.6    | 98.5<br>98.5   | 98.5             | 7.8<br>7.8 7.0            | 9.5<br>9.5   |      | 9<br>10          |    | 78<br>78        |    |                       |                       | <0.2<br><0.2                 | 1.8               |
| IM8           | Cloudy      | Rough      | 13:05    | 7.4       | Middle         | 3.7          | 0.6              | 141               | 18.8         | 18.8          | 7.9        | 7.9     | 27.8         | 27.8    | 98.9           | 98.9             | 7.8                       | 10.5         | 10.5 | 10               | 11 | 82              | 81 | 821710                | 807846                | <0.2                         | 1.6 1.7           |
|               |             | 5          |          |           |                | 3.7<br>6.4   | 0.7              | 143<br>140        | 18.8<br>18.5 |               | 7.9<br>7.9 |         | 27.8<br>28.5 |         | 98.9<br>100.2  |                  | 7.8<br>7.9 7.0            | 10.5<br>11.4 | -    | 12<br>15         |    | 81<br>84        |    | -                     | -                     | <0.2<br><0.2                 | 1.6<br>1.9        |
| DA: Depth-Ave |             |            |          |           | Bottom         | 6.4          | 0.7              | 142               | 18.5         | 18.5          | 7.9        | 7.9     | 28.5         | 28.5    | 100.2          | 100.2            | 7.9 7.9                   | 11.4         | -    | 12               |    | 84              |    |                       |                       | <0.2                         | 1.8               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on09 February 17 during 09 February 17 during Mid-Ebb tide

| Water Qua             | ity Monito | oring Resi | lits on  |           | 09 February 17 | during Mid  |                  |                      |              |               |            |         |              |         |                |                  |                         |              |      |                  |    |                 |    |                       |                       |                    |               |
|-----------------------|------------|------------|----------|-----------|----------------|-------------|------------------|----------------------|--------------|---------------|------------|---------|--------------|---------|----------------|------------------|-------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|--------------------|---------------|
| Monitoring<br>Station | Weather    | Sea        | Sampling | Water     | Sampling Dep   | th (m)      | Current<br>Speed | Current<br>Direction | Water Ter    | mperature (°C | C)         | pН      | Salinity     | y (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen     | Turbidity    | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L) | Nickel (µg/L) |
| Station               | Condition  | Condition  | Time     | Depth (m) |                |             | (m/s)            |                      | Value        | Average       | Value      | Average |              | Average |                | Average          |                         | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA           | Value DA      |
|                       |            |            |          |           | Surface        | 1.0         | 0.7              | 123<br>135           | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 27.7<br>27.7 | 27.7    | 98.5<br>98.5   | 98.5             | 7.8                     | 10.5<br>10.5 | -    | 13<br>11         |    | 79<br>78        |    |                       |                       | <0.2<br><0.2       | 1.3<br>1.3    |
| IM9                   | Cloudy     | Rough      | 12:56    | 7.1       | Middle         | 3.6         | 0.5              | 139                  | 18.8         | 18.8          | 7.9        | 7.9     | 27.8         | 27.8    | 99.1           | 99.1             | 7.8                     | 12.5         | 13.3 | 15               | 15 | 82              | 81 | 822099                | 808828                | <0.2               | 1.2 1.2       |
| -                     | ,          | 5          |          |           |                | 3.6<br>6.1  | 0.6              | 151<br>146           | 18.8<br>18.6 |               | 7.9<br>7.9 | -       | 27.8<br>28.4 |         | 99.1<br>101.4  |                  | 7.8<br>8.0              | 12.5<br>16.8 |      | 17<br>18         | -  | 81<br>84        |    |                       |                       | <0.2               | 1.3           |
|                       |            |            |          |           | Bottom         | 6.1         | 0.6              | 159                  | 18.6         | 18.6          | 7.9        | 7.9     | 28.4         | 28.4    | 101.5          | 101.5            | 8.0 8.0                 | 16.9         |      | 16               |    | 84              |    |                       |                       | <0.2               | 1.1           |
|                       |            |            |          |           | Surface        | 1.0<br>1.0  | 0.8<br>0.8       | 138<br>139           | 18.9<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9     | 28.0<br>28.0 | 28.0    | 98.3<br>98.3   | 98.3             | 7.8<br>7.8<br>7.8       | 9.1<br>9.1   | ŀ    | 11<br>12         |    | 78<br>77        |    |                       |                       | <0.2<br><0.2       | 1.3<br>1.6    |
| IM10                  | Cloudy     | Rough      | 12:46    | 7.1       | Middle         | 3.6<br>3.6  | 0.8              | 134<br>134           | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 28.2<br>28.2 | 28.2    | 97.7<br>97.7   | 97.7             | 7.7                     | 10.3<br>10.3 | 10.1 | 10<br>10         | 11 | 81<br>82        | 81 | 822225                | 809840                | <0.2<br><0.2 <0.2  | 1.5<br>1.4    |
|                       |            |            |          |           | Bottom         | 6.1         | 0.8              | 149                  | 18.7         | 18.7          | 7.9        | 7.9     | 28.6         | 28.6    | 98.6           | 98.6             | 7.8 7.8                 | 11.0         |      | 12               |    | 84              |    |                       |                       | <0.2               | 1.0           |
|                       |            |            |          |           |                | 6.1<br>1.0  | 0.9              | 162<br>119           | 18.7<br>18.9 |               | 7.9<br>7.9 |         | 28.6<br>28.1 |         | 98.6<br>99.1   |                  | 7.8                     | 11.0<br>7.3  |      | 11<br>10         |    | 83<br>79        |    |                       |                       | <0.2<br><0.2       | 1.1           |
|                       |            |            |          |           | Surface        | 1.0         | 0.8              | 128                  | 18.9         | 18.9          | 7.9        | 7.9     | 28.1         | 28.1    | 99.1           | 99.1             | 7.8 7.8                 | 7.3          | -    | 8                |    | 78              |    |                       |                       | <0.2               | 1.4           |
| IM11                  | Cloudy     | Rough      | 12:36    | 8.0       | Middle         | 4.0         | 0.7              | 121<br>128           | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 28.3<br>28.3 | 28.3    | 99.1<br>99.1   | 99.1             | 7.8<br>7.8              | 7.6<br>7.6   | 7.6  | 11<br>12         | 10 | 82<br>81        | 81 | 821502                | 810532                | <0.2<br><0.2 <0.2  | 1.2<br>1.4    |
|                       |            |            |          |           | Bottom         | 7.0         | 0.6              | 151                  | 18.8         | 18.8          | 7.9        | 7.9     | 28.7         |         | 101.7          | 101.7            | 8.0 8.0                 | 8.0          |      | 10               |    | 84              |    |                       |                       | <0.2               | 1.1           |
|                       |            |            |          |           | Surface        | 7.0<br>1.0  | 0.7<br>0.8       | 153<br>139           | 18.8<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9     | 28.7<br>28.3 |         | 101.7<br>99.6  | 99.6             | 8.0 0.0<br>7.8          | 8.0<br>6.7   |      | 11<br>10         |    | 83<br>78        |    |                       |                       | <0.2<br><0.2       | 0.9           |
|                       |            |            |          |           | Sunace         | 1.0<br>4.3  | 0.8              | 149<br>127           | 18.9<br>18.8 |               | 7.9        | 7.9     | 28.3<br>28.7 | 20.5    | 99.6<br>97.9   |                  | 7.8 7.8                 | 6.7<br>8.0   | -    | 11<br>12         |    | 77<br>81        |    |                       |                       | <0.2<br><0.2       | 1.0           |
| IM12                  | Cloudy     | Rough      | 12:26    | 8.5       | Middle         | 4.3         | 0.7              | 137                  | 18.8         | 18.8          | 7.9<br>7.9 | 7.9     | 28.7         | 20.7    | 97.9           | 97.9             | 7.7                     | 8.0          | 7.7  | 11               | 11 | 81              | 81 | 821179                | 811519                | <0.2               | 1.0           |
|                       |            |            |          |           | Bottom         | 7.5<br>7.5  | 0.8              | 146<br>146           | 18.8<br>18.8 | 18.8          | 7.9        | 7.9     | 28.8<br>28.8 | 28.8    | 99.6<br>99.6   | 99.6             | 7.8 7.8                 | 8.3<br>8.3   | -    | 11<br>13         |    | 84<br>83        |    |                       |                       | <0.2               | 1.1           |
|                       |            |            |          |           | Surface        | 1.0         | 0.3              | 100                  | 18.8         | 18.8          | 7.9        | 7.9     | 28.8         |         | 101.9          | 101.9            | 8.0                     | 8.4          |      | 11               |    | 78              |    |                       |                       | <0.2               | 0.9           |
| 000                   | Olevely    | Madausta   | 11.40    | 4.5       | N (i al all a  | 1.0<br>0.0  | - 0.4            | - 102                | - 18.8       |               | 7.9        |         | - 28.8       |         | 101.9          |                  | 8.0 8.0                 | - 8.4        | 10.5 | 9                | 10 | 79<br>-         | 01 | 001475                | 014100                | <0.2               | 1.0           |
| SR2                   | Cloudy     | Moderate   | 11:42    | 4.5       | Middle         | 0.0<br>3.5  | - 0.3            | - 111                | -<br>18.8    | -             | -          | -       | -            | -       | -              | -                | 8.5 0.5                 | -<br>16.6    | 12.5 | - 9              | 10 | -               | 81 | 821475                | 814166                | - <0.2<br><0.2     | - 1.0<br>1.0  |
|                       |            |            |          |           | Bottom         | 3.5         | 0.3              | 122                  | 18.8         | 18.8          | 7.8<br>7.8 | 7.8     | 29.3<br>29.3 |         | 109.1<br>109.1 | 109.1            | 8.5<br>8.5              | 16.6         |      | 10               |    | 83<br>84        |    |                       |                       | <0.2               | 1.0           |
|                       |            |            |          |           | Surface        | 1.0         | 0.6              | 169<br>181           | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 27.4<br>27.4 | 27.4    | 98.4<br>98.4   | 98.4             | 7.8<br>7.8<br>7.8       | 9.3<br>9.3   | -    | 10<br>12         |    | -               |    |                       |                       | -                  | -             |
| SR3                   | Cloudy     | Rough      | 13:11    | 8.7       | Middle         | 4.4         | 0.6              | 165                  | 18.8         | 18.8          | 7.9        | 7.9     | 27.6         | 27.6    | 99.0           | 99.0             | 7.8                     | 10.5         | 10.9 | 10               | 11 | -               | -  | 822144                | 807587                |                    |               |
|                       | -          | Ū          |          |           |                | 4.4         | 0.6<br>0.5       | <u>177</u><br>178    | 18.8<br>18.6 |               | 7.9<br>7.9 |         | 27.6<br>28.2 |         | 99.0<br>102.7  |                  | 7.8<br>8.1              | 10.5<br>12.8 | -    | 12<br>13         |    | -               |    |                       |                       | -                  | -             |
|                       |            |            |          |           | Bottom         | 7.7         | 0.5              | 178                  | 18.6         | 18.6          | 7.9        | 7.9     | 28.2         | 20.2    | 102.7          | 102.7            | 8.1 8.1                 | 12.8         |      | 11               |    | -               |    |                       |                       |                    |               |
|                       |            |            |          |           | Surface        | 1.0         | 0.4              | 88<br>95             | 15.5<br>15.5 | 15.5          | 7.6<br>7.6 | 7.6     | 26.8<br>26.8 | 26.8    | 97.3<br>97.2   | 97.3             | 8.2<br>8.2<br>8.3       | 16.7<br>16.8 | -    | 17<br>18         |    | -               |    |                       |                       | -                  | -             |
| SR4A                  | Cloudy     | Moderate   | 11:49    | 8.3       | Middle         | 4.2         | 0.4              | 92<br>94             | 15.5<br>15.5 | 15.5          | 7.6        | 7.6     | 26.5<br>26.5 | 26.5    | 97.3<br>97.3   | 97.3             | 8.3<br>8.3              | 17.7<br>17.8 | 17.6 | 21<br>20         | 20 | -               | -  | 817205                | 807828                |                    |               |
|                       |            |            |          |           | Bottom         | 7.3         | 0.4              | 90                   | 15.4         | 15.4          | 7.6        | 7.6     | 25.5         | 25.5    | 98.4           | 98.5             | 8.4 8.4                 | 18.3         | -    | 20               |    | -               |    |                       |                       | -                  | -             |
|                       |            |            |          |           |                | 7.3         | 0.4              | 92<br>97             | 15.4<br>15.6 |               | 7.6<br>7.5 |         | 25.4<br>24.8 |         | 98.5<br>98.3   |                  | 8.4 0.4<br>8.4          | 18.3<br>9.2  |      | 21<br>12         |    | -               |    |                       |                       | -                  | -             |
|                       |            |            |          |           | Surface        | 1.0         | 0.4              | 98                   | 15.6         | 15.6          | 7.5        | 7.5     | 24.8         | 24.8    | 98.4           | 98.4             | 8.4 8.4                 | 9.3          | ļ    | 10               |    | -               |    |                       |                       | -                  | -             |
| SR5A                  | Sunny      | Moderate   | 11:30    | 4.8       | Middle         | 0.0         | -                | -                    | -            | -             | -          | -       | -            | -       | -              | -                | -                       | -            | 9.4  | -                | 11 | -               | -  | 816609                | 810676                |                    |               |
|                       |            |            |          |           | Bottom         | 3.8<br>3.8  | 0.4              | 100<br>106           | 15.5<br>15.5 | 15.5          | 7.4        | 7.4     | 23.1<br>23.1 |         | 100.7<br>100.8 | 100.8            | 8.7<br>8.7<br>8.7       | 9.4<br>9.5   | -    | 10<br>10         |    | -               |    |                       |                       | -                  | -             |
|                       |            |            |          |           | Surface        | 1.0         | 0.4              | 92                   | 15.5         | 15.5          | 7.4        | 7.4     | 25.6         | 25.6    | 98.9           | 99.0             | 8.4                     | 16.8         |      | 22               |    | -               |    |                       |                       | -                  | -             |
|                       |            |            |          |           |                | 1.0<br>0.0  | - 0.4            | - 99                 | - 15.5       | 1010          | 7.4        |         | - 25.6       | 20.0    | 99.0<br>-      |                  | 8.4 8.4                 | - 16.6       |      | - 22             |    | -               |    |                       |                       | -                  | -             |
| SR6                   | Sunny      | Moderate   | 11:04    | 4.5       | Middle         | 0.0         | -                | -                    | -            | -             | -          | -       | -            | -       | -              | -                | -                       | -            | 15.4 | -                | 22 | -               | -  | 817890                | 814670                | -                  | -             |
|                       |            |            |          |           | Bottom         | 3.5<br>3.5  | 0.4              | 112<br>115           | 15.5<br>15.5 | 15.5          | 7.3<br>7.3 | 7.3     | 23.3<br>23.3 | 23.3    | 102.5<br>102.6 | 102.6            | 8.9<br>8.9              | 14.2<br>14.0 | -    | 22<br>22         |    | -               |    |                       |                       | -                  | -             |
|                       |            |            |          |           | Surface        | 1.0         | 0.3              | 126                  | 18.6<br>18.6 | 18.6          | 7.9<br>7.9 | 7.9     | 30.1<br>30.1 |         | 91.8<br>91.8   | 91.8             | 7.2                     | 6.6<br>6.7   |      | 6<br>7           |    | -               |    |                       |                       | -                  | -             |
| SR7                   | Cloudy     | Moderate   | 10:46    | 16.2      | Middle         | 8.1         | 0.3              | 132<br>89            | 18.5         | 18.5          | 7.9        | 7.9     | 30.2         | 30.2    | 92.0           | 92.1             | 7.2                     | 7.9          | 7.7  | 9                | 10 | -               |    | 823629                | 823743                | -                  | -             |
| 017                   | Cioudy     | wouerale   | 10.40    | 10.2      |                | 8.1<br>15.2 | 0.2              | 97<br>72             | 18.5<br>18.5 |               | 7.9<br>7.9 |         | 30.2<br>30.2 |         | 92.1<br>95.2   |                  | 7.2<br>7.5 7.5          | 7.9<br>8.4   | ·    | 11<br>11         | 10 | -               | -  | 020023                | 020140                | -                  | -             |
|                       |            |            |          |           | Bottom         | 15.2        | 0.2              | 75                   | 18.5         | 18.5          | 7.9        | 7.9     | 30.2         | 30.2    | 95.2           | 95.2             | 7.5                     | 8.4          | -    | 13               |    | -               |    |                       |                       | <u> </u>           | -             |
|                       |            |            |          |           | Surface        | 1.0         | 0.3              | 142<br>154           | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.9     | 28.6<br>28.6 | 28.6    | 98.4<br>98.4   | 98.4             | 7.7                     | 9.8<br>9.8   | ŀ    | 8<br>10          |    | -               |    |                       |                       | -                  | -             |
| SR8                   | Cloudy     | Moderate   | 11:59    | 4.8       | Middle         | 0.0         | -                | -                    | -            | -             | -          |         | -            | -       | -              | -                | - 7.7                   | -            | 10.9 | -                | 10 | -               | -  | 820411                | 811606                |                    |               |
|                       | -          |            |          |           | Pottom         | 0.0 3.8     | - 0.3            | - 141                | - 18.8       | 10.0          | - 7.9      | 7.0     | - 28.7       | 29.7    | -<br>102.7     | 100.7            | -<br>8.1 <sub>8.1</sub> | -<br>11.9    | ŀ    | -<br>12          |    | -               |    |                       |                       | -                  | -             |
| DA: Depth-Aver        |            |            |          |           | Bottom         | 3.8         | 0.3              | 149                  | 18.8         | 18.8          | 7.9        | 7.9     | 28.7         | 28.7    | 102.7          | 102.7            | 8.1 8.1                 | 11.9         | -    | 10               |    | -               |    |                       |                       | -                  | -             |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on11 February 17 during 11 February 17 during Mid-Flood Tide

| Water Qua     | lity Monito | oring Resi | lits on  |           | 11 February 17 | during Mid   |                  | ae         |              |               | -          |         |              |         |              |                  |                           |                      |             |                  |    |                   |    |                       | 1                     |                      |                   |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|--------------|------------------|---------------------------|----------------------|-------------|------------------|----|-------------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | th (m)       | Current<br>Speed | Current    | Water Ter    | nperature (°C | ;)         | рН      | Salinity     | y (ppt) |              | aturation<br>[%) | Dissolved<br>Oxygen       | Turbidity(           | NTU)        | Suspende<br>(mg/ |    | Total All<br>(ppi | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(μg/L)   | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average       | Value      | Average |              | Average |              | Average          | Value DA                  | Value                | DA          | Value            | DA | Value             | DA | (Northing)            | (Easting)             | Value DA             | Value DA          |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 77<br>77   | 14.3<br>14.3 | 14.3          | 8.1<br>8.1 | 8.1     | 32.5<br>32.5 | 32.5    | 96.4<br>96.4 | 96.4             | 8.1<br>8.1                | 20.2<br>20.3         | -           | 22<br>21         |    | 83<br>83          |    |                       |                       | <0.2<br><0.2         | 0.9               |
| C1            | Sunny       | Rough      | 07:56    | 6.7       | Middle         | 3.4<br>3.4   | 0.6              | 89<br>94   | 14.2<br>14.2 | 14.2          | 8.0<br>8.0 | 8.0     | 32.6<br>32.6 |         | 96.4<br>96.4 | 96.4             | 8.1<br>8.1                | 21.5<br>21.5         | 21.3        | 22<br>22         | 24 | 84<br>84          | 84 | 815629                | 804228                | <0.2<br><0.2 <0.2    | 1.2<br>1.2<br>1.0 |
|               |             |            |          |           | Bottom         | 5.7          | 0.5              | 76         | 14.1         | 14.1          | 8.0        | 8.0     | 32.6         | 20.6    | 96.3         | 96.3             | 8.1 8.1                   | 22.1                 | F           | 28               |    | 84                |    |                       |                       | <0.2                 | 0.7               |
|               |             |            |          |           | Surface        | 5.7<br>1.0   | 0.5<br>0.5       | 76<br>234  | 14.1<br>17.9 | 17.9          | 8.0<br>7.8 | 7.8     | 32.6<br>28.7 | 20.7    | 96.3<br>94.8 | 94.8             | 8.1 0.1<br>7.6            | 22.2<br>12.5         |             | 27<br>15         |    | 85<br>75          |    |                       |                       | <0.2<br><0.2         | 0.8               |
|               | File        |            | 00.40    | 10.0      |                | 1.0<br>6.3   | 0.5              | 237<br>252 | 17.9<br>17.9 |               | 7.8<br>7.8 |         | 28.7<br>28.7 |         | 94.8<br>95.8 |                  | 7.6<br>7.7<br>7.7         | 12.4<br>15.8         |             | 14<br>15         | 10 | 76<br>78          | 70 | 005000                |                       | <0.2<br><0.2         | 1.0<br>1.3        |
| C2            | Fine        | Rough      | 08:46    | 12.6      | Middle         | 6.3<br>11.6  | 0.6              | 270<br>251 | 17.9<br>17.9 | 17.9          | 7.8<br>7.8 | 7.8     | 28.7<br>28.7 | 20.7    | 95.8<br>98.1 | 95.8             | 7.7<br>7.8 7.0            | 15.9<br>18.8         | 15.7        | 15<br>16         | 16 | 80<br>84          | 79 | 825692                | 806928                | <0.2<br><0.2<br><0.2 | 1.0<br>1.4<br>1.3 |
|               |             |            |          |           | Bottom         | 11.6         | 0.6              | 261        | 17.9         | 17.9          | 7.8        | 7.8     | 28.7         | 28.7    | 98.2         | 98.2             | 7.9                       | 19.0                 |             | 18               |    | 83                |    |                       |                       | <0.2                 | 1.3               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.5<br>0.6       | 235<br>244 | 17.9<br>17.9 | 17.9          | 7.9<br>7.9 | 7.9     | 30.0<br>30.0 | 30.0    | 93.4<br>93.4 | 93.4             | 7.4<br>7.4<br>7.4         | 12.6<br>12.6         | -           | 14<br>15         |    | 77<br>76          |    |                       |                       | <0.2<br><0.2         | 0.7<br>0.9        |
| C3            | Cloudy      | Moderate   | 06:58    | 12.2      | Middle         | 6.1<br>6.1   | 0.6              | 244<br>251 | 17.9<br>17.9 | 17.9          | 7.9<br>7.9 | 7.9     | 30.0<br>30.0 | 30.0    | 93.2<br>93.2 | 93.2             | 7.4<br>7.4                | 15.2<br>15.4         | 16.5        | 17<br>17         | 16 | 79<br>80          | 80 | 822101                | 817785                | <0.2<br><0.2 <0.2    | 0.7 0.8           |
|               |             |            |          |           | Bottom         | 11.2<br>11.2 | 0.5<br>0.5       | 246<br>259 | 17.9<br>17.9 | 17.9          | 7.9<br>7.9 | 7.9     | 30.0<br>30.0 |         | 93.8<br>93.8 | 93.8             | 7.4 7.4                   | 21.4<br>21.5         | F           | 16<br>17         |    | 83<br>84          |    |                       |                       | <0.2<br><0.2         | 0.8               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.7              | 126<br>132 | 14.3<br>14.3 | 14.3          | 8.1<br>8.1 | 8.1     | 32.7<br>32.7 | 22.7    | 96.3<br>96.3 | 96.3             | 8.1<br>8.1                | 19.4<br>19.4         |             | 25<br>24         |    | 82<br>82          |    |                       |                       | <0.2<br><0.2         | 1.0<br>1.0        |
| IM1           | Sunny       | Rough      | 08:07    | 7.7       | Middle         | 3.9          | 0.7              | 120        | 14.3         | 14.3          | 8.1        | 8.1     | 32.7         | 20.7    | 96.2         | 96.2             | 8.1 8.1                   | 21.8                 | 21.4        | 25               | 25 | 82                | 83 | 818351                | 806448                | <0.2                 | 1.1 1.0           |
|               |             | Ū          |          |           | Bottom         | 3.9<br>6.7   | 0.7              | 125<br>111 | 14.3<br>14.3 | 14.3          | 8.1<br>8.1 | 8.1     | 32.7<br>32.6 | 22.6    | 96.2<br>96.2 | 96.2             | 8.1<br>8.1<br>8.1         | 21.8<br>23.1         |             | 26<br>25         |    | 83<br>83          |    |                       |                       | <0.2<br><0.2         | 1.1<br>0.9        |
|               |             |            |          |           |                | 6.7<br>1.0   | 0.7              | 115<br>118 | 14.3<br>14.1 |               | 8.1<br>8.0 |         | 32.6<br>32.9 |         | 96.2<br>96.9 |                  | 8.1 <sup>0.1</sup><br>8.1 | 23.1<br>16.2         |             | 23<br>19         |    | 83<br>82          |    |                       |                       | <0.2<br><0.2         | 0.9               |
|               |             |            |          |           | Surface        | 1.0<br>4.4   | 0.7              | 122<br>131 | 14.1<br>14.1 | 14.1          | 8.0<br>8.0 | 8.0     | 32.9<br>32.9 | 32.9    | 96.9<br>96.8 | 96.9             | 8.1<br>8.1 8.1            | 16.2<br>20.1         | -           | 19<br>23         |    | 82<br>83          |    |                       |                       | <0.2<br><0.2         | 1.2<br>1.2        |
| IM2           | Sunny       | Rough      | 08:17    | 8.8       | Middle         | 4.4          | 0.7              | 133<br>162 | 14.1<br>14.1 | 14.1          | 8.0<br>8.0 | 8.0     | 32.9         | 32.9    | 96.8         | 96.8             | 8.1                       | 20.1                 | 20.2        | 24<br>26         | 23 | 83<br>84          | 83 | 818841                | 806187                | <0.2<br><0.2<br><0.2 | 1.1<br>1.2<br>0.8 |
|               |             |            |          |           | Bottom         | 7.8          | 0.6<br>0.6       | 162        | 14.1         | 14.1          | 8.0        | 8.0     | 32.9<br>32.9 | 32.9    | 97.4<br>97.4 | 97.4             | 8.2<br>8.2<br>8.2         | 24.2<br>24.2         |             | 24               |    | 83                |    |                       |                       | <0.2                 | 0.8               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.6              | 93<br>98   | 14.1<br>14.1 | 14.1          | 8.0<br>8.0 | 8.0     | 33.0<br>33.0 | 33.0    | 96.8<br>96.8 | 96.8             | 8.1<br>8.1<br>8.1         | 16.1<br>16.0         | ŀ           | 18<br>18         |    | 81<br>81          |    |                       |                       | <0.2<br><0.2         | 1.2<br>1.2        |
| IM3           | Sunny       | Rough      | 08:27    | 8.7       | Middle         | 4.4          | 0.6              | 108<br>108 | 14.1<br>14.1 | 14.1          | 8.0<br>8.0 | 8.0     | 33.0<br>33.0 | 33.0    | 96.7<br>96.7 | 96.7             | 8.1<br>8.1                | 20.4<br>20.4         | 19.8        | 18<br>20         | 20 | 82<br>82          | 82 | 819405                | 806022                | <0.2<br><0.2<br><0.2 | 1.2<br>1.2<br>1.0 |
|               |             |            |          |           | Bottom         | 7.7          | 0.5<br>0.5       | 136<br>137 | 14.1<br>14.1 | 14.1          | 8.0<br>8.0 | 8.0     | 33.0<br>33.0 |         | 96.9<br>96.8 | 96.9             | 8.1<br>8.1 8.1            | 23.0<br>23.1         | -           | 23<br>24         |    | 83<br>83          |    |                       |                       | <0.2<br><0.2         | 0.8<br>0.5        |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.9              | 129<br>141 | 14.2         | 14.2          | 8.0<br>8.0 | 8.0     | 32.9<br>32.9 |         | 97.1<br>97.1 | 97.1             | 8.1                       | 19.0<br>19.0         |             | 20<br>19         |    | 81<br>80          |    |                       |                       | <0.2<br><0.2         | 0.8               |
| IM4           | Sunny       | Rough      | 08:35    | 7.9       | Middle         | 4.0          | 0.9              | 113        | 14.1         | 14.1          | 8.0        | 8.0     | 32.9         | 32.9    | 97.1         | 97.2             | 8.1<br>8.1<br>8.1         | 21.4                 | 21.2        | 18               | 19 | 81                | 82 | 819586                | 805037                | <0.2                 | 0.9               |
|               |             | Ū          |          |           | Bottom         | 4.0<br>6.9   | 0.9              | 117<br>157 | 14.1<br>14.2 | 14.2          | 8.0<br>8.0 | 8.0     | 32.9<br>32.9 | 22.0    | 97.2<br>97.6 | 97.6             | 8.1<br>8.2<br>8.2         | 21.4<br>23.2         |             | 18<br>19         |    | 82<br>83          |    |                       |                       | <0.2                 | 0.9               |
|               |             |            |          |           |                | 6.9<br>1.0   | 0.8<br>0.8       | 169<br>109 | 14.2<br>14.1 |               | 8.0<br>8.0 |         | 32.9<br>33.0 |         | 97.6<br>96.9 |                  | 8.2 0.2<br>8.1            | 23.2<br>25.1         |             | 20<br>16         |    | 83<br>80          |    |                       |                       | <0.2<br><0.2         | 1.0<br>0.7        |
|               |             |            |          |           | Surface        | 1.0<br>3.7   | 0.9              | 112<br>107 | 14.1<br>14.1 | 14.1          | 8.0<br>8.0 | 8.0     | 33.0<br>33.1 | 55.0    | 96.9<br>97.0 | 96.9             | 8.1<br>8.1 8.1            | 25.1<br>27.2         | -           | 14<br>19         |    | 80<br>81          |    |                       |                       | <0.2<br><0.2         | 0.8               |
| IM5           | Sunny       | Rough      | 08:45    | 7.4       | Middle         | 3.7<br>6.4   | 0.7              | 112        | 14.1         | 14.1          | 8.0        | 8.0     | 33.1         |         | 97.0         | 97.0             | 8.1                       | 27.2<br>30.0         | <u>27.5</u> | 19<br>24         | 19 | 81<br>82          | 81 | 820552                | 804935                | <0.2<br><0.2<br><0.2 | 0.8<br>0.8<br>0.9 |
|               |             |            |          |           | Bottom         | 6.4          | 0.7              | 149<br>160 | 14.1<br>14.1 | 14.1          | 8.0<br>8.0 | 8.0     | 33.1<br>33.1 | 33.1    | 97.3<br>97.4 | 97.4             | 8.1<br>8.1<br>8.1         | 30.1                 |             | 23               |    | 82                |    |                       |                       | <0.2                 | 0.9               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.7              | 121<br>131 | 14.3<br>14.3 | 14.3          | 7.9<br>7.9 | 7.9     | 33.3<br>33.3 |         | 96.2<br>96.2 | 96.2             | 8.0<br>8.0<br>8.0         | 21.8<br>21.8         | _           | 16<br>15         |    | 82<br>82          |    |                       |                       | <0.2<br><0.2         | 0.9               |
| IM6           | Sunny       | Rough      | 08:52    | 7.4       | Middle         | 3.7<br>3.7   | 0.7              | 124<br>131 | 14.3<br>14.3 | 14.3          | 7.9<br>7.9 | 7.9     | 33.3<br>33.3 | 33.3    | 96.0<br>96.0 | 96.0             | 8.0<br>8.0                | 24.7<br>24.7         | 25.0        | 19<br>20         | 19 | 83<br>84          | 83 | 821050                | 805835                | <0.2 <0.2 <0.2       | 0.8 0.8           |
|               |             |            |          |           | Bottom         | 6.4<br>6.4   | 0.6              | 98<br>107  | 14.3<br>14.3 | 14.3          | 7.9<br>7.9 | 7.9     | 33.3<br>33.3 |         | 96.0<br>96.0 | 96.0             | 8.0<br>8.0<br>8.0         | 28.6<br>28.6         | -           | 21<br>21         |    | 84<br>84          |    |                       |                       | <0.2<br><0.2         | 0.8               |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 95         | 14.3         | 14.3          | 7.9        | 7.9     | 33.3<br>33.3 | 22.2    | 96.0<br>96.0 | 96.0             | 8.0                       | 20.0<br>20.1<br>20.1 |             | 25               |    | 83                |    |                       |                       | <0.2<br><0.2<br><0.2 | 0.8 0.9           |
| IM7           | Sunny       | Rough      | 09:00    | 8.3       | Middle         | 1.0<br>4.2   | 0.7              | 99<br>99   | 14.3<br>14.3 | 14.3          | 7.9        | 7.9     | 33.3         | 33.3    | 95.9         | 95.9             | 8.0<br>8.0                | 26.8                 | <u>26.7</u> | 25<br>25         | 26 | 83<br>84          | 84 | 821359                | 806825                | <0.2                 | 0.8               |
|               |             |            |          |           | Bottom         | 4.2<br>7.3   | 0.7              | 108<br>104 | 14.3<br>14.3 | 14.3          | 7.9<br>7.9 | 7.9     | 33.3<br>33.3 | 22.2    | 95.9<br>95.8 | 95.8             | 8.0<br>8.0<br>8.0         | 26.8<br>33.3         |             | 24<br>29         | -  | 84<br>85          |    |                       |                       | <0.2                 | 0.8               |
|               |             |            |          |           |                | 7.3<br>1.0   | 0.8<br>0.5       | 110<br>174 | 14.3<br>17.6 |               | 7.9<br>7.9 |         | 33.3<br>29.4 | 55.5    | 95.8<br>96.6 |                  | 8.0<br>7.7                | 33.3<br>14.8         |             | 28<br>14         |    | 85<br>78          |    |                       |                       | <0.2<br><0.2         | 0.7               |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 189<br>196 | 17.6<br>17.5 | 17.6          | 7.9        | 7.9     | 29.4<br>29.4 |         | 96.6<br>97.7 | 96.6             | 7.7<br>7.8<br>7.8         | 14.9<br>17.3         | F           | 12<br>17         |    | 78<br>79          |    |                       |                       | <0.2                 | 1.1               |
| IM8           | Fine        | Rough      | 08:19    | 8.8       | Middle         | 4.4          | 0.5              | 206        | 17.5         | 17.5          | 7.9        | 7.9     | 29.4         | 29.4    | 97.7         | 97.7             | 7.8                       | 17.4                 | 16.7        | 18               | 15 | 80                | 81 | 821688                | 807822                | <0.2                 | 1.0               |
| DA: Dopth Avo |             |            |          |           | Bottom         | 7.8<br>7.8   | 0.4              | 168<br>179 | 17.5<br>17.5 | 17.5          | 7.9<br>7.9 | 7.9     | 29.4<br>29.4 | 29.4    | 99.4<br>99.5 | 99.5             | 8.0<br>8.0<br>8.0         | 17.8<br>17.8         | _           | 19<br>10         |    | 84<br>84          |    |                       |                       | <0.2<br><0.2         | 1.0<br>1.1        |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on11 February 17 during 11 February 17 during Mid-Flood Tide

| Water Qua  | lity Monite | oring Resu | ults on  |           | 11 February 17 | during Mid  |                  | de         |              |               |            |         |              |          |                | -                |   |              |       |                  |           |                 |    |                       |                       |                      |                   |
|------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|----------------|------------------|---|--------------|-------|------------------|-----------|-----------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)     | Current<br>Speed | Current    | Water Ter    | mperature (°C | <b>;</b> ) | рН      | Salini       | ty (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen                       | Turbidity(   | NTU)  | Suspende<br>(mg/ |           | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| Station    | Condition   | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  |                | Average          | Value DA                                  | Value        | DA    | Value            | DA        | Value           | DA | (Northing)            | (Easting)             | Value DA             | Value DA          |
|            |             |            |          |           | Surface        | 1.0         | 0.5              | 192<br>198 | 17.6<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 29.1<br>29.1 | 29.1     | 95.8<br>95.8   | 95.8             | 7.7                                       | 12.1<br>12.1 | -     | 10<br>12         |           | 79<br>79        |    |                       |                       | <0.2<br><0.2         | 1.4               |
| IM9        | Fine        | Rough      | 08:10    | 7.7       | Middle         | 3.9<br>3.9  | 0.5              | 207<br>223 | 17.6<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 29.1<br>29.1 | 29.1     | 96.1<br>96.1   | 96.1             | 7.7<br>7.7<br>7.7                         | 12.7<br>12.7 | 12.9  | 14<br>14         | 13        | 81<br>80        | 81 | 822087                | 808821                | <0.2<br><0.2 <0.2    | 13                |
|            |             |            |          |           | Bottom         | 6.7         | 0.5              | 181        | 17.6         | 17.6          | 7.9<br>7.9 | 7.9     | 29.2         | 29.2     | 97.3<br>97.3   | 97.3             | 7.8 7.9                                   | 13.9         | -     | 15               |           | 83              |    |                       |                       | <0.2                 | 1.0<br>1.2<br>1.0 |
|            |             |            |          |           | Surface        | 6.7<br>1.0  | 0.5              | 193<br>281 | 17.6<br>17.3 | 17.3          | 7.9        | 7.9     | 29.2<br>29.6 | 29.6     | 97.2           | 97.2             | 7.8<br>7.8<br>7.8                         | 13.8<br>19.5 |       | 14<br>20         |           | 83<br>78        |    |                       |                       | <0.2<br><0.2         | 0.9               |
|            | File        |            | 00.01    |           |                | 1.0<br>3.9  | 0.6              | 291<br>255 | 17.3<br>17.3 |               | 7.9<br>7.9 |         | 29.6<br>29.6 |          | 97.2<br>97.3   |                  | 7.8<br>7.8<br>7.8                         | 19.6<br>19.9 | 00 F  | 20<br>20         |           | 77<br>79        |    | 000000                | 000044                | <0.2<br><0.2         | 0.8               |
| IM10       | Fine        | Rough      | 08:01    | 7.7       | Middle         | 3.9<br>6.7  | 0.5              | 278<br>227 | 17.3<br>17.3 | 17.3          | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.0     | 97.3<br>99.4   | 97.3             | 7.8                                       | 19.9<br>22.0 | 20.5  | 21<br>21         | 20        | 81<br>84        | 81 | 822233                | 809841                | <0.2<br><0.2<br><0.2 | 0.8<br>0.8        |
|            |             |            |          |           | Bottom         | 6.7         | 0.4              | 233        | 17.3         | 17.3          | 7.9        | 7.9     | 29.6         | 29.6     | 99.5           | 99.5             | 8.0 8.0                                   | 21.9         | -     | 20               |           | 84              |    |                       |                       | <0.2                 | 0.8               |
|            |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.5       | 260<br>278 | 17.4<br>17.4 | 17.4          | 7.9<br>7.9 | 7.9     | 29.5<br>29.5 | 29.5     | 97.0<br>97.1   | 97.1             | 7.8<br>7.8<br>7.8<br>7.8                  | 15.6<br>15.7 | -     | 14<br>13         |           | 77<br>79        |    |                       |                       | <0.2<br><0.2         | 0.9<br>0.8        |
| IM11       | Cloudy      | Rough      | 07:53    | 7.9       | Middle         | 4.0         | 0.4              | 263<br>267 | 17.3<br>17.3 | 17.3          | 7.9<br>7.9 | 7.9     | 29.5<br>29.5 | 29.5     | 97.4<br>97.4   | 97.4             | 7.8<br>7.8                                | 16.7<br>16.8 | 17.1  | 18<br>18         | 18        | 81<br>80        | 81 | 821483                | 810563                | <0.2<br><0.2<br><0.2 | 0.8 0.8           |
|            |             |            |          |           | Bottom         | 6.9<br>6.9  | 0.3              | 255<br>260 | 17.3<br>17.3 | 17.3          | 7.9<br>7.9 | 7.9     | 29.5<br>29.5 | 29.5     | 98.4<br>98.5   | 98.5             | 7.9<br>7.9<br>7.9                         | 18.8<br>18.7 | -     | 23<br>23         |           | 83<br>83        |    |                       |                       | <0.2<br><0.2         | 0.8<br>0.9        |
|            |             |            |          |           | Surface        | 1.0<br>1.0  | 0.7              | 284<br>298 | 17.4         | 17.4          | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.6     | 96.5<br>96.5   | 96.5             | 7.7                                       | 14.9<br>15.0 | -     | 17               |           | 78<br>77        |    |                       |                       | <0.2<br><0.2         | 0.7               |
| IM12       | Cloudy      | Rough      | 07:44    | 8.5       | Middle         | 4.3         | 0.7              | 273        | 17.4         | 17.4          | 7.9        | 7.9     | 29.6         | 29.6     | 96.4           | 96.4             | 7.7                                       | 15.3         | 16.2  | 16<br>16         | 16        | 81              | 80 | 821146                | 811511                | <0.2                 | 0.9 0.8           |
|            |             | 3          |          |           | Bottom         | 4.3<br>7.5  | 0.6              | 284<br>231 | 17.4<br>17.4 | 17.4          | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.6     | 96.4<br>98.8   | 98.8             | 7.7<br>7.9<br>7.9                         | 15.6<br>18.1 | -     | 17<br>16         | -         | 79<br>84        |    |                       |                       | <0.2                 | 0.9               |
|            |             |            |          |           |                | 7.5         | 0.8              | 253<br>133 | 17.4<br>17.2 |               | 7.9<br>7.9 |         | 29.6<br>29.6 |          | 98.8<br>98.2   |                  | 7.9<br>7.9<br>7.9                         | 18.1<br>14.6 |       | 15<br>14         |           | 83<br>78        |    |                       |                       | <0.2<br><0.2         | 0.8<br>0.9        |
|            |             |            |          |           | Surface        | 1.0<br>0.0  | 0.2              | 138        | 17.2         | 17.2          | 7.9        | 7.9     | 29.6         | 29.6     | 98.2           | 98.2             | 7.9 7.9                                   | - 14.6       | -     | 14<br>-          |           | 80              |    |                       |                       | <0.2                 | 0.9               |
| SR2        | Cloudy      | Moderate   | 07:21    | 4.4       | Middle         | 0.0         | -                | -          | -            | -             | -          | -       | -            | -        | -              | -                | -   | -            | 17.0  | -                | 15        | -               | 81 | 821462                | 814169                | - <0.2               | - 0.9             |
|            |             |            |          |           | Bottom         | 3.4<br>3.4  | 0.2              | 120<br>128 | 17.2<br>17.2 | 17.2          | 7.8<br>7.8 | 7.8     | 29.6<br>29.6 |          | 101.9<br>102.1 | 102.0            | 8.2<br>8.2<br>8.2                         | 19.1<br>19.6 |       | 17<br>15         |           | 82<br>83        |    |                       |                       | <0.2<br><0.2         | 1.0<br>0.9        |
|            |             |            |          |           | Surface        | 1.0<br>1.0  | 0.7              | 125<br>131 | 17.6<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 29.3<br>29.3 | 29.3     | 96.1<br>96.1   | 96.1             | 7.7                                       | 12.1<br>12.0 | _     | 13<br>12         |           | -               |    |                       |                       | -                    | -                 |
| SR3        | Fine        | Rough      | 08:25    | 9.2       | Middle         | 4.6<br>4.6  | 0.6              | 164<br>168 | 17.5<br>17.5 | 17.5          | 7.9<br>7.9 | 7.9     | 29.4<br>29.4 | 29.4     | 96.2<br>96.2   | 96.2             | 7.7                                       | 12.0<br>11.8 | 13.6  | 14<br>14         | 13        | -               | -  | 822129                | 807563                |                      |                   |
|            |             |            |          |           | Bottom         | 8.2<br>8.2  | 0.6              | 141<br>141 | 17.3<br>17.3 | 17.3          | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.6     | 101.1<br>101.2 | 101.2            | 8.1<br>8.1 8.1                            | 16.7<br>16.7 | -     | 14<br>13         |           | -               |    |                       |                       | -                    | -                 |
|            |             |            |          |           | Surface        | 1.0         | 0.4              | 153        | 14.4         | 14.4          | 8.0        | 8.0     | 30.9         | 30.9     | 95.0           | 95.0             | 8.0                                       | 8.4          | _     | 11               |           | -               |    |                       |                       | -                    | -                 |
| SR4A       | Sunny       | Moderate   | 07:34    | 8.9       | Middle         | 1.0<br>4.5  | 0.4              | 164<br>126 | 14.4<br>14.4 | 14.4          | 8.0<br>8.0 | 8.0     | 30.9<br>31.0 | 31.0     | 95.0<br>95.3   | 95.3             | 8.0<br>8.0                                | 8.3<br>10.1  | 10.0  | 10<br>14         | 13        | -               | -  | 817178                | 807819                |                      |                   |
|            |             |            |          |           | Bottom         | 4.5<br>7.9  | 0.4              | 127<br>119 | 14.4<br>14.2 | 14.2          | 8.0<br>8.0 | 8.0     | 31.0<br>31.4 | 31.4     | 95.3<br>95.7   | 95.7             | 8.0<br>8.1 8.1                            | 10.0<br>11.5 |       | 14<br>13         | -         | -               |    |                       |                       | -                    | -                 |
|            |             |            |          |           |                | 7.9         | 0.4              | 128<br>285 | 14.2<br>14.5 |               | 8.0<br>8.0 |         | 31.4<br>29.8 |          | 95.7<br>94.8   |                  | 8.1 <sup>0.1</sup><br>8.0                 | 11.5<br>18.3 |       | 14<br>24         |           | -               |    |                       |                       | -                    | -                 |
|            |             |            |          |           | Surface        | 1.0<br>0.0  | 0.2              | 301        | 14.5         | 14.5          | 8.0        | 8.0     | 29.8         | 29.8     | 94.8           | 94.8             | 8.0 8.0                                   | - 18.4       | -     | - 24             |           | -               |    |                       |                       | -                    | -                 |
| SR5A       | Sunny       | Calm       | 07:14    | 5.3       | Middle         | 0.0         | -                | -          | -            | -             | -          | -       | -            | -        | -              | -                | -   | -            | 19.2  | -                | <u>26</u> | -               | -  | 816576                | 810712                | -                    | -                 |
|            |             |            |          |           | Bottom         | 4.3<br>4.3  | 0.2              | 293<br>298 | 14.4<br>14.4 | 14.4          | 7.9<br>7.9 | 7.9     | 29.7<br>29.7 | 29.7     | 96.2<br>96.3   | 96.3             | 8.2<br>8.2<br>8.2                         | 20.0<br>20.0 |       | 30<br>27         |           | -               |    |                       |                       | -                    | -                 |
|            |             |            |          |           | Surface        | 1.0<br>1.0  | 0.2              | 193<br>211 | 14.5<br>14.5 | 14.5          | 7.7<br>7.7 | 7.7     | 24.6<br>24.6 | 24.6     | 94.4<br>94.4   | 94.4             | 8.3<br>8.3<br>8.3                         | 6.0<br>6.0   | F     | 6<br>7           |           | -               |    |                       |                       | -                    | -                 |
| SR6        | Sunny       | Calm       | 06:51    | 3.8       | Middle         | 0.0         | -                | -          | -            | -             | -          | -       | -            | -        | -              | -                | - 0.3                                     | -            | 6.1   | -                | 7         | -               | -  | 817910                | 814651                |                      |                   |
|            |             |            |          |           | Bottom         | 2.8         | 0.2              | 201        | 14.5<br>14.5 | 14.5          | 7.7        | 7.7     | 23.8<br>23.8 | 23.8     | 94.6<br>94.6   | 94.6             | 8.3<br>8.3                                | 6.2<br>6.2   | -     | 8                |           | -               |    |                       |                       | -                    | -                 |
| <u> </u>   |             |            |          |           | Surface        | 1.0         | 0.2              | 201        | 17.8         | 17.8          | 7.9        | 7.9     | 30.2         | 30.2     | 93.2           | 93.2             | 7.4                                       | 9.5          |       | 8                |           | -               |    |                       |                       | -                    | -                 |
| SR7        | Cloudy      | Moderate   | 06:25    | 16.4      | Middle         | 1.0<br>8.2  | 0.3              | 112<br>109 | 17.8<br>17.8 | 17.8          | 7.9<br>7.9 | 7.9     | 30.2<br>30.2 | 30.2     | 93.2<br>92.7   | 92.7             | 7.4         7.4           7.4         7.4 | 9.5<br>10.6  | 10.3  | 10<br>11         | 11        | -               | _  | 823627                | 823726                | -                    | -                 |
| 0.17       | Cloudy      | moderate   | 00.20    | 10.4      |                | 8.2<br>15.4 | 0.3              | 116<br>102 | 17.8<br>17.8 |               | 7.9<br>7.9 |         | 30.2<br>30.2 |          | 92.7<br>92.5   |                  | 7.4<br>7.3 7.2                            | 10.5<br>10.7 | . 5.0 | 10<br>13         |           | -               |    | 020021                | 020720                | -                    | -                 |
| ┣────      |             |            |          |           | Bottom         | 15.4<br>1.0 | 0.2              | 102<br>88  | 17.8<br>17.5 | 17.8          | 7.9<br>7.9 | 7.9     | 30.2<br>29.4 | 30.2     | 92.5<br>97.7   | 92.5             | 7.3<br>7.3<br>7.8                         | 10.7<br>12.4 |       | 14<br>12         |           | -               |    |                       |                       | -                    | -                 |
|            |             |            |          |           | Surface        | 1.0         | 0.3              | 88         | 17.5         | 17.5          | 7.9        | 7.9     | 29.4         | 29.4     | 97.8           | 97.8             | 7.8 7.8                                   | 12.5         | F     | 12               |           | -               |    |                       |                       | -                    | -                 |
| SR8        | Cloudy      | Moderate   | 07:36    | 5.2       | Middle         | 0.0         | -                | -          | -            | -             | -          | -       | -            | -        | -              | -                | -   | -            | 13.8  | -                | 14        | -               | -  | 820411                | 811584                |                      |                   |
|            |             |            |          |           | Bottom         | 4.2<br>4.2  | 0.2              | 105<br>109 | 17.4<br>17.4 | 17.4          | 7.9<br>7.9 | 7.9     | 29.4<br>29.4 | 29.4     | 100.1<br>100.4 | 100.3            | 8.0<br>8.1<br>8.1                         | 15.1<br>15.2 |       | 16<br>16         |           | -               |    |                       |                       | -                    | -                 |
|            |             |            |          |           |                |             |                  |            |              |               |            |         |              |          |                |                  |   |              |       |                  |           |                 |    |                       |                       |                      |                   |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on11 February 17 during 11 February 17 during Mid-Ebb tide

| Water Qua     | lity Monit | oring Res | ults on  |           | 11 February 17 | during Mid   |                  |            |              |                | -                 |         | _            |         |               |                 |                     | 1            |      |                  |           |                 |    |                       |                       |                      |                   |
|---------------|------------|-----------|----------|-----------|----------------|--------------|------------------|------------|--------------|----------------|-------------------|---------|--------------|---------|---------------|-----------------|---------------------|--------------|------|------------------|-----------|-----------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring    | Weather    | Sea       | Sampling | Water     | Sampling De    | epth (m)     | Current<br>Speed | Current    | Water Te     | mperature (°C) |                   | pН      | Salinity     | y (ppt) |               | aturation<br>%) | Dissolved<br>Oxygen | Turbidity(   | NTU) | Suspende<br>(mg/ |           | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| Station       | Condition  | Condition | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average        |                   | Average |              | Average |               | Average         | Value DA            | Value        | DA   | Value            | DA        | Value           | DA | (Northing)            | (Easting)             | Value DA             |                   |
|               |            |           |          |           | Surface        | 1.0<br>1.0   | 0.5<br>0.5       | 212<br>219 | 14.2<br>14.2 | 14.2           | 7.9<br>7.9        | 7.9     | 34.4<br>34.4 | 34.4    | 98.0<br>98.0  | 98.0            | 8.1<br>8.1          | 16.8<br>16.8 | -    | 19<br>19         |           | 83<br>83        |    |                       |                       | <0.2<br><0.2         | 0.6               |
| C1            | Sunny      | Moderate  | 12:59    | 6.1       | Middle         | 3.1<br>3.1   | 0.5<br>0.5       | 205<br>215 | 14.2<br>14.2 | 14.2           | 7.9<br>7.9        | 7.9     | 34.4<br>34.4 | 34.4    | 98.0<br>98.0  | 98.0            | 8.1<br>8.1<br>8.1   | 17.9<br>17.9 | 18.3 | 19<br>19         | 20        | 84<br>84        | 84 | 815618                | 804242                | <0.2<br><0.2 <0.2    | 0.4               |
|               |            |           |          |           | Bottom         | 5.1          | 0.5              | 199        | 14.1         | 14.1           | 7.8               | 7.8     | 34.5         | 34.5    | 98.1          | 98.1            | 8.1 8.2             | 20.1         | ļ    | 20               |           | 85              |    |                       |                       | <0.2                 | 0.6               |
|               |            |           |          |           | Surface        | 5.1          | 0.5              | 202<br>114 | 14.1<br>17.8 | 17.8           | 7.8<br>7.9<br>7.9 | 7.9     | 34.5<br>28.6 | 28.6    | 98.1<br>96.1  | 96.2            | 8.2<br>7.7          | 20.0<br>11.5 |      | 21<br>10         |           | 85<br>74        |    |                       |                       | <0.2<br><0.2         | 1.5               |
|               |            |           |          |           |                | 1.0<br>6.1   | 0.5              | 120<br>130 | 17.8<br>17.7 |                | 7.9<br>7.8        |         | 28.6<br>28.7 |         | 96.2<br>96.7  |                 | 7.7<br>7.8<br>7.8   | 11.5<br>14.3 |      | 10<br>12         |           | 76<br>79        |    |                       |                       | <0.2<br><0.2         | 1.8               |
| C2            | Fine       | Rough     | 11:51    | 12.2      | Middle         | 6.1<br>11.2  | 0.4<br>0.3       | 135<br>175 | 17.7<br>17.7 | 17.7           | 7.8<br>7.8        | 7.8     | 28.7<br>28.8 | 28.7    | 96.7<br>100.2 | 96.7            | 7.8<br>8.0          | 14.4<br>14.4 | 13.3 | 14<br>15         | 13        | 80<br>84        | 79 | 825666                | 806939                | <0.2<br><0.2<br><0.2 | 1.9<br>2.1        |
|               |            |           |          |           | Bottom         | 11.2         | 0.4              | 190        | 17.7         | 17.7           | 7.8               | 7.8     | 28.8         | 28.8    | 100.3         | 100.3           | 8.0                 | 13.9         |      | 14               |           | 82              |    |                       |                       | <0.2                 | 1.8               |
|               |            |           |          |           | Surface        | 1.0<br>1.0   | 0.6              | 82<br>84   | 18.0<br>18.0 | 18.0           | 7.9<br>7.9        | 7.9     | 29.9<br>29.9 | 29.9    | 95.6<br>95.5  | 95.6            | 7.6<br>7.6<br>7.6   | 5.9<br>5.9   | ŀ    | 10<br>10         |           | 79<br>78        |    |                       |                       | <0.2<br><0.2         | 0.9               |
| C3            | Fine       | Moderate  | 13:32    | 13.0      | Middle         | 6.5<br>6.5   | 0.5              | 85<br>92   | 18.0<br>18.0 | 18.0           | 7.9<br>7.9        | 7.9     | 30.0<br>30.0 | 30.0    | 94.9<br>94.9  | 94.9            | 7.5<br>7.5          | 6.4<br>6.4   | 6.7  | 10<br>11         | 11        | 81<br>80        | 81 | 822103                | 817822                | <0.2<br><0.2<br><0.2 | 0.9 0.9           |
|               |            |           |          |           | Bottom         | 12.0<br>12.0 | 0.4              | 88<br>88   | 17.9<br>17.9 | 17.9           | 7.9<br>7.9        | 7.9     | 30.1<br>30.1 | 30.1    | 94.5<br>94.5  | 94.5            | 7.5<br>7.5<br>7.5   | 7.7          | -    | 10<br>12         |           | 83<br>84        |    |                       |                       | <0.2<br><0.2         | 0.8               |
|               |            |           |          |           | Surface        | 1.0          | 0.4              | 148        | 14.3         | 14.3           | 7.9               | 7.9     | 34.3         | 34.3    | 99.3          | 99.3            | 8.2                 | 11.9         |      | 14               |           | 82              |    |                       |                       | <0.2                 | 1.1               |
| IM1           | Sunny      | Moderate  | 12:44    | 7.2       | Middle         | 1.0<br>3.6   | 0.5<br>0.4       | 158<br>164 | 14.3<br>14.2 | 14.2           | 7.9<br>7.9        | 7.9     | 34.3<br>34.3 | 34.3    | 99.3<br>99.5  | 99.6            | 8.2<br>8.3          | 11.9<br>12.4 | 12.4 | 16<br>15         | 15        | 83<br>83        | 84 | 818363                | 806470                | <0.2<br><0.2<br><0.2 | 1.0<br>0.9<br>0.9 |
| 1111          | Sunny      | Woderale  | 12.44    | 7.2       |                | 3.6<br>6.2   | 0.4              | 178<br>153 | 14.2<br>14.2 |                | 7.9<br>7.9        |         | 34.3<br>34.3 |         | 99.6<br>100.6 |                 | 8.3<br>8.4          | 12.4<br>12.8 | 12.4 | 15<br>16         | 15        | 84<br>84        | 04 | 010303                | 800470                | <0.2<br><0.2         | 0.8               |
|               |            |           |          |           | Bottom         | 6.2<br>1.0   | 0.4              | 166<br>136 | 14.2         | 14.2           | 7.9               | 7.9     | 34.3<br>34.3 | 34.3    | 100.6         | 100.6           | 8.4 8.4             | 12.8<br>14.8 |      | 15<br>17         |           | 85              |    |                       |                       | <0.2                 | 0.7               |
|               |            |           |          |           | Surface        | 1.0          | 0.4              | 145        | 14.2<br>14.2 | 14.2           | 7.9<br>7.9        | 7.9     | 34.3         | 34.3    | 98.2<br>98.2  | 98.2            | 8.2<br>8.1<br>8.2   | 14.9         | F    | 18               |           | 82<br>82        |    |                       |                       | <0.2<br><0.2         | 0.6               |
| IM2           | Sunny      | Moderate  | 12:38    | 8.5       | Middle         | 4.3<br>4.3   | 0.4              | 155<br>162 | 14.1<br>14.1 | 14.1           | 7.9<br>7.9        | 7.9     | 34.3<br>34.3 | 34.3    | 98.1<br>98.2  | 98.2            | 8.2<br>8.2          | 16.9<br>16.8 | 16.7 | 18<br>19         | 18        | 82<br>83        | 83 | 818861                | 806209                | <0.2<br><0.2 <0.2    | 0.6               |
|               |            |           |          |           | Bottom         | 7.5<br>7.5   | 0.4              | 170<br>183 | 14.1<br>14.1 | 14.1           | 7.9<br>7.9        | 7.9     | 34.3<br>34.3 | 34.3    | 98.6<br>98.6  | 98.6            | 8.2<br>8.2<br>8.2   | 18.4<br>18.3 | -    | 19<br>19         |           | 83<br>83        |    |                       |                       | <0.2<br><0.2         | 0.6               |
|               |            |           |          |           | Surface        | 1.0          | 0.3<br>0.4       | 134<br>135 | 14.3<br>14.3 | 14.3           | 7.9<br>7.9        | 7.9     | 34.1<br>34.1 | 34.1    | 97.9<br>97.9  | 97.9            | 8.1<br>8.1          | 13.4<br>13.4 |      | 16<br>14         |           | 81<br>81        |    |                       |                       | <0.2<br><0.2         | 0.8               |
| IM3           | Sunny      | Moderate  | 12:30    | 8.7       | Middle         | 4.4          | 0.3              | 168        | 14.2         | 14.2           | 7.9<br>7.9        | 7.9     | 34.1<br>34.1 | 34.1    | 97.8<br>97.8  | 97.8            | 8.1 8.1             | 15.3         | 16.4 | 17               | 21        | 82<br>82        | 82 | 819403                | 806031                | <0.2<br><0.2<br><0.2 | 0.6 0.7           |
|               |            |           |          |           | Bottom         | 7.7          | 0.3              | 172<br>151 | 14.1         | 14.1           | 7.9               | 7.9     | 34.2         | 34.2    | 98.6          | 98.6            | 8.1<br>8.2<br>8.2   | 15.3<br>20.5 | F    | 19<br>29         |           | 83              |    |                       |                       | <0.2                 | 0.8               |
|               |            |           |          |           | Surface        | 7.7          | 0.3              | 165<br>148 | 14.1<br>14.2 | 14.2           | 7.9<br>7.9        | 7.9     | 34.2<br>33.9 | 33.9    | 98.6<br>97.9  | 97.9            | 8.2 0.2<br>8.1      | 20.2<br>16.3 |      | 28<br>17         |           | 83<br>82        |    |                       |                       | <0.2<br><0.2         | 0.6               |
|               |            |           | 10.01    |           |                | 1.0<br>3.9   | 0.4              | 152<br>147 | 14.2<br>14.1 |                | 7.9<br>7.9        |         | 33.9<br>34.1 |         | 97.8<br>97.9  |                 | 8.1<br>8.2<br>8.2   | 16.3<br>21.6 |      | 17<br>19         | 10        | 82<br>83        |    | 0/0570                |                       | <0.2<br><0.2         | 0.8               |
| IM4           | Sunny      | Moderate  | 12:24    | 7.7       | Middle         | 3.9<br>6.7   | 0.4<br>0.4       | 151<br>173 | 14.1<br>14.1 | 14.1           | 7.9<br>7.9        | 7.9     | 34.1<br>34.1 | 34.1    | 97.9<br>98.6  | 97.9            | 8.2<br>8.2          | 21.9<br>21.3 | 19.8 | 19<br>20         | 19        | 83<br>84        | 83 | 819576                | 805050                | <0.2<br><0.2<br><0.2 | 0.7 0.7 0.7       |
|               |            |           |          |           | Bottom         | 6.7          | 0.4              | 178        | 14.1         | 14.1           | 7.9               | 7.9     | 34.1         | 34.1    | 98.5          | 98.6            | 8.2 0.2             | 21.2         |      | 19               |           | 84              |    |                       |                       | <0.2                 | 0.6               |
|               |            |           |          |           | Surface        | 1.0<br>1.0   | 0.5<br>0.5       | 123<br>133 | 14.3<br>14.3 | 14.3           | 7.9<br>7.9        | 7.9     | 33.6<br>33.6 | 33.6    | 97.5<br>97.5  | 97.5            | 8.1<br>8.1<br>8.1   | 19.8<br>19.8 | -    | 20<br>18         |           | 80<br>80        |    |                       |                       | <0.2<br><0.2         | 0.8               |
| IM5           | Sunny      | Rough     | 12:14    | 7.0       | Middle         | 3.5<br>3.5   | 0.4              | 130<br>131 | 14.2<br>14.1 | 14.2           | 7.9<br>7.9        | 7.9     | 33.6<br>33.6 | 33.6    | 97.4<br>97.4  | 97.4            | 8.1<br>8.1          | 21.4<br>21.4 | 21.1 | 20<br>19         | 21        | 82<br>82        | 82 | 820557                | 804925                | <0.2 <0.2 <0.2       | 0.7 0.7           |
|               |            |           |          |           | Bottom         | 6.0<br>6.0   | 0.4              | 159<br>160 | 14.1<br>14.1 | 14.1           | 7.9<br>7.9        | 7.9     | 33.7<br>33.7 | 33.7    | 97.9<br>98.0  | 98.0            | 8.2<br>8.2<br>8.2   | 22.0<br>22.0 | F    | 23<br>24         |           | 82<br>83        |    |                       |                       | <0.2<br><0.2         | 0.8               |
|               |            |           |          |           | Surface        | 1.0          | 0.5              | 109<br>118 | 14.2<br>14.2 | 14.2           | 7.9<br>7.9        | 7.9     | 33.7<br>33.7 | 33.7    | 97.4<br>97.5  | 97.5            | 8.1<br>8.1          | 20.1<br>20.2 |      | 21<br>21         |           | 82<br>82        |    |                       |                       | <0.2<br><0.2         | 0.8               |
| IM6           | Sunny      | Rough     | 12:05    | 7.2       | Middle         | 3.6          | 0.5              | 128        | 14.1         | 14.1           | 7.9               | 7.9     | 33.7         | 33.7    | 97.6          | 97.6            | 8.1                 | 21.3         | 21.2 | 22               | 22        | 83              | 83 | 821061                | 805841                | <0.2                 | 0.8               |
|               |            | Ū         |          |           | Bottom         | 3.6<br>6.2   | 0.5<br>0.4       | 131<br>132 | 14.1<br>14.1 | 14.1           | 7.9<br>7.9        | 7.0     | 33.7<br>33.8 | 33.8    | 97.6<br>97.9  | 97.9            | 8.1<br>8.2<br>8.2   | 21.3<br>22.2 | -    | 22<br>22         |           | 83<br>84        |    |                       |                       | <0.2                 | 0.7               |
|               |            |           |          |           |                | 6.2<br>1.0   | 0.4              | 134<br>115 | 14.1<br>14.3 |                | 7.9<br>7.9        |         | 33.8<br>33.6 |         | 97.9<br>96.7  |                 | 8.2 0.2<br>8.0      | 22.1<br>20.4 |      | 21<br>23         |           | 84<br>83        |    |                       |                       | <0.2<br><0.2         | 0.8               |
|               |            | -         |          |           | Surface        | 1.0<br>4.4   | 0.5<br>0.5       | 120<br>119 | 14.3<br>14.3 | 14.3           | 7.9<br>7.9        | 7.9     | 33.6<br>33.6 | 33.6    | 96.7<br>96.8  | 96.7            | 8.0<br>8.1 8.1      | 20.4<br>20.7 | F    | 23<br>25         |           | 83<br>84        |    |                       |                       | <0.2                 | 0.9               |
| IM7           | Sunny      | Rough     | 11:51    | 8.8       | Middle         | 4.4          | 0.5              | 125        | 14.3         | 14.3           | 7.9               | 7.9     | 33.6         | 33.6    | 96.8          | 96.8            | 8.1                 | 20.7         | 21.0 | 24               | <u>24</u> | 84              | 84 | 821364                | 806832                | <0.2                 | 0.8               |
|               |            |           |          |           | Bottom         | 7.8<br>7.8   | 0.5              | 101        | 14.2<br>14.2 | 14.2           | 7.9<br>7.9        | 7.9     | 33.6<br>33.6 | 33.6    | 97.1<br>97.1  | 97.1            | 8.1<br>8.1<br>7.0   | 21.8<br>21.9 |      | 25<br>25         |           | 85<br>85        |    |                       |                       | <0.2<br><0.2         | 1.0<br>0.8        |
|               |            |           |          |           | Surface        | 1.0<br>1.0   | 0.5              | 132<br>144 | 17.4<br>17.4 | 17.4           | 7.9<br>7.9        | 7.9     | 29.5<br>29.5 | 29.5    | 97.6<br>97.6  | 97.6            | 7.8<br>7.8<br>7.8   | 15.5<br>15.4 | ╞    | 18<br>18         |           | 78<br>77        |    |                       |                       | <0.2<br><0.2         | 0.9               |
| IM8           | Fine       | Rough     | 12:17    | 8.4       | Middle         | 4.2          | 0.5<br>0.5       | 143<br>147 | 17.4<br>17.4 | 17.4           | 7.9<br>7.9        | 7.9     | 29.5<br>29.5 | 29.5    | 97.4<br>97.4  | 97.4            | 7.8<br>7.8          | 16.7<br>16.8 | 17.4 | 18<br>20         | 19        | 81<br>79        | 80 | 821683                | 807836                | <0.2<br><0.2<br><0.2 | 0.9 0.9           |
|               |            |           |          |           | Bottom         | 7.4          | 0.4              | 150<br>163 | 17.2<br>17.2 | 17.2           | 7.9<br>7.9        | 7.9     | 29.6<br>29.6 | 29.6    | 97.0<br>97.0  | 97.0            | 7.8<br>7.8<br>7.8   | 20.0<br>20.2 | F    | 20<br>18         |           | 83<br>84        |    |                       |                       | <0.2<br><0.2         | 0.9               |
| DA: Depth-Ave | <u> </u>   |           | 1        |           | 1              | 7.4          | 0.0              | 103        | 11.2         |                | 1.9               | 1       | 29.0         |         | JI.U          |                 | 1.0                 | 20.2         |      | 10               |           | 04              |    |                       | 1                     | NU.2                 | 0.3               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on11 February 17 during 11 February 17 during Mid-Ebb tide

| Water Qua             | ity Monit | oring Resu | lits on  |           | 11 February 17 | during Mid-         | Ebb tide          | 9                    |                      |               |                   |         | -                    |              |                      |                  |                          |                                    | -     |                  |    |                 |     |                       | -                     |                              |                   |
|-----------------------|-----------|------------|----------|-----------|----------------|---------------------|-------------------|----------------------|----------------------|---------------|-------------------|---------|----------------------|--------------|----------------------|------------------|--------------------------|------------------------------------|-------|------------------|----|-----------------|-----|-----------------------|-----------------------|------------------------------|-------------------|
| Monitoring<br>Station | Weather   | Sea        | Sampling | Water     | Sampling Dep   | oth (m)             | Current<br>Speed  | Current<br>Direction | Water Ten            | nperature (°C | C) F              | ЪΗ      | Salir                | ity (ppt)    | (                    | aturation<br>(%) | Dissolved<br>Oxygen      | I urbidity                         | (NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | om) | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(μg/L)           | Nickel (µg/L)     |
| Station               | Condition | Condition  | Time     | Depth (m) |                | -                   | (m/s)             |                      | Value                | Average       | Value             | Average | Value                | Average      | Value                | Average          | Value D                  | A Value                            | DA    | Value            | DA | Value           | DA  | (Northing)            | (Easting)             | Value DA                     | Value DA          |
|                       |           |            |          |           | Surface        | 1.0<br>1.0<br>4.0   | 0.6<br>0.7<br>0.6 | 95<br>102<br>90      | 17.4<br>17.4<br>17.4 | 17.4          | 8.0<br>8.0<br>7.9 | 8.0     | 29.5<br>29.5<br>29.5 | 29.5         | 97.6<br>97.5<br>97.3 | 97.6             | 7.8<br>7.8<br>7.8<br>7.8 | 15.3           15.4           17.3 |       | 17<br>16<br>18   |    | 79<br>80<br>82  |     |                       |                       | <0.2<br><0.2<br><0.2         | 1.1<br>0.9<br>1.0 |
| IM9                   | Fine      | Rough      | 12:23    | 7.9       | Middle         | 4.0                 | 0.6               | 92<br>107            | 17.4<br>17.2         | 17.4          | 7.9               | 7.9     | 29.5<br>29.6         | 29.5         | 97.3<br>97.0         | 97.3<br>97.0     | 7.8                      | 17.4                               | 18.2  | 18<br>18         | 17 | 80<br>83        | 81  | 822107                | 808819                | <0.2<br><0.2                 | 0.9               |
|                       |           |            |          |           | Bottom         | 6.9                 | 0.6               | 115                  | 17.2                 | 17.2          | 7.9               | 7.9     | 29.6                 | 29.6         | 97.0                 |                  | 7.8                      | 21.9                               |       | 17               |    | 84              |     |                       |                       | <0.2                         | 0.9               |
|                       |           |            |          |           | Surface        | 1.0<br>1.0<br>3.7   | 0.5<br>0.6<br>0.5 | 85<br>92<br>93       | 17.6<br>17.6<br>17.5 | 17.6          | 7.9<br>7.9<br>7.9 | 7.9     | 29.4<br>29.4<br>29.4 | 29.4         | 97.7<br>97.7<br>97.4 | 97.7             | 7.8<br>7.8<br>7.8<br>7.8 | 9.0<br>9.0<br>9.4                  |       | 9<br>10<br>12    |    | 77<br>79<br>81  |     |                       |                       | <0.2<br><0.2<br><0.2         | 0.9<br>0.7<br>1.0 |
| IM10                  | Fine      | Rough      | 12:34    | 7.4       | Middle         | 3.7<br>6.4          | 0.5               | 96<br>122            | 17.5<br>17.4         | 17.5          | 7.9<br>7.9        | 7.9     | 29.4<br>29.5         | 29.4<br>29.5 | 97.4<br>97.4         | 97.4<br>97.4     | 7.8<br>7.8<br>7.8<br>7.1 | 9.5                                | 9.6   | 12<br>11         | 11 | 79<br>84        | 81  | 822221                | 809852                | <0.2<br><0.2                 | 0.9               |
|                       |           |            |          |           | Bottom         | 6.4<br>1.0          | 0.4               | 123<br>95            | 17.4<br>17.6         | 17.4          | 7.9<br>7.9        | 7.9     | 29.5<br>29.5         | 29.5         | 97.4<br>97.7         | 97.4             | 7.8                      | <sup>2</sup> 10.4<br>8.4           |       | 12<br>10         |    | 83<br>77        |     |                       |                       | <0.2<br><0.2                 | 0.8               |
| IM11                  | Fine      | Rough      | 12:41    | 9.0       | Middle         | 1.0<br>4.5          | 0.5               | 98<br>97             | 17.6<br>17.4         | 17.0          | 7.9<br>7.9        | 7.9     | 29.5<br>29.5         | 29.5         | 97.7<br>97.2         | 97.2             | 7.8<br>7.8<br>7.8        | 8.5                                | 8.5   | 10<br>10         | 10 | 79<br>80<br>79  | 81  | 821514                | 810554                | <0.2<br><0.2<br><0.2<br><0.2 | 0.9               |
|                       |           |            |          |           | Bottom         | 4.5<br>8.0          | 0.5               | 102<br>102           | 17.4<br>17.4         | 17.4          | 7.9<br>7.9        | 7.9     | 29.5<br>29.5         | 29.5         | 97.2<br>97.5<br>97.5 | 97.5             | 7.8<br>7.8<br>7.0        | 8.6<br>8.5                         |       | 10<br>12         |    | 84              |     |                       |                       | <0.2<br><0.2<br><0.2         | 1.0<br>1.0<br>1.0 |
|                       |           |            |          |           | Surface        | 8.0<br>1.0<br>1.0   | 0.5<br>0.5<br>0.5 | 106<br>89<br>93      | 17.4<br>17.7<br>17.7 | 17.7          | 7.9<br>7.9<br>7.9 | 7.9     | 29.5<br>29.5<br>29.5 | 29.5         | 97.5<br>98.3<br>98.3 | 98.3             | 7.8<br>7.9<br>7.9        | 8.6<br>7.6<br>7.6                  |       | 10<br>11         |    | 85<br>78<br>80  |     |                       |                       | <0.2<br><0.2<br><0.2         | 1.0<br>1.0<br>1.0 |
| IM12                  | Fine      | Rough      | 12:49    | 9.3       | Middle         | 4.7                 | 0.5               | 93<br>99<br>99       | 17.7<br>17.6<br>17.6 | 17.6          | 7.9 7.9 7.9       | 7.9     | 29.5<br>29.5<br>29.5 | 29.5         | 98.3<br>98.0<br>98.0 | 98.0             | 7.9<br>7.8<br>7.8        | 9 7.6<br>8.0<br>8.1                | 8.3   | 11<br>12<br>11   | 11 | 80<br>80<br>79  | 81  | 821154                | 811508                | <0.2<br><0.2<br><0.2<br><0.2 | 11                |
|                       |           |            |          |           | Bottom         | 8.3                 | 0.4               | 98<br>98             | 17.5<br>17.5         | 17.5          | 7.9               | 7.9     | 29.6<br>29.6         | 29.6         | 98.8<br>98.8         | 98.8             | 7.9<br>7.9<br>7.9        | 03                                 |       | 10<br>12         |    | 82<br>84        |     |                       |                       | <0.2                         | 1.0               |
|                       |           |            |          |           | Surface        | 1.0<br>1.0          | 0.4               | 86<br>93             | 17.8<br>17.8         | 17.8          | 7.9<br>7.9        | 7.9     | 29.5<br>29.5         | 29.5         | 97.9<br>97.9         | 97.9             | 7.8<br>7.8<br>7.8        | 7.8                                |       | 8<br>8           |    | 76<br>78        |     |                       |                       | <0.2<br><0.2                 | 0.9               |
| SR2                   | Fine      | Moderate   | 13:11    | 4.7       | Middle         | 0.0 0.0             | -                 |                      | -                    | -             | -                 | -       | -                    | -            | -                    | -                | - 7.                     | -                                  | 8.8   | -                | 8  | -               | 80  | 821480                | 814152                | - <0.2                       | -                 |
|                       |           |            |          |           | Bottom         | 3.7<br>3.7          | 0.3               | 87<br>92             | 17.8<br>17.8         | 17.8          | 7.9<br>7.9        | 7.9     | 29.6<br>29.6         | 29.6         | 99.4<br>99.5         | 99.5             | 7.9<br>7.9<br>7.9        | 9.7                                |       | 8 7              |    | 83<br>84        |     |                       |                       | <0.2<br><0.2                 | 0.9<br>1.0        |
|                       |           |            |          |           | Surface        | 1.0<br>1.0<br>4.7   | 0.5<br>0.5<br>0.5 | 110<br>111<br>95     | 17.4<br>17.4<br>17.4 | 17.4          | 7.9<br>7.9        | 7.9     | 29.5<br>29.5<br>29.5 | 29.5         | 97.7<br>97.7<br>97.5 | 97.7             | 7.8<br>7.8<br>7.8<br>7.8 | 17.3<br>17.4                       |       | 18<br>18<br>18   |    | -               |     |                       |                       | -                            | -                 |
| SR3                   | Fine      | Rough      | 12:10    | 9.4       | Middle         | 4.7                 | 0.5               | 103<br>106           | 17.4<br>17.3<br>17.2 | 17.4          | 7.9<br>7.9<br>7.9 | 7.9     | 29.5<br>29.6         | 29.5         | 97.5<br>97.3         | 97.5             | 7.8                      | 18.9<br>19.1<br>21.6               | 19.3  | 19<br>17         | 18 | -               | -   | 822141                | 807575                |                              |                   |
|                       |           |            |          |           | Bottom         | 8.4                 | 0.4               | 114<br>96            | 17.2                 | 17.2          | 7.9               | 7.9     | 29.6<br>34.2         | 29.6         | 97.3<br>98.2         | 97.3             | 7.8<br>7.8<br>8.2        | 3 21.7 14.2                        |       | 17               |    | -               |     |                       |                       | -                            | -                 |
| SR4A                  | Cuppy     | Madarata   | 10.10    | 0.1       | Surface        | 1.0<br>4.6          | 0.5<br>0.4        | 103<br>100           | 14.1<br>14.1         | 14.1          | 7.8<br>7.8        | 7.8     | 34.2<br>34.2         | 34.2         | 98.3<br>98.9         | 98.3<br>99.0     | 8.2<br>8.2               | 14.4                               | 14.7  | 17<br>17         | 10 | -               |     | 017100                | 807701                | -                            | -                 |
| SR4A                  | Sunny     | Moderate   | 13:16    | 9.1       | Bottom         | 4.6<br>8.1          | 0.4<br>0.4        | 102<br>98            | 14.1<br>14.1         | 14.1          | 7.8<br>7.8        | 7.8     | 34.2<br>34.3         | 34.2<br>34.3 | 99.0<br>100.2        | 100.3            | 8.2<br>8.3<br>8.3        | 14.7<br>15.1                       | 14.7  | 18<br>19         | 18 | -               | -   | 817198                | 807791                | -                            | -                 |
|                       |           |            |          |           | Surface        | 8.1                 | 0.4               | 100<br>200           | 14.1<br>14.8         | 14.8          | 7.8<br>7.8        | 7.8     | 34.3<br>33.0         |              | 100.3<br>100.1       |                  | 8.3<br>8.3               | 15.1<br>7.1                        |       | 20<br>9          |    | -               |     |                       |                       |                              |                   |
| SR5A                  | Sunny     | Calm       | 13:34    | 4.9       | Middle         | 1.0<br>0.0          | 0.1<br>-          | - 200                | - 14.8               | -             | 7.8<br>-          | -       | 33.0                 | -            | - 100.2              | -                | 8.3<br>- 8.1             | -                                  | 7.2   | 9                | 9  | -               | -   | 816580                | 810686                |                              |                   |
|                       |           |            |          |           | Bottom         | 0.0<br>3.9<br>3.9   | -<br>0.1<br>0.1   | -<br>198<br>205      | -<br>14.6<br>14.5    | 14.6          | -<br>7.8<br>7.8   | 7.8     | -<br>33.2<br>33.2    | 33.2         | -<br>101.9<br>102.0  | 102.0            | -<br>8.5<br>8.5          | -<br>7.3<br>7.3                    |       | -<br>8<br>10     |    | -               |     |                       |                       | -                            | -                 |
|                       |           |            |          |           | Surface        | 1.0<br>1.0          | 0.1               | 101<br>110           | 14.5<br>15.0<br>14.9 | 15.0          | 7.8               | 7.8     | 33.0<br>33.0         | 33.0         | 98.8<br>98.8         | 98.8             | 8.1<br>8.1               | 6.2                                |       | 9                |    | -               |     |                       |                       | -                            | -                 |
| SR6                   | Sunny     | Calm       | 13:56    | 4.5       | Middle         | 0.0                 | -                 |                      | -                    | -             | -                 | -       | -                    | -            | -                    | -                | - 8.                     | -                                  | 6.9   | -                | 9  | -               | -   | 817913                | 814653                |                              |                   |
|                       |           |            |          |           | Bottom         | 3.5<br>3.5          | 0.2               | 114<br>116           | 14.8<br>14.8         | 14.8          | 7.8<br>7.8        | 7.8     | 33.0<br>33.0         | 33.0         | 100.0<br>100.1       | 100.1            | 8.3<br>8.3               | 3 7.5<br>7.5                       |       | 9<br>9           |    | -               |     |                       |                       | -                            | -                 |
|                       |           |            |          |           | Surface        | 1.0<br>1.0          | 0.6<br>0.6        | 98<br>105            | 18.0<br>18.0         | 18.0          | 7.9<br>7.9        | 7.9     | 30.1<br>30.1         | 30.1         | 94.9<br>94.9         | 94.9             | 7.5<br>7.5<br>7.5        | 4.7<br>4.7                         |       | 5<br>6           |    | -               |     |                       |                       | -                            | -                 |
| SR7                   | Fine      | Moderate   | 13:58    | 17.0      | Middle         | 8.5<br>8.5          | 0.5               | 93<br>101            | 17.9<br>17.9         | 17.9          | 7.9<br>7.9        | 7.9     | 30.1<br>30.1         | 30.1         | 93.9<br>93.9         | 93.9             | 7.4 7.4                  | 6.1<br>6.1                         | 6.0   | 5                | 6  | -               | -   | 823633                | 823733                |                              |                   |
|                       |           |            |          |           | Bottom         | 16.0<br>16.0<br>1.0 | 0.3               | 127<br>127<br>163    | 17.8<br>17.8         | 17.8          | 7.9<br>7.9<br>7.9 | 7.9     | 30.2<br>30.2         | 30.2         | 93.6<br>93.6         | 93.6             | 7.4<br>7.4<br>8.0        | 7.1                                |       | 8<br>9<br>12     |    | -               |     |                       |                       | -                            | -                 |
|                       |           |            |          |           | Surface        | 1.0<br>1.0<br>0.0   | 0.3               | 163<br>167           | 17.5<br>17.5         | 17.5          | 7.9<br>7.9        | 7.9     | 29.4<br>29.4         | 29.4         | 100.0                | 100.0            | 8.0<br>8.0<br>- 8.1      | 12.2<br>12.2                       |       | 12<br>14         |    | -               |     |                       |                       | -                            | -                 |
| SR8                   | Fine      | Moderate   | 12:56    | 5.0       | Middle         | 0.0                 | - 0.3             | -<br>-<br>196        | - 17.4               | -             | - 7.8             | -       | - 29.5               | -            | - 106.7              | -                | - 86                     | - 13.1                             | 12.7  | -<br>-<br>14     | 14 | -               | -   | 820429                | 811608                |                              |                   |
| DA: Denth-Aver        |           |            |          |           | Bottom         | 4.0                 | 0.3               | 196                  | 17.4                 | 17.4          | 7.8               | 7.8     | 29.5                 | 29.5         | 100.7                | 106.9            | 8.6 8.                   | 3 13.1                             |       | 16               |    | -               |     |                       |                       | -                            | _                 |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on14 February 17 14 February 17 during Mid-Flood Tide

| Water Qua      | lity Monito | oring Resu | llts on  |           | 14 February 17 | during Mid   | -Flood II        | de         |              |               |            |         |              |          |              |                  | •                   | ·              |      |                 |              |                 |    |                       |                       | , <b></b>            |                  |
|----------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|--------------|------------------|---------------------|----------------|------|-----------------|--------------|-----------------|----|-----------------------|-----------------------|----------------------|------------------|
| Monitoring     | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | nperature (°C | C)         | рН      | Salini       | ty (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(     | NTU) | Suspende<br>(mg |              | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)    |
| Station        | Condition   | Condition  | Time     | Depth (m) | 1 0 1          |              | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  | Value        | Average          | Value DA            | Value          | DA   | Value           | DA           | Value           | DA | (Northing)            | (Easting)             | Value DA             | Value DA         |
|                |             |            |          |           | Surface        | 1.0          | 0.8              | 65<br>67   | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 33.9<br>33.9 | 33.9     | 96.6<br>96.7 | 96.7             | 8.0<br>8.0          | 71.5<br>71.5   | -    | 74<br>68        |              | 83<br>83        |    |                       |                       | <0.2<br><0.2         | 0.6              |
| C1             | Sunny       | Moderate   | 10:25    | 8.5       | Middle         | 4.3          | 0.9              | 65         | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 34.0<br>34.0 | 34.0     | 96.7<br>96.7 | 96.7             | 8.0 8.0             | 82.5<br>82.4   | 80.9 | 84<br>92        | 106          | 84<br>84        | 84 | 815634                | 804264                | <0.2<br><0.2 <0.2    | 0.6              |
|                |             |            |          |           | Bottom         | 4.3<br>7.5   | 0.9<br>0.8       | 67<br>55   | 14.2         | 14.2          | 7.8        | 7.8     | 34.0         | 34.0     | 97.1         | 97.1             | 8.0<br>8.1<br>8.1   | 89.0           | -    | 154             | l ŀ          | 85              |    |                       |                       | <0.2                 | 0.6              |
|                |             |            |          |           |                | 7.5          | 0.8              | 55<br>150  | 14.2<br>17.8 |               | 7.8        |         | 34.0<br>27.3 |          | 97.1<br>94.4 |                  | 8.1 0.1<br>7.6      | 88.4<br>8.5    |      | 166<br>8        | ┝───┤        | 85<br>75        |    |                       |                       | <0.2<br><0.2         | 0.5              |
|                |             |            |          |           | Surface        | 1.0          | 0.5              | 158        | 17.8         | 17.8          | 7.8        | 7.8     | 27.3         | 27.3     | 94.4         | 94.4             | 7.6 7.6             | 8.5            | -    | 8               | l t          | 76              |    |                       |                       | <0.2                 | 2.0              |
| C2             | Fine        | Moderate   | 10:23    | 12.8      | Middle         | 6.4<br>6.4   | 0.6<br>0.6       | 125<br>134 | 17.8<br>17.8 | 17.8          | 7.8<br>7.8 | 7.8     | 27.5<br>27.5 | 27.5     | 94.2<br>94.2 | 94.2             | 7.6<br>7.6          | 9.0<br>9.2     | 10.5 | 8<br>9          | 9            | 79<br>80        | 80 | 825676                | 806936                | <0.2<br><0.2 <0.2    | 2.0              |
|                |             |            |          |           | Bottom         | 11.8<br>11.8 | 0.4              | 257<br>258 | 17.7<br>17.7 | 17.7          | 7.8<br>7.8 | 7.8     | 27.8<br>27.8 | 27.8     | 95.1<br>95.1 | 95.1             | 7.7 7.7             | 14.0<br>14.0   | -    | 12<br>11        |              | 83<br>84        |    |                       |                       | <0.2<br><0.2         | 1.8<br>1.9       |
|                |             |            |          |           | Surface        | 1.0          | 0.7              | 263<br>270 | 17.6<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 29.4<br>29.4 | 29.4     | 95.9<br>95.9 | 95.9             | 7.7                 | 8.1<br>8.2     | -    | 8<br>8          |              | 78<br>78        |    |                       |                       | <0.2<br><0.2         | 0.9              |
| C3             | Fine        | Moderate   | 08:51    | 11.3      | Middle         | 5.7          | 0.6              | 264        | 17.6         | 17.6          | 7.9        | 7.9     | 29.5         | 29.5     | 95.2         | 95.2             | 7.6                 | 14.5           | 14.7 | 10              | 13           | 81              | 81 | 822094                | 817812                | <0.2                 | 1.1 1.0          |
|                |             |            |          | -         |                | 5.7<br>10.3  | 0.7              | 272<br>268 | 17.6<br>17.6 |               | 7.9<br>7.9 |         | 29.5<br>29.6 | 00.0     | 95.2<br>95.1 |                  | 7.6<br>7.6 7.6      | 14.5<br>21.4   | -    | 11<br>20        |              | 79<br>84        | -  |                       |                       | <0.2<br><0.2         | 1.0              |
|                |             |            |          |           | Bottom         | 10.3<br>1.0  | 0.5              | 269<br>54  | 17.6<br>14.5 | 17.6          | 7.9<br>7.8 | 7.9     | 29.6<br>33.5 | 29.0     | 95.1<br>97.4 | 95.1             | 7.6<br>7.6<br>8.1   | 21.4<br>13.6   |      | 21<br>15        | Ī            | 83<br>83        |    |                       |                       | <0.2<br><0.2         | 1.0<br>0.8       |
|                |             |            |          |           | Surface        | 1.0          | 0.8              | 56         | 14.5         | 14.5          | 7.8        | 7.8     | 33.5         | 33.5     | 97.4         | 97.4             | 8.1 8.1             | 13.6           | -    | 14              |              | 83              |    |                       |                       | <0.2                 | 0.8              |
| IM1            | Sunny       | Moderate   | 10:42    | 7.7       | Middle         | 3.9<br>3.9   | 0.7              | 72<br>73   | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 33.6<br>33.6 | 33.6     | 97.2<br>97.2 | 97.2             | 8.1<br>8.1          | 15.3<br>15.4   | 14.6 | 19<br>21        | 21           | 83<br>83        | 83 | 818342                | 806456                | <0.2<br><0.2 <0.2    | 2 0.7 0.7        |
|                |             |            |          |           | Bottom         | 6.7<br>6.7   | 0.7              | 94<br>102  | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 33.6<br>33.6 | 33.6     | 97.4<br>97.4 | 97.4             | 8.1<br>8.1<br>8.1   | 14.8<br>14.9   | -    | 26<br>28        | l [          | 84<br>84        |    |                       |                       | <0.2<br><0.2         | 0.7              |
|                |             |            |          |           | Surface        | 1.0          | 0.7              | 52         | 14.6         | 14.6          | 7.8        | 7.8     | 33.4         | 33.4     | 96.6         | 96.6             | 8.0                 | 23.0           |      | 61              |              | 82              |    |                       |                       | <0.2                 | 0.7              |
| IM2            | Sunny       | Moderate   | 10:48    | 8.7       | Middle         | 1.0<br>4.4   | 0.7              | 54<br>75   | 14.6<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.4<br>33.5 | 33.5     | 96.6<br>96.3 | 96.3             | 8.0<br>8.0          | 23.4<br>38.1   | 33.9 | 58<br>58        | 60           | 81<br>82        | 83 | 818856                | 806210                | <0.2<br><0.2<br><0.2 | 0.8              |
| IVIZ           | Gunny       | Woderate   | 10.40    | 0.7       |                | 4.4          | 0.6              | 80<br>62   | 14.4<br>14.4 |               | 7.8        |         | 33.5<br>33.6 |          | 96.3<br>96.5 |                  | 8.0<br>8.0          | 38.1<br>40.6   | 00.0 | 58<br>60        | 00           | 83<br>84        | 00 | 010000                | 000210                | <0.2                 | 0.9              |
|                |             |            |          |           | Bottom         | 7.7          | 0.6              | 67<br>113  | 14.4<br>14.5 | 14.4          | 7.8        | 7.8     | 33.6<br>33.4 | 33.6     | 96.5<br>96.2 | 96.5             | 8.0<br>8.0<br>8.0   | 40.4<br>41.3   |      | 62<br>44        | <u> </u>     | 84<br>83        |    |                       |                       | <0.2<br><0.2         | 0.8              |
|                |             |            |          |           | Surface        | 1.0          | 0.5              | 117        | 14.5         | 14.5          | 7.8<br>7.8 | 7.8     | 33.4         | 33.4     | 96.2         | 96.2             | 8.0 8.0             | 41.4           | -    | 48              |              | 83              |    |                       |                       | <0.2                 | 1.1              |
| IM3            | Sunny       | Moderate   | 10:55    | 8.5       | Middle         | 4.3          | 0.5              | 94<br>98   | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 33.4<br>33.4 | 33.4     | 96.3<br>96.2 | 96.3             | 8.0<br>8.0          | 46.5<br>46.8   | 47.9 | 60<br>63        | 58           | 84<br>84        | 84 | 819412                | 806000                | <0.2<br><0.2 <0.2    | 0.9              |
|                |             |            |          |           | Bottom         | 7.5<br>7.5   | 0.5              | 101<br>107 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.5<br>33.5 | 33.5     | 96.8<br>96.8 | 96.8             | 8.0<br>8.0          | 55.7<br>55.7   |      | 67<br>68        | l [          | 85<br>85        |    |                       |                       | <0.2<br><0.2         | 0.9              |
|                |             |            |          |           | Surface        | 1.0          | 0.6              | 98         | 14.6         | 14.6          | 7.8        | 7.8     | 33.4         | 33.4     | 97.0         | 97.0             | 8.0                 | 26.9           |      | 33              |              | 82              |    |                       |                       | <0.2                 | 0.7              |
| IM4            | Sunny       | Moderate   | 11:05    | 8.3       | Middle         | 1.0<br>4.2   | 0.6<br>0.5       | 107<br>110 | 14.6<br>14.3 | 14.3          | 7.8<br>7.8 | 7.8     | 33.4<br>33.5 | 33.5     | 97.0<br>96.3 | 96.4             | 8.0<br>8.0          | 27.0<br>100.5  | 77.4 | 33<br>59        | 52           | 81<br>82        | 82 | 819564                | 805058                | <0.2<br><0.2<br><0.2 | 0.7              |
|                | Canny       | moderate   |          | 010       |                | 4.2<br>7.3   | 0.6              | 115<br>138 | 14.3<br>14.3 |               | 7.8<br>7.8 |         | 33.5<br>33.5 |          | 96.4<br>97.0 |                  | 8.0<br>8.1          | 100.1<br>105.2 |      | 60<br>64        |              | 83<br>83        | 02 | 010001                |                       | <0.2<br><0.2         | 0.8              |
|                |             |            |          |           | Bottom         | 7.3<br>1.0   | 0.6<br>0.6       | 151<br>91  | 14.3<br>14.5 | 14.3          | 7.8<br>7.8 | 7.8     | 33.5<br>33.3 | 33.5     | 97.0<br>95.9 | 97.0             | 8.1<br>8.0          | 104.8<br>47.9  |      | 62<br>58        | Ī            | 83<br>80        |    |                       |                       | <0.2<br><0.2         | 0.6 0.8          |
|                |             |            |          |           | Surface        | 1.0          | 0.6              | 92         | 14.5         | 14.5          | 7.8        | 7.8     | 33.3         | 33.3     | 95.9         | 95.9             | 8.0 8.0             | 48.0           | -    | 57              | l t          | 80              |    |                       |                       | <0.2                 | 0.7              |
| IM5            | Sunny       | Moderate   | 11:15    | 7.2       | Middle         | 3.6<br>3.6   | 0.6              | 95<br>101  | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.3<br>33.3 |          | 95.7<br>95.7 | 95.7             | 7.9<br>7.9          | 77.0<br>77.8   | 71.2 | 96<br>90        | 83           | 81<br>81        | 81 | 820544                | 804904                | <0.2<br><0.2 <0.2    | 2 0.8 0.8<br>0.8 |
|                |             |            |          |           | Bottom         | 6.2<br>6.2   | 0.6              | 87<br>90   | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.4<br>33.4 |          | 95.7<br>95.7 | 95.7             | 7.9<br>7.9<br>7.9   | 88.2<br>88.0   |      | 96<br>99        | [            | 82<br>82        |    |                       |                       | <0.2<br><0.2         | 0.9              |
|                |             |            |          |           | Surface        | 1.0          | 0.6              | 57         | 17.6         | 17.6          | 7.9        | 7.9     | 29.1         |          | 96.9         | 96.9             | 7.8                 | 36.7           |      | 30              |              | 80              |    |                       |                       | <0.2                 | 0.9              |
| IM6            | Sunny       | Moderate   | 11:08    | 7.1       | Middle         | 1.0<br>3.6   | 0.7              | 60<br>66   | 17.6<br>17.6 | 17.6          | 7.9        | 7.9     | 29.1<br>29.1 | 29.1     | 96.9<br>96.9 | 96.9             | 7.8<br>7.8<br>7.8   | 36.7<br>53.5   | 48.8 | 32<br>54        | 54           | 80<br>81        | 81 | 821079                | 805838                | <0.2<br><0.2<br><0.2 | 0.9              |
| INIO           | Gunny       | Woderate   | 11.00    | 7.1       |                | 3.6<br>6.1   | 0.6              | 72<br>69   | 17.6<br>17.5 |               | 7.9<br>7.9 |         | 29.1<br>29.1 |          | 96.9<br>97.4 |                  | 7.8<br>7.8 7.0      | 52.9<br>56.5   | 40.0 | 56<br>78        | 34           | 81<br>82        | 01 | 021075                | 000000                | <0.2<br><0.2         | 2 0.8 0.9<br>1.0 |
|                |             |            |          |           | Bottom         | 6.1          | 0.6              | 72         | 17.5         | 17.5          | 7.9        | 7.9     | 29.1         | 29.1     | 97.4         | 97.4             | 7.8                 | 56.5           |      | 73              | <u> </u>     | 82              |    |                       |                       | <0.2                 | 1.0              |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.9              | 67<br>69   | 17.8<br>17.8 | 17.8          | 7.9        | 7.9     | 29.0<br>29.0 | 29.0     | 96.6<br>96.6 | 96.6             | 7.7 7.7 7.7         | 15.7<br>15.7   |      | 18<br>18        | ↓            | 82<br>82        |    |                       |                       | <0.2<br><0.2         | 1.0<br>0.8       |
| IM7            | Sunny       | Moderate   | 10:58    | 8.4       | Middle         | 4.2          | 0.7              | 73<br>75   | 17.6<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 29.1<br>29.1 | 29.1     | 96.1<br>96.1 | 96.1             | 7.7                 | 19.4<br>19.5   | 19.9 | 19<br>18        | 19           | 83<br>83        | 83 | 821337                | 806818                | <0.2<br><0.2 <0.2    | 2 1.0 1.0        |
|                |             |            |          |           | Bottom         | 7.4          | 0.6<br>0.6       | 105<br>113 | 17.5<br>17.5 | 17.5          | 7.9<br>7.9 | 7.9     | 29.4<br>29.4 |          | 96.2<br>96.2 | 96.2             | 7.7 7.7             | 24.6<br>24.4   | F    | 20<br>21        | l ļ          | 84<br>84        |    |                       |                       | <0.2<br><0.2         | 1.1<br>0.9       |
|                |             |            |          |           | Surface        | 1.0          | 0.4              | 179        | 17.7         | 17.7          | 7.8        | 7.8     | 27.6         | 27.6     | 96.4         | 96.4             | 7.8                 | 9.4            |      | 12              | <del> </del> | 77              |    |                       |                       | <0.2                 | 1.6              |
| IM8            | Fine        | Moderate   | 10:00    | Q 4       | Middle         | 1.0<br>4.2   | 0.4              | 180<br>160 | 17.7<br>17.7 | 17.7          | 7.8<br>7.8 | 7.8     | 27.6<br>27.6 | 27.6     | 96.4<br>96.7 | 96.7             | 7.8<br>7.8<br>7.8   | 9.4<br>10.4    | 9.7  | 10<br>11        | 11           | 76<br>79        | 80 | 821702                | 807850                | <0.2<br><0.2<br><0.2 | 1.4              |
| IIVIO          | 1 IIIE      | Moderate   | 10.00    | 8.4       |                | 4.2<br>7.4   | 0.4              | 172<br>195 | 17.7<br>17.7 |               | 7.8<br>7.8 | ł – – – | 27.6<br>27.7 |          | 96.7<br>97.9 |                  | 7.8<br>7.9 7.0      | 9.9<br>9.6     | IJ.1 | 11<br>11        |              | 80<br>84        | 00 | 021702                | 007030                | <0.2<br><0.2         | 1.3<br>1.4       |
| DA: Dopth Aver |             |            |          |           | Bottom         | 7.4          | 0.4              | 199        | 17.7         | 17.7          | 7.8        | 7.8     | 27.7         | 27.7     | 97.9         | 97.9             | 7.9 7.9             | 9.6            |      | 10              | i            | 85              |    |                       |                       | <0.2                 | 1.5              |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on14 February 17 14 February 17 during Mid-Flood Tide

| Water Qua     | lity Monito  | oring Resu | ults on  |           | 14 February 17 | during Mid  | -Flood Ti        | ide        |              |               | -          |         | •            |          |                |                  |                           | •            |             |                  |           |                 |    |                       |                       | <u> </u>             |                         |
|---------------|--------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|----------------|------------------|---------------------------|--------------|-------------|------------------|-----------|-----------------|----|-----------------------|-----------------------|----------------------|-------------------------|
| Monitoring    | Weather      | Sea        | Sampling | Water     | Sampling Dep   | oth (m)     | Current<br>Speed | Current    | Water Ter    | nperature (°C | ;)         | рН      | Salinit      | ty (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity(   | NTU)        | Suspende<br>(mg/ |           | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)           |
| Station       | Condition    | Condition  | Time     | Depth (m) | 1 0 1          |             | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  |                | Average          | Value DA                  | Value        | DA          | Value            | DA        | Value           | DA | (Northing)            | (Easting)             | Value DA             | Value DA                |
|               |              |            |          |           | Surface        | 1.0         | 0.5              | 254<br>257 | 17.7<br>17.7 | 17.7          | 7.9<br>7.9 | 7.9     | 28.5<br>28.5 | 28.5     | 96.4<br>96.4   | 96.4             | 7.7                       | 15.8<br>15.9 | -           | 18<br>17         |           | 76<br>78        |    |                       |                       | <0.2<br><0.2         | 1.5<br>1.1              |
| IM9           | Fine         | Moderate   | 09:53    | 7.4       | Middle         | 3.7<br>3.7  | 0.4              | 235<br>256 | 17.7<br>17.7 | 17.7          | 7.9<br>7.9 | 7.9     | 28.7<br>28.7 | 28.7     | 96.6<br>96.6   | 96.6             | 7.8<br>7.8<br>7.8         | 18.6<br>18.6 | 18.7        | 21<br>20         | 20        | 81<br>80        | 80 | 822107                | 808819                | <0.2<br><0.2 <0.2    | 2 1.4 1.4               |
|               |              |            |          |           | Bottom         | 6.4         | 0.4              | 232        | 17.6         | 17.6          | 7.9<br>7.9 | 7.9     | 28.8<br>28.8 | 28.8     | 98.4<br>98.4   | 98.4             | 7.9<br>7.9<br>7.9         | 21.8         | -           | 22               |           | 83<br>84        |    |                       |                       | <0.2                 | 1.5                     |
|               |              |            |          |           | Surface        | 6.4<br>1.0  | 0.4              | 245<br>272 | 17.6<br>17.5 | 17.5          | 7.9        | 7.9     | 29.3         | 29.3     | 97.2           | 97.2             | 7.8                       | 28.6         |             | 23<br>31         |           | 77              |    |                       |                       | <0.2                 | 0.9                     |
| 10410         | Fine         | Madarata   | 00:47    | 7.0       |                | 1.0<br>3.9  | 0.7              | 281<br>280 | 17.5<br>17.5 |               | 7.9<br>7.9 |         | 29.3<br>29.4 |          | 97.2<br>97.4   |                  | 7.8<br>7.8<br>7.8         | 28.6<br>36.8 | 25.0        | 32<br>40         | 07        | 78<br>82        | 01 | 800050                | 809836                | <0.2<br><0.2         | 1.0                     |
| IM10          | Fine         | Moderate   | 09:47    | 7.8       | Middle         | 3.9<br>6.8  | 0.7              | 295<br>281 | 17.5<br>17.5 | 17.5          | 7.9<br>7.9 | 7.9     | 29.4<br>29.4 | 29.4     | 97.4<br>97.9   | 97.4             | 7.8<br>7.9 7.0            | 37.0<br>41.9 | <u>35.8</u> | 39<br>39         | <u>37</u> | 80<br>84        | 81 | 822250                | 809836                | <0.2<br><0.2<br><0.2 | 2 <u>0.9</u> 1.0<br>1.2 |
|               |              |            |          |           | Bottom         | 6.8<br>1.0  | 0.8              | 302        | 17.5         | 17.5          | 7.9        | 7.9     | 29.4         | 29.4     | 97.9           | 97.9             | 7.9                       | 42.1         |             | 40               |           | 83              |    |                       |                       | <0.2                 | 1.2                     |
|               |              |            |          |           | Surface        | 1.0         | 0.6              | 284<br>303 | 17.4<br>17.4 | 17.4          | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.6     | 97.4<br>97.4   | 97.4             | 7.8<br>7.8<br>7.8         | 18.6<br>18.6 | -           | 24               |           | 79<br>77        |    |                       |                       | <0.2<br><0.2         | 0.8                     |
| IM11          | Fine         | Moderate   | 09:39    | 8.2       | Middle         | 4.1         | 0.5              | 282<br>299 | 17.4<br>17.4 | 17.4          | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.6     | 97.4<br>97.4   | 97.4             | 7.8<br>7.8                | 20.9<br>20.9 | 20.3        | 26<br>28         | 26        | 81<br>80        | 81 | 821506                | 810550                | <0.2<br><0.2 <0.2    | 0.6                     |
|               |              |            |          |           | Bottom         | 7.2         | 0.5              | 276<br>284 | 17.4<br>17.4 | 17.4          | 7.8<br>7.8 | 7.8     | 29.6<br>29.6 |          | 101.1<br>101.1 | 101.1            | 8.1<br>8.1 8.1            | 21.5<br>21.5 |             | 27<br>29         |           | 83<br>84        |    |                       |                       | <0.2<br><0.2         | 0.7                     |
|               |              |            |          |           | Surface        | 1.0<br>1.0  | 0.7              | 271<br>275 | 17.5<br>17.5 | 17.5          | 7.9<br>7.9 | 7.9     | 29.4<br>29.4 | 29.4     | 97.3<br>97.3   | 97.3             | 7.8                       | 20.4<br>20.1 | -           | 18<br>20         |           | 79<br>78        |    |                       |                       | <0.2<br><0.2         | 0.8                     |
| IM12          | Fine         | Moderate   | 09:32    | 8.7       | Middle         | 4.4         | 0.7              | 276        | 17.5         | 17.5          | 7.9        | 7.9     | 29.4         | 29.4     | 97.5           | 97.5             | 7.8                       | 21.4         | 20.8        | 29               | 25        | 80              | 81 | 821143                | 811514                | <0.2                 | 1.0 0.8                 |
|               |              |            |          |           | Bottom         | 4.4         | 0.7<br>0.6       | 297<br>279 | 17.5<br>17.4 | 17.4          | 7.9<br>7.9 | 7.9     | 29.4<br>29.5 | 29.5     | 97.5<br>99.9   | 99.9             | 7.8<br>8.0<br>8.0         | 21.4<br>20.7 | -           | 28<br>28         |           | 79<br>83        |    |                       |                       | <0.2<br><0.2         | 0.8                     |
|               |              |            |          |           |                | 7.7         | 0.6              | 296<br>110 | 17.4<br>17.5 |               | 7.9<br>7.9 |         | 29.5<br>29.4 |          | 99.9<br>97.1   | 97.1             | 8.0 0.0<br>7.8            | 20.7<br>20.5 |             | 29<br>24         |           | 84<br>77        |    |                       |                       | <0.2<br><0.2         | 0.7<br>0.9              |
|               |              |            |          |           | Surface        | 1.0<br>2.3  | 0.3              | 117        | 17.5         | 17.5          | 7.9        | 7.9     | 29.4         | 29.4     | 97.1<br>-      | 97.1             | 7.8 7.8                   | 20.6         | -           | - 22             |           | 78<br>-         |    |                       |                       | <0.2                 | 0.9                     |
| SR2           | Fine         | Moderate   | 09:09    | 4.6       | Middle         | 2.3<br>3.6  | - 0.2            | -<br>119   | -<br>17.4    | -             | -<br>7.9   | -       | -            | -        | -              | -                | - 7.9 7.0                 | -<br>21.3    | 20.9        | -<br>23          | 23        | -<br>83         | 80 | 821464                | 814168                | - <0.2<br><0.2       | 2 <u>-</u> 0.9          |
|               |              |            |          |           | Bottom         | 3.6         | 0.3              | 119        | 17.4         | 17.4          | 7.9        | 7.9     | 29.5<br>29.5 | 29.5     | 98.6<br>98.6   | 98.6             | 7.9                       | 21.3         |             | 22               |           | 83              |    |                       |                       | <0.2                 | 0.9                     |
|               |              |            |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.6       | 128<br>134 | 17.8<br>17.8 | 17.8          | 7.8<br>7.8 | 7.8     | 27.4<br>27.4 | 27.4     | 96.0<br>95.9   | 96.0             | 7.8<br>7.8<br>7.8         | 7.9<br>8.0   | -           | 6<br>5           |           | -               |    |                       |                       | -                    | -                       |
| SR3           | Fine         | Moderate   | 10:06    | 9.1       | Middle         | 4.6         | 0.5              | 177<br>185 | 17.7<br>17.7 | 17.7          | 7.8<br>7.8 | 7.8     | 27.5<br>27.5 | 27.5     | 96.1<br>96.1   | 96.1             | 7.8<br>7.8                | 12.0<br>12.2 | 10.5        | 10<br>10         | 11        | -               | -  | 822157                | 807585                |                      |                         |
|               |              |            |          |           | Bottom         | 8.1<br>8.1  | 0.5<br>0.5       | 128<br>133 | 17.7<br>17.7 | 17.7          | 7.8<br>7.8 | 7.8     | 27.5<br>27.5 | 27.5     | 97.2<br>97.2   | 97.2             | 7.9<br>7.9<br>7.9         | 11.5<br>11.5 | -           | 16<br>17         |           | -               |    |                       |                       | -                    | -                       |
|               |              |            |          |           | Surface        | 1.0<br>1.0  | 0.2              | 181<br>186 | 14.3<br>14.3 | 14.3          | 7.8        | 7.8     | 33.4<br>33.4 | 33.4     | 96.5<br>96.6   | 96.6             | 8.0<br>8.0                | 14.5<br>14.5 |             | 16<br>18         |           | -               |    |                       |                       | -                    | -                       |
| SR4A          | Sunny        | Moderate   | 10:00    | 8.3       | Middle         | 4.2         | 0.2              | 176        | 14.3         | 14.3          | 7.8        | 7.8     | 33.5         | 33.5     | 96.6           | 96.7             | 8.1 8.1                   | 14.3         | 14.7        | 24               | 23        | -               | -  | 817173                | 807791                |                      |                         |
|               |              |            |          |           | Bottom         | 4.2<br>7.3  | 0.3              | 182<br>163 | 14.3<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 33.5<br>33.5 | 33.5     | 96.7<br>97.2   | 97.2             | 8.1<br>8.1<br>8.1         | 14.3<br>15.2 | _           | 26<br>25         |           | -               |    |                       |                       | -                    | -                       |
|               |              |            |          |           |                | 7.3         | 0.3              | 176<br>282 | 14.2<br>14.2 |               | 7.8<br>7.8 |         | 33.5<br>32.9 |          | 97.2<br>97.2   |                  | 8.1 <sup>0.1</sup><br>8.1 | 15.2<br>11.5 |             | 26<br>15         |           | -               |    |                       |                       | -                    |                         |
|               |              |            |          |           | Surface        | 1.0<br>2.3  | 0.4              | 295        | - 14.2       | 14.2          | 7.8        | 7.8     | 32.9         | 32.9     | 97.2<br>-      | 97.2             | 8.1 8.1                   | 11.5<br>-    | -           | 16<br>-          |           | -               |    |                       |                       | -                    | -                       |
| SR5A          | Sunny        | Moderate   | 09:43    | 4.6       | Middle         | 2.3<br>3.6  | -                | -          | -            | -             | -          | -       | -            | -        | -              | -                | -                         | -<br>13.5    | 12.5        | -<br>15          | 15        | -               | -  | 816612                | 810676                |                      |                         |
|               |              |            |          |           | Bottom         | 3.6         | 0.2              | 283<br>287 | 14.2<br>14.2 | 14.2          | 7.8        | 7.8     | 33.0<br>33.0 | 33.0     | 97.5<br>97.5   | 97.5             | 8.2<br>8.2<br>8.2         | 13.5         | -           | 14               |           | -               |    |                       |                       | -                    | -                       |
|               |              |            |          |           | Surface        | 1.0<br>1.0  | 0.2              | 230<br>240 | 14.4<br>14.4 | 14.4          | 7.7        | 7.7     | 31.8<br>31.8 | 31.8     | 96.2<br>96.2   | 96.2             | 8.1<br>8.1<br>8.1         | 8.4<br>8.4   | -           | 10<br>9          |           | -               |    |                       |                       | -                    | -                       |
| SR6           | Sunny        | Moderate   | 09:19    | 4.5       | Middle         | 2.3<br>2.3  | -                | -          | -            | -             | -          |         | -            | -        | -              | -                | - 0.1                     | -            | 9.0         | -                | 15        | -               | -  | 817898                | 814647                |                      |                         |
|               |              |            |          |           | Bottom         | 3.5<br>3.5  | 0.2              | 233<br>253 | 14.4<br>14.4 | 14.4          | 7.7        | 7.7     | 31.5<br>31.5 | 31.5     | 96.8<br>96.8   | 96.8             | 8.1<br>8.1 8.1            | 9.6<br>9.6   | -           | 19<br>21         |           | -               |    |                       |                       | -                    | -                       |
|               |              |            |          |           | Surface        | 1.0         | 0.3              | 230        | 17.6         | 17.6          | 7.9        | 7.9     | 29.6         | 29.6     | 95.2           | 95.2             | 7.6                       | 7.5          |             | 11               |           | -               |    |                       |                       | -                    | -                       |
| SR7           | Fine         | Calm       | 08:02    | 17.5      | Middle         | 1.0<br>8.8  | 0.3<br>0.3       | 251<br>108 | 17.6<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 29.6<br>29.8 | 29.8     | 95.2<br>95.1   | 95.1             | 7.6<br>7.6<br>7.6         | 7.6<br>9.4   | 9.2         | 10<br>15         | 15        | -               | _  | 823619                | 823726                | -                    |                         |
| 0/            |              | 54         | SOUL     |           |                | 8.8<br>16.5 | 0.3<br>0.4       | 111<br>116 | 17.6<br>17.6 |               | 7.9<br>7.9 |         | 29.8<br>29.8 |          | 95.1<br>96.1   |                  | 7.6<br>7.7 77             | 9.5<br>10.5  |             | 13<br>21         |           | -               |    |                       |                       | -                    | -                       |
|               | <b>├</b> ─── |            | + +      |           | Bottom         | 16.5<br>1.0 | 0.4              | 126<br>205 | 17.6<br>17.5 | 17.6          | 7.9<br>7.9 | 7.9     | 29.8<br>29.1 | 29.8     | 96.1<br>97.8   | 96.1             | 7.7<br>7.7<br>7.9         | 10.5<br>14.7 |             | 19<br>18         |           | -               |    |                       |                       | -                    | -                       |
|               |              |            |          |           | Surface        | 1.0         | 0.3              | 211        | 17.5         | 17.5          | 7.9        | 7.9     | 29.1         | 29.1     | 97.8           | 97.8             | 7.9 7.9                   | 14.8         | -           | 17               |           | -               |    |                       |                       | -                    | -                       |
| SR8           | Fine         | Moderate   | 09:23    | 5.2       | Middle         | 2.6<br>2.6  | -                | -          | -            | -             | -          | -       | -            | -        | -              | -                | -                         | -            | 15.3        | -                | 22        | -               | -  | 820430                | 811596                |                      |                         |
|               |              |            |          |           | Bottom         | 4.2         | 0.3              | 230<br>239 | 17.5<br>17.5 | 17.5          | 7.9<br>7.9 | 7.9     | 29.2<br>29.2 | 29.2     | 98.5<br>98.6   | 98.6             | 7.9<br>7.9<br>7.9         | 15.8<br>16.0 |             | 28<br>26         |           | -               |    |                       |                       | -                    | -                       |
| DA: Denth-Ave |              |            |          |           |                |             |                  |            |              |               |            |         |              |          |                |                  |                           |              |             |                  |           |                 |    |                       |                       |                      |                         |

#### Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 14 February 17 during Mid-Ebb tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 14 February 17 | during Mid  |                  | •          |              |               |            |         |              |          |              |                  |                     |              |             | _                |           |                   |    |                       |                       |                      |                                |
|---------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|--------------|------------------|---------------------|--------------|-------------|------------------|-----------|-------------------|----|-----------------------|-----------------------|----------------------|--------------------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Der   | oth (m)     | Current<br>Speed | Current    | Water Ter    | mperature (°C | C)         | рН      | Salini       | ty (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(   | NTU)        | Suspende<br>(mg/ |           | Total All<br>(ppi | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(μg/L)   | Nickel (µg/L)                  |
| Station       | Condition   | Condition  | Time     | Depth (m) | Camping 20     | ,           | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  | Value        | Average          | Value DA            | Value        | DA          | Value            | DA        | Value             | DA | (Northing)            | (Easting)             | Value DA             | Value DA                       |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 184<br>189 | 14.8<br>14.8 | 14.8          | 7.8<br>7.8 | 7.8     | 34.1<br>34.1 | 34.1     | 98.0<br>98.0 | 98.0             | 8.0<br>8.0          | 10.3<br>10.2 | ·           | 14<br>16         |           | 83<br>84          |    |                       |                       | <0.2<br><0.2         | 0.7                            |
| C1            | Sunny       | Moderate   | 15:08    | 8.8       | Middle         | 4.4         | 0.4<br>0.4       | 193<br>202 | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 34.2<br>34.2 | 34.2     | 97.4<br>97.4 | 97.4             | 8.0<br>8.0<br>8.0   | 12.1<br>12.2 | 12.1        | 15<br>17         | 17        | 84<br>84          | 84 | 815627                | 804253                | <0.2<br><0.2 <0.2    | 0.8                            |
|               |             |            |          |           | Bottom         | 7.8         | 0.4              | 226        | 14.2         | 14.2          | 7.8        | 7.8     | 34.8         | 34.8     | 98.1         | 98.1             | 8.1 8.1             | 14.0         | -           | 19               |           | 85                |    |                       |                       | <0.2                 | 0.5                            |
|               |             |            |          |           | Surface        | 7.8         | 0.4              | 243<br>111 | 14.2<br>18.3 | 18.3          | 7.8<br>7.8 | 7.8     | 34.8<br>27.3 |          | 98.1<br>97.6 | 97.6             | 8.1<br>7.8          | 13.8<br>8.6  |             | 21<br>8          |           | 85<br>74          |    |                       |                       | <0.2<br><0.2         | 0.6                            |
|               |             |            |          |           |                | 1.0<br>6.4  | 0.4              | 114<br>97  | 18.3<br>18.1 |               | 7.8<br>7.8 |         | 27.3<br>27.9 |          | 97.6<br>97.0 |                  | 7.8<br>7.8<br>7.8   | 8.7<br>12.5  | ·           | 9<br>11          |           | 75<br>78          |    |                       |                       | <0.2<br><0.2         | 1.8                            |
| C2            | Fine        | Moderate   | 13:33    | 12.7      | Middle         | 6.4<br>11.7 | 0.4              | 105        | 18.1         | 18.1          | 7.8        | 7.8     | 27.9         | 27.9     | 97.0         | 97.0             | 7.8                 | 12.5         | 13.2        | 10<br>14         | 11        | 79<br>82          | 79 | 825688                | 806949                | <0.2<br><0.2<br><0.2 | 2 <u>1.5</u> 1.7<br><u>1.8</u> |
|               |             |            |          |           | Bottom         | 11.7        | 0.2<br>0.2       | 193<br>210 | 17.7<br>17.7 | 17.7          | 7.8<br>7.8 | 7.8     | 28.7<br>28.7 | 28.7     | 97.0<br>97.0 | 97.0             | 7.8<br>7.8<br>7.8   | 18.4<br>18.3 |             | 14               |           | 84                |    |                       |                       | <0.2                 | 1.7                            |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.5       | 82<br>88   | 17.9<br>17.9 | 17.9          | 7.9<br>7.9 | 7.9     | 29.5<br>29.5 | 29.5     | 96.2<br>96.1 | 96.2             | 7.6<br>7.6<br>7.6   | 9.4<br>9.4   |             | 9<br>11          |           | 78<br>77          |    |                       |                       | <0.2<br><0.2         | 0.9                            |
| C3            | Fine        | Calm       | 15:26    | 12.1      | Middle         | 6.1<br>6.1  | 0.4              | 73<br>77   | 17.7<br>17.7 | 17.7          | 7.9<br>7.9 | 7.9     | 29.8<br>29.8 | 29.8     | 95.0<br>95.0 | 95.0             | 7.6<br>7.6          | 10.5<br>10.5 | 11.4        | 11<br>12         | 13        | 82<br>81          | 81 | 822089                | 817816                | <0.2 <0.2            | 2 0.8 0.9                      |
|               |             |            |          |           | Bottom         | 11.1        | 0.4              | 100<br>101 | 17.7<br>17.7 | 17.7          | 7.9<br>7.9 | 7.9     | 29.9<br>29.9 | 29.9     | 96.3<br>96.3 | 96.3             | 7.7 7.7             | 14.4<br>14.4 |             | 15<br>17         |           | 83<br>84          |    |                       |                       | <0.2<br><0.2         | 0.8<br>0.8                     |
|               |             |            |          |           | Surface        | 1.0         | 0.3              | 142        | 15.3         | 15.3          | 7.8        | 7.8     | 34.3         | 34.3     | 99.6         | 99.6             | 8.1                 | 9.9          |             | 12               |           | 83                |    |                       |                       | <0.2                 | 0.6                            |
| IM1           | Sunny       | Moderate   | 14:48    | 7.5       | Middle         | 1.0<br>3.8  | 0.3              | 151<br>145 | 15.3<br>15.0 | 15.0          | 7.8<br>7.8 | 7.8     | 34.3<br>34.5 | 34.5     | 99.6<br>98.8 | 98.8             | 8.1<br>8.1          | 9.9<br>10.7  | 10.7        | 11<br>14         | 13        | 83<br>83          | 84 | 818356                | 806458                | <0.2<br><0.2<br><0.2 | 0.7<br>2 0.6 0.6               |
|               | Sunny       | Moderale   | 14.40    | 7.5       |                | 3.8<br>6.5  | 0.3              | 156<br>139 | 15.0<br>14.8 |               | 7.8<br>7.8 |         | 34.5<br>34.6 |          | 98.8<br>98.8 |                  | 8.1<br>8.1          | 10.8<br>11.6 | 10.7        | 13<br>15         | 15        | 83<br>84          | 04 | 010330                | 800438                | <0.2<br><0.2         | 0.6                            |
|               |             |            |          |           | Bottom         | 6.5<br>1.0  | 0.3              | 142<br>143 | 14.8<br>14.7 | 14.8          | 7.8        | 7.8     | 34.6<br>34.5 | 34.6     | 98.8<br>97.4 | 98.8             | 8.1<br>8.0          | 11.5<br>13.6 | -           | 13<br>16         |           | 85<br>80          |    |                       |                       | <0.2<br><0.2         | 0.6                            |
|               |             |            |          |           | Surface        | 1.0         | 0.4              | 154        | 14.7         | 14.7          | 7.8        | 7.8     | 34.5         | 34.5     | 97.4         | 97.4             | 8.0 8.0             | 13.5         | -           | 15               |           | 80                |    |                       |                       | <0.2                 | 0.7                            |
| IM2           | Sunny       | Moderate   | 14:42    | 8.2       | Middle         | 4.1<br>4.1  | 0.3              | 178<br>190 | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 34.6<br>34.6 | 34.6     | 97.0<br>96.9 | 97.0             | 8.0<br>8.0          | 18.9<br>18.9 | 18.2        | 19<br>17         | 20        | 81<br>81          | 81 | 818851                | 806196                | <0.2<br><0.2<br><0.2 | 0.4                            |
|               |             |            |          |           | Bottom         | 7.2         | 0.3              | 182<br>188 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 34.6<br>34.6 | 34.6     | 97.5<br>97.5 | 97.5             | 8.0<br>8.0          | 22.3<br>22.2 |             | 26<br>26         |           | 82<br>82          |    |                       |                       | <0.2<br><0.2         | 0.5                            |
|               |             |            |          |           | Surface        | 1.0         | 0.5<br>0.5       | 122<br>123 | 14.6<br>14.6 | 14.6          | 7.8<br>7.8 | 7.8     | 34.5<br>34.5 | 34.5     | 97.5<br>97.4 | 97.5             | 8.0<br>8.0          | 13.5<br>13.4 |             | 16<br>15         |           | 81<br>81          |    |                       |                       | <0.2<br><0.2         | 0.4                            |
| IM3           | Sunny       | Moderate   | 14:34    | 8.7       | Middle         | 4.4         | 0.4              | 146        | 14.5<br>14.5 | 14.5          | 7.8        | 7.8     | 34.5<br>34.5 | 34.5     | 97.2<br>97.2 | 97.2             | 8.0<br>8.0<br>8.0   | 15.5<br>15.6 | 16.2        | 16<br>17         | 18        | 82                | 82 | 819412                | 806015                | <0.2                 | 0.5 0.5                        |
|               |             |            |          |           | Bottom         | 7.7         | 0.4              | 168        | 14.3         | 14.3          | 7.8        | 7.8     | 34.6         | 34.6     | 98.1         | 98.2             | 8.1 8.1             | 19.7         | -           | 21               |           | 82<br>83          |    |                       |                       | <0.2                 | 0.6                            |
|               |             |            |          |           | Surface        | 7.7         | 0.4              | 181<br>153 | 14.3<br>15.0 | 15.0          | 7.8<br>7.8 | 7.8     | 34.6<br>33.9 | 33.9     | 98.2<br>98.3 | 98.4             | 8.1 0.1<br>8.1      | 19.5<br>12.3 |             | 23<br>16         |           | 83<br>83          |    |                       |                       | <0.2<br><0.2         | 0.5<br>0.5                     |
|               | 0           | Madaaata   | 11.00    | 7.0       |                | 1.0         | 0.3              | 165<br>168 | 15.0<br>14.7 |               | 7.8<br>7.8 |         | 33.9<br>34.0 |          | 98.4<br>97.6 |                  | 8.1<br>8.0 8.1      | 12.3<br>12.7 | 10.0        | 16<br>15         | 10        | 82<br>83          |    | 010501                | 005005                | <0.2                 | 0.6                            |
| IM4           | Sunny       | Moderate   | 14:28    | 7.9       | Middle         | 4.0         | 0.3              | 169<br>172 | 14.7<br>14.4 | 14.7          | 7.8<br>7.8 | 7.8     | 34.0<br>34.5 | 34.0     | 97.6<br>97.1 | 97.6             | 8.0<br>8.0          | 12.8<br>14.8 | 13.3        | 14<br>16         | 16        | 83<br>84          | 83 | 819561                | 805025                | <0.2<br><0.2<br><0.2 | 2 0.6 0.6<br>0.6               |
|               |             |            |          |           | Bottom         | 6.9         | 0.3              | 175        | 14.4         | 14.4          | 7.8        | 7.8     | 34.5         | 34.5     | 97.2         | 97.2             | 8.0 8.0             | 14.7         | -           | 19               |           | 84                |    |                       |                       | <0.2                 | 0.7                            |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.4<br>0.4       | 148<br>159 | 14.9<br>14.9 | 14.9          | 7.8<br>7.8 | 7.8     | 33.6<br>33.6 | 33.6     | 97.7<br>97.8 | 97.8             | 8.0<br>8.0<br>8.0   | 14.2<br>14.2 |             | 18<br>19         |           | 80<br>79          |    |                       |                       | <0.2<br><0.2         | 0.8<br>0.7                     |
| IM5           | Sunny       | Moderate   | 14:18    | 7.3       | Middle         | 3.7<br>3.7  | 0.3              | 174<br>188 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.9<br>33.9 | 33.9     | 96.6<br>96.6 | 96.6             | 8.0<br>8.0          | 18.6<br>18.7 | <u>24.5</u> | 22<br>20         | 21        | 81<br>81          | 81 | 820564                | 804908                | <0.2 <0.2            | 2 0.7 0.8                      |
|               |             |            |          |           | Bottom         | 6.3<br>6.3  | 0.3              | 187<br>199 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 34.5<br>34.5 | 34.5     | 96.2<br>96.3 | 96.3             | 8.0<br>8.0          | 40.5<br>40.5 | -           | 25<br>24         |           | 82<br>82          |    |                       |                       | <0.2<br><0.2         | 0.7                            |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.6              | 129<br>130 | 14.9<br>14.9 | 14.9          | 7.8        | 7.8     | 33.9<br>33.9 | 33.9     | 98.4<br>98.3 | 98.4             | 8.1<br>8.1          | 22.5<br>22.5 |             | 25<br>24         |           | 81<br>81          |    |                       |                       | <0.2<br><0.2         | 0.6                            |
| IM6           | Sunny       | Moderate   | 14:07    | 7.2       | Middle         | 3.6         | 0.5              | 132        | 14.6         | 14.6          | 7.8        | 7.8     | 34.0         | 34.0     | 97.2         | 97.2             | 8.0 8.1             | 17.3         | <u>24.8</u> | 28               | <u>26</u> | 82                | 82 | 821058                | 805843                | <0.2                 | 0.6                            |
|               |             |            |          |           | Bottom         | 3.6<br>6.2  | 0.5<br>0.5       | 141<br>153 | 14.6<br>14.3 | 14.3          | 7.8<br>7.8 | 7.8     | 34.0<br>34.3 | 34.3     | 97.2<br>97.4 | 97.5             | 8.0<br>8.1<br>8.1   | 17.3<br>34.4 |             | 27<br>27         |           | 82<br>83          |    |                       |                       | <0.2<br><0.2         | 0.6                            |
|               |             |            |          |           | Surface        | 6.2<br>1.0  | 0.5              | 167<br>107 | 14.3<br>14.7 | 14.7          | 7.8<br>7.8 |         | 34.3<br>34.1 | 34.1     | 97.5<br>97.7 | 97.7             | 8.1 0.1<br>8.0      | 34.5<br>16.5 |             | 25<br>19         |           | 83<br>83          |    |                       |                       | <0.2<br><0.2         | 0.6                            |
|               |             |            |          |           |                | 1.0<br>4.3  | 0.6<br>0.4       | 112<br>115 | 14.7<br>14.4 |               | 7.8<br>7.8 | 7.8     | 34.1<br>34.2 |          | 97.7<br>97.0 |                  | 8.0<br>8.0          | 16.6<br>25.2 |             | 20<br>21         |           | 83<br>84          |    |                       |                       | <0.2                 | 0.6                            |
| IM7           | Sunny       | Moderate   | 13:57    | 8.5       | Middle         | 4.3         | 0.5              | 122        | 14.4         | 14.4          | 7.8        | 7.8     | 34.2         | 34.2     | 97.0         | 97.0             | 8.0                 | 25.3<br>39.4 | <u>27.1</u> | 22<br>26         | 23        | 84<br>85          | 84 | 821348                | 806851                | <0.2<br><0.2<br><0.2 | 2 0.8 0.7<br>0.6               |
|               |             |            |          |           | Bottom         | 7.5         | 0.5              | 138        | 14.4<br>14.4 | 14.4          | 7.8        | 7.8     | 34.3<br>34.3 | 34.3     | 97.3<br>97.3 | 97.3             | 8.0<br>8.0<br>7.0   | 39.7         | -           | 27               |           | 85                |    |                       |                       | <0.2                 | 0.6                            |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.6<br>0.6       | 98<br>107  | 17.7<br>17.7 | 17.7          | 7.9<br>7.9 | 7.9     | 29.8<br>29.8 | 29.8     | 99.3<br>99.3 | 99.3             | 7.9<br>7.9<br>7.9   | 23.6<br>23.7 |             | 25<br>24         |           | 77<br>78          |    |                       |                       | <0.2<br><0.2         | 0.9                            |
| IM8           | Fine        | Moderate   | 14:04    | 8.4       | Middle         | 4.2         | 0.6              | 112<br>122 | 17.6<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 29.8<br>29.8 | 29.8     | 99.1<br>99.1 | 99.1             | 7.9<br>7.9          | 29.2<br>29.5 | <u>28.7</u> | 26<br>25         | <u>25</u> | 81<br>80          | 81 | 821686                | 807828                | <0.2 <0.2            | 2 0.7 0.7                      |
|               |             |            |          |           | Bottom         | 7.4         | 0.5              | 100<br>109 | 17.4<br>17.4 | 17.4          | 7.9<br>7.9 | 7.9     | 29.9<br>29.9 | 29.9     | 99.6<br>99.6 | 99.6             | 8.0<br>8.0<br>8.0   | 33.4<br>33.0 |             | 26<br>26         |           | 83<br>84          |    |                       |                       | <0.2<br><0.2         | 0.6                            |
| DA: Denth-Ave | I           |            | 1        |           | 1              | 1.+         | 0.0              | 103        | 17.4         |               | 1.3        | L       | LJ.J         |          | 55.0         |                  | 0.0                 | 00.0         |             | 20               |           | J7                | I  |                       | I                     |                      | 0.0                            |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on14 February 17 14 February 17 during Mid-Ebb tide

| Water Qua      | ity Monito | oring Resu | ults on  |           | 14 February 17 | during Mid  | -Ebb tide        |              |              |               | i.         |         |              |          |                |                  | •                        |              |             |                  |           |                 |    |                       | i i i i i i i i i i i i i i i i i i i |                              |                   |
|----------------|------------|------------|----------|-----------|----------------|-------------|------------------|--------------|--------------|---------------|------------|---------|--------------|----------|----------------|------------------|--------------------------|--------------|-------------|------------------|-----------|-----------------|----|-----------------------|---------------------------------------|------------------------------|-------------------|
| Monitoring     | Weather    | Sea        | Sampling | Water     | Sampling Dep   | oth (m)     | Current<br>Speed | Current      | Water Ter    | nperature (°C | C)         | рН      | Salini       | ty (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen      | Turbidity    | NTU)        | Suspende<br>(mg/ |           | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid                 | Chromium<br>(µg/L)           | Nickel (µg/L)     |
| Station        | Condition  | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction    | Value        | Average       | Value      | Average | Value        | Average  |                | Average          | Value DA                 | Value        | DA          | Value            | DA        | Value           | DA | (Northing)            | (Easting)                             | Value DA                     | Value DA          |
|                |            |            |          |           | Surface        | 1.0         | 0.5<br>0.6       | 93<br>94     | 17.8<br>17.8 | 17.8          | 7.9<br>7.9 | 7.9     | 29.5<br>29.5 | 29.5     | 98.5<br>98.4   | 98.5             | 7.9<br>7.9<br>7.0        | 24.9<br>25.3 | -           | 21<br>20         |           | 76<br>77        |    |                       |                                       | <0.2<br><0.2                 | 0.6               |
| IM9            | Fine       | Moderate   | 14:11    | 7.7       | Middle         | 3.9<br>3.9  | 0.5<br>0.5       | 91<br>95     | 17.5<br>17.5 | 17.5          | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.6     | 97.9<br>97.9   | 97.9             | 7.8<br>7.8<br>7.8        | 40.5<br>40.3 | <u>40.8</u> | 23<br>23         | <u>34</u> | 81<br>79        | 80 | 822087                | 808807                                | <0.2<br><0.2 <0.2            | 2 0.5 0.6<br>0.5  |
|                |            |            |          |           | Bottom         | 6.7<br>6.7  | 0.5              | 85<br>88     | 17.5<br>17.5 | 17.5          | 7.9        | 7.9     | 29.6<br>29.6 | 29.6     | 98.9<br>98.9   | 98.9             | 7.9<br>7.9<br>7.9        | 56.9<br>56.9 | -           | 56<br>60         |           | 83<br>84        |    |                       |                                       | <0.2<br><0.2                 | 0.5               |
|                |            |            |          |           | Surface        | 1.0         | 0.5<br>0.6       | 92           | 17.8         | 17.8          | 7.9        | 7.9     | 29.4         | 29.4     | 99.1           | 99.1             | 7.9                      | 19.4         | I           | 17               |           | 78              |    |                       |                                       | <0.2                         | 1.0               |
| IM10           | Fine       | Moderate   | 14:17    | 7.5       | Middle         | 1.0<br>3.8  | 0.6<br>0.5       | 92<br>90     | 17.8<br>17.7 | 17.7          | 7.9<br>7.9 | 7.9     | 29.4<br>29.3 | 29.3     | 99.1<br>99.2   | 99.2             | 7.9<br>7.9<br>7.9        | 19.6<br>23.6 | <u>24.5</u> | 18<br>20         | 23        | 77<br>79        | 80 | 822235                | 809857                                | <0.2<br><0.2<br><0.2<br><0.2 | 1.1<br>1.2<br>1.0 |
| imito          | T IIIC     | Moderate   | 14.17    | 7.5       |                | 3.8<br>6.5  | 0.5              | 90<br>97     | 17.7<br>17.6 |               | 7.9<br>7.9 |         | 29.3<br>29.4 |          | 99.2<br>100.5  |                  | 7.9<br>8.1               | 23.9<br>30.2 | <u>24.0</u> | 18<br>33         | 20        | 80<br>82        | 00 | 022200                | 000007                                | <0.2                         | 1.0<br>0.9        |
|                |            |            |          |           | Bottom         | 6.5<br>1.0  | 0.4              | 100<br>101   | 17.6<br>18.0 | 17.6          | 7.9<br>7.9 | 7.9     | 29.4<br>29.1 | 29.4     | 100.5<br>99.3  | 100.5            | 8.1<br>8.1<br>7.9        | 30.2<br>8.8  |             | 33<br>11         |           | 83<br>78        |    |                       |                                       | <0.2<br><0.2                 | 1.0               |
|                |            |            |          |           | Surface        | 1.0         | 0.8              | 108<br>108   | 18.0<br>17.8 | 18.0          | 7.9        | 7.9     | 29.1<br>29.2 | 29.1     | 99.3<br>98.8   | 99.3             | 7.9<br>7.9<br>7.9        | 8.9<br>12.0  | -           | 10<br>14         |           | 80              |    |                       |                                       | <0.2                         | 0.9               |
| IM11           | Fine       | Moderate   | 14:24    | 7.0       | Middle         | 3.5         | 0.6              | 110          | 17.8         | 17.8          | 7.9<br>7.9 | 7.9     | 29.2         | 29.2     | 98.8           | 98.8             | 7.9                      | 12.1         | 11.5        | 14               | 14        | 81<br>82        | 81 | 821484                | 810540                                | <0.2                         | 1.2               |
|                |            |            |          |           | Bottom         | 6.0<br>6.0  | 0.6              | 105<br>112   | 17.6<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 29.3<br>29.3 | 29.3     | 100.2<br>100.2 | 100.2            | 8.0<br>8.0               | 13.5<br>13.4 | -           | 15<br>17         |           | 84<br>83        |    |                       |                                       | <0.2<br><0.2                 | 1.0<br>0.9        |
|                |            |            |          |           | Surface        | 1.0         | 0.7              | 99<br>102    | 17.9<br>17.9 | 17.9          | 7.9<br>7.9 | 7.9     | 29.2<br>29.2 | 29.2     | 99.4<br>99.3   | 99.4             | 7.9<br>7.9               | 7.9<br>8.0   | -           | 9<br>10          |           | 79<br>80        |    |                       |                                       | <0.2<br><0.2                 | 1.0<br>1.1        |
| IM12           | Fine       | Moderate   | 14:32    | 8.5       | Middle         | 4.3<br>4.3  | 0.6              | 92<br>98     | 17.8<br>17.8 | 17.8          | 7.9<br>7.9 | 7.9     | 29.3<br>29.3 | 29.3     | 99.6<br>99.6   | 99.6             | 8.0<br>8.0<br>8.0        | 8.0<br>8.0   | 8.0         | 12<br>14         | 12        | 82<br>80        | 82 | 821154                | 811511                                | <0.2<br><0.2 <0.2            | 2 1.0 1.0         |
|                |            |            |          |           | Bottom         | 7.5<br>7.5  | 0.4<br>0.4       | 104<br>113   | 17.7<br>17.7 | 17.7          | 7.9<br>7.9 | 7.9     | 29.3<br>29.3 | 29.3     | 100.7<br>100.8 | 100.8            | 8.0<br>8.1<br>8.1        | 8.0<br>8.0   | -           | 14<br>13         |           | 84<br>85        |    |                       |                                       | <0.2<br><0.2                 | 0.9               |
|                |            |            |          |           | Surface        | 1.0<br>1.0  | 0.5              | 85<br>85     | 17.7<br>17.7 | 17.7          | 7.9        | 7.9     | 29.4<br>29.4 | 29.4     | 97.1<br>97.1   | 97.1             | 7.8<br>7.8<br>7.8        | 9.8<br>9.8   |             | 10<br>10<br>10   |           | 79<br>79<br>79  |    |                       |                                       | <0.2<br><0.2<br><0.2         | 0.9               |
| SR2            | Fine       | Moderate   | 15:06    | 4.8       | Middle         | 2.4         | -                | -            | -            | -             | -          |         | -            | -        | -              | -                | - 7.8                    | -            | 11.2        | -                | 11        | -               | 81 | 821455                | 814179                                | - <0.2                       | -                 |
|                |            |            |          |           | Bottom         | 2.4<br>3.8  | - 0.4            | 86           | - 17.7       | 17.7          | 7.9        | 7.9     | - 29.4       | 29.4     | -<br>97.7      | 97.7             | 7.8 7.8                  | - 12.4       |             | - 12             |           | 83              |    |                       |                                       | <0.2                         | 0.8               |
|                |            |            |          |           | Surface        | 3.8<br>1.0  | 0.4<br>0.5       | 89<br>137    | 17.7<br>18.2 | 18.2          | 7.9<br>7.8 | 7.9     | 29.4<br>27.7 | 27.7     | 97.7<br>97.7   | 97.7             | 7.8                      | 12.6<br>6.9  |             | 13<br>11         |           | 83<br>-         |    |                       |                                       | <0.2                         | -                 |
| SR3            | Fine       | Moderate   | 13:55    | 9.5       | Middle         | 1.0<br>4.8  | 0.5<br>0.5       | 145<br>94    | 18.2<br>17.9 | 17.9          | 7.9<br>7.9 | 7.9     | 27.7<br>28.5 | 28.5     | 97.7<br>97.3   | 97.3             | 7.8<br>7.8<br>7.8        | 6.8<br>19.0  | 16.5        | 9<br>15          | 14        | -               | _  | 822143                | 807578                                | -                            | -                 |
| 0110           | T IIIC     | Moderate   | 10.00    | 5.5       |                | 4.8<br>8.5  | 0.6<br>0.5       | 102<br>86    | 17.9<br>17.7 |               | 7.9<br>7.9 |         | 28.5<br>28.9 |          | 97.3<br>96.9   |                  | 7.8<br>7.8 7.9           | 19.2<br>23.4 | 10.0        | 14<br>17         | 14        | -               |    | 022140                | 00/0/0                                | -                            | -                 |
|                |            |            |          |           | Bottom         | 8.5<br>1.0  | 0.5              | 90<br>107    | 17.7<br>14.6 | 17.7          | 7.9<br>7.8 | 7.9     | 28.9<br>34.3 | 28.9     | 96.9<br>96.9   | 96.9             | 7.8<br>7.8<br>8.0        | 23.4<br>17.1 |             | 18<br>23         |           | -               |    |                       |                                       | -                            | -                 |
|                |            |            |          |           | Surface        | 1.0<br>4.0  | 0.4<br>0.4       | 112<br>100   | 14.6<br>14.5 | 14.6          | 7.8<br>7.8 | 7.8     | 34.3<br>34.3 | 34.3     | 96.9<br>96.8   | 96.9             | 8.0<br>8.0               | 17.1<br>19.1 |             | 24<br>23         |           | -               |    |                       |                                       | -                            | -                 |
| SR4A           | Sunny      | Moderate   | 15:34    | 7.9       | Middle         | 4.0         | 0.4              | 104<br>121   | 14.5<br>14.6 | 14.5          | 7.8        | 7.8     | 34.3<br>34.4 | 34.3     | 96.8<br>97.2   | 96.8             | 8.0<br>8.0               | 19.2<br>18.9 | 18.4        | 25<br>24         | <u>24</u> | -               | -  | 817199                | 807816                                | -                            | -                 |
|                |            |            |          |           | Bottom         | 6.9         | 0.4              | 123          | 14.6         | 14.6          | 7.9        | 7.9     | 34.4         | 34.4     | 97.2           | 97.2             | 8.0                      | 19.0         |             | 25               |           | -               |    |                       |                                       |                              | -                 |
|                |            |            |          |           | Surface        | 1.0<br>1.0  | 0.1<br>0.1       | 175<br>186   | 15.4<br>15.4 | 15.4          | 7.8<br>7.8 | 7.8     | 34.1<br>34.1 | 34.1     | 102.6<br>102.7 | 102.7            | 8.3<br>8.3<br>8.3        | 6.5<br>6.5   | ŀ           | 10<br>8          |           | -               |    |                       |                                       | -                            | -                 |
| SR5A           | Sunny      | Calm       | 15:51    | 4.6       | Middle         | 2.3<br>2.3  | -                | -            | -            | -             | -          |         | -            | -        | -              | -                | -                        | -            | 7.8         | -                | 9         | -               | -  | 816597                | 810693                                |                              |                   |
|                |            |            |          |           | Bottom         | 3.6<br>3.6  | 0.1              | 194<br>209   | 15.1<br>15.1 | 15.1          | 7.8<br>7.8 | 7.8     | 34.2<br>34.2 | 34.2     | 101.1<br>101.1 | 101.1            | 8.3<br>8.3               | 9.2<br>9.1   | -           | 10<br>8          |           | -               |    |                       |                                       | -                            | -                 |
|                |            |            |          |           | Surface        | 1.0<br>1.0  | 0.2              | 121<br>123   | 14.8<br>14.8 | 14.8          | 7.8<br>7.8 | 7.8     | 34.1<br>34.1 | 34.1     | 99.8<br>99.8   | 99.8             | 8.2<br>8.2               | 7.5<br>7.6   |             | 10<br>9          |           | -               |    |                       |                                       | -                            | -                 |
| SR6            | Sunny      | Calm       | 16:15    | 3.7       | Middle         | 1.9<br>1.9  | -                | -            | -            | -             | -          |         | -            | -        | -              | -                | - 8.2                    | -            | 8.2         | -                | 11        | -               | -  | 817912                | 814675                                |                              |                   |
|                |            |            |          |           | Bottom         | 2.7         | 0.2              | 134<br>140   | 14.6<br>14.6 | 14.6          | 7.8<br>7.8 | 7.8     | 34.1<br>34.1 | 34.1     | 99.6<br>99.7   | 99.7             | 8.2<br>8.2 8.2           | 8.9<br>8.7   | -           | 12<br>13         |           | -               |    |                       |                                       | -                            | -                 |
|                |            |            |          |           | Surface        | 1.0         | 0.4              | 63           | 17.9         | 17.9          | 7.9        | 7.9     | 30.0         | 30.0     | 95.2           | 95.2             | 7.6                      | 5.2          |             | 4                |           | -               |    |                       | <u> </u>                              | -                            | -                 |
| SR7            | Fine       | Calm       | 15:55    | 17.7      | Middle         | 1.0<br>8.9  | 0.4              | 63<br>60     | 17.9<br>17.8 | 17.8          | 7.9<br>7.9 | 7.9     | 30.0<br>30.0 | 30.0     | 95.2<br>94.8   | 94.8             | 7.6<br>7.5<br>7.6        | 5.2<br>6.4   | 6.7         | 5<br>7           | 7         | -               | -  | 823623                | 823729                                |                              |                   |
|                |            |            |          |           | Bottom         | 8.9<br>16.7 | 0.4              | 64<br>129    | 17.8<br>17.8 | 17.8          | 7.9<br>7.9 | 7.9     | 30.0<br>30.0 | 30.0     | 94.8<br>94.8   | 94.8             | 7.5<br>7.5<br>7.5<br>7.5 | 6.2<br>8.5   |             | 6<br>8           |           | -               |    |                       |                                       | -                            | -                 |
|                |            |            |          |           |                | 16.7<br>1.0 | 0.3<br>0.2       | 137<br>160.0 | 17.8<br>18.1 |               | 7.9<br>7.9 |         | 30.0<br>29.4 |          | 94.8<br>99.7   |                  | 7.5<br>7.9               | 8.5<br>10.0  | [           | 10<br>13         |           | -               |    |                       |                                       | -                            | -                 |
|                |            |            |          |           | Surface        | 1.0<br>2.6  | 0.2              | 160.0        | 18.1         | 18.1          | 7.9        | 7.9     | 29.4         | 29.4     | 99.7           | 99.7             | 7.9 7.9                  | - 10.0       | •           | 12               |           | -               |    |                       |                                       | -                            | -                 |
| SR8            | Fine       | Moderate   | 14:52    | 5.2       | Middle         | 2.6<br>4.2  | - 0.3            | - 159.0      | - 17.6       | -             | -          | -       | -            | -        | -              | -                | -                        | -            | 10.7        | -                | 14        | -               | -  | 820414                | 811607                                | -                            | -                 |
| DA: Denth-Aver |            |            |          |           | Bottom         | 4.2         | 0.3              | 172.0        | 17.6         | 17.6          | 7.9<br>7.9 | 7.9     | 29.4<br>29.4 | 29.4     | 99.6<br>99.6   | 99.6             | 8.0<br>8.0<br>8.0        | 11.1<br>11.8 | -           | 15<br>16         |           | -               |    |                       |                                       | -                            |                   |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on16 February 17 16 February 17 during Mid-Flood Tide

| Water Qua     | ity Monite | oring Resu | ults on  |           | 16 February 17 | during Mid  |                  | de         |              |               | -          |         | -            |         |              |                  |                     |              |      |                  |    |                 |    |                       |                       |                              |                   |
|---------------|------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|--------------|------------------|---------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|------------------------------|-------------------|
| Monitoring    | Weather    | Sea        | Sampling | Water     | Sampling Dep   | oth (m)     | Current<br>Speed | Current    | Water Ter    | mperature (°C | <b>;</b> ) | рН      | Salinit      | y (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)     |
| Station       | Condition  | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average | Value        | Average          | Value DA            | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA                     | Value DA          |
|               |            |            |          |           | Surface        | 1.0         | 0.6<br>0.6       | 65<br>69   | 14.8<br>14.8 | 14.8          | 7.8<br>7.8 | 7.8     | 32.5<br>32.5 | 32.5    | 97.1<br>97.1 | 97.1             | 8.0<br>8.1          | 9.4<br>9.4   | F    | 13<br>13         |    | 83<br>83        |    |                       |                       | <0.2<br><0.2                 | 1.0<br>0.8        |
| C1            | Sunny      | Moderate   | 10:26    | 8.6       | Middle         | 4.3<br>4.3  | 0.5              | 75<br>80   | 14.7<br>14.7 | 14.7          | 7.8<br>7.8 | 7.8     | 32.7<br>32.7 | 32.7    | 96.7<br>96.8 | 96.8             | 8.0<br>8.0<br>8.0   | 13.5<br>13.6 | 16.7 | 16<br>18         | 18 | 84<br>84        | 84 | 815639                | 804232                | <0.2 <0.2 <0.2               | 0.9 0.9           |
|               |            |            |          |           | Bottom         | 7.6         | 0.5              | 71<br>71   | 14.6<br>14.6 | 14.6          | 7.8<br>7.8 | 7.8     | 32.9<br>32.9 | 32.9    | 97.3<br>97.3 | 97.3             | 8.1<br>8.1          | 27.4<br>26.7 | F    | 26<br>24         |    | 85<br>85        |    |                       |                       | <0.2<br><0.2                 | 0.9               |
|               |            |            |          |           | Surface        | 1.0<br>1.0  | 0.5              | 157        | 18.2<br>18.2 | 18.2          | 7.9        | 7.9     | 25.9<br>25.9 |         | 95.7<br>95.7 | 95.7             | 7.7                 | 6.0<br>6.0   |      | 3                |    | 79              |    |                       |                       | <0.2<br><0.2<br><0.2         | 2.3               |
| C2            | Sunny      | Moderate   | 11:29    | 12.2      | Middle         | 6.1         | 0.5<br>0.6       | 164<br>194 | 17.9         | 17.9          | 7.9        | 7.9     | 27.5         | 27.5    | 94.8         | 94.8             | 7.6                 | 10.2         | 9.5  | 3<br>5           | 6  | 80<br>81        | 81 | 825663                | 806963                | <0.2                         | 2.3<br>1.6<br>1.8 |
|               |            |            |          |           | Bottom         | 6.1<br>11.2 | 0.6<br>0.4       | 199<br>255 | 17.9<br>17.9 | 17.9          | 7.9<br>7.9 | 7.9     | 27.5<br>27.6 | 27.6    | 94.8<br>95.5 | 95.5             | 7.6<br>7.7<br>7.7   | 10.2<br>12.2 |      | 5<br>11          |    | 81<br>84        |    |                       |                       | <0.2<br><0.2                 | 1.6<br>1.6        |
|               |            |            |          |           | Surface        | 11.2<br>1.0 | 0.4              | 256<br>262 | 17.9<br>17.9 | 17.9          | 7.9<br>7.9 | 7.9     | 27.6<br>28.8 | 28.8    | 95.5<br>96.7 | 96.7             | 7.7                 | 12.2<br>5.3  |      | 10<br>7          |    | 82<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.6<br>1.1        |
| 00            | Current    | Madavata   | 00.00    | 11.0      |                | 1.0<br>5.7  | 0.5<br>0.5       | 272<br>266 | 17.9<br>17.8 |               | 7.9<br>7.9 |         | 28.8<br>29.2 |         | 96.6<br>96.1 |                  | 7.7<br>7.7<br>7.7   | 5.3<br>7.9   |      | 5<br>10          | 10 | 79<br>82        |    | 000115                | 017704                | <0.2<br><0.2                 | 1.1<br>0.9        |
| C3            | Sunny      | Moderate   | 09:33    | 11.3      | Middle         | 5.7<br>10.3 | 0.6<br>0.4       | 283<br>264 | 17.8<br>17.8 | 17.8          | 7.9<br>7.9 | 7.9     | 29.2<br>29.2 | 29.2    | 96.1<br>96.0 | 96.1             | 7.7                 | 7.9<br>13.8  | 9.0  | 10<br>15         | 10 | 81<br>86        | 82 | 822115                | 817784                | <0.2<br><0.2<br><0.2         | 1.0<br>1.0        |
|               |            |            |          |           | Bottom         | 10.3        | 0.4              | 276<br>84  | 17.8         | 17.8          | 7.9        | 7.9     | 29.2<br>31.8 |         | 96.0<br>97.0 | 96.0             | 7.7<br>7.7<br>8.0   | 13.8<br>5.2  |      | 13<br>9          |    | 86<br>80        |    |                       |                       | <0.2                         | 1.0<br>1.2        |
|               |            |            |          |           | Surface        | 1.0         | 0.7              | 88         | 15.2         | 15.2          | 8.0        | 8.0     | 31.8         | 31.0    | 97.0         | 97.0             | 8.0 8.0             | 5.2          | F    | 9                |    | 80              |    |                       |                       | <0.2                         | 1.4               |
| IM1           | Sunny      | Moderate   | 10:44    | 7.7       | Middle         | 3.9<br>3.9  | 0.6<br>0.6       | 145<br>147 | 14.8<br>14.8 | 14.8          | 8.0<br>8.0 | 8.0     | 32.2<br>32.2 | 32.2    | 96.1<br>96.1 | 96.1             | 8.0<br>8.0          | 7.5<br>7.3   | 16.3 | 12<br>12         | 15 | 81<br>81        | 81 | 818366                | 806453                | <0.2<br><0.2<br><0.2         | 1.1               |
|               |            |            |          |           | Bottom         | 6.7<br>6.7  | 0.5<br>0.5       | 164<br>178 | 14.6<br>14.6 | 14.6          | 8.0<br>8.0 | 8.0     | 32.7<br>32.7 | 32.7    | 95.4<br>95.4 | 95.4             | 7.9<br>7.9<br>7.9   | 36.2<br>36.3 |      | 24<br>23         |    | 82<br>82        |    |                       |                       | <0.2<br><0.2                 | 0.9               |
|               |            |            |          |           | Surface        | 1.0<br>1.0  | 0.8<br>0.8       | 106<br>114 | 15.3<br>15.3 | 15.3          | 7.9<br>7.9 | 7.9     | 31.4<br>31.4 | 31.4    | 96.9<br>96.9 | 96.9             | 8.0<br>8.0<br>8.0   | 4.8<br>4.8   |      | 7<br>6           |    | 81<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.3<br>1.4        |
| IM2           | Sunny      | Moderate   | 10:50    | 8.5       | Middle         | 4.3<br>4.3  | 0.7              | 105<br>112 | 14.7<br>14.7 | 14.7          | 7.9<br>7.9 | 7.9     | 32.4<br>32.4 | 32.4    | 95.8<br>95.8 | 95.8             | 8.0<br>8.0          | 16.9<br>17.0 | 17.5 | 22<br>21         | 21 | 81<br>82        | 81 | 818851                | 806173                | <0.2<br><0.2<br><0.2         | 1.3<br>1.2<br>1.3 |
|               |            |            |          |           | Bottom         | 7.5<br>7.5  | 0.6<br>0.6       | 117<br>126 | 14.7<br>14.7 | 14.7          | 7.9<br>7.9 | 7.9     | 32.4<br>32.4 | 32.4    | 95.8<br>95.8 | 95.8             | 8.0<br>8.0<br>8.0   | 30.9<br>30.3 | F    | 33<br>35         |    | 82<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.2<br>1.2        |
|               |            |            |          |           | Surface        | 1.0         | 0.6              | 123<br>127 | 15.1<br>15.1 | 15.1          | 7.8<br>7.8 | 7.8     | 31.2<br>31.2 | 31.2    | 96.4<br>96.4 | 96.4             | 8.0<br>8.0          | 4.6<br>4.6   |      | 6 7              |    | 80<br>81        |    |                       |                       | <0.2<br><0.2                 | 1.6<br>1.5        |
| IM3           | Sunny      | Moderate   | 10:58    | 8.6       | Middle         | 4.3         | 0.5              | 102        | 14.8<br>14.8 | 14.8          | 7.9        | 7.9     | 32.0<br>32.0 | 32.0    | 95.7<br>95.7 | 95.7             | 7.9<br>8.0          | 11.1<br>11.3 | 18.6 | 15<br>15         | 23 | 81<br>82        | 81 | 819397                | 806002                | <0.2<br><0.2<br><0.2         | 1.3               |
|               |            |            |          |           | Bottom         | 7.6         | 0.5              | 98         | 14.8         | 14.8          | 7.9        | 7.9     | 32.3<br>32.3 | 32.3    | 95.8<br>95.8 | 95.8             | 8.0<br>8.0<br>8.0   | 39.9<br>39.8 | F    | 47 49            |    | 82<br>82        |    |                       |                       | <0.2                         | 1.3<br>1.2<br>1.4 |
|               |            |            |          |           | Surface        | 1.0         | 0.7              | 117        | 15.2         | 15.2          | 7.8        | 7.8     | 31.4         | 31.4    | 97.3         | 97.4             | 8.1                 | 5.2          |      | 13               |    | 82              |    | I                     |                       | <0.2                         | 1.7               |
| IM4           | Sunny      | Moderate   | 11:08    | 8.1       | Middle         | 1.0<br>4.1  | 0.7<br>0.7       | 117<br>99  | 15.1<br>14.9 | 14.9          | 7.8<br>7.8 | 7.8     | 31.4<br>31.9 | 31.9    | 97.4<br>96.7 | 96.7             | 8.1<br>8.0          | 5.3<br>7.2   | 13.3 | 11<br>12         | 19 | 82<br>82<br>83  | 83 | 819572                | 805033                | <0.2<br><0.2<br><0.2         | 1.5<br>1.3<br>1.4 |
|               | ,          |            |          |           | Bottom         | 4.1<br>7.1  | 0.7<br>0.7       | 101<br>112 | 14.9<br>14.8 | 14.8          | 7.8<br>7.8 | 7.8     | 31.9<br>32.4 | 20.4    | 96.7<br>97.0 | 97.1             | 8.0<br>8.0<br>8.1   | 7.4<br>27.7  |      | 13<br>30         | -  | 84              |    |                       |                       | <0.2                         | 1.4               |
|               |            |            |          |           | Surface        | 7.1<br>1.0  | 0.7<br>0.6       | 121<br>143 | 14.8<br>15.1 | 15.1          | 7.8<br>7.8 | 7.8     | 32.4<br>31.4 |         | 97.1<br>96.8 | 96.9             | 8.1 0.1<br>8.0      | 26.7<br>3.7  |      | 33<br>5          |    | 84<br>79        |    |                       |                       | <0.2<br><0.2                 | 1.1<br>1.5        |
|               |            | Madaaala   | 44.47    |           |                | 1.0<br>3.5  | 0.7              | 152<br>107 | 15.1<br>14.9 |               | 7.8<br>7.8 |         | 31.4<br>31.9 |         | 96.9<br>96.1 |                  | 8.0<br>8.0          | 3.7<br>18.6  |      | 3<br>13          |    | 80<br>80        |    | 000540                | 004040                | <0.2<br><0.2                 | 1.4               |
| IM5           | Sunny      | Moderate   | 11:17    | 6.9       | Middle         | 3.5<br>5.9  | 0.5<br>0.5       | 112<br>97  | 14.9<br>14.8 | 14.9          | 7.8<br>7.8 | 7.8     | 31.9<br>32.1 | 31.9    | 96.1<br>96.4 | 96.1             | 8.0<br>8.0          | 18.4<br>43.4 | 21.8 | 14<br>46         | 21 | 81<br>81        | 80 | 820549                | 804919                | <0.2<br><0.2<br><0.2         | 1.4<br>1.2        |
|               |            |            |          |           | Bottom         | 5.9<br>1.0  | 0.6              | 106<br>79  | 14.8<br>15.4 | 14.8          | 7.8<br>7.8 | 7.8     | 32.1<br>31.3 | 32.1    | 96.4<br>96.8 | 96.4             | 8.0<br>8.0<br>8.0   | 43.2<br>4.3  |      | 44<br>6          |    | 81<br>81        |    |                       |                       | <0.2<br><0.2                 | 1.4<br>1.5        |
|               |            |            |          |           | Surface        | 1.0<br>3.6  | 0.8              | 81<br>95   | 15.4<br>14.9 | 15.4          | 7.8        | 7.8     | 31.3<br>31.9 | 31.3    | 96.8<br>95.7 | 96.8             | 8.0<br>7.9<br>8.0   | 4.4          | -    | 4<br>16          |    | 80<br>81        |    |                       |                       | <0.2                         | 1.6<br>1.4        |
| IM6           | Sunny      | Moderate   | 11:26    | 7.1       | Middle         | 3.6         | 0.8              | 102        | 14.9         | 14.9          | 7.8        | 7.8     | 31.9         | 31.9    | 95.7         | 95.7             | 7.9                 | 12.6         | 13.5 | 14               | 15 | 81              | 81 | 821068                | 805838                | <0.2                         | 1.4               |
|               |            |            |          |           | Bottom         | 6.1<br>6.1  | 0.7<br>0.7       | 106<br>107 | 14.9<br>14.9 | 14.9          | 7.8<br>7.8 | 7.8     | 32.0<br>32.0 | 32.0    | 95.9<br>96.0 | 96.0             | 8.0<br>8.0          | 23.4<br>23.5 |      | 23<br>25         |    | 82<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.5<br>1.7        |
|               |            |            |          |           | Surface        | 1.0<br>1.0  | 0.6<br>0.6       | 42<br>44   | 15.2<br>15.2 | 15.2          | 7.8<br>7.8 | 7.8     | 30.9<br>30.9 | 30.9    | 96.6<br>96.6 | 96.6             | 8.0<br>8.0<br>8.0   | 3.8<br>3.8   | ŀ    | 5<br>5           |    | 83<br>83        |    |                       |                       | <0.2<br><0.2                 | 2.0<br>2.0        |
| IM7           | Sunny      | Moderate   | 11:33    | 7.9       | Middle         | 4.0         | 0.7<br>0.7       | 42<br>43   | 15.0<br>15.0 | 15.0          | 7.8<br>7.8 | 7.8     | 31.7<br>31.7 | 31.7    | 96.0<br>96.0 | 96.0             | 8.0<br>8.0          | 6.2<br>6.3   | 10.4 | 11<br>12         | 13 | 84<br>84        | 84 | 821332                | 806821                | <0.2<br><0.2 <0.2            | 1.5               |
|               |            |            |          |           | Bottom         | 6.9<br>6.9  | 0.5<br>0.5       | 77<br>77   | 14.8<br>14.8 | 14.8          | 7.8<br>7.8 | 7.8     | 32.8<br>32.8 | 32.8    | 95.8<br>95.8 | 95.8             | 7.9<br>7.9<br>7.9   | 21.3<br>21.1 | F    | 21<br>23         |    | 84<br>85        |    |                       |                       | <0.2<br><0.2                 | 1.0<br>1.1        |
|               |            |            |          |           | Surface        | 1.0<br>1.0  | 0.3<br>0.3       | 160<br>160 | 18.4<br>18.4 | 18.4          | 7.9<br>7.9 | 7.9     | 25.6<br>25.6 | 25.6    | 98.0<br>98.0 | 98.0             | 7.9<br>7.9          | 4.5<br>4.5   |      | 7<br>6           |    | 81<br>81        |    |                       |                       | <0.2<br><0.2                 | 2.5<br>2.8        |
| IM8           | Sunny      | Moderate   | 11:06    | 7.3       | Middle         | 3.7<br>3.7  | 0.4              | 164<br>172 | 18.1<br>18.1 | 18.1          | 7.9<br>7.9 | 7.9     | 26.5<br>26.5 | 26.5    | 97.2<br>97.2 | 97.2             | 7.9<br>7.9<br>7.9   | 6.5<br>6.5   | 7.0  | 8                | 7  | 83<br>82        | 83 | 821699                | 807829                | <0.2<br><0.2<br><0.2<br><0.2 | 2.0               |
|               |            |            |          |           | Bottom         | 6.3         | 0.4              | 164        | 17.9         | 17.9          | 7.9        | 7.9     | 27.8         | 27.8    | 96.9         | 96.9             | 7.8 7.8             | 9.9          | ╞    | 8                |    | 84              |    |                       |                       | <0.2                         | 1.5               |
| DA: Depth-Ave | L . L      |            |          |           |                | 6.3         | 0.4              | 176        | 17.9         |               | 7.9        |         | 27.8         |         | 96.9         |                  | 7.8                 | 9.9          |      | ð                |    | 84              |    |                       |                       | <0.2                         | 1.6               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on16 February 17 16 February 17 during Mid-Flood Tide

| Water Qua             | ity Monit | oring Resu | ults on  |           | 16 February 17    | during Mid-              | Flood T                  | ide                      | -                            |              |                          |  |                  |  |                                      |            |   |                          |             |                  |            |                      |     |                       |                       |                                      |   |
|-----------------------|-----------|------------|----------|-----------|-------------------|--------------------------|--------------------------|--------------------------|------------------------------|--------------|--------------------------|--|------------------|--|--------------------------------------|------------|---|--------------------------|-------------|------------------|------------|----------------------|-----|-----------------------|-----------------------|--------------------------------------|---|
| Monitoring<br>Station | Weather   | Sea        | Sampling | Water     | Sampling Dep      | oth (m)                  | Current<br>Speed         | Current<br>Direction     | Water Tem                    | perature (°C | C) p⊢                    | ı د  | Salinity (       | (ppt) D                                    | O Satura<br>(%)                      |            | Dissolved<br>Oxygen                                     | Turbidity(               | NTU)        | Suspende<br>(mg/ |            | Total All<br>(ppi    | om) | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)                   | Nickel (µg/L)                                 |
| Station               | Condition | Condition  | Time     | Depth (m) |                   |                          | (m/s)                    |                          | Value                        | Average      | Value A                  | verage Va  | lue Av           | -  | alue Ave                             | rage       | Value DA  | Value                    | DA          | Value            | DA         | Value                | DA  | (Northing)            | (Easting)             | Value DA                             | Value DA                                      |
| IM9                   | Sunny     | Moderate   | 10:59    | 7.5       | Surface<br>Middle | 1.0<br>1.0<br>3.8<br>3.8 | 0.4<br>0.4<br>0.4<br>0.4 | 259<br>279<br>264<br>273 | 18.1<br>18.1<br>18.0<br>18.0 | 18.1<br>18.0 | 7.9<br>7.9<br>7.9<br>7.9 | 7.9     21       7.9     21       7.9     21       7.9     21                            | 7.4<br>7.8       | 27.4 9<br>27.8 9                           | 7.7 97<br>7.7 97<br>7.3 97<br>7.3 97 |            | 7.8<br>7.8<br>7.8<br>7.8<br>7.8                         | 6.6<br>6.6<br>9.4<br>9.4 | 8.6         | 6<br>6<br>8<br>9 | 9          | 82<br>81<br>82<br>82 | 83  | 822079                | 808804                | <0.2<br><0.2<br><0.2<br><0.2<br><0.2 | 1.8           1.7           1.6           1.6 |
|                       |           |            |          |           | Bottom            | 6.5<br>6.5               | 0.3<br>0.3               | 266<br>277               | 18.0<br>18.0                 | 18.0         | 7.9<br>7.9               | 7.9 27   | '.8 <sup>'</sup> | 27.8 9 <sup>°</sup><br>9 <sup>°</sup>      | 7.5<br>7.5                           | 7.5        | 7.8<br>7.8<br>7.8                                       | 9.7<br>9.7               |             | 13<br>13         |            | 85<br>84             |     |                       |                       | <0.2<br><0.2                         | 1.6<br>1.4                                    |
| IM10                  | Sunny     | Moderate   | 10:52    | 8.2       | Surface           | 1.0<br>1.0<br>4.1        | 0.6<br>0.6<br>0.6        | 301<br>302<br>301        | 18.2<br>18.2<br>17.8         | 18.2         | 7.9<br>7.9<br>7.9        | 7.9 28<br>7.9 28<br>7.9 28   | 8.0 <sup>2</sup> | 20.0 9 <sup>-</sup><br>20.5 9 <sup>-</sup> | 7.7 97<br>7.7 97<br>6.9 96           |            | 7.8<br>7.8<br>7.8<br>7.8                                | 9.0<br>9.1<br>15.6       | 16.1        | 6<br>7<br>11     | 13         | 83<br>82<br>83       | 83  | 822248                | 809845                | <0.2<br><0.2<br><0.2<br><0.2<br><0.2 | 1.3<br>1.3<br>1.2<br>1.2                      |
| inite                 | Guinty    | Moderate   | 10.02    | 0.2       | Bottom            | 4.1<br>7.2<br>7.2        | 0.6<br>0.4<br>0.5        | 317<br>288<br>315        | 17.8<br>17.8<br>17.8         | 17.8         | 7.9<br>7.9<br>7.9        | 7.9 28<br>7.9 28   | 8.5<br>8.6 ,     | <u>9</u>                                   | 0.9                                  |            | 7.8           7.8         7.8           7.8         7.8 | 15.6<br>23.5<br>23.8     |             | 10<br>23<br>21   | -          | 83<br>85<br>84       | 00  |                       | 000010                | <0.2<br><0.2<br><0.2                 | 1.2<br>1.1<br>1.1                             |
|                       |           |            |          |           | Surface           | 1.0<br>1.0<br>4.1        | 0.7<br>0.8<br>0.7        | 277<br>284<br>283        | 18.0<br>18.0<br>17.8         | 18.0         | 7.9<br>7.9<br>7.9        | 7.9 22   | '.9 <sup>'</sup> | 27.9 9                                     | 8.3<br>8.3<br>7.0                    |            | 7.9<br>7.9<br>7.8<br>7.9                                | 7.0<br>7.0<br>11.7       |             | 9<br>8<br>24     |            | 83<br>83<br>85       |     |                       |                       | <0.2<br><0.2<br><0.2                 | 1.5<br>1.7<br>1.5 1.5                         |
| IM11                  | Sunny     | Moderate   | 10:45    | 8.2       | Bottom            | 4.1<br>7.2               | 0.7<br>0.5               | 292<br>276               | 17.8<br>17.7                 | 17.8         | 7.9<br>7.9               | 7.9 28   | 8.5 <sup>°</sup> | 20.0 9 <sup>°</sup>                        | 7.6 <sup>97</sup><br>7.3 o-          |            | 7.8<br>7.8 7.9  | 11.7<br>23.7             | 14.1        | 25<br>28         | 20         | 85<br>85             | 84  | 821483                | 810546                | <0.2<br><0.2                         | 1.6<br>1.5                                    |
|                       |           |            |          |           | Surface           | 7.2<br>1.0<br>1.0        | 0.5<br>0.7<br>0.8        | 282<br>275<br>298        | 17.7<br>17.9<br>17.9         | 17.9         | 7.9<br>7.9<br>7.9        | 7.9 28<br>7.9 28<br>28   | 3.8<br>3.9 ,     | 9<br>28 0 9                                | 7.3                                  |            | 7.8<br>7.8<br>7.9                                       | 23.3<br>11.6<br>11.6     |             | 27<br>12<br>13   |            | 85<br>83<br>82       |     |                       |                       | <0.2<br><0.2<br><0.2                 | 1.3<br>1.4<br>1.5                             |
| IM12                  | Sunny     | Moderate   | 10:38    | 8.6       | Middle            | 4.3<br>4.3<br>7.6        | 0.6<br>0.6<br>0.5        | 271<br>297<br>278        | 17.7<br>17.7<br>17.7         | 17.7         | 7.9<br>7.9<br>7.9        | 7.9 29   | ).1 <sup>2</sup> | 29.1<br>9                                  | 6.9<br>6.9<br>6.9                    |            | 7.8<br>7.8<br>7.8                                       | 12.8<br>12.8<br>14.4     | 12.9        | 15<br>14<br>17   | 15         | 84<br>83<br>86       | 84  | 821150                | 811534                | <0.2<br><0.2<br><0.2                 | 13  |
|                       |           |            |          |           | Bottom<br>Surface | 7.6<br>1.0               | 0.6<br>0.2               | 278<br>155               | 17.7<br>17.8                 | 17.7<br>17.8 | 7.9<br>7.9               | 7.9<br>29<br>7.9<br>28   | ).1<br>3.9 ,     | 29.1<br>90<br>90<br>90                     | 6.9 90<br>6.7 00                     | 5.9        | 7.8<br>7.7  | 14.4<br>16.4             |             | 16<br>18         |            | 85<br>82             |     |                       |                       | <0.2<br><0.2                         | 1.3<br>1.1                                    |
| SR2                   | Sunny     | Moderate   | 10:08    | 4.0       | Middle            | 1.0<br>2.0<br>2.0        | 0.2<br>-<br>-            | 163<br>-<br>-            | 17.8<br>-<br>-               | -            | 7.9<br>-<br>-            | -  | -<br>-           | -  | 6.7 90<br>-<br>-                     |            | 7.7<br>-<br>-   | 16.1<br>-<br>-           | 17.2        | 17<br>-<br>-     | 22         | 81<br>-<br>-         | 84  | 821475                | 814146                | <0.2<br>- <0.2                       | -   |
|                       |           |            |          |           | Bottom            | 3.0<br>3.0<br>1.0        | 0.2<br>0.2<br>0.4        | 141<br>142<br>175        | 17.8<br>17.8<br>18.1         | 17.8         | 7.9<br>7.9<br>7.9        | 7.9 28   | 3.9 <sup>2</sup> | 20.9 9                                     | 6.6 96<br>6.6 96<br>7.3 0-           |            | 7.7<br>7.7<br>7.9<br>7.7                                | 18.1<br>18.1<br>5.0      |             | 27<br>27<br>7    |            | 87<br>86             |     |                       |                       | <0.2<br><0.2                         | 1.2<br>1.0                                    |
| SR3                   | Sunny     | Moderate   | 11:10    | 8.9       | Surface Middle    | 1.0<br>4.5<br>4.5        | 0.4<br>0.5<br>0.5        | 185<br>191<br>210        | 18.1<br>18.0<br>18.0         | 18.1<br>18.0 | 7.9<br>7.9<br>7.9        | 7.9     20       7.9     20       7.9     20       7.9     20                            | 6.0 <sup>2</sup> | 20.0 9 <sup>-</sup>                        | 7.3 97<br>7.3 6.8 96<br>6.8 96       | 1.3        | 7.9<br>7.8<br>7.8                                       | 5.0<br>6.9<br>6.9        | 9.2         | 5<br>9<br>10     | 11         | -                    | -   | 822163                | 807553                |                                      |   |
|                       |           |            |          |           | Bottom            | 7.9<br>7.9<br>1.0        | 0.4<br>0.4<br>0.4        | 195<br>205<br>239        | 17.9<br>17.9<br>14.8         | 17.9         | 7.9<br>7.9<br>7.8        | 7.9 27   |                  | 27.0 9                                     | 6.8<br>6.8<br>6.2                    | 6.8        | 7.8<br>7.8<br>8.0                                       | 15.8<br>15.8<br>18.0     |             | 18<br>18<br>23   |            | -                    |     |                       |                       | -                                    | -   |
| SR4A                  | Sunny     | Moderate   | 10:03    | 8.9       | Surface<br>Middle | 1.0<br>1.0<br>4.5<br>4.5 | 0.4<br>0.3               | 242<br>243<br>263        | 14.8<br>14.8<br>14.8         | 14.8<br>14.8 | 7.8<br>7.8<br>7.8<br>7.8 | 7.8         32           7.8         32           7.8         32           32         32 | 2.7              | 32.7 9<br>22.7 9                           | 6.2 96<br>6.2 96<br>6.2 96           |            | 8.0<br>8.0<br>8.0                                       | 18.0<br>20.1<br>20.2     | 19.0        | 24<br>22         | 23         | -                    | -   | 817204                | 807810                | -                                    | -   |
|                       |           |            |          |           | Bottom            | 7.9<br>7.9               | 0.3<br>0.3<br>0.3        | 241<br>262               | 14.8<br>14.8                 | 14.8         | 7.8<br>7.8               | 7.8 32   | 2.7<br>2.7       | 32.7 <u>9</u>                              | 6.6<br>6.6 96                        |            | 8.0<br>8.0  | 18.8<br>18.7             |             | 22<br>24<br>22   | -          | -                    |     |                       |                       | -                                    | -   |
| SR5A                  | Sunny     | Moderate   | 09:45    | 4.1       | Surface           | 1.0<br>1.0<br>2.1        | 0.4<br>0.4<br>-          | 256<br>269<br>-          | 14.7<br>14.7<br>-            | 14.7         | 7.8<br>7.8<br>-          | 7.0 32   | 2.3<br>2.3       | 32.3<br>9                                  | 7.0<br>7.1<br>-                      | 7.1        | 8.1<br>8.1<br>- 8.1                                     | 13.1<br>13.2<br>-        | 12.1        | 14<br>13<br>-    | 14         | -                    | -   | 816609                | 810685                | -<br>-                               | -<br>-<br>-                                   |
| Chick                 | Guinty    | Moderate   | 00.10    |           | Bottom            | 2.1<br>3.1<br>3.1        | -<br>0.3<br>0.4          | -<br>260<br>268          | -<br>14.6<br>14.6            | 14.6         | -<br>7.8<br>7.8          | 7.8 32   | -<br>2.3<br>2.3  | 32.3 9                                     | -<br>7.2<br>7.3                      | (.3 –      | -<br>8.1<br>8.1   | -<br>11.0<br>11.0        | -           | -<br>14<br>16    |            | -                    |     | 010000                | 010000                | -                                    | -   |
|                       |           |            |          |           | Surface           | 1.0<br>1.0<br>2.3        | 0.2<br>0.2<br>-          | 240<br>263               | 14.6<br>14.6                 | 14.6         | 7.8 7.8                  | 7.8 30   |                  | 30.4 94                                    | 4.5<br>4.5                           | 4.5        | 8.0<br>8.0<br>- 8.0                                     | 51.3<br>51.4             |             | 74<br>75         |            | -                    |     |                       |                       | -                                    | -   |
| SR6                   | Sunny     | Moderate   | 09:20    | 4.5       | Bottom            | 2.3<br>3.5               | -<br>0.2                 | -<br>234                 | - 14.6                       | - 14.6       | -<br>7.8<br>7.8          | 7.8 30   |                  | -<br>30 3 9,                               | -                                    | -<br>1.6   | -<br>8.0<br>8.0<br>8.0                                  | -<br>57.3<br>57.3        | <u>54.3</u> | -<br>78          | <u>76</u>  | -                    | -   | 817894                | 814648                |                                      | -<br>-  |
|                       |           |            |          |           | Surface           | 3.5<br>1.0<br>1.0        | 0.2<br>0.2<br>0.2        | 257<br>170<br>176        | 14.6<br>17.7<br>17.7         | 17.7         | 7.9<br>7.9               | 7.9 29   | ).3<br>).3       | 29.3 <u>9</u>                              | 5.8<br>5.8                           |            | 7.7<br>7.7<br>7.7                                       | 4.7<br>4.7               |             | 78<br>7<br>6     | <br>  <br> | -                    |     |                       |                       | -                                    | -   |
| SR7                   | Sunny     | Moderate   | 08:47    | 17.2      | Middle            | 8.6<br>8.6<br>16.2       | 0.2<br>0.2<br>0.2        | 176<br>191<br>166        | 17.7<br>17.7<br>17.7         | 17.7         | 7.9<br>7.9<br>7.9        | 7 9 29   | ).3<br>).4       | 29.3<br>99.4<br>94                         | 5.1<br>4.7 g/                        | 5.2<br>1 7 | 7.6<br>7.6<br>7.6<br>7.6                                | 4.8<br>4.8<br>5.0        | 4.8         | 10<br>9<br>10    | 9          | -                    | -   | 823630                | 823731                | -<br>-                               | -<br>-  |
|                       |           |            |          |           | Surface           | 16.2<br>1.0<br>1.0       | 0.2<br>0.2<br>0.2        | 180<br>189<br>189        | 17.7<br>18.1<br>18.0         | 18.1         | 7.9<br>7.9<br>7.9        | 7.0 2  | 9.4<br>7 7       | 9 <sup>7</sup><br>27 7 9                   | 4.7<br>7.9<br>7.9 97                 |            | 7.6<br>7.8<br>7.8                                       | 4.9<br>8.9<br>9.0        |             | 10<br>8<br>10    | [<br>      | -                    |     |                       |                       | -                                    | -   |
| SR8                   | Sunny     | Moderate   | 10:21    | 5.1       | Middle            | 2.6<br>2.6               | -                        | -                        | -                            | -            | -                        |  | -                |  | -                                    | -          | - 7.8   | -                        | 9.6         | -                | 10         | -                    | -   | 820399                | 811596                |                                      |   |
| DA: Depth-Aver        |           |            |          |           | Bottom            | 4.1<br>4.1               | 0.3<br>0.3               | 265<br>276               | 17.8<br>17.8                 | 17.8         | 7.9<br>7.9               | 7.9 28   | 8.3<br>8.3       |  | 7.6<br>7.6 97                        | 7.6        | 7.8<br>7.8<br>7.8                                       | 10.2<br>10.2             | -           | 11<br>11         | -          | -                    |     |                       |                       | -                                    | -   |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on16 February 17 16 February 17 during Mid-Ebb tide

| Water Qua     | lity Monit | oring Res | ults on  |           | 16 February 17 | during Mid          |                  |            |              |                |                   |         |                     |         |              |                 |                     | 1            |      |                  |    |                 |    |                       | 1                     |                              |                   |
|---------------|------------|-----------|----------|-----------|----------------|---------------------|------------------|------------|--------------|----------------|-------------------|---------|---------------------|---------|--------------|-----------------|---------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|------------------------------|-------------------|
| Monitoring    | Weather    | Sea       | Sampling | Water     | Sampling De    | epth (m)            | Current<br>Speed | Current    | Water Te     | mperature (°C) |                   | pН      | Salinity            | y (ppt) |              | aturation<br>%) | Dissolved<br>Oxygen | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)     |
| Station       | Condition  | Condition | Time     | Depth (m) |                |                     | (m/s)            | Direction  | Value        | Average        |                   | Average |                     | Average |              | Average         | Value DA            | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA                     |                   |
|               |            |           |          |           | Surface        | 1.0<br>1.0          | 0.2              | 159<br>169 | 15.0<br>15.0 | 15.0           | 7.9<br>7.9        | 7.9     | 33.6<br>33.6        | 33.6    | 98.4<br>98.4 | 98.4            | 8.1<br>8.1<br>8.1   | 6.7<br>6.8   | ŀ    | 9<br>7           |    | 83<br>83        |    |                       |                       | <0.2<br><0.2                 | 0.8               |
| C1            | Sunny      | Moderate  | 15:41    | 8.5       | Middle         | 4.3                 | 0.2              | 160<br>164 | 14.6<br>14.6 | 14.6           | 7.9<br>7.9        | 7.9     | 34.1<br>34.1        | 34.1    | 97.3<br>97.2 | 97.3            | 8.0<br>8.0          | 8.5<br>8.6   | 8.7  | 11<br>13         | 11 | 83<br>84        | 84 | 815609                | 804266                | <0.2 <0.2 <0.2               | 2 0.6 0.8         |
|               |            |           |          |           | Bottom         | 7.5                 | 0.3              | 163<br>175 | 14.5<br>14.5 | 14.5           | 7.9<br>7.9        | 7.9     | 34.4<br>34.4        | 34.4    | 97.1<br>97.1 | 97.1            | 8.0<br>8.0<br>8.0   | 10.6<br>10.7 | F    | 12<br>13         |    | 84<br>85        |    | ľ                     |                       | <0.2<br><0.2                 | 0.9               |
|               |            |           |          |           | Surface        | 1.0                 | 0.3              | 110        | 18.4<br>18.4 | 18.4           | 7.9               | 7.9     | 26.9                | 26.9    | 96.7<br>96.7 | 96.7            | 7.7                 | 10.1         |      | 4                |    | 82              |    |                       |                       | <0.2<br><0.2<br><0.2         | 2.2               |
| C2            | Sunny      | Moderate  | 14:41    | 12.3      | Middle         | 1.0<br>6.2          | 0.3<br>0.2       | 120<br>154 | 17.9         | 17.9           | 7.9               | 7.9     | 26.9<br>28.2        | 28.2    | 95.3         | 95.3            | 7.7<br>7.6<br>7.7   | 10.1<br>13.9 | 12.0 | 5<br>9           | 9  | 81<br>84        | 84 | 825700                | 806933                | <0.2                         | 2.4<br>2 1.9 1.9  |
|               |            |           |          |           | Bottom         | 6.2<br>11.3         | 0.2              | 164<br>221 | 17.9<br>17.9 | 17.9           | 7.9<br>7.9        | 7.9     | 28.2<br>29.0        | 29.0    | 95.3<br>95.7 | 95.7            | 7.6<br>7.6<br>7.6   | 13.9<br>12.0 |      | 8<br>13          | -  | 84<br>85        |    |                       |                       | <0.2                         | 1.9               |
|               |            |           |          |           |                | 11.3                | 0.2              | 233<br>72  | 17.9<br>18.0 |                | 7.9<br>7.9        |         | 29.0<br>29.1        |         | 95.7<br>96.2 |                 | 7.6<br>7.6          | 12.0<br>6.1  |      | 15<br>4          |    | 85<br>76        |    |                       |                       | <0.2<br><0.2                 | 1.3<br>1.0        |
|               |            |           |          |           | Surface        | 1.0<br>6.0          | 0.4<br>0.3       | 74<br>86   | 18.0<br>17.9 | 18.0           | 7.9<br>7.9        | 7.9     | 29.1<br>29.4        | 29.1    | 96.2<br>94.2 | 96.2            | 7.6<br>7.5<br>7.6   | 6.1<br>7.8   | F    | 6<br>6           |    | 76<br>81        |    | ľ                     |                       | <0.2                         | 1.1               |
| C3            | Sunny      | Moderate  | 17:05    | 12.0      | Middle         | 6.0                 | 0.3              | 87         | 17.9         | 17.9           | 7.9               | 7.9     | 29.4                | 29.4    | 94.2         | 94.2            | 7.5                 | 7.8          | 7.2  | 5                | 6  | 82              | 80 | 822102                | 817805                | <0.2                         | 1.0               |
|               |            |           |          |           | Bottom         | <u>11.0</u><br>11.0 | 0.2<br>0.3       | 96<br>99   | 17.8<br>17.8 | 17.8           | 7.9<br>7.9        | 7.9     | 29.7<br>29.7        | 29.7    | 93.6<br>93.6 | 93.6            | 7.5<br>7.5<br>7.5   | 7.8<br>7.8   |      | 6<br>6           |    | 83<br>84        |    |                       |                       | <0.2<br><0.2                 | 0.8<br>0.8        |
|               |            |           |          |           | Surface        | 1.0<br>1.0          | 0.3              | 148<br>152 | 15.2<br>15.2 | 15.2           | 7.9<br>7.9        | 7.9     | 33.9<br>33.9        | 33.9    | 98.5<br>98.5 | 98.5            | 8.0<br>8.0<br>8.0   | 9.8<br>9.7   | _    | 13<br>11         |    | 82<br>83        |    | ľ                     |                       | <0.2<br><0.2                 | 0.7               |
| IM1           | Sunny      | Moderate  | 15:22    | 7.7       | Middle         | 3.9<br>3.9          | 0.2              | 189<br>203 | 15.0<br>15.0 | 15.0           | 7.9<br>7.9        | 7.9     | 34.0<br>34.0        | 34.0    | 97.5<br>97.6 | 97.6            | 8.0<br>8.0          | 12.1<br>12.1 | 12.0 | 14<br>14         | 16 | 83<br>83        | 83 | 818367                | 806458                | <0.2<br><0.2<br><0.2         | 2 0.6 0.6         |
|               |            |           |          |           | Bottom         | 6.7<br>6.7          | 0.2<br>0.2       | 191<br>198 | 14.8<br>14.8 | 14.8           | 7.9<br>7.9        | 7.9     | 34.1<br>34.1        | 34.1    | 97.6<br>97.6 | 97.6            | 8.0<br>8.0<br>8.0   | 14.3<br>14.2 | F    | 21<br>21         |    | 84<br>83        |    | ľ                     |                       | <0.2<br><0.2                 | 0.5<br>0.5        |
|               |            |           |          |           | Surface        | 1.0<br>1.0          | 0.2              | 127<br>133 | 15.4<br>15.3 | 15.4           | 7.9<br>7.9<br>7.9 | 7.9     | 33.8<br>33.8        | 33.8    | 98.2<br>98.1 | 98.2            | 8.0<br>8.0          | 11.8<br>12.2 | -    | 11<br>12         |    | 80<br>80        |    |                       |                       | <0.2<br><0.2<br><0.2         | 0.7               |
| IM2           | Sunny      | Moderate  | 15:17    | 8.9       | Middle         | 4.5                 | 0.1              | 129        | 14.8         | 14.8           | 7.9               | 7.9     | 34.0                | 34.0    | 97.1         | 97.1            | 8.0                 | 15.4         | 13.8 | 12               | 15 | 81              | 81 | 818862                | 806181                | <0.2                         | 2 0.8 0.8         |
|               | ,          |           |          |           | Bottom         | 4.5<br>7.9          | 0.1              | 140<br>175 | 14.8<br>14.9 | 14.9           | 7.9<br>7.9        | 7.0     | 34.0<br>34.0        | 34.0    | 97.1<br>97.7 | 97.7            | 8.0<br>8.0<br>8.0   | 15.4<br>14.0 | ŀ    | 14<br>18         |    | 81<br>81        |    |                       |                       | <0.2                         | 0.8               |
|               |            |           |          |           |                | 7.9                 | 0.1              | 188<br>158 | 14.9<br>15.5 |                | 7.9<br>7.9        |         | 34.0<br>33.6        |         | 97.7<br>99.0 |                 | 8.0 0.0<br>8.0      | 13.7<br>8.6  |      | 20<br>9          |    | 81<br>81        |    |                       |                       | <0.2<br><0.2                 | 0.8               |
|               |            |           |          |           | Surface        | 1.0<br>4.4          | 0.3<br>0.3       | 158<br>182 | 15.5<br>15.1 | 15.5           | 7.9<br>7.9<br>7.9 | 7.9     | 33.6<br>33.8        | 33.6    | 99.0<br>97.8 | 99.0            | 8.0<br>8.0<br>8.0   | 8.7<br>11.2  | F    | 8<br>11          |    | 81<br>82        |    | ľ                     |                       | <0.2                         | 0.8               |
| IM3           | Sunny      | Moderate  | 15:10    | 8.7       | Middle         | 4.4                 | 0.3              | 184        | 15.1<br>14.8 | 15.1           | 7.9<br>7.9        | 7.9     | 33.8<br>33.9        | 33.8    | 97.8<br>97.8 | 97.8            | 8.0<br>8.0          | 11.2<br>12.9 | 10.9 | 12<br>16         | 12 | 82<br>83        | 82 | 819417                | 806005                | <0.2<br><0.2<br><0.2         | 2 0.8 0.8 0.8 0.8 |
|               |            |           |          |           | Bottom         | 7.7                 | 0.4              | 199        | 14.8         | 14.8           | 7.9               | 7.9     | 33.9                | 33.9    | 97.8         | 97.8            | 8.0                 | 12.9         |      | 18               |    | 83              |    |                       |                       | <0.2                         | 0.7               |
|               |            |           |          |           | Surface        | 1.0<br>1.0          | 0.3<br>0.3       | 158<br>159 | 15.6<br>15.6 | 15.6           | 8.0<br>8.0        | 8.0     | 33.3<br>33.3        | 33.3    | 98.9<br>98.8 | 98.9            | 8.0<br>8.0<br>8.0   | 8.9<br>9.0   |      | 10<br>9          |    | 80<br>80        |    | ľ                     |                       | <0.2<br><0.2                 | 0.9<br>0.9        |
| IM4           | Sunny      | Moderate  | 15:02    | 8.2       | Middle         | 4.1                 | 0.3              | 156<br>164 | 15.0<br>15.0 | 15.0           | 8.0<br>8.0        | 8.0     | 33.6<br>33.6        | 33.6    | 97.4<br>97.4 | 97.4            | 8.0<br>8.0          | 12.4<br>12.5 | 12.1 | 13<br>13         | 12 | 81<br>81        | 81 | 819564                | 805048                | <0.2<br><0.2 <0.2            | 2 0.9 0.9         |
|               |            |           |          |           | Bottom         | 7.2                 | 0.3              | 181<br>191 | 14.8<br>14.8 | 14.8           | 8.0<br>8.0        | 8.0     | 33.8<br>33.8        | 33.8    | 97.4<br>97.4 | 97.4            | 8.0<br>8.0<br>8.0   | 15.0<br>14.8 | F    | 14<br>15         |    | 81<br>82        |    |                       |                       | <0.2<br><0.2                 | 1.1<br>1.0        |
|               |            |           |          |           | Surface        | 1.0<br>1.0          | 0.3              | 133<br>136 | 15.2<br>15.2 | 15.2           | 7.9<br>7.9        | 7.9     | 33.5<br>33.5        | 33.5    | 97.9<br>98.0 | 98.0            | 8.0<br>8.0          | 13.2<br>13.3 | -    | 13<br>14         |    | 80<br>81        |    |                       |                       | <0.2<br><0.2                 | 1.0<br>0.8        |
| IM5           | Sunny      | Moderate  | 14:56    | 7.1       | Middle         | 3.6                 | 0.3              | 148        | 14.8         | 14.8           | 7.9<br>7.9        | 7.9     | <u>33.7</u><br>33.7 | 33.7    | 97.0         | 97.0            | 8.0                 | 14.9         | 15.0 | 14               | 16 | 82              | 82 | 820561                | 804908                | <0.2<br><0.2<br><0.2<br><0.2 | 2 0.7 0.8         |
|               |            |           |          |           | Bottom         | 3.6<br>6.1          | 0.3<br>0.3       | 159<br>148 | 14.7         | 14.7           | 7.9               | 7.9     | 33.8                | 33.8    | 97.0<br>97.2 | 97.2            | 8.0<br>8.0<br>8.0   | 14.8<br>17.0 | F    | 16<br>20         |    | 82<br>83        |    | ľ                     |                       | <0.2                         | 0.8               |
|               |            |           |          |           | Surface        | 6.1<br>1.0          | 0.3              | 160<br>128 | 14.7<br>15.3 | 15.3           | 7.9<br>7.9        | 7.9     | 33.8<br>33.7        | 33.7    | 97.2<br>98.4 | 98.4            | 8.0<br>8.0          | 16.9<br>12.8 |      | 20<br>14         |    | 83<br>79        |    |                       |                       | <0.2<br><0.2                 | 0.7               |
| IMC           | Cumpu      | Madarata  | 14.47    | 7 1       |                | 1.0                 | 0.4              | 138<br>122 | 15.3<br>15.2 |                | 7.9<br>7.9        |         | 33.7<br>33.6        |         | 98.4<br>98.2 |                 | 8.0<br>8.0          | 12.8<br>13.2 | 10.0 | 14<br>16         | 10 | 80<br>81        | 01 | 801077                | 005045                | <0.2                         | 0.7               |
| IM6           | Sunny      | Moderate  | 14:47    | 7.1       | Middle         | 3.6<br>6.1          | 0.4 0.3          | 122<br>151 | 15.2<br>14.8 | 15.2           | 7.9<br>7.9        | 7.9     | 33.6<br>33.8        | 33.6    | 98.2<br>97.7 | 98.2            | 8.0<br>8.0          | 13.1<br>15.5 | 13.8 | 14<br>18         | 16 | 81<br>81        | 81 | 821077                | 805845                | <0.2<br><0.2<br><0.2         | 2 0.7 0.8<br>1.0  |
|               |            |           |          |           | Bottom         | 6.1<br>1.0          | 0.3              | 157<br>118 | 14.8<br>15.4 | 14.8           | 7.9               |         | 33.8<br>33.3        | 33.8    | 97.7<br>98.4 | 97.7            | 8.0<br>8.0<br>8.0   | 15.6<br>11.6 |      | 18<br>12         |    | 82<br>83        |    |                       |                       | <0.2                         | 0.9               |
|               |            |           |          |           | Surface        | 1.0                 | 0.5              | 129        | 15.4         | 15.4           | 7.8<br>7.8        | 7.8     | 33.3                | 33.3    | 98.4         | 98.4            | 8.0 8.0             | 11.6         | F    | 14               |    | 84              |    |                       |                       | <0.2                         | 0.9               |
| IM7           | Sunny      | Moderate  | 14:39    | 8.8       | Middle         | 4.4                 | 0.5<br>0.5       | 108<br>117 | 15.0<br>15.0 | 15.0           | 7.8<br>7.8        | 7.8     | 33.4<br>33.4        | 33.4    | 97.5<br>97.5 | 97.5            | 8.0<br>8.0          | 14.7<br>14.8 | 14.3 | 18<br>18         | 17 | 84<br>84        | 84 | 821355                | 806817                | <0.2<br><0.2<br><0.2         | 0.9               |
|               |            |           |          |           | Bottom         | 7.8<br>7.8          | 0.4              | 109<br>110 | 14.9<br>14.9 | 14.9           | 7.8<br>7.8        | 7.8     | 33.4<br>33.4        | 33.4    | 97.4<br>97.4 | 97.4            | 8.0<br>8.0          | 16.4<br>16.4 |      | 18<br>20         |    | 85<br>85        |    |                       |                       | <0.2<br><0.2                 | 0.8               |
|               |            |           |          |           | Surface        | 1.0                 | 0.4              | 139<br>152 | 18.6<br>18.6 | 18.6           | 7.9<br>7.9        | 7.9     | 27.6<br>27.6        | 27.6    | 99.6<br>99.6 | 99.6            | 7.9<br>7.9          | 12.6<br>12.6 |      | 6<br>7           |    | 81<br>81        |    |                       |                       | <0.2<br><0.2                 | 1.7<br>1.5        |
| IM8           | Sunny      | Moderate  | 15:06    | 8.6       | Middle         | 4.3                 | 0.4              | 112        | 17.9<br>17.9 | 17.9           | 7.9<br>7.9        | 7.9     | 28.9<br>28.9        | 28.9    | 98.0<br>98.0 | 98.0            | 7.8<br>7.8<br>7.8   | 16.6<br>16.6 | 17.9 | 10<br>11         | 11 | 84<br>83        | 83 | 821679                | 807820                | <0.2<br><0.2<br><0.2         | 12                |
|               |            |           |          |           | Bottom         | 7.6                 | 0.4              | 110        | 17.9         | 17.9           | 7.9<br>7.9        | 7.9     | 29.2                | 29.2    | 98.1<br>98.1 | 98.1            | 7.8 7.8             | 24.4         | F    | 16               |    | 86              |    |                       |                       | <0.2                         | 0.8               |
| DA: Depth-Ave |            |           |          |           |                | 7.6                 | 0.4              | 119        | 17.9         |                | 7.9               |         | 29.2                |         | 98.1         |                 | 7.8                 | 24.4         |      | 18               |    | 85              |    |                       |                       | <0.2                         | 1.0               |

#### Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on16 February 17during 16 February 17 during Mid-Ebb tide

| Water Qua     | lity Monite                           | oring Resu | ults on  |           | 16 February 17 | during Mid  | -                |              |              |               |            |         |              |           |                |                  | •                   |              |      |                  |    |                 |                  | <u> </u>              |                       |                         |                            |
|---------------|---------------------------------------|------------|----------|-----------|----------------|-------------|------------------|--------------|--------------|---------------|------------|---------|--------------|-----------|----------------|------------------|---------------------|--------------|------|------------------|----|-----------------|------------------|-----------------------|-----------------------|-------------------------|----------------------------|
| Monitoring    | Weather                               | Sea        | Sampling | Water     | Sampling Dep   | oth (m)     | Current<br>Speed | Current      | Water Ter    | mperature (°C | C)         | рН      | Salin        | ity (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity    | NTU) | Suspende<br>(mg, |    | Total Al<br>(pp | lkalinity<br>om) | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromiun<br>(µg/L)      | <sup>m</sup> Nickel (μg/L) |
| Station       | Condition                             | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction    | Value        | Average       | Value      | Average | Value        | Average   |                | Average          | Value DA            | Value        | DA   | Value            | DA | Value           | DA               | (Northing)            | (Easting)             | Value D                 |                            |
|               |                                       |            |          |           | Surface        | 1.0         | 0.6              | 100<br>106   | 18.4<br>18.4 | 18.4          | 7.9<br>7.9 | 7.9     | 27.3<br>27.3 | 27.3      | 99.1<br>99.1   | 99.1             | 7.9                 | 9.6<br>9.6   |      | 5<br>4           |    | 82<br>81        |                  |                       |                       | <0.2<br><0.2            | 2.0                        |
| IM9           | Sunny                                 | Moderate   | 15:15    | 7.4       | Middle         | 3.7<br>3.7  | 0.5<br>0.5       | 77<br>83     | 18.1<br>18.1 | 18.1          | 7.9<br>7.9 | 7.9     | 28.6<br>28.6 | 28.6      | 98.3<br>98.3   | 98.3             | 7.8<br>7.8<br>7.8   | 13.8<br>13.8 | 12.9 | 12<br>13         | 12 | 83<br>83        | 83               | 822106                | 808793                | <0.2<br><0.2 <0         | 12                         |
|               |                                       |            |          |           | Bottom         | 6.4         | 0.5              | 79           | 18.1         | 18.1          | 7.9        | 7.9     | 28.8         | 28.8      | 98.3           | 98.3             | 7.8 7.9             | 15.4         |      | 19               |    | 85              |                  |                       |                       | <0.2                    | 1.1                        |
|               |                                       |            |          |           | Surface        | 6.4<br>1.0  | 0.5<br>0.5       | 81<br>86     | 18.1<br>18.7 | 18.7          | 7.9<br>7.9 | 7.9     | 28.8<br>27.5 |           | 98.3<br>100.1  | 100.1            | 7.8 7.8<br>7.9      | 15.4<br>10.3 |      | 18<br>7          |    | 85<br>80        |                  |                       |                       | <0.2<br><0.2            | 1.1                        |
|               |                                       |            |          |           |                | 1.0<br>4.0  | 0.5              | 90<br>92     | 18.7<br>18.0 |               | 7.9<br>7.9 |         | 27.5<br>28.9 |           | 100.1<br>98.0  |                  | 7.9<br>7.8<br>7.9   | 10.3<br>20.4 |      | 6<br>19          |    | 80<br>82        |                  |                       |                       | <0.2<br><0.2            | 1.5                        |
| IM10          | Sunny                                 | Moderate   | 15:27    | 7.9       | Middle         | 4.0<br>6.9  | 0.4<br>0.3       | 97<br>101    | 18.0<br>17.9 | 18.0          | 7.9<br>7.9 | 7.9     | 28.9<br>29.0 | 28.9      | 98.0<br>97.6   | 98.0             | 7.8<br>7.8 7.9      | 20.4<br>24.3 | 18.3 | 19<br>20         | 15 | 83<br>85        | 82               | 822254                | 809838                | <0.2 <0<br><0.2 <0      | 0.2 0.9 1.1<br>0.9         |
|               |                                       |            |          |           | Bottom         | 6.9         | 0.3              | 110          | 17.9         | 17.9          | 7.9        | 7.9     | 29.0         | 29.0      | 97.6           | 97.6             | 7.8                 | 24.3         |      | 21               |    | 84              | •                | ļ                     |                       | <0.2                    | 0.9                        |
|               |                                       |            |          |           | Surface        | 1.0<br>1.0  | 0.6              | 145<br>156   | 18.6<br>18.6 | 18.6          | 7.9<br>7.9 | 7.9     | 28.1<br>28.1 | 28.1      | 100.3<br>100.3 | 100.3            | 7.9<br>7.9<br>7.9   | 7.8<br>7.8   |      | 3                |    | 77<br>78        |                  |                       |                       | <0.2<br><0.2            | 1.5<br>1.4                 |
| IM11          | Sunny                                 | Moderate   | 15:39    | 7.6       | Middle         | 3.8<br>3.8  | 0.6              | 130<br>139   | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 28.7<br>28.7 | 28.7      | 98.7<br>98.7   | 98.7             | 7.8                 | 13.1<br>13.1 | 14.9 | 6<br>6           | 9  | 80<br>81        | 81               | 821509                | 810555                | <0.2<br><0.2 <0         | 0.2 1.0 1.1                |
|               |                                       |            |          |           | Bottom         | 6.6<br>6.6  | 0.6<br>0.7       | 124<br>133   | 18.0<br>18.0 | 18.0          | 7.9<br>7.9 | 7.9     | 29.1<br>29.1 | 29.1      | 97.7<br>97.7   | 97.7             | 7.8<br>7.8<br>7.8   | 23.8<br>23.8 |      | 17<br>17         |    | 84<br>84        |                  |                       |                       | <0.2<br><0.2            | 0.8                        |
|               |                                       |            |          |           | Surface        | 1.0         | 0.6              | 99           | 18.8         | 18.8          | 8.0        | 8.0     | 27.8         | 27.8      | 99.7           | 99.7             | 7.9                 | 8.1          |      | 3                |    | 79              |                  |                       |                       | <0.2                    | 1.2                        |
| IM12          | Sunny                                 | Moderate   | 15:47    | 9.2       | Middle         | 1.0<br>4.6  | 0.7<br>0.6       | 101<br>112   | 18.8<br>18.0 | 18.0          | 8.0<br>7.9 | 7.9     | 27.8<br>28.8 | 28.8      | 99.7<br>97.2   | 97.2             | 7.9<br>7.8<br>7.9   | 8.1<br>12.4  | 11.8 | 3<br>4           | 6  | 80<br>81        | 82               | 821171                | 811513                | <0.2<br><0.2<br><0.2 <0 | 1.2<br>1.9<br>1.4          |
|               | Cullity                               | modorato   | 10.17    | 0.2       |                | 4.6<br>8.2  | 0.7              | 115<br>116   | 18.0<br>18.0 |               | 7.9<br>7.9 |         | 28.8<br>28.8 |           | 97.2<br>97.0   |                  | 7.8<br>7.7          | 12.4<br>14.8 | 11.0 | 5<br>11          | 0  | 82<br>84        | 02               | 021171                | 011010                | <0.2<br><0.2            | 1.8                        |
|               |                                       |            |          |           | Bottom         | 8.2<br>1.0  | 0.5<br>0.3       | 120<br>196   | 18.0<br>18.5 | 18.0          | 7.9<br>7.9 | 7.9     | 28.8<br>28.2 | 28.8      | 97.0<br>99.0   | 97.0             | 7.7<br>7.7<br>7.8   | 14.8<br>6.8  |      | 12<br>4          |    | 84<br>76        |                  |                       |                       | <0.2<br><0.2            | 1.2<br>1.8                 |
|               |                                       |            |          |           | Surface        | 1.0         | 0.3              | 212          | 18.5         | 18.5          | 7.9        | 7.9     | 28.2         | 28.2      | 99.0           | 99.0             | 7.8 7.8             | 6.8          |      | 4                |    | 76              |                  |                       |                       | <0.2                    | 1.7                        |
| SR2           | Sunny                                 | Moderate   | 16:46    | 4.2       | Middle         | 2.1         | -                | -            | -            | -             | -          | -       | -            | -         | -              | -                | -                   | -            | 7.1  | -                | 6  | -               | 77               | 821481                | 814179                | - <0                    | -                          |
|               |                                       |            |          |           | Bottom         | 3.2<br>3.2  | 0.2              | 190<br>204   | 18.1<br>18.1 | 18.1          | 7.9<br>7.9 | 7.9     | 28.6<br>28.6 | 28.6      | 98.1<br>98.1   | 98.1             | 7.8<br>7.8<br>7.8   | 7.3<br>7.3   |      | 7<br>7           |    | 78<br>78        |                  |                       |                       | <0.2<br><0.2            | 1.4                        |
|               |                                       |            |          |           | Surface        | 1.0         | 0.4              | 142<br>145   | 18.2<br>18.2 | 18.2          | 7.9<br>7.9 | 7.9     | 27.6<br>27.6 | 27.6      | 98.8<br>98.8   | 98.8             | 7.9<br>7.9<br>7.0   | 10.7<br>10.7 |      | 5<br>3           |    | -               | -                |                       |                       | -                       | -                          |
| SR3           | Sunny                                 | Moderate   | 15:01    | 9.2       | Middle         | 4.6<br>4.6  | 0.4              | 115<br>120   | 18.4<br>18.4 | 18.4          | 7.9<br>7.9 | 7.9     | 28.0<br>28.0 | 28.0      | 99.3<br>99.3   | 99.3             | 7.9<br>7.9<br>7.9   | 13.0<br>13.0 | 17.5 | 11<br>9          | 9  | -               | -                | 822160                | 807590                |                         |                            |
|               |                                       |            |          |           | Bottom         | 8.2<br>8.2  | 0.4              | 87           | 18.0<br>18.0 | 18.0          | 7.9        | 7.9     | 28.8<br>28.8 | 28.8      | 98.0<br>98.0   | 98.0             | 7.8<br>7.8<br>7.8   | 28.7<br>28.7 |      | 14<br>12         |    | -               |                  |                       |                       | -                       | -                          |
|               |                                       |            |          |           | Surface        | 1.0         | 0.3              | 109          | 15.3         | 15.3          | 7.9        | 7.9     | 33.9         | 33.9      | 98.8           | 98.8             | 8.0                 | 10.3         |      | 9                |    | -               |                  |                       |                       | -                       | -                          |
| SR4A          | Sunny                                 | Moderate   | 16:01    | 8.7       | Middle         | 1.0<br>4.4  | 0.3              | 111<br>97    | 15.3<br>15.2 | 15.2          | 7.9<br>7.9 | 7.9     | 33.9<br>33.9 | 33.9      | 98.8<br>98.4   | 98.4             | 8.0<br>8.0          | 10.4<br>11.3 | 11.4 | 10<br>12         | 12 | -               |                  | 817184                | 807806                | -                       | -                          |
|               | Cullity                               | modorato   | 10.01    | 0.7       |                | 4.4         | 0.4              | 101<br>94    | 15.2<br>15.2 |               | 7.9<br>7.9 |         | 33.9<br>34.0 |           | 98.4<br>98.4   |                  | 8.0<br>8.0          | 11.4<br>12.5 |      | 14<br>13         |    | -               |                  |                       | 007000                | -                       | -                          |
|               |                                       |            |          |           | Bottom         | 7.7         | 0.3              | 98<br>136    | 15.2<br>15.9 | 15.2          | 7.9<br>7.9 | 7.9     | 34.0<br>34.1 | 34.0      | 98.4<br>103.1  | 98.4             | 8.0<br>8.3          | 12.5<br>8.4  |      | 12<br>10         |    | -               |                  |                       |                       | -                       |                            |
|               |                                       |            |          |           | Surface        | 1.0         | 0.2              | 148          | 16.0         | 16.0          | 7.9        | 7.9     | 34.1         | 34.1      | 103.1          | 103.1            | 8.3 8.3             | 8.4          |      | 11               |    | -               |                  |                       |                       | -                       | -                          |
| SR5A          | Sunny                                 | Moderate   | 16:18    | 4.1       | Middle         | 2.1<br>2.1  | -                | -            | -            | -             | -          | -       | -            | -         | -              | -                | -                   | -            | 8.4  | -                | 10 | -               | -                | 816583                | 810692                |                         |                            |
|               |                                       |            |          |           | Bottom         | 3.1<br>3.1  | 0.2              | 144<br>150   | 15.9<br>15.9 | 15.9          | 7.9<br>7.9 | 7.9     | 34.1<br>34.1 | 34.1      | 101.3<br>101.2 | 101.3            | 8.1<br>8.1<br>8.1   | 8.3<br>8.3   |      | 9<br>10          |    | -               |                  |                       |                       | -                       | -                          |
|               |                                       |            |          |           | Surface        | 1.0         | 0.1              | 218<br>233   | 17.0<br>17.0 | 17.0          | 7.9<br>7.9 | 7.9     | 33.3<br>33.3 | 33.3      | 100.5<br>100.4 | 100.5            | 7.9<br>7.9<br>7.0   | 7.5<br>7.6   |      | 5<br>6           |    | -               | -                |                       |                       | -                       | -                          |
| SR6           | Sunny                                 | Moderate   | 16:41    | 4.0       | Middle         | 2.0<br>2.0  | -                | -            | -            | -             | -          | -       | -            | -         | -              | -                | - 7.9               | -            | 9.8  | -                | 9  | -               | -                | 817886                | 814666                |                         |                            |
|               |                                       |            |          |           | Bottom         | 3.0         | 0.2              | 133          | 14.8         | 14.8          | 7.9        | 7.9     | 34.2         | 34.2      | 97.8           | 97.9             | 8.0 8.0             | 12.0         |      | 13               |    | -               |                  |                       |                       | -                       | -                          |
| <u> </u>      |                                       |            |          |           | Surface        | 3.0         | 0.2              | 133<br>55    | 14.8<br>18.2 | 18.2          | 7.9<br>7.9 | 7.9     | 34.2<br>29.5 | 29.5      | 97.9<br>96.1   | 96.1             | 8.0<br>7.6          | 12.0<br>3.7  |      | 11<br>4          | I  | -               |                  |                       |                       | -                       | -                          |
| 007           | Suppris                               | Modorato   | 17:20    | 16.0      |                | 1.0<br>8.1  | 0.4<br>0.5       | 55<br>39     | 18.2<br>18.0 |               | 7.9<br>7.9 |         | 29.5<br>29.6 |           | 96.1<br>95.3   |                  | 7.6<br>7.6<br>7.6   | 3.7<br>4.1   | 20   | 4<br>5           | E  | -               |                  | 909607                | 900704                | -                       | -                          |
| SR7           | Sunny                                 | Moderate   | 17:32    | 16.2      | Middle         | 8.1<br>15.2 | 0.5<br>0.4       | 42<br>89     | 18.0<br>18.1 | 18.0          | 7.9<br>7.9 | 7.9     | 29.6<br>29.6 | 29.6      | 95.3<br>95.1   | 95.3             | 7.6<br>7.5 7.5      | 4.1<br>3.8   | 3.9  | 5<br>4           | 5  | -               |                  | 823627                | 823724                | -                       |                            |
|               |                                       |            |          |           | Bottom         | 15.2        | 0.4              | 96<br>91.0   | 18.1         | 18.1          | 7.9        | 7.9     | 29.6<br>28.7 | 29.6      | 95.1           | 95.1             | 7.5                 | 3.8<br>7.9   |      | 5                |    | -               |                  | <b>ا</b>              |                       | -                       | -                          |
|               |                                       |            |          |           | Surface        | 1.0         | 0.4              | 94.0         | 18.2<br>18.2 | 18.2          | 7.9<br>7.9 | 7.9     | 28.7         | 28.7      | 98.5<br>98.5   | 98.5             | 7.8<br>7.8<br>7.8   | 7.9          |      | 9                |    | -               |                  |                       |                       | -                       | -                          |
| SR8           | Sunny                                 | Moderate   | 15:54    | 5.3       | Middle         | 2.7<br>2.7  | -                | -            | -            | -             | -          | -       | -            | -         | -              | -                | -                   | -            | 7.9  | -                | 8  | -               | -                | 820412                | 811584                |                         |                            |
|               |                                       |            |          |           | Bottom         | 4.3<br>4.3  | 0.3              | 92.0<br>97.0 | 18.0<br>18.0 | 18.0          | 7.9<br>7.9 | 7.9     | 28.8<br>28.7 | 28.8      | 98.1<br>98.2   | 98.2             | 7.8<br>7.8<br>7.8   | 7.9<br>7.8   |      | 7<br>8           |    | -               |                  |                       |                       | -                       | -                          |
| DA: Depth-Ave | · · · · · · · · · · · · · · · · · · · |            |          |           | 1              |             | 5.0              |              |              |               | 1          |         | - 2          |           |                | 1                |                     |              |      | 2                | 1  |                 |                  | //                    |                       |                         |                            |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on18 February 17 18 February 17 during Mid-Flood Tide

| Water Qua             | ity Monit | oring Resi | lits on  |           | 18 February 17 | during Mid-  | Flood I          | Ide                  |              |               |                          |              |            |                |                  |                     |              |      |                  |    |          |                  |                       |                       |                      |                   |
|-----------------------|-----------|------------|----------|-----------|----------------|--------------|------------------|----------------------|--------------|---------------|--------------------------|--------------|------------|----------------|------------------|---------------------|--------------|------|------------------|----|----------|------------------|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring<br>Station | Weather   | Sea        | Sampling | Water     | Sampling Dep   | th (m)       | Current<br>Speed | Current<br>Direction | Water Tem    | nperature (°C | c) pH                    | Sali         | nity (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(   | NTU) | Suspende<br>(mg/ |    |          | lkalinity<br>om) | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(μg/L)   | Nickel (µg/L)     |
| Otation               | Condition | Condition  | Time     | Depth (m) |                | •            | (m/s)            |                      | Value        | Average       | Value Average            |              | Average    |                | Average          | Value DA            | Value        | DA   | Value            | DA | Value    | DA               | (Northing)            | (Easting)             | Value DA             | Value DA          |
|                       |           |            |          |           | Surface        | 1.0          | 0.6              | 115<br>121           | 15.3<br>15.3 | 15.3          | 8.2<br>8.2 8.2           | 32.4<br>32.4 | 32.4       | 99.6<br>99.6   | 99.6             | 8.2<br>8.2          | 4.9<br>4.9   | -    | 8                |    | 83<br>83 | -                |                       |                       | <0.2<br><0.2         | 1.2               |
| C1                    | Sunny     | Moderate   | 11:30    | 8.6       | Middle         | 4.3          | 0.6              | 78                   | 14.9         | 14.9          | 8.3 8.3                  | 33.4         | 33.5       | 98.1           | 98.1             | 8.1 8.2             | 9.2          | 11.1 | 9                | 11 | 84       | 84               | 815626                | 804257                | <0.2                 | 1.5               |
|                       | -         |            |          |           | Bettem         | 4.3<br>7.6   | 0.7<br>0.5       | 84<br>80             | 14.8<br>14.3 | 14.0          | 8.3 0.5<br>8.3 0.0       | 33.5<br>34.7 | 24.7       | 98.0<br>97.2   | 97.2             | 8.1<br>8.0          | 9.4<br>19.2  | -    | 8<br>18          |    | 84<br>84 | -                |                       |                       | <0.2                 | 1.4<br>0.7        |
|                       |           |            |          |           | Bottom         | 7.6          | 0.5              | 80<br>199            | 14.3<br>18.8 | 14.3          | 8.3 8.3                  | 34.7         | 34.7       | 97.2           |                  | 8.0 8.0             | 19.1         |      | 19<br>4          |    | 85<br>80 |                  |                       |                       | <0.2                 | 0.7 3.0           |
|                       |           |            |          |           | Surface        | 1.0          | 0.5              | 207                  | 18.8         | 18.8          | 7.9<br>7.9<br>7.9        | 25.5<br>25.5 | 25.5       | 99.6<br>99.6   | 99.6             | 8.0<br>8.0<br>7.9   | 3.0<br>3.0   | -    | 4                |    | 76       |                  |                       |                       | <0.2<br><0.2         | 3.0               |
| C2                    | Fine      | Moderate   | 12:05    | 12.4      | Middle         | 6.2<br>6.2   | 0.5              | 302<br>302           | 18.6<br>18.6 | 18.6          | 7.9<br>7.9<br>7.9        | 27.3<br>27.3 | 27.3       | 97.7<br>97.7   | 97.7             | 7.8<br>7.8          | 3.5<br>3.6   | 7.3  | 3<br>4           | 4  | 83<br>81 | 81               | 825676                | 806944                | <0.2<br><0.2 <0.2    | 2.2<br>2.2<br>2.3 |
|                       |           |            |          |           | Bottom         | 11.4         | 0.4              | 198                  | 18.4         | 18.4          | 7.9 7.9                  | 27.8         | 27.8       | 96.5           | 96.5             | 7.7 7.7             | 15.4         | ŀ    | 4                |    | 84       | 1                |                       |                       | <0.2                 | 1.8               |
|                       |           |            |          |           |                | 11.4         | 0.4              | 200<br>221           | 18.4<br>18.8 |               | 7.9                      | 27.8<br>27.6 |            | 96.5<br>98.6   |                  | 7.7 7.7             | 15.4<br>2.8  |      | 2                |    | 83<br>79 |                  |                       |                       | <0.2<br><0.2         | 1.8               |
|                       |           |            |          |           | Surface        | 1.0<br>5.8   | 0.5              | 238<br>228           | 18.8         | 18.8          | 7.9 7.9                  | 27.6         | 27.6       | 98.5           | 98.6             | 7.8<br>7.7<br>7.8   | 2.8          | F    | 3<br>2           |    | 80       |                  |                       |                       | <0.2                 | 1.6               |
| C3                    | Fine      | Moderate   | 10:27    | 11.5      | Middle         | 5.8          | 0.4              | 228                  | 18.5<br>18.5 | 18.5          | 7.9<br>7.9<br>7.9        | 28.1<br>28.1 | 28.1       | 96.9<br>96.8   | 96.9             | 7.7                 | 3.5<br>3.5   | 3.3  | 3                | 4  | 83<br>82 | 82               | 822095                | 817807                | <0.2<br><0.2 <0.2    | 1.7<br>1.6        |
|                       |           |            |          |           | Bottom         | 10.5<br>10.5 | 0.5              | 238<br>251           | 18.3<br>18.3 | 18.3          | 7.8 7.8                  | 28.7<br>28.7 | 28.7       | 97.0<br>97.1   | 97.1             | 7.7 7.7             | 3.6<br>3.7   | -    | 4<br>5           |    | 85<br>85 |                  |                       |                       | <0.2<br><0.2         | 1.4<br>1.6        |
|                       |           |            |          |           | Surface        | 1.0          | 0.6              | 134                  | 16.2         | 16.2          | 8.1 0.1                  | 31.2         | 31.2       | 101.6          | 101.6            | 8.3                 | 1.8          | _    | 2                |    | 80       |                  |                       |                       | <0.2                 | 1.8               |
|                       |           |            |          |           |                | 1.0<br>3.9   | 0.6              | 139<br>187           | 16.2<br>15.8 |               | 8.1                      | 31.2<br>31.9 |            | 101.6<br>100.7 |                  | 8.3<br>8.2 8.3      | 1.8<br>2.9   |      | 2<br><2          |    | 80<br>81 | -                | - /                   |                       | <0.2                 | 1.8               |
| IM1                   | Sunny     | Moderate   | 11:48    | 7.7       | Middle         | 3.9          | 0.6              | 187                  | 15.8         | 15.8          | 8.2 0.2                  | 31.9         | 31.9       | 100.6          | 100.7            | 8.2                 | 3.0          | 6.4  | 3                | 6  | 81       | 81               | 818356                | 806475                | <0.2                 | 1.8               |
|                       |           |            |          |           | Bottom         | 6.7<br>6.7   | 0.5<br>0.6       | 201<br>214           | 15.2<br>15.2 | 15.2          | 8.3<br>8.3               | 33.2<br>33.2 | 33.2       | 99.0<br>99.0   | 99.0             | 8.1<br>8.1<br>8.1   | 14.3<br>14.4 | -    | 12<br>13         |    | 82<br>82 | -                |                       |                       | <0.2<br><0.2         | 1.0<br>1.7        |
|                       |           |            |          |           | Surface        | 1.0          | 0.7              | 127<br>136           | 15.9<br>15.9 | 15.9          | 7.9<br>7.9<br>7.9        | 31.5<br>31.6 | 31.6       | 100.0<br>99.9  | 100.0            | 8.2<br>8.1          | 2.4<br>2.4   | -    | <2<br><2         |    | 81<br>80 | -                |                       |                       | <0.2<br><0.2         | 1.7               |
| IM2                   | Sunny     | Moderate   | 11:54    | 8.7       | Middle         | 4.4          | 0.6              | 112                  | 15.6         | 15.6          | 7.9 7.9                  | 32.5         | 32.5       | 98.9           | 98.9             | 8.1                 | 3.9          | 4.2  | <2               | 3  | 81       | 81               | 818845                | 806204                | <0.2                 | 2.3 1.0           |
|                       | Canny     | modorato   | 11.01    | 0.7       |                | 4.4          | 0.6<br>0.5       | 118<br>177           | 15.6<br>15.4 |               | 7.9                      | 32.5<br>33.1 |            | 98.9<br>98.6   |                  | 8.1<br>8.0          | 3.9<br>6.2   |      | <2<br>6          | Ū. | 82<br>82 |                  | 010010                | 000201                | <0.2<br><0.2         | 2.2<br>1.6        |
|                       |           |            |          |           | Bottom         | 7.7          | 0.6              | 182                  | 15.4         | 15.4          | 7.9                      | 33.1         | - 33.1     | 98.6           | 98.6             | 8.0 8.0             | 6.4          |      | 6                |    | 82       |                  |                       |                       | <0.2                 | 1.6               |
|                       |           |            |          |           | Surface        | 1.0          | 0.4              | 128<br>135           | 16.1<br>16.1 | 16.1          | 7.9<br>7.9<br>7.9        | 30.8<br>30.7 | 30.8       | 100.5<br>100.5 | 100.5            | 8.2<br>8.2          | 1.8<br>1.7   | -    | <2<br><2         |    | 79<br>80 | -                |                       |                       | <0.2<br><0.2         | 2.5<br>2.3        |
| IM3                   | Sunny     | Moderate   | 12:01    | 8.5       | Middle         | 4.3<br>4.3   | 0.4              | 152                  | 15.8<br>15.8 | 15.8          | 7.9<br>7.9<br>7.9        | 31.6<br>31.6 | 31.6       | 99.1<br>99.0   | 99.1             | 8.1<br>8.1<br>8.1   | 2.8<br>2.9   | 3.7  | 4                | 4  | 81       | 81               | 819407                | 806025                | <0.2<br><0.2 <0.2    | 2.1 1.9           |
|                       |           |            |          |           | Bottom         | 4.3<br>7.5   | 0.4              | 165<br>133           | 15.4         | 15.4          | 7.9 7.9                  | 33.1         | - 33.1     | 97.9           | 98.0             | 8.0<br>8.0<br>8.0   | 6.8          | -    | 2<br>7           | ·  | 81<br>81 |                  |                       |                       | <0.2                 | 1.9<br>1.3        |
|                       |           |            |          |           | Dottom         | 7.5          | 0.4              | 139<br>141           | 15.4<br>16.2 |               | 7.9                      | 33.1<br>28.4 |            | 98.0<br>101.4  |                  | 8.0 0.0<br>8.4      | 6.2<br>1.5   |      | 9<br><2          |    | 81<br>83 |                  |                       |                       | <0.2<br><0.2         | 1.2<br>2.6        |
|                       |           |            |          |           | Surface        | 1.0          | 0.5              | 149                  | 16.2         | 16.2          | 7.8                      | 28.3         | 28.4       | 101.4          | 101.4            | 8.4 8.3             | 1.6          |      | <2               |    | 83       |                  |                       |                       | <0.2                 | 2.7               |
| IM4                   | Sunny     | Moderate   | 12:10    | 8.2       | Middle         | 4.1          | 0.5              | 106<br>113           | 15.8<br>15.8 | 15.8          | 7.9<br>7.9<br>7.9        | 31.3<br>31.3 | 31.3       | 99.5<br>99.4   | 99.5             | 8.2<br>8.1          | 3.5<br>3.6   | 4.8  | 4<br>6           | 7  | 83<br>83 | 83               | 819579                | 805026                | <0.2<br><0.2 <0.2    | 1.7<br>1.8        |
|                       |           |            |          |           | Bottom         | 7.2<br>7.2   | 0.4              | 117<br>117           | 15.2<br>15.2 | 15.2          | 7.9<br>7.9<br>7.9        | 33.3<br>33.3 | 33.3       | 97.8<br>97.9   | 97.9             | 8.0<br>8.0<br>8.0   | 9.3<br>9.2   | F    | 14<br>16         |    | 84<br>84 | 1                |                       |                       | <0.2<br><0.2         | 1.0               |
|                       |           |            |          |           | Surface        | 1.0          | 0.5              | 117                  | 16.0         | 16.0          | 7.9 7.9                  | 29.5         | 29.5       | 100.2          | 100.2            | 8.3                 | 2.1          |      | 2                |    | 80       |                  |                       |                       | <0.2                 | 2.4               |
|                       |           |            |          |           | Gunace         | 1.0<br>3.5   | 0.6              | 119<br>113           | 16.0<br>15.7 |               | 7.9                      | 29.5<br>31.5 |            | 100.1<br>98.8  | -                | 8.3<br>8.1 8.2      | 2.2<br>3.3   | -    | 2                |    | 80<br>81 | -                |                       |                       | <0.2                 | 2.3               |
| IM5                   | Sunny     | Moderate   | 12:17    | 6.9       | Middle         | 3.5          | 0.6              | 122                  | 15.7         | 15.7          | 7.8                      | 31.5         |            | 98.8           | 98.8             | 8.1                 | 3.4          | 5.5  | 3                | 6  | 81       | 81               | 820547                | 804936                | <0.2                 | 1.6               |
|                       |           |            |          |           | Bottom         | 5.9<br>5.9   | 0.5<br>0.5       | 117<br>126           | 15.2<br>15.2 | 15.2          | 7.9 7.9                  | 33.3<br>33.3 |            | 97.2<br>97.2   | 97.2             | 8.0<br>8.0<br>8.0   | 11.2<br>11.0 | -    | 14<br>12         |    | 81<br>81 | -                |                       |                       | <0.2<br><0.2         | 1.1<br>0.9        |
|                       |           |            |          |           | Surface        | 1.0          | 0.5              | 125                  | 16.5         | 16.6          | 7.8 7.8                  | 30.2         | 20.2       | 100.3          | 100.3            | 8.2                 | 1.9          | -    | <2               |    | 83       | - 1              |                       |                       | <0.2                 | 2.1               |
| IM6                   | Suppy     | Madarata   | 12:26    | 7.1       | Middle         | 1.0<br>3.6   | 0.6              | 125<br>76            | 16.6<br>15.5 | 15.5          | 79                       | 30.2<br>32.5 | 32.5       | 100.3<br>97.4  | 97.4             | 8.1<br>8.0<br>8.1   | 1.9<br>5.6   | 6.4  | <2<br>2          | 5  | 83<br>84 | 84               | 821058                | 805810                | <0.2                 | 2.0<br>1.4<br>1.4 |
| IIVIO                 | Sunny     | Moderate   | 12.20    | 7.1       | Middle         | 3.6<br>6.1   | 0.5              | 79<br>107            | 15.5<br>15.3 | 15.5          | 7.9<br>7.9<br>7.9<br>7.9 | 32.5<br>33.2 |            | 97.4           |                  | 8.0<br>8.0          | 5.8<br>11.5  | 0.4  | 4<br>10          | 5  | 84<br>85 | 04               | 621056                | 805810                | <0.2<br><0.2<br><0.2 | 1.4<br>0.8        |
|                       |           |            |          |           | Bottom         | 6.1          | 0.4              | 109                  | 15.3         | 15.3          | 7.9 7.9                  | 33.2         |            | 97.8<br>97.8   | 97.8             | 8.0 8.0             | 11.5         |      | 10               |    | 85<br>85 |                  |                       |                       | <0.2                 | 0.9               |
|                       |           |            |          |           | Surface        | 1.0          | 0.5              | 130<br>136           | 16.1<br>16.1 | 16.1          | 7.9<br>7.9<br>7.9        | 29.5<br>29.5 |            | 99.4<br>99.3   | 99.4             | 8.2<br>8.2          | 2.9<br>2.9   | -    | <2<br><2         |    | 83<br>83 | -                |                       |                       | <0.2<br><0.2         | 2.2<br>2.1        |
| IM7                   | Sunny     | Moderate   | 12:34    | 7.6       | Middle         | 3.8          | 0.5              | 88                   | 15.5         | 15.5          | 7.9 7.9                  | 32.7         | 32.7       | 97.5           | 97.5             | 8.0                 | 6.3          | 5.7  | 5                | 6  | 84       | 84               | 821335                | 806842                | <0.2                 | 1.3 1.6           |
|                       | ,         |            |          | -         |                | 3.8<br>6.6   | 0.5<br>0.4       | 92<br>82             | 15.5<br>15.4 |               | 7.9                      | 32.7<br>32.9 |            | 97.5<br>97.6   |                  | 8.0<br>8.0          | 6.4<br>8.1   | ŀ    | 6<br>11          |    | 84<br>85 |                  |                       |                       | <0.2                 | 1.4<br>1.2        |
|                       |           |            |          |           | Bottom         | 6.6          | 0.4              | 86                   | 15.4         | 15.4          | 7.9                      | 32.9         | 32.9       | 97.8           | 97.7             | 8.0 8.0             | 7.7          |      | 10               |    | 85       | 1                |                       |                       | <0.2                 | 1.1               |
|                       |           |            |          |           | Surface        | 1.0          | 0.3              | 221<br>222           | 19.0<br>19.0 | 19.0          | 7.9<br>7.9<br>7.9        | 24.4<br>24.4 | 24.4       | 101.9<br>101.9 | 101.9            | 8.2<br>8.2<br>8.2   | 3.5<br>3.5   | ŀ    | 4                |    | 77<br>80 |                  |                       |                       | <0.2<br><0.2         | 2.8<br>2.5        |
| IM8                   | Fine      | Moderate   | 11:40    | 8.4       | Middle         | 4.2          | 0.3              | 233<br>237           | 18.8<br>18.8 | 18.8          | 7.9<br>7.9<br>7.9        | 25.0<br>25.0 | 25.0       | 101.2<br>101.2 | 101.2            | 8.1<br>8.1          | 3.7<br>3.7   | 3.9  | 4<br>3           | 3  | 83<br>82 | 82               | 821678                | 807819                | <0.2<br><0.2 <0.2    | 24                |
|                       |           |            |          |           | Bottom         | 7.4          | 0.3              | 189                  | 18.8         | 18.8          | 7.9 7.9                  | 25.5         | 25.5       | 100.5          | 100.5            | 8.1 8.1             | 4.5          | ŀ    | 3                |    | 84       | 1                |                       |                       | <0.2                 | 2.3               |
| DA: Depth-Aver        |           |            |          |           | Bollom         | 7.4          | 0.4              | 193                  | 18.8         | 10.0          | 7.9                      | 25.5         | 20.0       | 100.5          | 100.0            | 8.1                 | 4.5          |      | 3                |    | 84       |                  |                       |                       | <0.2                 | 2.4               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on18 February 17 18 February 17 during Mid-Flood Tide

| Water Qual            | ity Monit | oring Resi | llts on  |           | 18 February 17 | during Mid-       | Flood I           | ide                  |                      |              |                   |         |                      |              |                      |                  |                          |                   |      |                  |    |                 |     |                       |                       |                      |  |
|-----------------------|-----------|------------|----------|-----------|----------------|-------------------|-------------------|----------------------|----------------------|--------------|-------------------|---------|----------------------|--------------|----------------------|------------------|--------------------------|-------------------|------|------------------|----|-----------------|-----|-----------------------|-----------------------|----------------------|--|
| Monitoring<br>Station | Weather   | Sea        | Sampling | Water     | Sampling De    | oth (m)           | Current<br>Speed  | Current<br>Direction | Water Tem            | perature (°C | C) p              | н       |                      | ity (ppt)    |                      | aturation<br>(%) | Dissolved<br>Oxygen      | Iurbidity         |      | Suspende<br>(mg/ |    | Total Al<br>(pp | om) | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)  |
| Station               | Condition | Condition  | Time     | Depth (m) |                | -                 | (m/s)             |                      | Value                | Average      |                   | Average |                      | Average      |                      | Average          | Value DA                 |                   | DA   | Value            | DA | Value           | DA  | (Northing)            | (Easting)             | Value DA             |  |
|                       |           |            |          |           | Surface        | 1.0<br>1.0        | 0.3               | 194<br>208           | 19.5<br>19.5         | 19.5         | 7.9 7.9           | 7.9     | 23.4<br>23.4         | 23.4         | 102.1                | 102.1            | 8.2<br>8.2<br>8.1        | 3.7<br>3.7        |      | 3                |    | 77<br>79        |     |                       |                       | <0.2                 | 2.8<br>2.6   |
| IM9                   | Fine      | Moderate   | 11:32    | 7.3       | Middle         | 3.7<br>3.7<br>6.3 | 0.3<br>0.4<br>0.4 | 210<br>218<br>197    | 18.9<br>18.9         | 18.9         | 7.9<br>7.9        | 7.9     | 25.3<br>25.3         | 25.3         | 100.3<br>100.3       | 100.3            | 8.0<br>8.0<br>7.0        | 4.9<br>4.9        | 5.1  | 4                | 3  | 81<br>82        | 81  | 822074                | 808820                | <0.2<br><0.2<br><0.2 | 2.4  |
|                       |           |            |          |           | Bottom         | 6.3               | 0.4               | 199                  | 18.7<br>18.7         | 18.7         | 7.9<br>7.9        |         | 26.5<br>26.5         | 20.5         | 99.5<br>99.5         | 99.5             | 7.9<br>7.9<br>7.9        | 6.8               |      | 3<br>2           |    | 84<br>84        |     |                       |                       | <0.2                 | 2.0<br>2.1   |
|                       |           |            |          |           | Surface        | 1.0<br>1.0        | 0.6<br>0.6        | 266<br>288           | 19.1<br>19.1         | 19.1         | 7.9<br>7.9        | 7.9     | 25.0<br>25.0         | 25.0         | 100.9<br>100.9       | 100.9            | 8.1<br>8.1<br>8.0        | 3.8<br>3.9        |      | 2<br>3           |    | 79<br>80        |     |                       |                       | <0.2<br><0.2         | 2.4<br>2.1   |
| IM10                  | Fine      | Moderate   | 11:25    | 7.8       | Middle         | 3.9<br>3.9        | 0.6               | 273<br>273           | 18.7<br>18.7         | 18.7         | 7.9<br>7.9        | 7.9     | 26.4<br>26.4         | 20.4         | 99.0<br>99.0         | 99.0             | 7.9<br>7.9               | 5.8<br>5.9        | 7.9  | 2 4              | 3  | 83<br>82        | 82  | 822251                | 809831                | <0.2<br><0.2 <0.2    | 2.4  |
|                       |           |            |          |           | Bottom         | 6.8<br>6.8        | 0.5               | 261<br>264           | 18.6<br>18.6         | 18.6         | 7.9<br>7.9        | 7.9     | 27.6<br>27.6         | 27.6         | 97.5<br>97.5         | 97.5             | 7.7<br>7.7<br>7.7        | 13.9              | -    | 2<br>3           |    | 85<br>85        |     |                       |                       | <0.2<br><0.2         | 2.4<br>2.6   |
|                       |           |            |          |           | Surface        | 1.0<br>1.0        | 0.6               | 259<br>283           | 19.0<br>19.0         | 19.0         | 7.9 7.9           | 7.9     | 26.0<br>26.0         | 26.0         | 100.3                | 100.3            | 8.0<br>8.0<br>7.0 8.0    | 4.3               |      | 2                |    | 78<br>79        |     |                       |                       | <0.2                 | 2.1  |
| IM11                  | Fine      | Moderate   | 11:17    | 8.3       | Middle         | 4.2               | 0.7               | 272<br>283           | 18.8<br>18.8         | 18.8         | 7.9<br>7.9        | 7.9     | 26.4<br>26.4         | 26.4         | 98.7<br>98.7         | 98.7             | 7.9<br>7.9               | 6.8<br>7.0        | 7.6  | 2<br>3           | 3  | 81<br>83        | 82  | 821482                | 810542                | <0.2<br><0.2<br><0.2 | 1.5  |
|                       |           |            |          |           | Bottom         | 7.3<br>7.3        | 0.6               | 253<br>260           | 18.6<br>18.6         | 18.6         | 7.9<br>7.9        |         | 27.8                 | 27.0         | 97.9<br>97.9         | 97.9             | 7.8<br>7.8<br>7.8        | 11.6              |      | 2 4              |    | 84<br>84        |     |                       |                       | <0.2                 | 1.4<br>1.6   |
|                       |           |            |          |           | Surface        | 1.0<br>1.0<br>4.1 | 0.8<br>0.9<br>0.9 | 260<br>267<br>267    | 18.7<br>18.7         | 18.7         | 7.9<br>7.9        | 7.9     | 26.8<br>26.8<br>27.4 | 20.0         | 99.1<br>99.1<br>97.9 | 99.1             | 7.9<br>7.9<br>7.8<br>7.9 | 4.9<br>4.9<br>9.2 |      | 3<br>3<br>18     |    | 79<br>79        |     |                       |                       | <0.2                 | 2.3<br>2.0<br>1.4  |
| IM12                  | Fine      | Moderate   | 11:10    | 8.1       | Middle         | 4.1 4.1 7.1       | 0.9               | 275<br>258           | 18.6<br>18.6<br>18.5 | 18.6         | 7.9<br>7.9<br>7.9 |         | 27.4<br>27.4<br>28.1 | 27.4         | 97.9<br>97.9<br>97.9 | 97.9             | 7.8                      | 9.4               | 10.1 | 19<br>18         | 13 | 82<br>83<br>84  | 82  | 821166                | 811503                | <0.2<br><0.2<br><0.2 | $\begin{array}{c c} 1.4 \\ \hline 1.3 \\ \hline 1.6 \end{array}$ |
|                       |           |            |          |           | Bottom         | 7.1               | 0.7               | 266<br>187           | 18.5<br>18.5         | 18.5         | 7.9               |         | 28.1<br>27.9         | 20.1         | 98.0<br>96.4         | 98.0             | 7.8<br>7.8<br>7.7        | 16.0<br>4.9       | -    | 19<br>3          |    | 85<br>78        |     |                       |                       | <0.2<br><0.2<br><0.2 | 1.6<br>1.6   |
|                       |           |            |          |           | Surface        | 1.0               | 0.2               | 204                  | 18.5                 | 18.5         | 7.9               | 7.9     | 27.9                 | 27.9         | 96.5                 | 96.5             | 7.7 7.7                  | 5.0               | -    | 4                |    | 79              |     |                       |                       | <0.2                 | 1.7  |
| SR2                   | Fine      | Moderate   | 10:49    | 4.6       | Middle         | 2.3               | - 0.2             | -<br>174             | -<br>18.5            | -            | -<br>7.8          |         | -<br>28.2            | -            | -<br>96.5            | -                | -<br>7.7                 | -                 | 5.5  | - 4              | 4  | -<br>84         | 81  | 821471                | 814185                | - <0.2<br><0.2       | 2 1.5  |
|                       |           |            |          |           | Bottom         | 3.6               | 0.2               | 176<br>199           | 18.5<br>19.0         | 18.5         | 7.8<br>7.9        |         | 28.2<br>23.3         | 28.2<br>23.3 | 96.5<br>101.1        | 96.5<br>101.1    | 7.7<br>7.7<br>8.2        | 6.1<br>4.3        |      | 5<br><2          |    | 84<br>-         |     |                       |                       | <0.2                 | 1.2  |
| SR3                   | Fine      | Moderate   | 11:45    | 9.2       | Surface        | 1.0<br>4.6        | 0.4<br>0.4        | 211<br>226           | 19.0<br>18.8         | 19.0<br>18.8 | 7.9<br>7.9        |         | 23.3<br>25.3         | 23.3         | 101.1<br>100.3       | 101.1            | 8.2<br>8.0 8.1           | 13                | 4.7  | <2<br>3          | 3  | -               |     | 822162                | 807551                | -                    | -  |
| 0110                  | T IIIC    | Woderate   | 11.45    | 5.2       | Bottom         | 4.6<br>8.2        | 0.4<br>0.4        | 242<br>124           | 18.8<br>18.7         | 18.7         | 7.9<br>7.9        | 7.0     | 25.3<br>26.0         | 26.0         | 100.3<br>99.8        | 99.8             | 8.0<br>8.0<br>8.0<br>8.0 | 5.1<br>4.7        | 4.7  | 3<br>3           | 5  | -               | _   | 022102                | 007331                | -                    | -  |
|                       |           |            |          |           | Surface        | 8.2               | 0.4               | 128<br>236           | 18.7<br>15.9         | 15.9         | 7.9<br>8.2        | 8.2     | 26.0<br>32.5         | 32.5         | 99.8<br>99.6         | 99.6             | 8.0<br>8.1               | 4.7<br>6.3        |      | 4<br>7           |    | -               |     |                       |                       | -                    | -  |
| SR4A                  | Sunny     | Moderate   | 11:08    | 7.3       | Middle         | 1.0               | 0.4               | 252<br>231           | 15.9<br>15.8         | 15.8         | 8.2<br>8.2        | 8.2     | 32.5<br>32.5         | 32.5         | 99.6<br>99.1         | 99.1             | 8.1<br>8.0<br>8.1        | 6.8               | 7.0  | 76               | 8  | -               | -   | 817182                | 807810                |                      |  |
|                       |           |            |          |           | Bottom         | 3.7<br>6.3<br>6.3 | 0.4               | 250<br>216<br>222    | 15.8<br>15.7         | 15.7         | 8.2<br>8.2<br>8.2 | 8.2     | 32.5<br>32.8         | 32.8         | 99.1<br>98.9<br>99.0 | 99.0             | 8.0<br>8.0<br>8.0<br>8.0 | 6.8<br>7.9        | -    | 6<br>11<br>9     |    | -               |     |                       |                       | -                    | -  |
|                       |           |            |          |           | Surface        | 6.3<br>1.0<br>1.0 | 0.4<br>0.2<br>0.2 | 222<br>284<br>297    | 15.7<br>15.7<br>15.7 | 15.7         | 8.2<br>8.2<br>8.2 | 0.0     | 32.8<br>33.3<br>33.3 | 33.3         | 99.0<br>98.9<br>98.9 | 98.9             | 8.0<br>8.0<br>8.0        | 7.8<br>5.1<br>5.1 |      | 9<br>5<br>7      |    | -               |     |                       |                       | -                    | -  |
| SR5A                  | Sunny     | Calm       | 10:48    | 4.2       | Middle         | 2.1               | -                 |                      | -                    | -            | -                 |         | -                    | -            | -                    | -                | - 8.0                    | -                 | 5.9  | -                | 7  | -               | -   | 816576                | 810700                |                      |  |
|                       |           |            |          |           | Bottom         | 3.2               | 0.2               | 296<br>309           | 15.6<br>15.6         | 15.6         | 8.2<br>8.2        | 8.2     | 33.5<br>33.5         | 33.5         | 99.3<br>99.3         | 99.3             | 8.1<br>8.1 8.1           | 6.8               | •    | 9<br>7           |    | -               |     |                       |                       | -                    | -  |
|                       |           |            |          |           | Surface        | 1.0               | 0.3               | 253<br>253           | 15.6<br>15.6         | 15.6         | 8.0<br>8.0        | 8.0     | 31.3<br>31.3         | 31.3         | 99.5<br>99.4         | 99.5             | 8.2                      | 5.3               |      | 7 7              |    | -               |     |                       |                       | -                    | -  |
| SR6                   | Sunny     | Calm       | 10:26    | 3.8       | Middle         | 1.9               | -                 |                      | -                    | -            | -                 | -       | -                    | -            | -                    | -                | - 8.2                    | -                 | 8.1  | -                | 13 | -               | -   | 817889                | 814681                |                      |  |
|                       |           |            |          |           | Bottom         | 2.8<br>2.8        | 0.2               | 240<br>256           | 15.6<br>15.6         | 15.6         | 7.9<br>7.9        | 7.9     | 32.2<br>32.2         | 32.2         | 99.7<br>99.8         | 99.8             | 8.2<br>8.2 8.2           | 11.0<br>10.8      |      | 18<br>18         |    | -               |     |                       |                       | -                    | -  |
|                       |           |            |          |           | Surface        | 1.0<br>1.0        | 0.2<br>0.2        | 183<br>191           | 18.4<br>18.4         | 18.4         | 7.9<br>7.9        | 7.9     | 28.2<br>28.2         | 28.2         | 98.4<br>98.4         | 98.4             | 7.8<br>7.8<br>7.8<br>7.8 | 2.1<br>2.1        |      | <2<br><2         |    | -               |     |                       |                       | -                    | -  |
| SR7                   | Fine      | Calm       | 09:55    | 17.3      | Middle         | 8.7<br>8.7        | 0.2<br>0.2        | 211<br>216           | 18.3<br>18.3         | 18.3         | 7.9<br>7.9        | 7.9     | 28.6<br>28.6         | 28.6         | 97.8<br>97.8         | 97.8             | 7.8<br>7.8               | 2.6<br>2.5        | 2.5  | 6<br>6           | 5  | -               | -   | 823641                | 823727                |                      |  |
|                       |           |            |          |           | Bottom         | 16.3<br>16.3      | 0.2               | 168<br>169           | 18.2<br>18.2         | 18.2         | 7.9<br>7.9        | 7.9     | 29.0<br>29.0         | 29.0         | 99.2<br>99.3         | 99.3             | 7.9<br>7.9<br>7.9        | 2.8               |      | 6<br>7           |    | -               |     |                       |                       | -                    | -  |
|                       |           |            |          |           | Surface        | 1.0<br>1.0        | 0.2               | 250<br>268           | 19.2<br>19.2         | 19.2         | 7.9<br>7.9        | 7.9     | 25.6<br>25.6         | 25.6         | 99.8<br>99.8         | 99.8             | 7.9<br>7.9<br>7.9        | 6.8<br>6.9        |      | 4 6              |    | -               |     |                       |                       | -                    | -  |
| SR8                   | Fine      | Moderate   | 11:04    | 4.8       | Middle         | 2.4<br>2.4        | -                 |                      |                      | -            | -                 | -       | -                    | -            | -                    | -                | -                        | -                 | 9.2  | -                | 9  | -               | -   | 820436                | 811578                |                      |  |
| DA: Depth-Aver        |           |            |          |           | Bottom         | 3.8<br>3.8        | 0.3               | 268<br>268           | 18.7<br>18.7         | 18.7         | 7.8<br>7.8        | 7.8     | 26.9<br>26.9         | 26.9         | 98.2<br>98.2         | 98.2             | 7.8<br>7.8<br>7.8        | 11.6<br>11.6      |      | 13<br>11         |    | -               |     |                       |                       | -                    | -  |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on18 February 17 18 February 17 during Mid-Ebb tide

| Water Qua     | lity Monit | oring Res | ults on  |           | 18 February 17 | during Mid   |                  |            |              |                | -                 |         |              |         |                |                  |                           |              |      |                  |    |                 |    |                       |                       |                              |                                       |
|---------------|------------|-----------|----------|-----------|----------------|--------------|------------------|------------|--------------|----------------|-------------------|---------|--------------|---------|----------------|------------------|---------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|------------------------------|---------------------------------------|
| Monitoring    | Weather    | Sea       | Sampling | Water     | Sampling De    | epth (m)     | Current<br>Speed | Current    | Water Te     | mperature (°C) |                   | pН      | Salinit      | y (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)                         |
| Station       | Condition  | Condition | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average        | Value             | Average | e Value /    | Average |                | Average          | Value DA                  | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA                     | Value DA                              |
|               |            |           |          |           | Surface        | 1.0<br>1.0   | 0.4              | 134<br>141 | 15.8<br>15.8 | 15.8           | 7.9<br>7.9        | 7.9     | 32.6<br>32.6 | 32.6    | 101.6<br>101.6 | 101.6            | 8.3<br>8.3                | 2.9<br>3.0   | -    | 8<br>7           |    | 83<br>84        |    |                       |                       | <0.2<br><0.2                 | 1.0                                   |
| C1            | Sunny      | Moderate  | 17:34    | 9.1       | Middle         | 4.6          | 0.3              | 122<br>124 | 15.2<br>15.2 | 15.2           | 7.9<br>7.9        | 7.9     | 33.6<br>33.6 | 33.6    | 99.0<br>99.0   | 99.0             | 8.1<br>8.1<br>8.1         | 4.5<br>4.6   | 4.6  | 7<br>8           | 8  | 84<br>84        | 84 | 815638                | 804243                | <0.2<br><0.2 <0.2            | 2 0.7 0.8                             |
|               |            |           |          |           | Bottom         | 8.1          | 0.3              | 145        | 14.7         | 14.7           | 7.9<br>7.9        | 7.9     | 34.4         | 34.4    | 97.4           | 97.4             | 8.0 8.0                   | 6.1          | -    | 9                |    | 85              |    |                       |                       | <0.2                         | 0.4                                   |
|               |            |           |          |           | Surface        | 8.1          | 0.3              | 158<br>173 | 14.7<br>19.0 | 19.0           | 7.9<br>7.9<br>7.9 | 7.9     | 34.4<br>25.0 | 25.0    | 97.4<br>102.1  | 102.1            | 8.0<br>8.2                | 6.2<br>3.6   |      | 9<br>3           |    | 85<br>76        |    |                       |                       | <0.2<br><0.2                 | 0.4 2.3                               |
|               |            |           |          |           |                | 1.0<br>6.3   | 0.3              | 184<br>180 | 19.0<br>18.7 |                | 7.9<br>7.9        |         | 25.0<br>26.6 |         | 102.0<br>99.5  |                  | 8.2<br>7.9 8.1            | 3.6<br>5.6   |      | 2                | -  | 77<br>81        |    |                       |                       | <0.2<br><0.2                 | 2.4                                   |
| C2            | Fine       | Moderate  | 16:30    | 12.5      | Middle         | 6.3<br>11.5  | 0.3<br>0.3       | 183<br>247 | 18.7<br>18.5 | 18.7           | 7.9               | 7.9     | 26.6<br>27.3 | 26.6    | 99.4           | 99.5             | 7.9<br>8.0                | 5.7<br>6.7   | 5.3  | 3                | 2  | 82<br>84        | 81 | 825669                | 806952                | <0.2<br><0.2<br><0.2         | 2.1 2.2                               |
|               |            |           |          |           | Bottom         | 11.5         | 0.3              | 252        | 18.5         | 18.5           | 7.9<br>7.9        | 7.9     | 27.3         | 27.3    | 100.1<br>100.1 | 100.1            | 8.0                       | 6.7          |      | 2                |    | 85              |    |                       |                       | <0.2                         | 2.2                                   |
|               |            |           |          |           | Surface        | 1.0<br>1.0   | 0.4              | 64<br>70   | 19.0<br>19.0 | 19.0           | 7.9<br>7.9        | 7.9     | 28.0<br>28.0 | 28.0    | 98.6<br>98.6   | 98.6             | 7.7 7.7 7.6               | 2.2<br>2.2   | -    | 3<br>4           |    | 79<br>80        |    |                       |                       | <0.2<br><0.2                 | 1.4<br>1.5                            |
| C3            | Fine       | Moderate  | 18:11    | 12.3      | Middle         | 6.2<br>6.2   | 0.3              | 100<br>103 | 18.4<br>18.4 | 18.4           | 7.9<br>7.9        | 7.9     | 29.0<br>29.0 | 29.0    | 95.2<br>95.2   | 95.2             | 7.5<br>7.5                | 2.5<br>2.5   | 2.5  | 2<br>3           | 3  | 81<br>80        | 82 | 822127                | 817807                | <0.2<br><0.2 <0.2            | 2 1.2 1.4                             |
|               |            |           |          |           | Bottom         | 11.3<br>11.3 | 0.2              | 128<br>128 | 18.0<br>18.0 | 18.0           | 7.9<br>7.9        | 7.9     | 29.6<br>29.6 | 29.6    | 94.9<br>94.9   | 94.9             | 7.5<br>7.5<br>7.5         | 2.8<br>2.8   |      | 3                |    | 84<br>85        |    |                       |                       | <0.2<br><0.2                 | 1.4                                   |
|               |            |           |          |           | Surface        | 1.0          | 0.3              | 183        | 16.5         | 16.5           | 7.9               | 7.9     | 31.2         | 31.2    | 102.7          | 102.7            | 8.3                       | 3.0          |      | 4                |    | 79              |    |                       |                       | <0.2                         | 1.4                                   |
| IM1           | Sunny      | Moderate  | 17:12    | 7.8       | Middle         | 1.0<br>3.9   | 0.3              | 196<br>147 | 16.5<br>15.8 | 15.8           | 7.9<br>7.9        | 7.9     | 31.2<br>32.3 | 32.3    | 102.7<br>99.9  | 99.9             | 8.3<br>8.1 8.2            | 3.0<br>4.7   | 5.8  | 4<br>6           | 5  | 80<br>80        | 80 | 818355                | 806467                | <0.2<br><0.2<br><0.2<br><0.2 | 1.4<br>1.6<br>1.8                     |
|               | Sunny      | Moderale  | 17.12    | 7.0       |                | 3.9<br>6.8   | 0.3              | 160<br>156 | 15.8<br>15.2 |                | 7.9<br>7.9        |         | 32.3<br>33.5 |         | 99.8<br>97.3   |                  | 8.1<br>7.9 7.0            | 4.8<br>9.5   | 5.0  | 5<br>5           | 5  | 81<br>81        | 80 | 010333                | 800407                | <0.2<br><0.2                 | 1.8<br>2.3                            |
|               |            |           |          |           | Bottom         | 6.8<br>1.0   | 0.4              | 165<br>190 | 15.2         | 15.2           | 7.9               | 7.9     | 33.5<br>30.8 | 33.5    | 97.3           | 97.3             | 7.9                       | 9.6<br>1.6   |      | 4                |    | 81              |    |                       |                       | <0.2                         | 2.2<br>2.2                            |
|               |            |           |          |           | Surface        | 1.0          | 0.4              | 207        | 16.6<br>16.6 | 16.6           | 7.9<br>7.9        | 7.9     | 30.8         | 30.8    | 104.5<br>104.5 | 104.5            | 8.4<br>8.4<br>8.4         | 1.6          | Ē    | 4                |    | 81<br>81        |    |                       |                       | <0.2<br><0.2                 | 2.5                                   |
| IM2           | Sunny      | Moderate  | 17:06    | 8.7       | Middle         | 4.4          | 0.4              | 155<br>163 | 16.2<br>16.2 | 16.2           | 7.9<br>7.9        | 7.9     | 31.6<br>31.6 | 31.6    | 101.9<br>101.8 | 101.9            | 8.3<br>8.3                | 2.5<br>2.5   | 2.8  | 4                | 4  | 82<br>82        | 82 | 818869                | 806184                | <0.2<br><0.2 <0.2            | 1.8                                   |
|               |            |           |          |           | Bottom         | 7.7          | 0.4              | 108<br>116 | 15.4<br>15.7 | 15.6           | 7.9<br>7.9        | 7.9     | 33.4<br>33.0 | 33.2    | 98.5<br>98.9   | 98.7             | 8.0<br>8.0<br>8.0         | 4.4<br>4.3   | -    | 4                |    | 83<br>83        |    |                       |                       | <0.2<br><0.2                 | 1.4<br>1.5                            |
|               |            |           |          |           | Surface        | 1.0          | 0.3              | 180<br>195 | 16.8<br>16.9 | 16.9           | 7.9<br>7.9        | 7.9     | 29.4<br>29.3 | 29.4    | 104.6<br>104.6 | 104.6            | 8.5<br>8.5                | 1.3<br>1.3   |      | 5<br>5           |    | 80<br>80        |    |                       |                       | <0.2<br><0.2                 | 2.1<br>2.3                            |
| IM3           | Sunny      | Moderate  | 16:58    | 8.7       | Middle         | 4.4          | 0.4              | 107        | 16.1         | 16.1           | 7.9<br>7.9        | 7.9     | 31.6<br>31.6 | 31.6    | 101.0          | 101.0            | 8.2<br>8.2<br>8.2         | 3.9          | 5.2  | 4                | 5  | 81              | 81 | 819402                | 806037                | <0.2<br><0.2<br><0.2         | 1.3 1.4                               |
|               |            |           |          |           | Bottom         | 7.7          | 0.4              | 109<br>133 | 16.1<br>15.1 | 15.1           | 7.9               | 7.9     | 33.8         | 33.8    | 101.0<br>97.6  | 97.6             | 8.0 8.0                   | 4.0<br>10.5  | -    | 4 7              |    | 81<br>82        |    |                       |                       | <0.2                         | 1.4<br>0.6                            |
|               |            |           |          |           | Surface        | 7.7          | 0.4              | 146<br>129 | 15.1<br>16.9 | 16.9           | 7.9<br>7.9        | - 7.9   | 33.8<br>28.6 | 28.6    | 97.6<br>102.2  | 102.2            | 8.0                       | 10.4<br>3.0  |      | 74               |    | 82<br>81        |    |                       |                       | <0.2<br><0.2                 | 0.7                                   |
|               |            |           | 10.50    |           |                | 1.0          | 0.3              | 139<br>139 | 16.9<br>15.2 |                | 7.9<br>7.9        |         | 28.6<br>33.4 |         | 102.1<br>98.2  |                  | 8.3<br>8.0 8.2            | 3.1<br>7.1   |      | 6<br>5           |    | 81<br>82        |    | 0/055/                | 0050/5                | <0.2                         | 2.2                                   |
| IM4           | Sunny      | Moderate  | 16:50    | 8.4       | Middle         | 4.2          | 0.3<br>0.3       | 139<br>155 | 15.2<br>15.0 | 15.2           | 7.9<br>7.9        | 7.9     | 33.4<br>33.9 | 33.4    | 98.1<br>97.1   | 98.2             | 8.0<br>7.9                | 7.2<br>14.8  | 8.3  | 3<br>19          | 9  | 82<br>82<br>83  | 82 | 819551                | 805045                | <0.2<br><0.2<br><0.2         | 2 <u>1.3</u> 1.8<br><u>1.7</u><br>1.2 |
|               |            |           |          |           | Bottom         | 7.4          | 0.3              | 164        | 15.0         | 15.0           | 7.9               | 7.9     | 33.9         | 33.9    | 97.2           | 97.2             | 8.0                       | 14.6         |      | 19               |    | 83              |    |                       |                       | <0.2                         | 1.3                                   |
|               |            |           |          |           | Surface        | 1.0<br>1.0   | 0.4<br>0.4       | 165<br>170 | 16.0<br>16.0 | 16.0           | 7.9<br>7.9        | 7.9     | 31.0<br>31.0 | 31.0    | 99.9<br>99.8   | 99.9             | 8.2<br>8.2<br>8.1         | 7.1<br>7.2   | -    | 9                |    | 79<br>80        |    |                       |                       | <0.2<br><0.2                 | 2.0<br>2.3                            |
| IM5           | Sunny      | Moderate  | 16:42    | 7.2       | Middle         | 3.6<br>3.6   | 0.4              | 157<br>166 | 15.2<br>15.2 | 15.2           | 7.9<br>7.9        | 7.9     | 33.4<br>33.4 | 33.4    | 96.7<br>96.7   | 96.7             | 7.9<br>7.9                | 15.7<br>15.6 | 12.5 | 20<br>19         | 16 | 81<br>81        | 81 | 820582                | 804932                | <0.2 <0.2 <0.2               | 2 0.8 1.3                             |
|               |            |           |          |           | Bottom         | 6.2<br>6.2   | 0.3              | 150<br>151 | 15.1<br>15.1 | 15.1           | 7.9<br>7.9        | 7.9     | 33.5<br>33.5 | 33.5    | 96.5<br>96.6   | 96.6             | 7.9<br>7.9<br>7.9         | 14.6<br>14.5 | F    | 21<br>20         |    | 82<br>81        |    |                       |                       | <0.2<br><0.2                 | 0.8                                   |
|               |            |           |          |           | Surface        | 1.0<br>1.0   | 0.4              | 160<br>172 | 16.0<br>16.0 | 16.0           | 7.9               | 7.9     | 31.0<br>31.0 | 31.0    | 100.0<br>100.0 | 100.0            | 8.2<br>8.2                | 5.9<br>6.0   | i    | 9                |    | 83<br>81        |    |                       |                       | <0.2<br><0.2<br><0.2         | 1.6<br>1.5                            |
| IM6           | Sunny      | Moderate  | 16:34    | 7.3       | Middle         | 3.7          | 0.4              | 150        | 15.4         | 15.4           | 7.9               | 7.9     | 32.9         | 32.9    | 97.2           | 97.2             | 7.9                       | 13.6         | 11.4 | 17               | 15 | 83              | 83 | 821042                | 805821                | <0.2                         | 1.0                                   |
|               |            |           |          |           | Bottom         | 3.7<br>6.3   | 0.4<br>0.3       | 161<br>167 | 15.4<br>15.3 | 15.3           | 7.9<br>7.9        | 7.9     | 32.9<br>33.1 | 33.1    | 97.2<br>97.1   | 97.2             | 7.9<br>7.9<br>7.9<br>7.9  | 13.7<br>14.6 | -    | 18<br>18         |    | 83<br>84        |    |                       |                       | <0.2                         | 0.9                                   |
|               |            |           |          |           |                | 6.3<br>1.0   | 0.3              | 181<br>122 | 15.3<br>16.7 |                | 7.9<br>7.9        |         | 33.1<br>29.4 |         | 97.2<br>102.2  |                  | 7.9 <sup>7.3</sup><br>8.3 | 14.6<br>1.8  |      | 17<br>3          |    | 84<br>82        |    |                       |                       | <0.2<br><0.2                 | 0.9                                   |
|               |            |           |          |           | Surface        | 1.0<br>4.4   | 0.5<br>0.6       | 124<br>109 | 16.7<br>15.5 | 16.7           | 7.9<br>8.0        | 7.9     | 29.4<br>32.4 | 29.4    | 102.1<br>98.1  | 102.2            | 8.3<br>8.0 8.2            | 1.9<br>5.5   | ļ    | 3<br>7           |    | 83<br>83        |    |                       |                       | <0.2                         | 2.2                                   |
| IM7           | Sunny      | Moderate  | 16:25    | 8.7       | Middle         | 4.4          | 0.6              | 111        | 15.5         | 15.5           | 8.0               | 8.0     | 32.4         | 32.4    | 98.0           | 98.1             | 8.0                       | 5.6          | 4.5  | 7                | 7  | 84              | 83 | 821352                | 806846                | <0.2                         | 1.8                                   |
|               |            |           |          |           | Bottom         | 7.7          | 0.5<br>0.5       | 138<br>146 | 15.4<br>15.4 | 15.4           | 8.0<br>8.0        | 8.0     | 32.8<br>32.8 | 32.8    | 98.3<br>98.3   | 98.3             | 8.0<br>8.0                | 5.9<br>6.0   |      | 9<br>10          |    | 84<br>84        |    |                       |                       | <0.2<br><0.2                 | 1.2<br>1.2                            |
|               |            |           |          |           | Surface        | 1.0<br>1.0   | 0.4              | 95<br>104  | 19.2<br>19.2 | 19.2           | 7.9<br>7.9        | 7.9     | 26.2<br>26.2 | 26.2    | 103.4<br>103.3 | 103.4            | 8.2<br>8.2<br>8.1         | 3.7<br>3.8   | ŀ    | 8<br>6           |    | 76<br>77        |    |                       |                       | <0.2<br><0.2                 | 2.3<br>2.3                            |
| IM8           | Fine       | Moderate  | 16:57    | 8.6       | Middle         | 4.3          | 0.4              | 103<br>112 | 18.7<br>18.7 | 18.7           | 7.9<br>7.9        | 7.9     | 27.5<br>27.5 | 27.5    | 100.0<br>99.6  | 99.8             | 7.9<br>7.9                | 5.0<br>5.1   | 4.9  | 10<br>9          | 8  | 82<br>81        | 81 | 821713                | 807826                | <0.2<br><0.2 <0.2            | 2.2                                   |
|               |            |           |          |           | Bottom         | 7.6          | 0.4              | 118        | 18.5<br>18.5 | 18.5           | 7.9<br>7.9        | 7.9     | 28.1         | 28.1    | 97.8<br>97.8   | 97.8             | 7.8<br>7.8<br>7.8         | 5.9<br>5.9   | ļ    | 8                |    | 83<br>84        |    |                       |                       | <0.2                         | 2.3<br>2.6                            |
| DA: Depth-Ave | <u> </u>   |           |          |           |                | 0.1          | 0.4              | 110        | 10.5         |                | 7.9               | 1       | ∠0.I         |         | 91.Ŭ           |                  | 1.0                       | 5.9          |      | ō                |    | 04              |    |                       |                       | <0.2                         | 2.0                                   |

#### Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on18 February 17during 18 February 17 during Mid-Ebb tide

| Water Qua             | lity Monite | oring Resu | ults on  |           | 18 February 17 | during Mid-  | -Ebb tide        | 9          |              |               |            |       |              |          |                |                 |                |       |             |      |                  |                                       |                   |    |                       | -                     |                      |                    |           |
|-----------------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|-------|--------------|----------|----------------|-----------------|----------------|-------|-------------|------|------------------|---------------------------------------|-------------------|----|-----------------------|-----------------------|----------------------|--------------------|-----------|
| Monitoring<br>Station | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ten    | nperature (°0 | C) pł      | н     | Salini       | ty (ppt) |                | aturation<br>%) | Dissol<br>Oxyg |       | Turbidity(N | NTU) | Suspende<br>(mg/ |                                       | Total All<br>(ppr | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | <sup>1</sup> Nicke | el (µg/L) |
| Station               | Condition   | Condition  | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average       |            |       |              | Average  |                | Average         | Value          | DA    | Value       | DA   | Value            | DA                                    | Value             | DA | (Northing)            | (Easting)             | Value DA             |                    | DA        |
|                       |             |            |          |           | Surface        | 1.0<br>1.0   | 0.6              | 106<br>109 | 19.2<br>19.2 | 19.2          | 7.9<br>7.9 |       | 26.3<br>26.3 | 26.3     | 102.7<br>102.6 | 102.7           | 8.1<br>8.1     |       | 3.8<br>3.8  |      | 3                | , İ                                   | 77<br>78          |    |                       |                       | <0.2<br><0.2         | 2.3<br>2.2         | -         |
| IM9                   | Fine        | Moderate   | 17:06    | 7.4       | Middle         | 3.7<br>3.7   | 0.6              | 121<br>130 | 19.1<br>19.1 | 19.1          | 7.9<br>7.9 |       | 26.4<br>26.4 | 26.4     | 100.1<br>99.9  | 100.0           | 7.9<br>7.9     | 8.0   | 4.6<br>4.7  | 4.8  | 6<br>6           | 6                                     | 83<br>82          | 82 | 822097                | 808818                | <0.2<br><0.2 <0.1    | 1.8                | 2.3       |
|                       |             |            |          |           | Bottom         | 6.4<br>6.4   | 0.7              | 123        | 18.6<br>18.6 | 18.6          | 7.9        | 7.0   | 27.8<br>27.8 | 07.0     | 97.4<br>97.4   | 97.4            | 7.7            | 7.7   | 5.9<br>5.9  | _    | 8<br>10          | ļ                                     | 84<br>85          |    |                       |                       | <0.2                 | 2.3                | -         |
|                       |             |            |          |           | Surface        | 1.0          | 0.6              | 128<br>129 | 19.4         | 19.4          | 7.9        | 7.0   | 26.2         | 00.0     | 101.9          | 101.9           | 8.0            |       | 3.1         |      | 6                | <del> </del>                          | 78                |    |                       |                       | <0.2                 | 2.5                |           |
| IM10                  | Fine        | Moderate   | 17:13    | 8.1       | Middle         | 1.0<br>4.1   | 0.6              | 135<br>160 | 19.4<br>19.3 | 19.3          | 7.9<br>7.9 | 7.0   | 26.2<br>27.3 | 07.0     | 101.9<br>99.8  | 99.8            | 8.0<br>7.8     | 7.9   | 3.1<br>3.5  | 3.6  | 6<br>4           | 6                                     | 78<br>82          | 81 | 822222                | 809830                | <0.2<br><0.2<br><0.2 | 2.4                | 2.3       |
| INTO                  | T IIIe      | Moderate   | 17.15    | 0.1       |                | 4.1<br>7.1   | 0.6              | 166<br>156 | 19.3<br>18.8 |               | 7.9<br>7.9 |       | 27.3<br>27.8 |          | 99.8<br>97.5   |                 | 7.8<br>7.7     |       | 3.5<br>4.1  | 5.0  | 4                | Ŭ                                     | 80<br>83          | 01 | OLLLL                 | 003030                | <0.2<br><0.2         | .2<br>2.5<br>2.0   | - 2.0     |
|                       |             |            |          |           | Bottom         | 7.1          | 0.6              | 158<br>130 | 18.8<br>19.1 | 18.8          | 7.9<br>7.9 | 7.9   | 27.8<br>27.3 | 27.0     | 97.5<br>100.9  | 97.5            | 7.7 8.0        | 7.7   | 4.1<br>3.6  |      | 6<br>4           | <u> </u>                              | 84<br>80          |    |                       |                       | <0.2<br><0.2         | 2.1<br>2.3         | <u> </u>  |
|                       |             |            |          |           | Surface        | 1.0          | 0.4              | 134        | 19.1         | 19.1          | 7.9        | 7.9   | 27.3         | 27.3     | 100.8          | 100.9           | 7.9            | 7.9   | 3.5         | _    | 5                | ļ                                     | 79                |    |                       |                       | <0.2                 | 2.3                | 1         |
| IM11                  | Fine        | Moderate   | 17:22    | 7.9       | Middle         | 4.0<br>4.0   | 0.3<br>0.4       | 143<br>148 | 18.9<br>18.9 | 18.9          | 7.9<br>7.9 | 7.9   | 27.7<br>27.7 | 21.1     | 99.5<br>99.5   | 99.5            | 7.8<br>7.8     |       | 3.9<br>3.9  | 3.9  | 6<br>5           | 7                                     | 82<br>81          | 82 | 821501                | 810547                | <0.2<br><0.2 <0.2    | 1.9                | 2.0       |
|                       |             |            |          |           | Bottom         | 6.9<br>6.9   | 0.3              | 130<br>135 | 18.6<br>18.6 | 18.6          | 7.9<br>7.9 |       | 28.0<br>28.0 | 28.0     | 99.0<br>99.0   | 99.0            | 7.8<br>7.8     | 7.8   | 4.2<br>4.2  | _    | 11<br>10         |                                       | 84<br>84          |    |                       |                       | <0.2<br><0.2         | 1.9<br>1.7         |           |
|                       |             |            |          |           | Surface        | 1.0<br>1.0   | 0.6              | 128<br>139 | 19.4<br>19.4 | 19.4          | 7.9<br>7.9 |       | 26.3<br>26.3 | 26.3     | 101.2<br>101.2 | 101.2           | 8.0<br>8.0     |       | 4.0<br>4.0  | _    | 4                |                                       | 81<br>79          |    |                       |                       | <0.2<br><0.2         | 2.4<br>2.2         | -         |
| IM12                  | Fine        | Moderate   | 17:27    | 9.1       | Middle         | 4.6          | 0.5              | 140<br>150 | 18.8<br>18.8 | 18.8          | 7.9<br>7.9 | 7.0   | 27.8<br>27.8 | 07.0     | 98.5<br>98.5   | 98.5            | 7.8<br>7.8     | 7.9   | 4.7<br>4.7  | 4.9  | 4 6              | 4                                     | 82<br>81          | 82 | 821151                | 811536                | <0.2<br><0.2 <0.2    | 16                 | 1.8       |
|                       |             |            |          |           | Bottom         | 8.1          | 0.5              | 127        | 18.5         | 18.5          | 7.9        | 79    | 28.1         |          | 98.3           | 98.3            | 7.8            | 7.8   | 6.1         |      | 4                | ł                                     | 83                |    |                       |                       | <0.2                 | 1.3                | -         |
|                       |             |            |          |           | Surface        | 8.1<br>1.0   | 0.5<br>0.4       | 129<br>121 | 18.5<br>19.0 | 19.0          | 7.9<br>7.9 | 7.0   | 28.1<br>27.7 | 27.7     | 98.3<br>99.2   | 99.2            | 7.8<br>7.8     |       | 6.1<br>5.7  | _    | 5<br>6           |                                       | 84<br>79          |    |                       |                       | <0.2<br><0.2         | 1.6                |           |
| SR2                   | Fine        | Moderate   | 17:50    | 4.7       | Middle         | 1.0<br>0.0   | - 0.4            | 127        | 19.0<br>-    | -             | 7.9        |       | 27.7         |          | 99.2<br>-      |                 | 7.8            | 7.8   | 5.7<br>-    | 6.8  | 6<br>-           | 6                                     | 79<br>-           | 81 | 821473                | 814169                | <0.2<br>- <0.1       | 1.8                | 1.6       |
| 5112                  | 1 IIIC      | Moderate   | 17.50    | 4.7       |                | 0.0 3.7      | - 0.4            | - 106      | - 18.6       |               | -<br>7.9   | 7.0   | -<br>28.2    |          | -<br>97.8      | -               | -<br>7.7       |       | -<br>7.8    | 0.0  | -<br>5           | 0                                     | -<br>83           | 01 | 021473                | 014109                | - <0.2               | - 1.4              | 1.0       |
|                       |             |            |          |           | Bottom         | 3.7<br>1.0   | 0.4              | 113<br>125 | 18.6<br>19.4 | 18.6          | 7.9<br>7.9 | 7.9   | 28.2<br>25.7 | 20.2     | 97.8<br>103.7  | 97.8            | 7.7<br>8.2     | 7.7   | 7.8<br>3.9  |      | 5<br>4           | <u> </u>                              | - 84              |    |                       |                       | <0.2                 | 1.4                | <u> </u>  |
|                       |             |            |          |           | Surface        | 1.0          | 0.4              | 130        | 19.4         | 19.4          | 7.9        | 7.9   | 25.7         | 23.7     | 103.5          | 103.6           | 8.2            | 8.1   | 4.0         | _    | 6                | ł                                     | -                 |    |                       |                       | -                    | -                  | - <br>-   |
| SR3                   | Fine        | Moderate   | 16:52    | 9.0       | Middle         | 4.5          | 0.5              | 103<br>106 | 19.1<br>19.1 | 19.1          | 7.9<br>7.9 | 7.9   | 26.2<br>26.2 | 20.2     | 100.5<br>100.4 | 100.5           | 8.0<br>8.0     |       | 4.2         | 4.5  | 6<br>7           | 6                                     | -                 | -  | 822139                | 807587                |                      | -                  | <br>      |
|                       |             |            |          |           | Bottom         | 8.0<br>8.0   | 0.4              | 119<br>128 | 18.5<br>18.5 | 18.5          | 7.9<br>7.9 |       | 28.2<br>28.2 | 28.2     | 97.7<br>97.6   | 97.7            | 7.7            | 7.7 — | 5.3<br>5.3  | _    | 7<br>6           |                                       | -                 |    |                       |                       | -                    | -                  |           |
|                       |             |            |          |           | Surface        | 1.0          | 0.4              | 98<br>107  | 16.3<br>16.3 | 16.3          | 7.9<br>7.9 |       | 31.7<br>31.7 | 31.7     | 101.5<br>101.4 | 101.5           | 8.2<br>8.2     |       | 5.3<br>5.3  | _    | 9<br>8           |                                       | -                 |    |                       |                       | -                    | -                  | -         |
| SR4A                  | Sunny       | Calm       | 17:55    | 7.1       | Middle         | 3.6<br>3.6   | 0.4              | 99<br>99   | 16.3<br>16.3 | 16.3          | 7.9<br>7.9 | /u _  | 31.7<br>31.8 | 31.8     | 100.0<br>99.9  | 100.0           | 8.1<br>8.1     | 8.2   | 6.6<br>6.7  | 7.0  | 7<br>8           | 9                                     | -                 | -  | 817188                | 807802                |                      | -                  |           |
|                       |             |            |          |           | Bottom         | 6.1<br>6.1   | 0.3              | 85<br>87   | 15.8<br>15.8 | 15.8          | 7.9        | 7.0   | 32.7<br>32.7 | 32.7     | 98.3<br>98.3   | 98.3            | 8.0<br>8.0     | 8.0   | 9.2<br>9.1  | _    | 10<br>9          | ļ                                     | -                 |    |                       |                       | -                    | -                  | -         |
|                       |             |            |          |           | Surface        | 1.0          | 0.1              | 120        | 16.5         | 16.5          | 7.9        | 7.0   | 32.7         | 20.7     | 100.4          | 100.4           | 8.0            |       | 7.8         | _    | 10               | <del> </del>                          |                   |    |                       |                       | -                    | -                  | <u> </u>  |
| SR5A                  | Sunny       | Calm       | 18:11    | 5.1       | Middle         | 1.0<br>0.0   | 0.1<br>-         | 120<br>-   | 16.5<br>-    | _             | 7.9        |       | 32.7<br>-    |          | 100.3<br>-     | _               | 8.0<br>-       | 8.0   | 7.8<br>-    | 7.5  | 9                | 9                                     | -                 | -  | 816581                | 810713                |                      | -                  |           |
|                       |             |            |          |           | Bottom         | 0.0          | - 0.2            | -<br>123   | - 16.4       | 16.4          | - 7.8      | 7.8   | -<br>33.0    | 33.0     | -<br>99.2      | 99.2            | -<br>7.9       | 7.9   | -<br>7.2    |      | - 9              |                                       | -                 |    |                       |                       | -                    | -                  | - !       |
|                       |             |            |          |           |                | 4.1          | 0.2              | 126<br>129 | 16.4<br>16.3 |               | 7.8<br>7.8 |       | 33.0<br>32.1 |          | 99.2<br>99.8   |                 | 7.9<br>8.0     | 7.5   | 7.2<br>9.2  |      | 9<br>11          |                                       | -                 |    |                       |                       | -                    | -                  | <u> </u>  |
|                       |             |            |          |           | Surface        | 1.0<br>0.0   | 0.2              | 131        | 16.3<br>-    | 16.3          | 7.8        |       | 32.1         | 32.1     | 99.7<br>-      | 99.8            | 8.0            | 8.0   | 9.1         | _    | 11<br>-          | ļ                                     | -                 |    |                       |                       | -                    | -                  | 1         |
| SR6                   | Sunny       | Calm       | 18:35    | 4.5       | Middle         | 0.0          | -                | -          | -            | -             | -          | -     | -            | -        | -              | -               | -              |       | -           | 9.1  | -                | 11                                    | -                 | -  | 817883                | 814676                |                      | -                  |           |
|                       |             |            |          |           | Bottom         | 3.5<br>3.5   | 0.2<br>0.2       | 110<br>118 | 16.1<br>16.1 | 16.1          | 7.8<br>7.8 | 7.8   | 33.0<br>33.0 |          | 98.6<br>98.6   | 98.6            | 7.9<br>7.9     | 7.9   | 9.0<br>9.1  |      | 10<br>11         | <br>                                  | -                 |    |                       |                       | -                    | -                  |           |
|                       |             |            |          |           | Surface        | 1.0<br>1.0   | 0.3              | 97<br>100  | 18.2<br>18.2 | 18.2          | 7.9<br>7.9 |       | 29.6<br>29.6 | 29.6     | 95.4<br>95.4   | 95.4            | 7.5<br>7.5     | 7.5   | 2.6<br>2.6  | ╞    | 4 3              |                                       | -                 |    |                       |                       | -                    | -                  | -         |
| SR7                   | Fine        | Moderate   | 18:41    | 17.3      | Middle         | 8.7<br>8.7   | 0.3              | 101<br>110 | 18.2<br>18.2 | 18.2          | 7.9<br>7.9 | / 9 - | 29.6<br>29.6 |          | 95.2<br>95.2   | 95.2            | 7.5<br>7.5     | 1.5   | 2.9<br>2.9  | 2.7  | 4                | 6                                     | -                 | -  | 823634                | 823727                |                      | -                  |           |
|                       |             |            |          |           | Bottom         | 16.3<br>16.3 | 0.2              | 116<br>121 | 18.1<br>18.1 | 18.1          | 7.9        | 79    | 29.6<br>29.6 | 20.6     | 95.8<br>95.8   | 95.8            | 7.6<br>7.6     | 7.6   | 2.7         | F    | 9                | ł                                     | -                 |    |                       |                       | -                    | -                  | 1         |
|                       |             |            |          |           | Surface        | 1.0          | 0.7              | 180        | 19.0         | 19.0          | 7.9        | 7.0   | 27.6         | 27.6     | 98.5           | 98.5            | 7.8            |       | 7.0         |      | 8                |                                       | -                 |    |                       |                       | -                    | -                  | <u> </u>  |
| SR8                   | Fine        | Moderate   | 17:35    | 5.0       | Middle         | 1.0<br>0.0   | 0.8<br>-         | - 187      | 19.0<br>-    | -             | 7.9        | _     | 27.6<br>-    | _        | 98.4<br>-      | -               | 7.8            | 7.8   | 7.1<br>-    | 7.5  | 6<br>-           | 9                                     | -                 | _  | 820408                | 811598                | -                    | -                  |           |
| GHO                   | 1 110       | MOGELALE   | 17.00    | 0.0       |                | 0.0 4.0      | - 0.7            | -<br>194   | -<br>18.7    | 10.7          | -<br>7.9   | 7.0   | -<br>28.0    | 00.0     | -<br>97.2      | 07.0            | -<br>7.7       | 77    | -<br>7.9    | ,    | -<br>10          | , , , , , , , , , , , , , , , , , , , | -                 |    | 020400                | 011000                | -                    | -                  |           |
| DA: Denth-Ave         |             |            |          |           | Bottom         | 4.0          | 0.7              | 198        | 18.7         | 18.7          | 7.9        |       | 28.0         |          | 97.2           | 97.2            | 7.7            | 7.7   | 7.9         |      | 11               | ا <u></u> ا                           | -                 |    |                       |                       | -                    | -                  | 1         |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on21 February 17 21 February 17 during Mid-Flood Tide

| Water Qua             | lity Monit | oring Res | ults on  |           | 21 February 17 | during Mid   | I-Flood Ti       | de                   |              |                | -          |        | -            |           |                |                  |                     |            |       |                  |    |                   |    |                       |                       |                              |                   |
|-----------------------|------------|-----------|----------|-----------|----------------|--------------|------------------|----------------------|--------------|----------------|------------|--------|--------------|-----------|----------------|------------------|---------------------|------------|-------|------------------|----|-------------------|----|-----------------------|-----------------------|------------------------------|-------------------|
| Monitoring<br>Station | Weather    | Sea       | Sampling | Water     | Sampling De    | pth (m)      | Current<br>Speed | Current<br>Direction | Water Te     | mperature (°C) |            | рН     | Salin        | ity (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity  | (NTU) | Suspende<br>(mg) |    | Total All<br>(ppi | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(μg/L)           | Nickel (µg/L)     |
| Station               | Condition  | Condition | Time     | Depth (m) |                | -            | (m/s)            |                      | Value        | Average        |            | Averag |              | Average   |                | Average          | Value DA            | Value      | DA    | Value            | DA | Value             | DA | (Northing)            | (Easting)             | Value DA                     | Value DA          |
|                       |            |           |          |           | Surface        | 1.0          | 0.7              | 160<br>170           | 15.8<br>15.8 | 15.8           | 7.8<br>7.8 | 7.8    | 32.3<br>32.3 | 32.3      | 103.9<br>103.8 | 103.9            | 8.5<br>8.4          | 3.2<br>3.3 |       | 5<br>4           |    | 83<br>83          |    |                       |                       | <0.2<br><0.2                 | 1.1<br>0.9        |
| C1                    | Cloudy     | Rough     | 13:51    | 8.8       | Middle         | 4.4          | 0.7              | 126                  | 15.4         | 15.4           | 7.8        | 7.8    | 32.9         | 33.0      | 102.2          |                  | 8.3 8.4             | 4.6        | 4.9   | 4                | 4  | 84                | 84 | 815638                | 804244                | <0.2                         | 1.0 0.9           |
|                       |            |           |          |           | Bottom         | 4.4<br>7.8   | 0.7              | 134<br>142           | 15.4<br>15.2 | 15.2           | 7.8<br>7.8 | 7.8    | 33.0<br>33.6 | 33.6      | 102.2<br>102.6 | 102.7            | 8.4<br>8.4<br>8.4   | 4.7<br>6.7 |       | 4<br>5           |    | 84<br>85          |    |                       |                       | <0.2<br><0.2                 | 1.0<br>0.6        |
|                       |            |           |          |           |                | 7.8          | 0.7              | <u>151</u><br>265    | 15.2<br>19.4 |                | 7.8<br>8.0 |        | 33.6<br>27.0 |           | 102.7<br>108.8 |                  | 8.4 0.4<br>8.5      | 6.7<br>2.4 |       | 4                |    | 85<br>76          |    |                       |                       | <0.2<br><0.2                 | 0.6               |
|                       |            |           |          |           | Surface        | 1.0          | 1.0              | 269                  | 19.4         | 19.4           | 8.0        | 8.0    | 27.0         | 27.0      | 108.8          | 108.8            | 8.5 8.2             | 2.4        |       | 3                |    | 77                |    |                       |                       | <0.2                         | 2.4               |
| C2                    | Cloudy     | Rough     | 12:35    | 12.4      | Middle         | 6.2<br>6.2   | 0.8              | 250<br>263           | 18.7<br>18.7 | 18.7           | 8.0<br>8.0 | 8.0    | 28.3<br>28.3 | 28.3      | 100.1<br>100.1 | 100.1            | 7.9<br>7.9          | 3.2<br>3.2 | 2.9   | 3<br>3           | 3  | 82<br>81          | 81 | 825685                | 806953                | <0.2 <0.2 <0.2               | 2.4 2.3           |
|                       |            |           |          |           | Bottom         | 11.4<br>11.4 | 0.8              | 229<br>248           | 18.5<br>18.5 | 18.5           | 7.9<br>7.9 | 7.9    | 28.7<br>28.7 | 28.7      | 102.8<br>102.8 | 102.8            | 8.1<br>8.1 8.1      | 3.1<br>3.1 |       | 2<br>3           |    | 84<br>84          |    |                       |                       | <0.2<br><0.2                 | 2.1<br>2.1        |
|                       |            |           |          |           | Surface        | 1.0          | 0.7              | 248                  | 18.4         | 18.4           | 8.0        | 8.0    | 29.6         | 29.6      | 97.9           | 97.9             | 7.7                 | 2.1        |       | 4                |    | 79                |    |                       |                       | <0.2                         | 0.8               |
|                       |            |           |          |           |                | 1.0<br>5.7   | 0.7              | 268<br>252           | 18.4<br>18.1 |                | 8.0<br>8.0 |        | 29.6<br>29.9 |           | 97.9<br>94.8   |                  | 7.7 7.6             | 2.1<br>2.4 |       | 3                | _  | 79<br>83          |    |                       |                       | <0.2                         | 0.8               |
| C3                    | Cloudy     | Rough     | 14:54    | 11.4      | Middle         | 5.7          | 0.6              | 262                  | 18.1         | 18.1           | 8.0        | 8.0    | 29.9         | 29.9      | 94.8           | 94.8             | 7.5                 | 2.4        | 2.3   | 4                | 5  | 83                | 82 | 822096                | 817788                | <0.2                         | 0.7               |
|                       |            |           |          |           | Bottom         | 10.4<br>10.4 | 0.5              | 239<br>254           | 18.1<br>18.1 | 18.1           | 8.0<br>7.9 | 8.0    | 29.9<br>29.9 | 29.9      | 95.3<br>95.8   | 95.6             | 7.5 7.6             | 2.3<br>2.4 |       | 8 7              |    | 85<br>84          |    |                       |                       | <0.2<br><0.2                 | 0.8               |
|                       |            |           |          |           | Surface        | 1.0          | 0.6              | 224<br>236           | 15.6<br>15.6 | 15.6           | 7.8<br>7.8 | 7.8    | 32.8<br>32.8 | 32.8      | 103.2<br>103.2 | 103.2            | 8.4<br>8.4          | 2.5<br>2.5 |       | 4<br>5           |    | 80<br>80          |    |                       |                       | <0.2<br><0.2                 | 0.9               |
| IM1                   | Cloudy     | Rough     | 13:31    | 7.8       | Middle         | 3.9          | 0.5              | 211                  | 15.6         | 15.6           | 7.8        | 7.8    | 32.8         | 32.8      | 102.7          | 102.7            | 8.4 0.4             | 2.6        | 2.7   | 6                | 6  | 81                | 81 | 818343                | 806447                | <0.2                         | 1.1 1.0           |
|                       | cicacy     | . iougii  | 10101    |           |                | 3.9<br>6.8   | 0.5              | 226<br>197           | 15.5<br>15.5 |                | 7.8<br>7.8 |        | 32.8<br>32.9 |           | 102.7<br>102.7 |                  | 8.4<br>8.4          | 2.6<br>2.9 |       | 5<br>6           | Ũ  | 81<br>82          | 0. | 010010                |                       | <0.2<br><0.2                 | 1.0<br>0.9        |
|                       |            |           |          |           | Bottom         | 6.8          | 0.6              | 213                  | 15.5         | 15.5           | 7.8        | 7.8    | 32.9         | 32.9      | 102.8          | 102.8            | 8.4 0.4             | 2.9        |       | 7                |    | 82                |    |                       |                       | <0.2                         | 0.9               |
|                       |            |           |          |           | Surface        | 1.0<br>1.0   | 0.5<br>0.5       | 205<br>219           | 15.6<br>15.6 | 15.6           | 7.8<br>7.8 | 7.8    | 32.5<br>32.5 | 32.5      | 101.9<br>101.9 | 101.9            | 8.3<br>8.3<br>8.3   | 1.2<br>1.2 |       | 5<br>6           |    | 80<br>81          |    |                       |                       | <0.2<br><0.2                 | 1.2               |
| IM2                   | Cloudy     | Rough     | 13:25    | 8.4       | Middle         | 4.2          | 0.5              | 210<br>210           | 15.6<br>15.6 | 15.6           | 7.8<br>7.8 | 7.8    | 32.5<br>32.5 | 32.5      | 101.7<br>101.7 | 101.7            | 8.3<br>8.3          | 1.5<br>1.6 | 1.4   | 5<br>6           | 5  | 82<br>82          | 82 | 818855                | 806198                | <0.2 <0.2 <0.2               | 1.4 1.2           |
|                       |            |           |          |           | Bottom         | 7.4          | 0.5              | 203                  | 15.5         | 15.5           | 7.8        | 7.8    | 32.6         | 32.6      | 102.0          | 102.1            | 8.3 8.3             | 1.5        |       | 5                |    | 82                |    |                       |                       | <0.2                         | 1.1               |
|                       |            |           |          |           | Curtage        | 7.4          | 0.5              | 211<br>224           | 15.5<br>15.8 |                | 7.8<br>7.8 |        | 32.6<br>32.2 |           | 102.1<br>102.8 |                  | 8.3 0.0<br>8.4      | 1.5<br>0.9 |       | 5<br>6           |    | 82<br>81          |    |                       |                       | <0.2<br><0.2                 | 1.1               |
|                       |            |           |          |           | Surface        | 1.0<br>4.3   | 0.8              | 235<br>239           | 15.8<br>15.8 | 15.8           | 7.8<br>7.8 | 7.8    | 32.2<br>32.2 | 32.2      | 102.8<br>102.5 | 102.8            | 8.4<br>8.3 8.4      | 0.9        |       | 4                |    | 81<br>82          |    |                       |                       | <0.2<br><0.2                 | 1.4               |
| IM3                   | Cloudy     | Rough     | 13:14    | 8.5       | Middle         | 4.3          | 0.8              | 245                  | 15.8         | 15.8           | 7.8        | 7.8    | 32.2         | 32.2      | 102.5          | 102.5            | 8.4                 | 1.0        | 1.1   | 4                | 5  | 81                | 82 | 819395                | 806038                | <0.2                         | 1.4               |
|                       |            |           |          |           | Bottom         | 7.5<br>7.5   | 0.7              | 233<br>245           | 15.9<br>15.9 | 15.9           | 7.8        | 7.8    | 32.1<br>32.1 | 32.1      | 102.7<br>102.8 | 102.8            | 8.3<br>8.3          | 1.2<br>1.3 |       | 4<br>5           |    | 82<br>82          |    |                       |                       | <0.2<br><0.2                 | 1.1               |
|                       |            |           |          |           | Surface        | 1.0          | 0.8              | 239<br>249           | 15.7<br>15.7 | 15.7           | 7.8<br>7.8 | 7.8    | 32.1<br>32.1 | 32.1      | 103.4<br>103.4 | 103.4            | 8.4                 | 1.1        |       | 4                |    | 81                |    |                       |                       | <0.2                         | 1.2               |
| IM4                   | Cloudy     | Rough     | 13:04    | 8.1       | Middle         | 4.1          | 0.9              | 238                  | 15.7         | 15.7           | 7.8        | 7.8    | 32.1         | 32.1      | 103.0          | 103.0            | 8.4<br>8.4<br>8.4   | 1.1<br>1.1 | 1.1   | 5<br>6           | 6  | 81<br>82<br>82    | 82 | 819559                | 805038                | <0.2<br><0.2<br><0.2<br><0.2 | 1.1 1.2           |
| 1111-4                | Cloudy     | nough     | 10.04    | 0.1       |                | 4.1          | 0.8              | 245<br>229           | 15.7<br>15.6 |                | 7.8<br>7.8 |        | 32.1<br>32.2 |           | 103.0<br>102.6 |                  | 8.4<br>8.4          | 1.1<br>1.2 | 1.1   | 4 8              | 0  | 82<br>82          | 02 | 010000                | 000000                | <0.2<br><0.2                 | 1.2               |
|                       |            |           |          |           | Bottom         | 7.1          | 0.7              | 231                  | 15.6         | 15.6           | 7.8        | 7.8    | 32.2         | 32.2      | 102.5          | 102.0            | 8.4 8.4             | 1.1        |       | 10               |    | 83                |    |                       |                       | <0.2                         | 1.3               |
|                       |            |           |          |           | Surface        | 1.0<br>1.0   | 0.9              | 261<br>277           | 15.9<br>15.9 | 15.9           | 7.8<br>7.8 | 7.8    | 31.3<br>31.3 | 31.3      | 104.7<br>104.7 | 104.7            | 8.6<br>8.6<br>8.6   | 0.8<br>0.8 |       | 4<br>5           |    | 80<br>81          |    |                       |                       | <0.2<br><0.2                 | 1.5<br>1.5        |
| IM5                   | Cloudy     | Rough     | 12:53    | 6.8       | Middle         | 3.4<br>3.4   | 0.8              | 256<br>259           | 15.8<br>15.8 | 15.8           | 7.8<br>7.8 | 7.8    | 31.4<br>31.4 | 31.4      | 103.7<br>103.7 | 103.7            | 8.5<br>8.5          | 1.1<br>1.1 | 1.0   | 4<br>5           | 5  | 81<br>81          | 81 | 820544                | 804932                | <0.2 <0.2                    | 1.8 1.7           |
|                       |            |           |          |           | Bottom         | 5.8          | 0.9              | 250                  | 15.8         | 15.8           | 7.8        |        | 31.5         | 31.5      | 103.0          | 103.0            | 8.4 8.4             | 1.2        |       | 5                |    | 82                |    |                       |                       | <0.2                         | 1.7               |
|                       |            |           |          |           |                | 5.8          | 0.9              | 269<br>217           | 15.8<br>15.9 |                | 7.8<br>7.8 |        | 31.4<br>31.2 |           | 103.0<br>102.9 |                  | 8.4 8.4             | 1.2<br>1.5 |       | 5<br>3           |    | 82<br>83          |    |                       |                       | <0.2<br><0.2                 | 1.7               |
|                       |            |           |          |           | Surface        | 1.0<br>3.3   | 0.8              | 220<br>226           | 15.9<br>15.9 | 15.9           | 7.8        | 7.8    | 31.2<br>31.2 | 31.2      | 102.9<br>102.7 |                  | 8.4<br>8.4<br>8.4   | 1.5<br>1.7 |       | 4<br>3           |    | 83<br>83          |    |                       |                       | <0.2<br><0.2                 | 1.7               |
| IM6                   | Cloudy     | Rough     | 12:46    | 6.5       | Middle         | 3.3          | 0.9              | 230                  | 15.9         | 15.9           | 7.8<br>7.8 | 7.8    | 31.2         | 31.2      | 102.7          | 102.7            | 8.4                 | 1.7        | 1.8   | 4                | 4  | 84                | 84 | 821059                | 805839                | <0.2                         | 1.5               |
|                       |            |           |          |           | Bottom         | 5.5<br>5.5   | 0.8              | 235<br>247           | 16.0<br>16.0 | 16.0           | 7.8<br>7.8 | 7.8    | 31.2<br>31.2 | 31.2      | 102.5<br>102.5 |                  | 8.4<br>8.4<br>8.4   | 2.0<br>2.1 |       | 4                |    | 84<br>84          |    |                       |                       | <0.2<br><0.2                 | 1.6               |
|                       |            |           |          |           | Surface        | 1.0          | 1.0              | 216                  | 15.9         | 15.9           | 7.8        | 7.8    | 31.3         | 31.3      | 102.1          | 102.2            | 8.3                 | 1.2        |       | 4                |    | 82                |    |                       |                       | <0.2                         | 1.4               |
| 11.47                 | Cloudy     | Dough     | 10.97    | 0 1       | Middle         | 1.0<br>4.1   | 1.0<br>0.9       | 219<br>237           | 15.9<br>15.8 |                | 7.8<br>7.8 |        | 31.3<br>31.3 |           | 102.2<br>101.4 |                  | 8.4<br>8.3<br>8.3   | 1.2<br>1.7 | 1.6   | 3<br>3           | 4  | 83<br>84          | 84 | 801060                | 806900                | <0.2<br><0.2                 | 1.6<br>1.6<br>1.5 |
| IM7                   | Cloudy     | Rough     | 12:37    | 8.1       | iviluale       | 4.1          | 1.0<br>0.9       | 244<br>212           | 15.8<br>15.8 | 15.8           | 7.8        | 7.8    | 31.3<br>31.4 | 31.3      | 101.4<br>102.0 | 101.4            | 8.3<br>8.3          | 1.7<br>1.9 | 0.1   | 4                | 4  | 84<br>84<br>84    | 04 | 821362                | 806823                | <0.2<br><0.2<br><0.2         | 1.6<br>1.5        |
|                       |            |           |          |           | Bottom         | 7.1          | 0.9              | 232                  | 15.8         | 15.8           | 7.8<br>7.8 | 7.8    | 31.4         | 31.4      | 102.0          | 102.0            | 8.3                 | 1.8        |       | 5                |    | 85                |    |                       |                       | <0.2                         | 1.4               |
|                       | $ $ $\top$ |           |          |           | Surface        | 1.0          | 0.7              | 250<br>250           | 18.7<br>18.7 | 18.7           | 8.0<br>8.0 | 8.0    | 28.5<br>28.5 | 28.5      | 102.2<br>102.2 | 102.2            | 8.1<br>8.1          | 4.4<br>4.4 |       | 3                |    | 77<br>77          |    | _                     |                       | <0.2<br><0.2                 | 1.3<br>1.2        |
| IM8                   | Cloudy     | Rough     | 13:06    | 8.7       | Middle         | 4.4          | 0.6              | 243                  | 18.6         | 18.6           | 8.0        | 8.0    | 28.5         | 28.5      | 101.2          |                  | 8.0                 | 5.3        | 5.0   | 5                | 5  | 81                | 81 | 821712                | 807822                | <0.2                         | 1.2 1.2           |
|                       |            | 5         |          |           |                | 4.4          | 0.7              | 245<br>243           | 18.6<br>18.5 |                | 8.0<br>8.0 |        | 28.5<br>28.5 |           | 101.2<br>100.8 |                  | 8.0<br>8.0          | 5.3<br>5.4 |       | 6<br>4           |    | 81<br>84          |    |                       |                       | <0.2                         | 1.3               |
| DA: Dopth Ave         |            |           |          |           | Bottom         | 7.7          | 0.6              | 254                  | 18.5         | 18.5           | 8.0        | 8.0    | 28.5         | 28.5      | 100.8          | 100.8            | 8.0 8.0             | 5.4        |       | 5                |    | 84                |    |                       |                       | <0.2                         | 1.3               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on21 February 17 during 21 February 17 during Mid-Flood Tide

| Water Qua             | lity Monit | oring Resi | lits on  |           | 21 February 17 | during Mid-  | Flood I          | Ide                  |                      |               |                          |              |            |                |                  |                     |              |          |                  |           |          |       |                       |                       |                      |                   |
|-----------------------|------------|------------|----------|-----------|----------------|--------------|------------------|----------------------|----------------------|---------------|--------------------------|--------------|------------|----------------|------------------|---------------------|--------------|----------|------------------|-----------|----------|-------|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring<br>Station | Weather    | Sea        | Sampling | Water     | Sampling Dep   | th (m)       | Current<br>Speed | Current<br>Direction | r                    | nperature (°C | C) pH                    |              | nity (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity    |          | Suspende<br>(mg/ |           | (pp      | 5111) | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| otation               | Condition  | Condition  | Time     | Depth (m) |                | 1            | (m/s)            |                      | Value                | Average       | Value Average            |              | Average    |                | Average          | Value DA            | Value        | DA       | Value            | DA        | Value    | DA    | (Northing)            | (Easting)             | Value DA             | Value DA          |
|                       |            |            |          |           | Surface        | 1.0<br>1.0   | 0.7              | 253<br>260           | 18.7<br>18.7         | 18.7          | 8.0<br>8.0               | 28.6<br>28.6 | 28.6       | 102.7<br>102.7 | 102.7            | 8.1<br>8.1<br>8.1   | 3.9<br>3.9   | -        | 5<br>5           |           | 77<br>78 |       |                       |                       | <0.2<br><0.2         | 1.2<br>1.3        |
| IM9                   | Cloudy     | Rough      | 13:17    | 7.6       | Middle         | 3.8<br>3.8   | 0.7              | 255<br>275           | 18.7<br>18.7         | 18.7          | 8.0<br>8.0               | 28.6<br>28.6 | 28.6       | 102.1<br>102.1 | 102.1            | 8.0<br>8.0          | 4.8<br>4.8   | 4.4      | 4                | 5         | 82<br>81 | 81    | 822088                | 808806                | <0.2<br><0.2 <0.2    | 1.3<br>1.5        |
|                       |            |            |          |           | Bottom         | 6.6<br>6.6   | 0.8<br>0.8       | 228<br>234           | 18.7<br>18.7         | 18.7          | 8.0<br>8.0<br>8.0        | 28.6<br>28.6 | 00.0       | 101.6<br>101.6 | 101.6            | 8.0<br>8.0          | 4.4          |          | 6<br>5           |           | 84<br>84 |       |                       |                       | <0.2<br><0.2         | 1.2               |
|                       |            |            |          |           | Surface        | 1.0<br>1.0   | 0.9              | 262<br>277           | 18.7<br>18.7<br>18.7 | 18.7          | 8.0<br>8.0<br>8.0        | 28.7<br>28.7 |            | 102.3<br>102.3 | 102.3            | 8.1<br>8.1          | 3.4<br>3.4   |          | 4 4              |           | 78       |       |                       |                       | <0.2<br><0.2<br><0.2 | 1.1<br>1.2        |
| IM10                  | Cloudy     | Rough      | 13:29    | 7.5       | Middle         | 3.8          | 0.9              | 256                  | 18.6                 | 18.6          | 8.0                      | 28.7         |            | 101.4          | 101.4            | 8.0 8.1             | 4.1          | 4.3      | 6                | 5         | 79<br>82 | 81    | 822238                | 809826                | <0.2                 | 1.1 1.1           |
|                       | ,          | 0          |          |           | Bottom         | 3.8<br>6.5   | 1.0<br>0.8       | 281<br>250           | 18.6<br>18.6         | 18.6          | 8.0                      | 28.7<br>28.7 |            | 101.4<br>100.7 | 100.7            | 8.0<br>7.9<br>7.9   | 4.1<br>5.4   |          | 5<br>7           |           | 82<br>84 |       |                       |                       | <0.2                 | 1.2               |
|                       |            |            |          |           | Surface        | 6.5<br>1.0   | 0.8              | 250<br>260           | 18.6<br>18.7         | 18.7          | 8.0 8.0<br>8.0 8.0       | 28.7<br>28.7 | 28.7       | 100.7<br>100.4 | 100.4            | 7.9 7.3<br>7.9      | 5.4<br>4.2   |          | 6<br>2           |           | 83<br>80 |       |                       |                       | <0.2<br><0.2         | 1.1<br>1.0        |
|                       |            | <b>_</b>   | 10.10    | 7.0       |                | 1.0<br>4.0   | 0.8              | 273<br>259           | 18.7<br>18.6         |               | 8.0                      | 28.7<br>28.8 |            | 100.4<br>99.7  |                  | 7.9<br>7.9<br>7.9   | 4.2<br>5.1   |          | 3<br>5           |           | 79<br>82 |       | 001100                | 0/0550                | <0.2                 | 1.0<br>1.0        |
| IM11                  | Cloudy     | Rough      | 13:42    | 7.9       | Middle         | 4.0          | 0.7              | 279<br>251           | 18.6<br>18.6         | 18.6          | 8.0<br>8.0<br>8.0        | 28.8<br>28.8 | 28.8       | 99.7<br>99.3   | 99.7             | 7.9                 | 5.1<br>6.4   | 5.3      | 4                | 4         | 81<br>84 | 82    | 821499                | 810550                | <0.2<br><0.2<br><0.2 | 1.0<br>1.0<br>1.0 |
|                       |            |            |          |           | Bottom         | 6.9<br>1.0   | 0.6              | 267<br>260           | 18.6<br>18.7         | 18.6          | 8.0                      | 28.8         | 28.8       | 99.3           | 99.3             | 7.8                 | 6.6          |          | 4 6              |           | 84       |       |                       |                       | <0.2                 | 1.0               |
|                       |            |            |          |           | Surface        | 1.0          | 0.7              | 263                  | 18.7                 | 18.7          | 7.9<br>7.9<br>7.9        | 28.7<br>28.7 | 20.7       | 98.3<br>98.3   | 98.3             | 7.7<br>7.7<br>7.7   | 4.4          | -        | 5                |           | 78<br>78 |       |                       |                       | <0.2<br><0.2         | 1.2<br>1.1        |
| IM12                  | Cloudy     | Rough      | 13:56    | 7.9       | Middle         | 4.0<br>4.0   | 0.6<br>0.6       | 267<br>289           | 18.6<br>18.6         | 18.6          | 7.9<br>7.9<br>7.9        | 28.7<br>28.7 | 28.7       | 97.1<br>97.1   | 97.1             | 7.7                 | 5.0<br>5.0   | 5.0      | 6<br>6           | 6         | 82<br>82 | 81    | 821173                | 811504                | <0.2<br><0.2 <0.2    | 1.1               |
|                       |            |            |          |           | Bottom         | 6.9<br>6.9   | 0.6<br>0.6       | 257<br>276           | 18.5<br>18.5         | 18.5          | 7.9<br>7.9<br>7.9        | 29.0<br>29.0 | 29.0       | 96.7<br>96.7   | 96.7             | 7.6<br>7.6<br>7.6   | 5.7<br>5.7   | -        | 5<br>7           |           | 84<br>84 |       |                       |                       | <0.2<br><0.2         | 1.0<br>0.9        |
|                       |            |            |          |           | Surface        | 1.0          | 0.3              | 144<br>155           | 18.5<br>18.5         | 18.5          | 8.0<br>8.0               | 29.2<br>29.2 | 29.2       | 100.4<br>100.2 | 100.3            | 7.9<br>7.9<br>7.9   | 4.4<br>4.5   | -        | 6<br>5           |           | 79<br>78 |       |                       |                       | <0.2<br><0.2         | 0.9 0.8           |
| SR2                   | Cloudy     | Rough      | 14:26    | 4.6       | Middle         | 2.3<br>2.3   | -                |                      | -                    | -             |                          | -            | -          | -              | -                | - 7.9               | -            | 4.5      | -                | 6         | -        | 82    | 821457                | 814164                | - <0.2               | - 0.9             |
|                       |            |            |          |           | Bottom         | 3.6<br>3.6   | 0.3<br>0.3       | 148<br>154           | 18.5<br>18.5         | 18.5          | 7.9<br>7.9<br>7.9        | 29.2<br>29.2 | 29.2       | 100.0<br>100.0 | 100.0            | 7.9<br>7.9<br>7.9   | 4.5<br>4.5   | -        | 7                |           | 85<br>85 |       |                       |                       | <0.2<br><0.2         | 1.0<br>1.0        |
|                       |            |            |          |           | Surface        | 1.0<br>1.0   | 0.9              | 238<br>250           | 18.8<br>18.8         | 18.8          | 8.0<br>8.0<br>8.0        | 28.4<br>28.4 | 28.4       | 103.2<br>103.2 | 103.2            | 8.1                 | 4.1          | <u> </u> | 5                |           | -        |       |                       |                       | -                    | -                 |
| SR3                   | Cloudy     | Rough      | 12:58    | 9.1       | Middle         | 4.6          | 0.9              | 248                  | 18.8                 | 18.8          | 8.0<br>8.0<br>8.0        | 28.4         | 28.4       | 102.7<br>102.7 | 102.7            | 8.1 8.1             | 4.3          | 4.3      | 5                | 5         | -        |       | 822136                | 807578                |                      | · .               |
|                       |            |            |          |           | Bottom         | 8.1          | 1.0<br>0.9       | 266<br>245           | 18.8<br>18.8         | 18.8          | 8.0 8.0                  | 28.4<br>28.4 | 28.4       | 102.4          | 102.4            | 8.1<br>8.1<br>8.1   | 4.3<br>4.6   |          | 5<br>5           |           | -        |       |                       |                       | -                    | -                 |
|                       |            |            |          |           | Surface        | 8.1          | 0.9              | 253<br>238           | 18.8<br>16.5         | 16.5          | 8.0<br>7.8<br>7.8        | 28.4<br>32.0 |            | 102.4<br>101.9 | 101.9            | 8.1 0.1<br>8.2      | 4.6<br>5.5   |          | 6<br>10          |           | -        |       |                       |                       | -                    | -                 |
| SR4A                  | Cloudy     | Moderate   | 14:14    | 8.9       | Middle         | 1.0<br>4.5   | 0.5              | 257<br>230           | 16.5<br>16.4         | 16.4          | 7.8 7.8                  | 32.0<br>32.1 | 22.1       | 101.9<br>101.8 | 101.8            | 8.2<br>8.2<br>8.2   | 6.1          | 6.6      | 10<br>10         | 11        | -        |       | 817181                | 807828                | -                    | -                 |
| 011477                | Cloudy     | Moderate   | 14.14    | 0.0       |                | 4.5<br>7.9   | 0.3              | 248<br>233           | 16.4<br>16.2         | 16.2          | 7.8                      | 32.1<br>32.2 | 32.2       | 101.8<br>102.4 |                  | 8.2<br>8.3          | 6.1<br>8.1   | 0.0      | 10<br>12         |           | -        |       | 017101                | 007020                | -                    | -                 |
|                       |            |            |          |           | Bottom         | 7.9<br>1.0   | 0.4              | 244<br>247           | 16.2<br>16.4         |               | 7.8<br>7.8<br>7.8<br>7.8 | 32.2<br>31.7 |            | 102.4<br>104.1 | 102.4            | 8.3<br>8.4          | 8.2<br>4.3   |          | 12<br>10         |           | -        |       |                       |                       | -                    |                   |
|                       |            |            |          |           | Surface        | 1.0<br>2.6   | 0.2              | 259                  | 16.4                 | 16.4          | 7.8 7.8                  | 31.7         | 31.7       | 104.1<br>-     | 104.1            | 8.4 8.4             | 4.3          | -        | 10               |           | -        |       |                       |                       | -                    | -                 |
| SR5A                  | Cloudy     | Moderate   | 14:33    | 5.2       | Middle         | 2.6<br>4.2   | - 0.2            | - 234                | -<br>16.4            | -             | 7.8 7.0                  | -<br>31.7    | -          | -<br>104.2     | -                | - 8.4 0.4           | - 4.3        | 4.3      | -<br>12          | 12        | -        | -     | 816602                | 810704                |                      | -                 |
|                       |            |            |          |           | Bottom         | 4.2          | 0.2              | 242                  | 16.4                 | 16.4          | 7.8                      | 31.7         | 31.7       | 104.3          | 104.3            | 8.4 8.4             | 4.4          |          | 14               |           | -        |       |                       |                       | -                    | -                 |
|                       |            |            |          |           | Surface        | 1.0<br>1.0   | 0.3<br>0.3       | 222<br>226           | 16.1<br>16.1         | 16.1          | 7.8<br>7.8<br>7.8        | 31.8<br>31.8 | 31.8       | 102.0<br>102.0 | 102.0            | 8.3<br>8.3<br>8.3   | 19.5<br>19.5 |          | 28<br>28         |           | -        |       |                       |                       | -                    | -                 |
| SR6                   | Cloudy     | Moderate   | 14:58    | 4.8       | Middle         | 2.4<br>2.4   | -                | -                    | -                    | -             |                          | -            | -          | -              | -                | -                   | -            | 19.4     | -                | <u>28</u> | -        |       | 817902                | 814652                |                      |                   |
|                       |            |            |          |           | Bottom         | 3.8<br>3.8   | 0.2              | 198<br>198           | 16.1<br>16.1         | 16.1          | 7.8<br>7.8<br>7.8        | 31.8<br>31.8 | 31.8       | 102.4<br>102.5 | 102.5            | 8.3<br>8.3          | 19.2<br>19.5 | -        | 29<br>27         |           | -        | -     |                       |                       | -                    | -                 |
|                       |            |            |          |           | Surface        | 1.0<br>1.0   | 0.2              | 205<br>224           | 18.2<br>18.2         | 18.2          | 8.0<br>8.0<br>8.0        | 29.9<br>29.9 | 29.9       | 96.1<br>96.1   | 96.1             | 7.6<br>7.6 7.6      | 2.3<br>2.3   |          | 6<br>4           |           | -        |       |                       |                       | -                    | -                 |
| SR7                   | Cloudy     | Moderate   | 15:38    | 16.2      | Middle         | 8.1<br>8.1   | 0.2              | 116<br>124           | 18.1<br>18.1         | 18.1          | 8.0<br>8.0<br>8.0        | 30.0<br>30.0 | 30.0       | 95.6<br>95.6   | 95.6             | 7.6<br>7.6<br>7.6   | 2.5<br>2.5   | 2.4      | 5<br>5           | 6         | -        | -     | 823625                | 823743                |                      |                   |
|                       |            |            |          |           | Bottom         | 15.2<br>15.2 | 0.2              | 159<br>169           | 18.0<br>18.0         | 18.0          | 8.0<br>8.0<br>8.0        | 30.1<br>30.1 | 30.1       | 95.8<br>95.8   | 95.8             | 7.6<br>7.6<br>7.6   | 2.4          |          | 9                |           | -        |       |                       |                       | -                    | -                 |
|                       |            |            |          |           | Surface        | 1.0          | 0.3              | 229                  | 18.8                 | 18.8          | 7.9<br>7.9<br>7.9        | 28.8<br>28.8 | 28.8       | 97.7<br>97.7   | 97.7             | 7.7                 | 5.9          |          | 10               |           | -        |       |                       |                       | -                    | -                 |
| SR8                   | Cloudy     | Rough      | 14:06    | 5.5       | Middle         | 1.0<br>2.8   | 0.3<br>-         | - 230                | 18.8<br>-            | -             |                          | -            |            | 97.7           | -                | 7.7 7.7             | 5.9<br>-     | 5.9      | 12<br>-          | 11        | -        |       | 820413                | 811612                |                      |                   |
| _                     |            | 5          |          |           | Bottom         | 2.8<br>4.5   | - 0.3            | -<br>219             | - 18.6               | 18.6          | -<br>7.9<br>7.9<br>7.9   | -<br>28.8    | 28.8       | -<br>97.7      | 97.7             | -<br>7.7<br>        | -<br>5.9     |          | -<br>11          |           | -        |       | -                     |                       | -                    | -                 |
| DA: Depth-Aver        |            |            |          |           | Dottoill       | 4.5          | 0.3              | 230                  | 18.6                 | 10.0          | 7.9                      | 28.8         | 20.0       | 97.7           | 51.1             | 7.7                 | 5.9          |          | 12               |           | -        |       |                       |                       |                      | -                 |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on21 February 17 21 February 17 during Mid-Ebb tide

| Water Qua      | lity Monite | oring Resi | ilts on  |           | 21 February 17 | during Mid   |                  |            |              |               |            |         |              | 1       |                | -                |                     | 1          |       |                  |    |                 |    |                       | 1                     |                      |                   |
|----------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|----------------|------------------|---------------------|------------|-------|------------------|----|-----------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring     | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | nperature (°C | ;)         | рН      | Salinit      | y (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity( | (NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| Station        | Condition   | Condition  | Time     | Depth (m) |                | x 7          | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average | Value          | Average          | Value DA            | Value      | DA    | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA             | Value DA          |
|                |             |            |          |           | Surface        | 1.0          | 0.5              | 191<br>200 | 15.7<br>15.7 | 15.7          | 7.9<br>7.9 | 7.9     | 30.4<br>30.4 | 30.4    | 104.5<br>104.5 | 104.5            | 8.6<br>8.6          | 2.3<br>2.4 |       | 5<br>5           |    | 83<br>83        |    |                       |                       | <0.2<br><0.2         | 1.4<br>1.3        |
| C1             | Cloudy      | Moderate   | 10:18    | 8.6       | Middle         | 4.3          | 0.5              | 185        | 15.7         | 15.7          | 7.9<br>7.9 | 7.9     | 30.5<br>30.5 | 30.5    | 103.4<br>103.4 | 103.4            | 8.5 8.6             | 2.7<br>2.7 | 3.4   | 6                | 6  | 84              | 84 | 815631                | 804240                | <0.2                 | 1.5 1.3           |
|                |             |            |          |           | Bottom         | 7.6          | 0.6<br>0.5       | 185<br>173 | 15.7<br>15.0 | 15.0          | 7.9        | 7.9     | 32.3         | 32.3    | 100.3          | 100.4            | 8.5<br>8.3<br>8.3   | 5.1        |       | 6<br>7           |    | 84<br>85        |    |                       |                       | <0.2<br><0.2         | 1.4<br>0.9        |
|                |             |            |          |           |                | 7.6          | 0.6              | 173<br>259 | 15.0<br>19.2 |               | 7.9<br>8.0 |         | 32.3<br>27.2 |         | 100.4<br>105.4 |                  | 8.3 0.5<br>8.3      | 5.0<br>2.4 |       | 7<br>5           |    | 85<br>77        |    |                       |                       | <0.2<br><0.2         | 1.1<br>2.1        |
|                |             |            |          |           | Surface        | 1.0<br>5.7   | 0.5              | 268<br>256 | 19.2<br>18.7 | 19.2          | 8.0        | 8.0     | 27.2<br>28.0 | 27.2    | 105.4<br>98.4  | 105.4            | 8.3<br>7.8 8.1      | 2.4<br>2.8 |       | 4                |    | 77<br>81        |    |                       |                       | <0.2<br><0.2         | 2.1<br>2.0        |
| C2             | Cloudy      | Moderate   | 11:41    | 11.4      | Middle         | 5.7          | 0.4              | 268        | 18.7         | 18.7          | 8.0<br>8.0 | 8.0     | 28.0         | 28.0    | 98.4           | 98.4             | 7.8                 | 2.8        | 2.9   | 6                | 5  | 82              | 81 | 825681                | 806945                | <0.2                 | 2.2               |
|                |             |            |          |           | Bottom         | 10.4<br>10.4 | 0.2              | 227<br>245 | 18.4<br>18.4 | 18.4          | 7.9<br>7.9 | 7.9     | 28.9<br>28.9 | 28.9    | 97.0<br>97.0   | 97.0             | 7.7 7.7             | 3.5<br>3.5 |       | 4 4              |    | 84<br>84        |    |                       |                       | <0.2<br><0.2         | 2.3<br>2.2        |
|                |             |            |          |           | Surface        | 1.0          | 0.3              | 244<br>244 | 18.4<br>18.4 | 18.4          | 7.9<br>7.9 | 7.9     | 29.5<br>29.5 | 29.5    | 96.7<br>96.7   | 96.7             | 7.6                 | 2.1<br>2.1 |       | 3                |    | 80<br>79        |    |                       |                       | <0.2<br><0.2         | 1.0               |
| C3             | Cloudy      | Moderate   | 09:35    | 13.0      | Middle         | 6.5          | 0.2              | 218        | 18.3         | 18.3          | 7.9        | 7.9     | 29.5<br>29.5 | 29.5    | 96.0           | 96.0             | 7.6                 | 2.0        | 2.1   | 4                | 4  | 82              | 82 | 822114                | 817803                | <0.2<br><0.2<br><0.2 | 1.0 1.0           |
|                |             |            |          |           | Bottom         | 6.5<br>12.0  | 0.2              | 219<br>220 | 18.3<br>18.2 | 18.2          | 7.9<br>7.9 | 7.9     | 29.8         | 29.8    | 96.0<br>95.3   | 95.3             | 7.6<br>7.5<br>7.5   | 2.0<br>2.1 |       | 3<br>5           |    | 83<br>85        |    |                       |                       | <0.2                 | 1.1<br>0.9        |
|                |             |            |          |           |                | 12.0<br>1.0  | 0.2              | 234<br>196 | 18.2<br>15.5 |               | 7.9<br>7.8 |         | 29.8<br>31.7 |         | 95.3<br>102.3  |                  | 7.5 7.3<br>8.4      | 2.1<br>2.6 |       | 3<br>6           |    | 84<br>80        |    |                       |                       | <0.2<br><0.2         | 1.1               |
|                |             |            |          |           | Surface        | 1.0<br>3.7   | 0.3              | 202<br>178 | 15.5<br>15.5 | 15.5          | 7.8<br>7.8 | 7.8     | 31.7<br>31.7 | 31.7    | 102.2<br>101.3 | 102.3            | 8.4<br>8.3 8.4      | 2.7<br>3.1 |       | 6<br>6           |    | 80<br>81        |    |                       |                       | <0.2<br><0.2         | 1.3<br>1.0        |
| IM1            | Cloudy      | Moderate   | 10:40    | 7.3       | Middle         | 3.7          | 0.3              | 194        | 15.5         | 15.5          | 7.8        | 7.8     | 31.7         | 31.7    | 101.2          | 101.3            | 8.3                 | 3.1        | 3.2   | 4                | 6  | 81              | 81 | 818349                | 806451                | <0.2                 | 1.0               |
|                |             |            |          |           | Bottom         | 6.3<br>6.3   | 0.3              | 166<br>167 | 15.2<br>15.2 | 15.2          | 7.8<br>7.8 | 7.8     | 32.2<br>32.1 | 32.2    | 100.7<br>100.7 | 100.7            | 8.3<br>8.3          | 3.8<br>3.7 |       | 7<br>9           |    | 81<br>82        |    |                       |                       | <0.2<br><0.2         | 0.9<br>0.8        |
|                |             |            |          |           | Surface        | 1.0          | 0.3              | 208<br>225 | 15.5<br>15.5 | 15.5          | 7.8<br>7.8 | 7.8     | 31.7<br>31.7 | 31.7    | 103.2<br>103.2 | 103.2            | 8.5<br>8.5          | 1.9<br>1.9 |       | 4                |    | 81<br>81        |    |                       |                       | <0.2<br><0.2         | 1.0               |
| IM2            | Cloudy      | Moderate   | 10:47    | 8.3       | Middle         | 4.2          | 0.3              | 192        | 15.5<br>15.5 | 15.5          | 7.8        | 7.8     | 31.7<br>31.7 | 31.7    | 102.2<br>102.2 | 102.2            | 8.4<br>8.4          | 2.3<br>2.3 | 2.4   | 8                | 6  | 82<br>82        | 82 | 818846                | 806190                | <0.2<br><0.2<br><0.2 | 1.3 1.1           |
|                |             |            |          |           | Bottom         | 7.3          | 0.3<br>0.2       | 194<br>156 | 15.4         | 15.4          | 7.8        | 7.8     | 31.9         |         | 101.0          | 101.0            | 8.3 8.3             | 3.0        |       | 6                |    | 82              |    |                       |                       | <0.2                 | 1.1<br>1.0        |
|                |             |            |          |           | Surface        | 7.3          | 0.2              | 160<br>217 | 15.4<br>15.6 | 15.6          | 7.8<br>7.8 |         | 31.9<br>31.5 |         | 101.0<br>102.9 | 102.9            | 8.3 0.5<br>8.4      | 2.9<br>1.3 |       | 6<br>5           |    | 82<br>82        |    |                       |                       | <0.2<br><0.2         | 0.9               |
|                |             |            |          |           |                | 1.0<br>4.1   | 0.9              | 233<br>218 | 15.6<br>15.6 |               | 7.8<br>7.9 | 7.8     | 31.5<br>31.5 |         | 102.9<br>102.5 |                  | 8.4<br>8.4<br>8.4   | 1.3<br>1.3 |       | 5<br>5           |    | 83<br>83        |    |                       |                       | <0.2<br><0.2         | 1.1               |
| IM3            | Cloudy      | Rough      | 10:55    | 8.1       | Middle         | 4.1          | 0.7              | 218        | 15.6         | 15.6          | 7.9        | 7.9     | 31.5         | 31.5    | 102.4          | 102.5            | 8.4                 | 1.3        | 1.6   | 7                | 6  | 83              | 83 | 819428                | 805999                | <0.2                 | 1.1               |
|                |             |            |          |           | Bottom         | 7.1<br>7.1   | 0.7              | 198<br>206 | 15.5<br>15.6 | 15.6          | 7.9<br>7.9 | 7.9     | 31.7<br>31.7 | 31.7    | 100.7<br>100.7 | 100.7            | 8.3<br>8.3<br>8.3   | 2.1<br>2.1 |       | 6<br>6           |    | 84<br>84        |    |                       |                       | <0.2<br><0.2         | 1.0<br>1.1        |
|                |             |            |          |           | Surface        | 1.0          | 0.9              | 228<br>246 | 15.7<br>15.7 | 15.7          | 7.9<br>7.9 | 7.9     | 31.5<br>31.5 | 31.5    | 104.3<br>104.3 | 104.3            | 8.6<br>8.6          | 1.4<br>1.5 |       | 5<br>4           |    | 80<br>81        |    |                       |                       | <0.2<br><0.2         | 1.1<br>1.0        |
| IM4            | Cloudy      | Rough      | 11:05    | 7.7       | Middle         | 3.9<br>3.9   | 0.8              | 226<br>235 | 15.6<br>15.6 | 15.6          | 7.9<br>7.9 | 7.9     | 31.5<br>31.5 | 31.5    | 104.0<br>104.0 | 104.0            | 8.5<br>8.5          | 1.5<br>1.5 | 1.5   | 6<br>6           | 5  | 81<br>82        | 81 | 819558                | 805033                | <0.2<br><0.2 <0.2    | 1.1<br>1.0        |
|                |             |            |          |           | Bottom         | 6.7          | 0.8              | 223        | 15.5         | 15.6          | 7.8        | 7.8     | 31.7         | 31.7    | 103.5          | 103.5            | 8.5 8.5             | 1.5        |       | 5                |    | 82              |    |                       |                       | <0.2                 | 0.9               |
|                |             |            |          |           | Surface        | 6.7<br>1.0   | 0.9<br>0.7       | 224<br>235 | 15.6<br>15.7 | 15.7          | 7.8<br>7.8 | 7.8     | 31.7<br>31.2 | 31.2    | 103.5<br>104.0 | 104.0            | 8.5 0.5<br>8.5      | 1.5<br>0.8 |       | 5<br>4           |    | 82<br>79        |    |                       |                       | <0.2<br><0.2         | 1.1<br>1.5        |
|                |             |            |          |           |                | 1.0          | 0.7              | 256<br>238 | 15.7<br>15.7 |               | 7.8<br>7.8 |         | 31.2<br>31.2 |         | 104.0<br>102.9 |                  | 8.5<br>8.4 8.5      | 0.8        |       | 2<br>3           |    | 80<br>80        |    | 000510                |                       | <0.2                 | 1.3               |
| IM5            | Cloudy      | Rough      | 11:13    | 6.8       | Middle         | 3.4<br>5.8   | 0.7              | 252<br>211 | 15.7<br>15.7 | 15.7          | 7.8<br>7.8 | 7.8     | 31.2         |         | 102.9<br>101.8 | 102.9            | 8.4<br>8.4          | 1.2<br>1.1 | 1.0   | 4                | 4  | 80<br>81        | 80 | 820549                | 804924                | <0.2<br><0.2<br><0.2 | 1.0<br>1.4<br>1.3 |
|                |             |            |          |           | Bottom         | 5.8          | 1.0              | 229        | 15.7         | 15.7          | 7.8        | 7.8     | 31.3<br>31.3 | 31.3    | 101.9          | 101.9            | 8.4 0.4             | 1.1        |       | 5                |    | 81              |    |                       |                       | <0.2                 | 1.4               |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.7              | 243<br>253 | 15.9<br>15.9 | 15.9          | 7.8<br>7.8 | 7.8     | 30.7<br>30.7 | 30.7    | 104.7<br>104.7 | 104.7            | 8.6<br>8.6<br>8.6   | 1.1<br>1.1 |       | 4<br>5           |    | 82<br>82        |    |                       |                       | <0.2<br><0.2         | 1.5<br>1.4        |
| IM6            | Cloudy      | Rough      | 11:28    | 6.2       | Middle         | 3.1<br>3.1   | 0.6              | 237<br>241 | 15.9<br>15.9 | 15.9          | 7.8<br>7.8 | 7.8     | 30.7<br>30.7 | 30.7    | 103.5<br>103.5 | 103.5            | 8.5<br>8.5          | 1.2<br>1.2 | 1.5   | 5<br>4           | 5  | 83<br>83        | 83 | 821062                | 805829                | <0.2<br><0.2<br><0.2 | 1.6<br>1.4        |
|                |             |            |          |           | Bottom         | 5.2          | 0.6              | 229        | 15.7         | 15.8          | 7.8        | 7.8     | 31.2<br>31.1 | 31.2    | 102.0<br>102.0 | 102.0            | 8.4 8.4             | 2.3<br>2.1 |       | 4                |    | 84              |    |                       |                       | <0.2                 | 1.4<br>1.6        |
|                |             |            |          |           | Surface        | 5.2          | 0.6              | 241<br>229 | 15.8<br>15.9 | 15.9          | 7.8        | 7.8     | 31.0         | 21.0    | 102.1          | 102.1            | 8.4 0.4<br>8.4      | 0.7        |       | 6                |    | 84<br>83        |    |                       |                       | <0.2                 | 1.3               |
| 11.47          | Cloudy      | Doursh     | 11.40    | 0.0       |                | 1.0<br>4.0   | 0.9              | 238<br>224 | 15.9<br>15.9 |               | 7.8<br>7.8 |         | 31.0<br>31.1 |         | 102.1<br>101.4 |                  | 8.4<br>8.3 8.4      | 0.7        | 1 4   | 3 4              | A  | 83<br>83        | 04 | 001051                | 006000                | <0.2<br><0.2         | 1.3<br>1.4        |
| IM7            | Cloudy      | Rough      | 11:40    | 8.0       | Middle         | 4.0 7.0      | 0.8              | 224<br>226 | 15.9<br>15.7 | 15.9          | 7.8<br>7.8 | 7.8     | 31.1<br>31.4 | 31.1    | 101.4<br>100.9 | 101.4            | 8.3                 | 1.2<br>2.4 | 1.4   | 3                | 4  | 84<br>84        | 84 | 821351                | 806839                | <0.2<br><0.2<br><0.2 | 1.4<br>1.4        |
|                |             |            |          |           | Bottom         | 7.0          | 0.7              | 227        | 15.7         | 15.7          | 7.8        | 7.8     | 31.4         | 31.4    | 101.0          | 101.0            | 8.3 0.3             | 2.3        |       | 4                |    | 85              |    |                       |                       | <0.2                 | 1.3               |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.5              | 220<br>224 | 18.7<br>18.7 | 18.7          | 8.0<br>8.0 | 8.0     | 28.1<br>28.1 | 28.1    | 103.3<br>103.3 | 103.3            | 8.2<br>8.2<br>8.1   | 3.8<br>3.8 |       | 6<br>4           |    | 77<br>77        |    |                       |                       | <0.2<br><0.2         | 1.6<br>1.5        |
| IM8            | Cloudy      | Moderate   | 11:14    | 8.2       | Middle         | 4.1          | 0.5              | 230<br>248 | 18.7<br>18.7 | 18.7          | 8.0<br>8.0 | 8.0     | 28.1<br>28.1 | 28.1    | 101.7<br>101.6 | 101.7            | 8.0<br>8.0          | 4.1<br>4.1 | 4.3   | 4<br>5           | 5  | 82<br>82        | 81 | 821691                | 807856                | <0.2<br><0.2 <0.2    | 1.4<br>1.4<br>1.5 |
|                |             |            |          |           | Bottom         | 7.2          | 0.6              | 183        | 18.4         | 18.4          | 8.0        | 8.0     | 28.3<br>28.3 | 28.3    | 100.4          | 100.4            | 8.0 8.0             | 4.9        |       | 4 4              |    | 84              |    |                       |                       | <0.2                 | 1.4<br>1.5        |
| DA: Depth-Aver |             |            |          |           |                | 7.2          | 0.6              | 199        | 18.4         |               | 8.0        |         | 20.3         |         | 100.4          |                  | 8.0                 | 4.9        |       | 4                |    | 84              |    |                       |                       | <0.2                 | I.3               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on21 February 17 21 February 17 during Mid-Ebb tide

| Image   | Water Qua | ity Monite | oring Resu | ults on  |           | 21 February 17 | during Mid |                  |     | •            |               |            |         | •       |          |              |         |                     |           |       |        |    |    |    |            |           | <b></b>            |               |
|---|-----------|------------|------------|----------|-----------|----------------|------------|------------------|-----|--------------|---------------|------------|---------|---------|----------|--------------|---------|---------------------|-----------|-------|--------|----|----|----|------------|-----------|--------------------|---------------|
| ○        ○        ○        ○        ○   |           | Weather    | Sea        | Sampling | Water     | Sampling Dep   | oth (m)    | Current<br>Speed |     | Water Ter    | nperature (°C | ;)         | рН      | Salinit | ty (ppt) |              |         | Dissolved<br>Oxygen | Turbidity | (NTU) |        |    |    | -  |            |           | Chromium<br>(µg/L) | Nickel (µg/L) |
| Norm         Norm <th< td=""><td>Station</td><td>Condition</td><td>Condition</td><td>Time</td><td>Depth (m)</td><td></td><td></td><td></td><td></td><td></td><td>Average</td><td></td><td>Average</td><td></td><td>Average</td><td></td><td>Average</td><td></td><td></td><td>DA</td><td>Value</td><td>DA</td><td></td><td>DA</td><td>(Northing)</td><td>(Easting)</td><td></td><td></td></th<>   | Station   | Condition  | Condition  | Time     | Depth (m) |                |            |                  |     |              | Average       |            | Average |         | Average  |              | Average |                     |           | DA    | Value  | DA |    | DA | (Northing) | (Easting) |                    |               |
|   |           |            |            |          |           | Surface        |            |                  |     |              | 18.6          |            | 8.0     |         | 28.3     |              | 100.8   | 8.0                 |           |       |        |    |    |    |            |           |                    |               |
| No.         No. </td <td>IM9</td> <td>Cloudy</td> <td>Moderate</td> <td>11:06</td> <td>7.5</td> <td>Middle</td> <td></td> <td></td> <td></td> <td>18.6</td> <td>18.6</td> <td></td> <td>8.0</td> <td></td> <td>28.4</td> <td>100.4</td> <td>100.4</td> <td>7.9 8.0</td> <td>4.1</td> <td>4.3</td> <td></td> <td>4</td> <td>81</td> <td>81</td> <td>822105</td> <td>808814</td> <td>&lt;0.2</td> <td></td>   | IM9       | Cloudy     | Moderate   | 11:06    | 7.5       | Middle         |            |                  |     | 18.6         | 18.6          |            | 8.0     |         | 28.4     | 100.4        | 100.4   | 7.9 8.0             | 4.1       | 4.3   |        | 4  | 81 | 81 | 822105     | 808814    | <0.2               |               |
| MB         Dark         Holene         DB         Holene         DB         Holene         DB         HOL         BB         DB         DB <thdb< th=""></thdb<>  |           |            |            |          |           | Bottom         | 6.5        | 0.4              | 164 | 18.4         | 18.4          | 8.0        | 80      | 28.6    |          | 100.0        | 100.0   | 7.9 7.9             | 4.6       |       | 4      |    | 84 |    |            |           | <0.2               | 1.2           |
| Model         Appendix         Appendix <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7.9</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>  |           |            |            |          |           |                |            |                  |     |              |               |            |         |         |          |              |         | 7.9                 |           |       | -      |    |    |    |            |           |                    |               |
| No.9       Vision   |           |            |            |          |           | Surface        | 1.0        | 0.5              | 262 | 18.8         | 18.8          | 8.0        | 8.0     | 28.3    |          | 101.4        | 101.4   | 8.0 8.0             | 3.0       |       |        |    | 78 |    |            |           | <0.2               | 1.4           |
| Image: Description of the sector    | IM10      | Cloudy     | Moderate   | 10:59    | 8.8       | Middle         | 4.4        | 0.5              | 261 | 18.8         | 18.8          | 8.0        | 8.0     | 28.4    | 28.4     | 100.0        | 100.0   | 7.9                 | 3.3       | 3.6   |        | 4  | 82 | 81 | 822220     | 809824    | <0.2               | 1.3           |
| b           |           |            |            |          |           | Bottom         |            |                  |     |              | 18.6          |            | 7.9     |         | 28.7     |              | 98.3    |                     |           |       |        |    |    |    |            |           | <0.2<br><0.2       |               |
| N11         Out         Number         10         Moder         Moder <th< td=""><td></td><td></td><td></td><td></td><td></td><td>Surface</td><td></td><td></td><td></td><td></td><td>18.7</td><td></td><td>8.0</td><td></td><td>28.4</td><td></td><td>99.6</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td>&lt;0.2</td><td></td></th<>   |           |            |            |          |           | Surface        |            |                  |     |              | 18.7          |            | 8.0     |         | 28.4     |              | 99.6    |                     |           | -     |        |    |    |    |            |           | <0.2               |               |
|   | IM11      | Cloudy     | Moderate   | 10:46    | 8.1       | Middle         | 4.1        | 0.4              | 211 | 18.7         | 18.7          | 7.9        | 7.9     | 28.4    | 28.4     | 98.8         | 98.8    | 7.8                 | 3.3       | 3.3   | 4      | 4  | 82 | 81 | 821509     | 810530    | <0.2               | 1.3 1.2       |
| No.         No. </td <td></td> <td>,</td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td>77</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>&lt;0.2</td> <td>1.2</td>   |           | ,          |            |          | •         |                |            |                  |     |              |               |            |         | _       |          |              |         | 77                  |           |       |        |    |    |    |            |           | <0.2               | 1.2           |
| Mn2         Outrain         100   |           |            |            |          |           | Bottom         |            |                  |     | 18.6         |               | 7.9        | 7.9     | 28.6    |          | 98.1         |         | 7.7                 | 3.5       |       |        |    | 84 |    |            |           | <0.2               | 1.4           |
| Int         Origonal         Mode         3         3         3         5         9         9         7         9         9         7         9         9         7         9         9         7         9         7         9         7         9         7         9         7         9         7         9         7         9         7         9         7       7 <th< td=""><td></td><td></td><td></td><td></td><td></td><td>Surface</td><td>1.0</td><td>0.6</td><td>243</td><td>18.7</td><td>18.7</td><td>7.9</td><td>7.9</td><td>28.4</td><td>28.4</td><td>98.6</td><td>98.6</td><td>7.8 7.8</td><td>3.5</td><td>-</td><td>3</td><td></td><td>77</td><td></td><td></td><td></td><td>&lt;0.2</td><td>1.2</td></th<>   |           |            |            |          |           | Surface        | 1.0        | 0.6              | 243 | 18.7         | 18.7          | 7.9        | 7.9     | 28.4    | 28.4     | 98.6         | 98.6    | 7.8 7.8             | 3.5       | -     | 3      |    | 77 |    |            |           | <0.2               | 1.2           |
| <   | IM12      | Cloudy     | Moderate   | 10:37    | 7.5       | Middle         |            |                  |     | 18.7<br>18.7 | 18.7          | 7.9<br>7.9 | 7.9     |         | 28.4     | 98.0<br>98.0 | 98.0    | 7.7                 |           | 3.6   |        | 5  |    | 81 | 821142     | 811508    | <0.2 <0.2          |               |
| Since         Surface         10         02         100         100         02         100<   |           |            |            |          |           | Bottom         |            |                  |     |              | 18.7          |            | 7.9     |         | 28.5     |              | 96.4    |                     |           |       |        |    | 84 |    |            |           |                    | 1.1           |
| She have         Moderni b         Add         Value  |           |            |            |          |           | Surface        | 1.0        | 0.2              | 198 | 18.5         | 18.5          | 7.9        | 7.9     | 28.8    | 28.8     | 95.8         | 95.8    | 7.6                 | 3.9       |       | 4      |    | 80 |    |            |           | <0.2               | 1.4           |
| Image: bolic  | 500       | Cloudy     | Modorato   | 09:57    | 4.5       | Middlo         |            |                  |     |              |               | -          |         |         |          |              |         | /.6                 |           | 20    |        | 4  |    | 92 | 921470     | 91/1/6    | -                  | -             |
| Image: bolic  | 0112      | Cloudy     | Moderate   | 03.37    | 4.5       |                |            |                  |     |              |               |            |         |         |          |              |         | - 7.6               |           | 0.0   |        | -  |    | 00 | 021475     | 014140    | -                  | -             |
| SR3         Older         Moderalia         112         Sintace         113         0.6         200         188       <   |           |            |            |          |           | Bottom         | 3.5        | 0.2              | 201 | 18.5         | 18.5          | 7.9        | 7.9     | 28.9    |          | 96.2         | 96.2    | 7.6                 | 3.9       | •     |        |    |    |    |            |           | <0.2               | 1.1           |
| SR3       Clouy       Moderate       1120       9.0       Middle       45       0.7       20       27.9       20       10.4       10.4       10.4       8.0       3.8       4.4       4.4       -       -       0       0.7      0.7      <   |           |            |            |          |           | Surface        | 1.0        | 0.6              | 205 | 18.8         | 18.8          | 8.0        | 8.0     | 27.9    | 27.9     | 102.6        | 102.6   | 8.1 8.1             | 3.6       |       |        |    | -  |    |            |           |                    |               |
| Image: bolic biase in the image: bolic biase in | SR3       | Cloudy     | Moderate   | 11:20    | 9.0       | Middle         |            |                  |     |              | 18.7          |            | 8.0     |         | 28.0     |              | 101.4   | 8.0                 |           | 3.8   |        | 4  |    | -  | 822158     | 807582    |                    | -             |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   |           |            |            |          |           | Bottom         | 8.0        |                  |     | 18.6         | 18.6          | 8.0        | 8.0     |         | 28.2     |              | 101.4   |                     |           | -     |        |    | -  |    |            |           | -                  | -             |
| SR4A         Cloudy         Moderate         09:58         8.2         Middle         4.1         0.3         20.5         15.9         8.0         0.00         9.00         8.0         9.00         8.0         9.00         8.0         9.00         8.0         9.00         8.0         9.00         8.0         9.00         8.0         9.00         8.0         9.00         8.0         9.00         8.0         9.00         8.0         9.00         8.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td>Surface</td><td>1.0</td><td>0.3</td><td>203</td><td>15.9</td><td>15.9</td><td>8.0</td><td>8.0</td><td>30.6</td><td>30.6</td><td>99.0</td><td>99.0</td><td>8.1</td><td>5.7</td><td></td><td>6</td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td></th<>   |           |            |            |          |           | Surface        | 1.0        | 0.3              | 203 | 15.9         | 15.9          | 8.0        | 8.0     | 30.6    | 30.6     | 99.0         | 99.0    | 8.1                 | 5.7       |       | 6      |    | -  |    |            |           | -                  |               |
| Image: bold bold bold bold bold bold bold bold  | SD4A      | Cloudy     | Modorato   | 00.58    | 8.2       | Middlo         |            |                  |     | 15.9         |               |            |         | 30.6    |          | 99.4         |         |                     |           | 6.1   | 7 7    | 0  | -  |    | 917179     | 807822    | -                  |               |
| Normalization         Normalinteracion         Normalization         Norma  | 0147      | Cloudy     | Moderate   | 03.00    | 0.2       |                |            |                  |     |              |               |            |         | _       |          |              |         | 82                  | -         | 0.1   | -      | 5  |    |    | 017170     | 007022    |                    |               |
| SR5A         Cloudy         Moderate         09:39         4.8         Sd1ade         10         01         198         16.2         16.7  |           |            |            |          |           | Bottom         | 7.2        | 0.3              | 225 | 15.9         | 15.9          | 8.0        | 8.0     | 30.6    |          | 100.2        |         | 8.2 8.2             | 6.4       |       |        |    | -  |    |            |           | <u> </u>           |               |
| SR5A         Cloudy<br>Hoderate         Moderate         09:39         4.8         Middle         2.4         -   |           |            |            |          |           | Surface        |            |                  |     |              | 16.2          |            | 8.0     | 29.8    | 29.8     | 99.9<br>99.9 | 99.9    | 82                  |           |       | 5<br>7 |    | -  |    |            |           | -                  | -             |
| Image: condiminant and problem andeproblem and problem and problem and problem and problem  | SR5A      | Cloudy     | Moderate   | 09:39    | 4.8       | Middle         |            |                  |     |              | -             |            | -       |         | -        |              |         | - 0.2               |           | 5.4   |        | 6  |    | -  | 816584     | 810706    |                    | -             |
| Barte Area         Anderate         Surface         1.0         0.2         161         15.8         15.8         7.9         2.0         2.0         10.0         2.0         10.0         2.0         10.0         2.0         10.0         2.0         10.0         2.0         10.0         <   |           |            |            |          |           | Bottom         |            |                  |     |              | 16.1          |            | 8.0     |         | 29.9     |              | 100.3   |                     |           |       | 6      |    | -  |    |            |           | -                  |               |
| SR6         Cloudy         Moderate         09:16         4.3         1.0         0.2         164         15.8         7.9         2.0         10.2         10.2         10.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td>Surface</td><td>1.0</td><td>0.2</td><td>161</td><td>15.8</td><td>15.8</td><td>7.9</td><td>7.9</td><td>28.0</td><td>28.0</td><td>102.9</td><td>102.9</td><td>8.6</td><td>1.8</td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td>-</td></th<>   |           |            |            |          |           | Surface        | 1.0        | 0.2              | 161 | 15.8         | 15.8          | 7.9        | 7.9     | 28.0    | 28.0     | 102.9        | 102.9   | 8.6                 | 1.8       |       |        |    | -  |    |            |           |                    | -             |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   | 0.00      | Olevely    | Madausta   | 00.10    | 4.0       |                |            |                  |     | -            |               |            |         |         |          |              |         | 8.6                 |           | 0.1   |        | F  | -  |    | 017010     | 014055    |                    |               |
| Image: bolic  | 586       | Cloudy     | Moderate   | 09:16    | 4.3       | IVIIdale       |            |                  |     |              | -             |            | -       |         | -        |              | -       | - 85                |           | 2.1   |        | Э  |    | -  | 817910     | 814655    |                    |               |
| SR7         Cloudy         Moderate         09:01         15.5         Surface         1.0         0.2         216         18.2         7.9         7.9         29.7         95.0         95.0         7.5         7.5         2.4  |           |            |            |          |           | Bottom         | 3.3        | 0.2              | 187 | 15.8         | 15.8          | 7.8        | 7.8     | 27.9    | 27.9     | 102.1        | 102.2   | 8.5 8.5             | 2.3       |       | 5      |    |    |    |            |           |                    |               |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   |           |            |            |          |           | Surface        |            |                  |     |              | 18.2          |            | 7.9     |         | 29.7     | 95.0<br>95.0 | 95.0    | 75                  |           |       |        |    |    |    |            |           |                    |               |
| Image: boline       Bottom       14.5       0.1       186       18.1       18.1       7.9       7.9       30.0       96.1       96.1       96.1       96.1       7.6 <th< td=""><td>SR7</td><td>Cloudy</td><td>Moderate</td><td>09:01</td><td>15.5</td><td>Middle</td><td></td><td></td><td></td><td></td><td>18.1</td><td></td><td>7.9</td><td></td><td>29.9</td><td></td><td>94.7</td><td>7.5</td><td></td><td>2.4</td><td></td><td>3</td><td></td><td>-</td><td>823638</td><td>823752</td><td>-</td><td>-</td></th<>   | SR7       | Cloudy     | Moderate   | 09:01    | 15.5      | Middle         |            |                  |     |              | 18.1          |            | 7.9     |         | 29.9     |              | 94.7    | 7.5                 |           | 2.4   |        | 3  |    | -  | 823638     | 823752    | -                  | -             |
| Image: Notice of the second         |           |            |            |          |           | Bottom         | 14.5       | 0.1              | 186 | 18.1         | 18.1          | 7.9        | 7.9     | 30.0    | 30.0     | 96.1         | 96.1    | 7.6 7.6             | 2.5       |       | 3      |    | -  |    |            |           |                    | -             |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $  |           |            |            | + +      |           | Surface        | 1.0        | 0.2              | 194 | 18.7         |               | 7.9        |         | 28.5    |          | 97.8         |         | 7.7                 | 5.3       |       |        |    |    |    |            |           | -                  |               |
| SR8       Cloudy       Moderate       10:13       5.2       Middle       2.6       - <th< td=""><td>075</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>10.7</td><td></td><td>1.3</td><td></td><td>20.0</td><td></td><td>37.0</td><td>(.(</td><td></td><td>_</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td></th<>  | 075       |            |            |          |           |                |            |                  |     | -            | 10.7          |            | 1.3     |         | 20.0     |              | 37.0    | (.(                 |           | _     |        |    | -  |    |            |           |                    |               |
|   | SH8       | Cloudy     | Moderate   | 10:13    | 5.2       | Middle         | 2.6        | -                | -   | -            | -             | -          | -       | -       | -        | -            | -       | - 77                | -         | 5.0   |        | 6  |    | -  | 820409     | 811578    |                    | -             |
|   |           |            |            |          |           | Bottom         |            |                  |     |              | 18.5          |            | 7.9     |         | 28.8     |              | 96.9    |                     |           |       |        |    |    |    |            |           | -                  |               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on24 February 17during 24 February 17 during Mid-Flood Tide

| Water Qua      | lity Monite | oring Resi | lits on  |           | 24 February 17 | during Mid   |                  | de         |              |               |            |         | i.           |         |                |                  |                     | 1            |          |                 |    |                 |    |                       |                       |                               |                   |
|----------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|----------------|------------------|---------------------|--------------|----------|-----------------|----|-----------------|----|-----------------------|-----------------------|-------------------------------|-------------------|
| Monitoring     | Weather     | Sea        | Sampling | Water     | Sampling Dep   | th (m)       | Current<br>Speed | Current    | Water Ter    | nperature (°C | ;)         | рН      | Salinit      | y (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity    | NTU)     | Suspende<br>(mg |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(μg/L)            | Nickel (µg/L)     |
| Station        | Condition   | Condition  | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average | Value          | Average          | Value DA            | Value        | DA       | Value           | DA | Value           | DA | (Northing)            | (Easting)             | Value DA                      | Value DA          |
|                |             |            |          |           | Surface        | 1.0          | 0.4              | 174<br>186 | 14.7<br>14.7 | 14.7          | 7.8<br>7.8 | 7.8     | 31.8<br>31.8 | 31.8    | 100.4<br>100.4 | 100.4            | 8.4<br>8.4          | 3.2<br>3.2   | -        | 7<br>5          |    | 83<br>83        |    |                       |                       | <0.2<br><0.2                  | 1.5<br>1.4        |
| C1             | Cloudy      | Rough      | 16:46    | 8.2       | Middle         | 4.1          | 0.4              | 134        | 14.7         | 14.7          | 7.8        | 7.8     | 32.6         | 32.6    | 101.5          | 101.5            | 8.4 8.4             | 4.6          | 4.4      | 4               | 6  | 83              | 84 | 815615                | 804257                | <0.2                          | 1.5 1.2           |
|                |             |            |          | •         |                | 4.1<br>7.2   | 0.4              | 140<br>96  | 14.7<br>14.6 |               | 7.8<br>7.8 |         | 32.6<br>33.6 |         | 101.5<br>102.6 |                  | 8.4<br>8.5          | 4.6<br>5.4   |          | 4<br>8          | -  | 84<br>84        |    |                       |                       | <0.2                          | 1.5<br>0.8        |
|                |             |            |          |           | Bottom         | 7.2          | 0.4              | 101        | 14.6         | 14.6          | 7.8        | 7.8     | 33.6         | 33.6    | 102.6          | 102.6            | 8.5 8.5             | 5.3          |          | 10              |    | 84              |    |                       |                       | <0.2                          | 0.8               |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.4              | 189<br>195 | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.9<br>27.9 | 27.9    | 97.5<br>97.5   | 97.5             | 7.8<br>7.8<br>7.8   | 3.8<br>3.8   | ŀ        | 3 4             |    | 77<br>76        |    |                       |                       | <0.2<br><0.2                  | 1.5<br>1.7        |
| C2             | Cloudy      | Moderate   | 15:39    | 11.7      | Middle         | 5.9<br>5.9   | 0.4              | 213<br>232 | 18.3<br>18.3 | 18.3          | 8.0<br>8.0 | 8.0     | 28.0<br>28.0 | 28.0    | 96.6<br>96.6   | 96.6             | 7.7                 | 4.2<br>4.2   | 4.1      | 3               | 4  | 82<br>81        | 81 | 825696                | 806935                | <0.2<br><0.2 <0.2             | 2.0<br>1.7 1.6    |
|                |             |            |          |           | Bottom         | 10.7         | 0.4              | 194        | 18.3         | 18.3          | 8.0        | 8.0     | 28.4         | 28.4    | 96.7           | 96.7             | 7.7 7.7             | 4.3          |          | 4               |    | 83              |    |                       |                       | <0.2                          | 1.5               |
|                |             |            |          |           |                | 10.7<br>1.0  | 0.4              | 198<br>260 | 18.3<br>17.7 |               | 8.0<br>8.0 |         | 28.4<br>29.1 |         | 96.7<br>96.7   |                  | 7.7 7.7             | 4.3<br>4.2   |          | 4               |    | 84<br>79        |    |                       |                       | <0.2<br><0.2                  | 1.4<br>0.6        |
|                |             |            |          |           | Surface        | 1.0          | 0.6              | 278        | 17.7         | 17.7          | 8.0        | 8.0     | 29.1         | 29.1    | 96.7           | 96.7             | 7.7 7.7             | 4.2          | -        | 4               |    | 80              |    |                       |                       | <0.2                          | 0.7               |
| C3             | Cloudy      | Moderate   | 17:37    | 11.6      | Middle         | 5.8<br>5.8   | 0.8              | 258<br>261 | 17.8<br>17.8 | 17.8          | 8.0<br>8.0 | 8.0     | 30.0<br>30.0 | 30.0    | 96.1<br>96.1   | 96.1             | 7.6                 | 5.5<br>5.5   | 6.2      | 4               | 4  | 83<br>83        | 83 | 822124                | 817798                | <0.2<br><0.2 <0.2             | 0.9<br>0.8 0.7    |
|                |             |            |          |           | Bottom         | 10.6<br>10.6 | 0.6              | 263        | 17.8         | 17.8          | 8.0<br>8.0 | 8.0     | 30.2<br>30.2 | 30.2    | 96.5<br>96.5   | 96.5             | 7.7 7.7             | 8.9          | ļ        | 6               |    | 85              |    |                       |                       | <0.2<br><0.2                  | 0.7               |
|                |             |            |          |           | Surface        | 10.6         | 0.7              | 274<br>195 | 17.8<br>15.0 | 15.0          | 7.8        | 7.8     | 30.2         | 32.1    | 96.5<br>97.8   | 97.8             | 8.1                 | 8.9<br>6.1   |          | 5<br>8          |    | 85<br>82        |    |                       |                       | <0.2                          | 1.2               |
|                |             |            |          |           |                | 1.0<br>3.6   | 0.3              | 210<br>177 | 15.0<br>15.0 |               | 7.8<br>7.8 |         | 32.1<br>32.3 | 52.1    | 97.8<br>99.5   |                  | 8.1<br>8.2<br>8.2   | 6.1<br>7.5   | -        | 7               |    | 81<br>83        |    |                       |                       | <0.2                          | 1.2               |
| IM1            | Cloudy      | Rough      | 16:25    | 7.2       | Middle         | 3.6          | 0.3              | 193        | 15.0         | 15.0          | 7.8        | 7.8     | 32.2         | 32.3    | 99.6           | 99.6             | 8.2                 | 7.6          | 9.5      | 8               | 8  | 83              | 83 | 818367                | 806477                | <0.2                          | 1.2               |
|                |             |            |          |           | Bottom         | 6.2<br>6.2   | 0.3              | 140<br>145 | 14.7<br>14.7 | 14.7          | 7.8        | 7.8     | 34.1<br>34.1 | 34.1    | 100.8<br>100.9 | 100.9            | 8.3<br>8.3<br>8.3   | 14.8<br>14.8 | -        | 9<br>8          |    | 83<br>83        |    |                       |                       | <0.2                          | 1.2               |
|                |             |            |          |           | Surface        | 1.0          | 0.4              | 214        | 15.0         | 15.0          | 7.8        | 7.8     | 31.1         | 31.1    | 99.0           | 99.0             | 8.3                 | 4.1          |          | 5               |    | 81              |    |                       |                       | <0.2                          | 1.4               |
| 11.40          | Olaviatio   | Daviah     | 10.10    | 0.1       | Mistal -       | 1.0<br>4.1   | 0.4              | 214<br>197 | 15.0<br>15.0 |               | 7.8<br>7.8 | -       | 31.1<br>31.2 | 01.0    | 99.0<br>100.1  |                  | 8.3<br>8.3          | 4.1<br>6.1   | <u> </u> | 4<br>5          | 0  | 81<br>81        |    | 010000                | 000100                | <0.2                          | 1.6               |
| IM2            | Cloudy      | Rough      | 16:19    | 8.1       | Middle         | 4.1<br>7.1   | 0.3<br>0.3       | 204<br>150 | 14.9<br>14.8 | 15.0          | 7.8        | 7.8     | 31.2<br>33.7 | 31.2    | 100.1<br>101.1 | 100.1            | 8.3                 | 6.2          | 6.5      | 5<br>9          | 6  | 82              | 82 | 818862                | 806196                | <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 | 1.6<br>1.0        |
|                |             |            |          |           | Bottom         | 7.1          | 0.3              | 164        | 14.8         | 14.8          | 7.8<br>7.8 | 7.8     | 33.7         |         | 101.1          | 101.1            | 8.3<br>8.3<br>8.3   | 9.3<br>9.3   |          | 9               |    | 83<br>82        |    |                       |                       | <0.2                          | 1.0               |
|                |             |            |          |           | Surface        | 1.0          | 0.4              | 217<br>218 | 15.1<br>15.1 | 15.1          | 7.7<br>7.7 | 7.7     | 30.9<br>30.9 | 30.9    | 99.2<br>99.3   | 99.3             | 8.3<br>8.3          | 5.1<br>5.1   | -        | 6<br>7          |    | 82<br>81        |    |                       |                       | <0.2<br><0.2                  | 1.9<br>1.8        |
| IM3            | Cloudy      | Rough      | 16:09    | 8.2       | Middle         | 4.1          | 0.4              | 222        | 15.1         | 15.1          | 7.7        | 7.7     | 31.0         | 31.0    | 100.5          | 100.5            | 8.4 8.4             | 6.2          | 6.1      | 8               | 7  | 82              | 82 | 819401                | 806036                | <0.2                          | 1.7 1.6           |
|                | ,           | 3          |          | -         |                | 4.1<br>7.2   | 0.4              | 242<br>186 | 15.1<br>15.0 |               | 7.7        |         | 31.0<br>32.7 |         | 100.5<br>101.8 |                  | 8.4<br>8.4          | 6.2<br>6.9   | -        | 9<br>7          |    | 83<br>83        |    |                       |                       | <0.2<br><0.2                  | 1.9               |
|                |             |            |          |           | Bottom         | 7.2          | 0.3              | 200        | 15.0         | 15.0          | 7.7        | 7.7     | 32.7         | 32.7    | 101.9          | 101.9            | 8.4 0.4             | 6.8          |          | 7               |    | 83              |    |                       |                       | <0.2                          | 1.2               |
|                |             |            |          |           | Surface        | 1.0          | 0.4              | 202<br>211 | 15.1<br>15.1 | 15.1          | 7.7        | 7.7     | 30.9<br>30.9 | 30.9    | 98.6<br>98.6   | 98.6             | 8.2<br>8.2<br>8.3   | 6.7<br>6.7   | -        | 6               |    | 82<br>82        |    |                       |                       | <0.2<br><0.2                  | 1.7<br>1.8        |
| IM4            | Cloudy      | Rough      | 16:00    | 7.6       | Middle         | 3.8<br>3.8   | 0.3              | 207<br>220 | 15.1<br>15.1 | 15.1          | 7.7        | 7.7     | 31.0<br>31.0 | 31.0    | 99.4<br>99.4   | 99.4             | 8.3<br>8.3          | 8.8<br>8.9   | 8.7      | 9<br>8          | 10 | 83<br>83        | 83 | 819573                | 805034                | <0.2<br><0.2 <0.2             | 1.6<br>1.5        |
|                |             |            |          |           | Bottom         | 6.6          | 0.3              | 201        | 15.0         | 15.0          | 7.8        | 7.8     | 32.5         | 32.5    | 100.3          | 100.4            | 8.3 8.3             | 10.6         | ŀ        | 13              |    | 84              |    |                       |                       | <0.2                          | 1.3               |
|                |             |            |          |           |                | 6.6<br>1.0   | 0.3              | 202<br>204 | 15.0<br>15.2 |               | 7.8        |         | 32.5<br>30.7 |         | 100.4<br>97.9  |                  | 8.3 0.0<br>8.1      | 10.6<br>5.1  |          | 14<br>6         |    | 84<br>80        |    |                       |                       | <0.2<br><0.2                  | 1.3<br>1.6        |
|                |             |            |          |           | Surface        | 1.0          | 0.4              | 215        | 15.2         | 15.2          | 7.7        | 7.7     | 30.7         | 30.7    | 97.9           | 97.9             | 8.1 8.2             | 5.2          |          | 5               |    | 80              |    |                       |                       | <0.2                          | 1.8               |
| IM5            | Cloudy      | Rough      | 15:52    | 6.6       | Middle         | 3.3<br>3.3   | 0.3 0.4          | 199<br>211 | 15.2<br>15.2 | 15.2          | 7.7        | 7.7     | 30.9<br>30.9 | 30.9    | 98.9<br>98.9   | 98.9             | 8.2<br>8.2          | 8.9<br>9.0   | 9.7      | 9<br>8          | 10 | 81<br>81        | 81 | 820575                | 804911                | <0.2<br><0.2 <0.2             | 1.7<br>1.7<br>1.5 |
|                |             |            |          |           | Bottom         | 5.6<br>5.6   | 0.3              | 162<br>169 | 15.0<br>15.0 | 15.0          | 7.8<br>7.8 | 7.8     | 33.1<br>33.1 | 33.1    | 100.0          | 100.0            | 8.2<br>8.2<br>8.2   | 14.9<br>14.9 | -        | 16<br>14        |    | 82<br>81        |    |                       |                       | <0.2<br><0.2                  | 1.1<br>0.9        |
|                |             |            |          |           | Surface        | 1.0          | 0.5              | 191        | 15.2         | 15.2          | 7.7        | 7.7     | 30.6         | 30.6    | 98.2           | 98.2             | 8.2                 | 8.0          |          | 7               |    | 80              |    |                       |                       | <0.2                          | 1.5               |
|                |             |            |          |           |                | 1.0<br>3.2   | 0.6<br>0.5       | 204<br>200 | 15.2<br>15.2 |               | 7.7        | -       | 30.6<br>30.7 |         | 98.2<br>99.4   |                  | 8.2<br>8.3<br>8.3   | 8.0<br>12.3  |          | 8               |    | 81<br>81        |    |                       |                       | <0.2                          | 1.4               |
| IM6            | Cloudy      | Rough      | 15:43    | 6.4       | Middle         | 3.2          | 0.5              | 210        | 15.2         | 15.2          | 7.7        | 7.7     | 30.7         | 30.7    | 99.3           | 99.4             | 8.3                 | 12.5         | 13.0     | 9               | 10 | 82              | 81 | 821062                | 805808                | <0.2                          | 1.5               |
|                |             |            |          |           | Bottom         | 5.4<br>5.4   | 0.4              | 196<br>215 | 15.1<br>15.1 | 15.1          | 7.8<br>7.8 | 7.8     | 32.6<br>32.6 | 32.6    | 100.4<br>100.5 | 100.5            | 8.3<br>8.3          | 18.3<br>18.6 | -        | 13<br>13        |    | 82<br>82        |    |                       |                       | <0.2<br><0.2                  | 1.1<br>1.1        |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.3              | 216<br>222 | 15.3<br>15.3 | 15.3          | 7.7        | 7.7     | 30.5<br>30.5 | 30.5    | 98.7<br>98.8   | 98.8             | 8.2<br>8.2          | 5.7<br>5.8   |          | 5<br>6          |    | 83<br>83        |    |                       |                       | <0.2<br><0.2                  | 1.8<br>1.8        |
| IM7            | Cloudy      | Rough      | 15:31    | 7.9       | Middle         | 4.0          | 0.3              | 230        | 15.3         | 15.3          | 7.7        | 7.7     | 30.7         | 30.7    | 100.4          | 100.4            | 8.3 8.3             | 7.7          | 7.7      | 5               | 5  | 84              | 84 | 821353                | 806840                | <0.2                          | 1.7 1.7           |
|                | Cloudy      | i lougi i  | 10.01    | 7.5       |                | 4.0<br>6.9   | 0.3              | 249<br>215 | 15.3<br>15.3 |               | 7.7        |         | 30.7<br>31.0 |         | 100.4<br>101.5 |                  | 8.3<br>8.4          | 7.9<br>9.6   |          | 5<br>6          | J  | 84<br>84        | 57 | 021000                | 00000                 | <0.2<br><0.2                  | 1.6               |
|                |             |            |          |           | Bottom         | 6.9          | 0.3              | 224        | 15.3         | 15.3          | 7.7        | 7.7     | 30.9         | 31.0    | 101.5          | 101.5            | 8.4 0.4             | 9.2          |          | 5               |    | 85              |    |                       |                       | <0.2                          | 1.7               |
|                |             |            |          |           | Surface        | 1.0          | 0.4              | 192<br>198 | 18.1<br>18.1 | 18.1          | 8.0<br>8.0 | 8.0     | 26.8<br>26.8 | 26.8    | 99.6<br>99.6   | 99.6             | 8.0                 | 5.9<br>5.9   | ŀ        | 5<br>5          |    | 76<br>77        |    |                       |                       | <0.2<br><0.2                  | 2.0               |
| IM8            | Cloudy      | Moderate   | 16:05    | 8.1       | Middle         | 4.1          | 0.5              | 214        | 18.2         | 18.2          | 8.0        | 8.0     | 26.9         | 26.9    | 100.8          | 100.8            | 8.1 8.1             | 6.3          | 6.2      | 5               | 6  | 81              | 81 | 821690                | 807819                | <0.2                          | 1.7 1.0           |
|                |             |            |          |           | Pottom         | 4.1          | 0.5              | 214<br>225 | 18.2<br>18.2 |               | 8.0<br>8.0 |         | 26.9<br>27.0 |         | 100.8<br>104.2 |                  | 8.1<br>8.4          | 6.3<br>6.4   | ŀ        | 5<br>8          |    | 82<br>84        |    |                       |                       | <0.2                          | 2.0<br>1.8        |
| DA: Denth-Aver |             |            |          |           | Bottom         | 7.1          | 0.5              | 238        | 18.2         | 18.2          | 8.0        | 8.0     | 27.0         | 27.0    | 104.2          | 104.2            | 8.4                 | 6.4          | -        | 6               |    | 83              | 1  |                       |                       | <0.2                          | 1.8               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on24 February 17during 24 February 17 during Mid-Flood Tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 24 February 17 | during Mid   | -Flood Ti        | de         |              |               | -          |         |              |         |                |                  | •                   |              |      |                  | -  |                   |    |                       |                       | <u> </u>             |                   |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|----------------|------------------|---------------------|--------------|------|------------------|----|-------------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | mperature (°C | ;)         | pН      | Salinit      | y (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total All<br>(ppr | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                | -            | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average |                | Average          | Value DA            | Value        | DA   | Value            | DA | Value             | DA | (Northing)            | (Easting)             | Value DA             | Value DA          |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 232<br>235 | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.1<br>27.1 | 27.1    | 99.7<br>99.7   | 99.7             | 8.0<br>8.0          | 6.4<br>6.4   | -    | 6<br>5           |    | 77<br>76          |    |                       |                       | <0.2<br><0.2         | 1.9<br>1.9        |
| IM9           | Cloudy      | Moderate   | 16:14    | 7.4       | Middle         | 3.7<br>3.7   | 0.5<br>0.5       | 229<br>241 | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.1<br>27.1 | 27.1    | 100.4<br>100.4 | 100.4            | 8.0<br>8.0<br>8.0   | 7.2<br>7.2   | 7.7  | 6<br>7           | 6  | 82<br>82          | 81 | 822104                | 808826                | <0.2<br><0.2 <0.2    | 2.0               |
|               |             |            |          |           | Bottom         | 6.4          | 0.5              | 219        | 18.2         | 18.2          | 8.0        | 8.0     | 27.2         | 27.2    | 102.2          | 102.2            | 8.2 8.2             | 9.5          | Ē    | 7                |    | 84                |    |                       |                       | <0.2                 | 2.0               |
|               |             |            |          |           | Surface        | 6.4<br>1.0   | 0.5              | 220<br>256 | 18.2<br>18.1 | 18.1          | 8.0<br>8.0 | 8.0     | 27.2<br>27.3 | 27.3    | 102.2<br>99.6  | 99.6             | 8.2 0.2<br>8.0      | 9.5<br>5.9   |      | 7 4              |    | 83<br>77          |    |                       |                       | <0.2<br><0.2         | 2.1<br>1.8        |
|               |             |            |          |           |                | 1.0<br>4.2   | 0.5              | 280<br>248 | 18.1<br>18.1 |               | 8.0<br>8.0 |         | 27.3<br>27.4 |         | 99.6<br>99.9   |                  | 8.0<br>8.0          | 5.9<br>8.6   |      | 5<br>5           |    | 78<br>82          |    |                       |                       | <0.2<br><0.2         | 1.8<br>1.6        |
| IM10          | Cloudy      | Moderate   | 16:23    | 8.3       | Middle         | 4.2          | 0.6              | 250<br>260 | 18.1<br>18.0 | 18.1          | 8.0        | 8.0     | 27.4<br>27.7 | 27.4    | 99.9           | 99.9             | 8.0                 | 8.6<br>12.9  | 9.1  | 7 6              | 6  | 81<br>84          | 81 | 822232                | 809823                | <0.2<br><0.2<br><0.2 | 1.7<br>1.7<br>1.5 |
|               |             |            |          |           | Bottom         | 7.3          | 0.5              | 268        | 18.0         | 18.0          | 8.0<br>8.0 | 8.0     | 27.7         | 27.7    | 100.6<br>100.6 | 100.6            | 8.1<br>8.1<br>8.1   | 12.9         |      | 6                |    | 84                |    |                       |                       | <0.2                 | 1.6               |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.6              | 240<br>242 | 18.0<br>18.0 | 18.0          | 8.0<br>8.0 | 8.0     | 27.5<br>27.5 | 27.5    | 97.4<br>97.4   | 97.4             | 7.8<br>7.8<br>7.8   | 7.8<br>7.8   | -    | 6<br>5           |    | 78<br>77          |    |                       |                       | <0.2<br><0.2         | 1.4<br>1.3        |
| IM11          | Cloudy      | Moderate   | 16:32    | 8.6       | Middle         | 4.3          | 0.6              | 250<br>270 | 18.1<br>18.1 | 18.1          | 8.0<br>8.0 | 8.0     | 27.7<br>27.7 | 27.7    | 97.0<br>97.0   | 97.0             | 7.8<br>7.8          | 9.5<br>9.5   | 12.6 | 8<br>7           | 13 | 82<br>82          | 81 | 821498                | 810556                | <0.2<br><0.2<br><0.2 | 1.5<br>1.3        |
|               |             |            |          |           | Bottom         | 7.6<br>7.6   | 0.5              | 249<br>262 | 18.3<br>18.3 | 18.3          | 8.0<br>8.0 | 8.0     | 28.6<br>28.6 | 28.6    | 97.4<br>97.4   | 97.4             | 7.7 7.7             | 20.6<br>20.6 | -    | 26<br>24         |    | 84<br>84          |    |                       |                       | <0.2<br><0.2         | 1.0<br>0.9        |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 258        | 18.0         | 18.0          | 8.0        | 8.0     | 27.5         | 27.5    | 97.7           | 97.7             | 7.8                 | 6.8          |      | 4                |    | 78                |    |                       |                       | <0.2                 | 1.2               |
| IM12          | Cloudy      | Moderate   | 16:41    | 8.1       | Middle         | 1.0<br>4.1   | 0.6              | 283<br>260 | 18.0<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.5<br>27.7 | 27.7    | 97.7<br>96.9   | 96.9             | 7.8<br>7.8<br>7.8   | 6.8<br>9.2   | 12.3 | 4<br>6           | 6  | 78<br>82          | 81 | 821181                | 811517                | <0.2<br><0.2<br><0.2 | 1.3<br>1.7<br>1.5 |
| 11112         | Cloudy      | Woderale   | 10.41    | 0.1       |                | 4.1<br>7.1   | 0.7              | 278<br>263 | 18.2<br>18.2 |               | 8.0<br>8.0 |         | 27.7<br>29.2 |         | 96.9<br>98.0   |                  | 7.8<br>7.8 7.0      | 9.2<br>20.9  | 12.3 | 5<br>6           | 0  | 82<br>84          | 01 | 021101                | 811517                | <0.2<br><0.2         | 1.5<br>1.7        |
|               |             |            |          |           | Bottom         | 7.1          | 0.6              | 279<br>123 | 18.2<br>18.0 | 18.2          | 8.0<br>8.0 | 8.0     | 29.2<br>28.2 | 29.2    | 98.0<br>97.9   | 98.0             | 7.8<br>7.8<br>7.8   | 20.9<br>5.3  |      | 8                |    | 84<br>80          |    |                       |                       | <0.2<br><0.2         | 1.5<br>1.4        |
|               |             |            |          |           | Surface        | 1.0          | 0.2              | 125        | 18.0         | 18.0          | 8.0        | 8.0     | 28.2         | 28.2    | 97.9           | 97.9             | 7.8 7.8             | 5.3          | ŀ    | 5                |    | 79                |    |                       |                       | <0.2                 | 1.6               |
| SR2           | Cloudy      | Moderate   | 17:07    | 4.8       | Middle         | 2.4<br>2.4   | -                | -          | -            | -             | -          | -       | -            | -       | -              | -                | -                   | -            | 5.5  | -                | 7  | -                 | 82 | 821443                | 814161                | - <0.2               | -                 |
|               |             |            |          |           | Bottom         | 3.8<br>3.8   | 0.2              | 113<br>121 | 18.0<br>18.0 | 18.0          | 8.0<br>8.0 | 8.0     | 28.3<br>28.3 | 28.3    | 100.8<br>100.8 | 100.8            | 8.1<br>8.1<br>8.1   | 5.7<br>5.7   | -    | 8<br>8           |    | 84<br>84          |    |                       |                       | <0.2<br><0.2         | 1.2<br>1.2        |
|               |             |            |          |           | Surface        | 1.0          | 0.6<br>0.6       | 187<br>197 | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.1<br>27.1 | 27.1    | 98.4<br>98.4   | 98.4             | 7.9<br>7.9<br>7.9   | 7.7<br>7.7   | -    | 6<br>6           |    | -                 |    |                       |                       | -                    | -                 |
| SR3           | Cloudy      | Moderate   | 15:59    | 9.0       | Middle         | 4.5          | 0.5              | 203<br>220 | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.6<br>27.6 | 27.6    | 98.8<br>98.9   | 98.9             | 7.9<br>7.9<br>7.9   | 10.2<br>10.2 | 9.4  | 14<br>15         | 12 | -                 | -  | 822152                | 807555                |                      |                   |
|               |             |            |          |           | Bottom         | 8.0          | 0.5              | 185        | 18.2         | 18.2          | 8.0        | 8.0     | 27.7         | 27.7    | 99.6           | 99.6             | 8.0 8.0             | 10.4         | ŀ    | 14               |    | -                 |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 8.0          | 0.6              | 188<br>254 | 18.2<br>15.1 | 15.1          | 8.0<br>7.8 | 7.8     | 27.7<br>31.5 | 31.5    | 99.6<br>97.3   | 97.3             | 8.0 0.0<br>8.1      | 10.4<br>11.4 |      | 16<br>14         |    | -                 |    |                       |                       | -                    | -                 |
| 0544          |             | 0.1        | 17.11    | 7.0       |                | 1.0<br>3.9   | 0.4              | 263<br>243 | 15.1<br>15.2 |               | 7.8<br>7.8 |         | 31.5<br>31.6 |         | 97.3<br>99.2   |                  | 8.1<br>8.2 8.2      | 11.5<br>12.7 | 10.5 | 16<br>16         | 10 | -                 |    | 017175                | 007000                | -                    | -                 |
| SR4A          | Cloudy      | Calm       | 17:11    | 7.8       | Middle         | 3.9<br>6.8   | 0.4              | 244<br>222 | 15.2<br>15.2 | 15.2          | 7.8<br>7.7 | 7.8     | 31.6<br>32.0 | 31.6    | 99.2<br>101.7  | 99.2             | 8.2<br>8.4          | 12.7<br>13.2 | 12.5 | 16<br>17         | 16 | -                 | -  | 817175                | 807806                | -                    | -                 |
|               |             |            |          |           | Bottom         | 6.8          | 0.3              | 240        | 15.2         | 15.2          | 7.7        | 7.7     | 32.0         | 32.0    | 101.8<br>98.4  | 101.8            | 8.4 8.4             | 13.2         |      | 18<br>11         |    | -                 |    |                       |                       |                      |                   |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.2              | 299<br>320 | 15.5<br>15.5 | 15.5          | 7.7<br>7.7 | 7.7     | 31.7<br>31.7 | 31.7    | 98.4<br>98.4   | 98.4             | 8.1<br>8.1<br>8.1   | 7.0<br>7.1   | ŀ    | 11               |    | -                 |    |                       |                       | -                    | -                 |
| SR5A          | Cloudy      | Calm       | 17:33    | 4.9       | Middle         | 2.5<br>2.5   | -                | -          | -            | -             | -          |         | -            | -       | -              | -                | -                   | -            | 7.2  | -                | 11 | -                 | -  | 816602                | 810700                |                      |                   |
|               |             |            |          |           | Bottom         | 3.9<br>3.9   | 0.2              | 293<br>308 | 15.5<br>15.5 | 15.5          | 7.7        | 7.7     | 31.7<br>31.7 | 31.7    | 101.1          | 101.2            | 8.3<br>8.3          | 7.2<br>7.3   | -    | 11<br>11         |    | -                 |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0          | 0.2              | 221<br>230 | 15.2<br>15.2 | 15.2          | 7.8<br>7.8 | 7.8     | 30.9<br>30.9 | 30.9    | 100.1<br>100.2 | 100.2            | 8.3<br>8.3          | 11.4<br>11.3 |      | 15<br>14         |    | -                 |    |                       |                       | -                    | -                 |
| SR6           | Cloudy      | Calm       | 17:59    | 4.2       | Middle         | 2.1          | -                | -          | -            | -             | -          |         | -            | -       | -              | _                | - 8.3               | -            | 11.1 | -                | 17 | -                 | -  | 817909                | 814661                |                      |                   |
|               |             |            |          |           | Bottom         | 2.1<br>3.2   | - 0.2            | -<br>174   | - 15.2       | 15.2          | -<br>7.8   | 7.8     | -<br>31.1    | 31.1    | -<br>102.5     | 102.6            | -<br>8.5<br>8.5     | - 10.8       | -    | -<br>18          |    | -                 |    |                       |                       | -                    | -                 |
|               |             |            |          |           |                | 3.2          | 0.2              | 184<br>228 | 15.2<br>17.7 |               | 7.7        |         | 31.1<br>30.3 |         | 102.6<br>96.6  |                  | 8.5 0.0<br>7.7      | 11.0<br>4.8  |      | 19<br>10         |    | -                 |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0<br>8.6   | 0.2              | 238<br>231 | 17.7<br>17.7 | 17.7          | 8.0<br>8.0 | 8.0     | 30.3<br>30.4 | 30.3    | 96.6<br>97.0   | 96.6             | 7.7 7.7             | 4.9<br>5.4   | _ [  | 9<br>10          |    | -                 |    |                       |                       | -                    | -                 |
| SR7           | Cloudy      | Moderate   | 18:13    | 17.2      | Middle         | 8.6          | 0.3              | 233        | 17.7         | 17.7          | 8.0        | 8.0     | 30.4         | 30.4    | 97.0           | 97.0             | 7.7                 | 5.4          | 5.2  | 8                | 10 | -                 | -  | 823616                | 823743                |                      | -                 |
|               |             |            |          |           | Bottom         | 16.2<br>16.2 | 0.3              | 230<br>252 | 17.7<br>17.7 | 17.7          | 8.0<br>8.0 | 8.0     | 30.5<br>30.5 | 30.5    | 100.9<br>100.9 | 100.9            | 8.0<br>8.0<br>8.0   | 5.3<br>5.3   |      | 10<br>10         |    | -                 |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.4              | 230<br>245 | 18.0<br>18.0 | 18.0          | 8.0<br>8.0 | 8.0     | 27.5<br>27.5 | 27.5    | 99.6<br>99.6   | 99.6             | 8.0<br>8.0<br>8.0   | 11.6<br>11.6 | F    | 12<br>13         |    | -                 |    |                       |                       | -                    | -                 |
| SR8           | Cloudy      | Moderate   | 16:48    | 5.2       | Middle         | 2.6<br>2.6   | -                | -          | -            | -             | -          | -       | -            | -       | -              | -                | - 8.0               | -            | 13.5 | -                | 16 | -                 | -  | 820435                | 811601                |                      |                   |
|               |             |            |          |           | Bottom         | 4.2          | 0.5              | 209        | 18.1         | 18.1          | 8.0<br>8.0 | 8.0     | 27.6         | 27.6    | 102.0          | 102.0            | 8.2 8.2             | 15.4         | þ    | 19               |    | -                 |    |                       |                       | -                    | -                 |
| DA: Depth-Ave |             |            |          |           |                | 4.2          | 0.5              | 228        | 18.1         |               | 8.0        | 1       | 27.6         |         | 102.0          |                  | 8.2                 | 15.4         |      | 20               |    |                   |    |                       |                       |                      |                   |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on24 February 17during 24 February 17 during Mid-Ebb tide

| Water Qua     | lity Monite | oring Resi | ults on  |           | 24 February 17 | during Mid  |                  |            |              |               |            |         |              |         |                |                  |                                 |              |      | _                |    |                 |    |                       | 1                     |                      |                   |
|---------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|----------------|------------------|---------------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling De    | oth (m)     | Current<br>Speed | Current    | Water Ter    | mperature (°C | ;)         | рН      | Salinit      | y (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen             | Turbidity    | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction  | Value        | Average       | Value      | Average |              | Average |                | Average          | Value DA                        | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA             | Value DA          |
|               |             |            |          |           | Surface        | 1.0         | 1.3<br>1.3       | 213<br>231 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.0<br>33.0 | 33.0    | 99.6<br>99.5   | 99.6             | 8.3<br>8.3                      | 9.5<br>9.5   | -    | 4 4              |    | 83<br>83        |    |                       |                       | <0.2<br><0.2         | 1.5<br>1.4        |
| C1            | Cloudy      | Rough      | 12:12    | 8.2       | Middle         | 4.1         | 1.3<br>1.3       | 206<br>209 | 14.5<br>14.4 | 14.5          | 7.8<br>7.8 | 7.8     | 33.0<br>33.0 | 33.0    | 99.4<br>99.3   | 99.4             | 8.3<br>8.3                      | 9.9<br>9.9   | 10.0 | 6<br>6           | 6  | 84<br>84        | 84 | 815612                | 804253                | <0.2 <0.2 <0.2       | 0.9 0.9           |
|               |             |            |          |           | Bottom         | 7.2         | 1.3<br>1.5       | 220<br>227 | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 33.2<br>33.2 | 33.2    | 99.2<br>99.2   | 99.2             | 8.3<br>8.3                      | 10.5<br>10.5 |      | 10               |    | 84<br>85        |    |                       |                       | <0.2<br><0.2         | 0.5               |
|               |             |            |          |           | Surface        | 1.0         | 0.7              | 166        | 18.1<br>18.1 | 18.1          | 8.0<br>8.0 | 8.0     | 27.1         | 27.1    | 97.4<br>97.4   | 97.4             | 7.8           7.8           7.8 | 5.7          |      | 4                |    | 76              |    |                       |                       | <0.2<br><0.2<br><0.2 | 1.7<br>1.6        |
| C2            | Cloudy      | Moderate   | 13:10    | 11.3      | Middle         | 5.7         | 0.7              | 175<br>159 | 18.2         | 18.2          | 8.0        | 8.0     | 28.9         | 28.9    | 96.5           | 96.5             | 7.6                             | 5.5          | 5.7  | 5 4              | 4  | 76<br>82        | 80 | 825667                | 806941                | <0.2                 | 2.0               |
|               |             |            |          |           | Bottom         | 5.7<br>10.3 | 0.5<br>0.4       | 167<br>166 | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 28.9<br>29.5 | 29.5    | 96.5<br>97.9   | 97.9             | 7.6<br>7.7<br>7.8               | 5.5<br>5.8   | -    | 5<br>3           |    | 81<br>83        |    |                       |                       | <0.2<br><0.2         | 1.9<br>2.0        |
|               |             |            |          |           | Surface        | 10.3<br>1.0 | 0.4              | 173<br>114 | 18.2<br>17.9 | 17.9          | 8.0<br>8.0 | 8.0     | 29.5<br>30.1 | 30.1    | 97.9<br>96.3   | 96.3             | 7.8                             | 5.8<br>3.9   |      | 4                |    | 83<br>79        |    |                       |                       | <0.2<br><0.2         | 1.8<br>0.6        |
| 00            | Olaushi     | Madausta   | 10.50    | 10.4      |                | 1.0<br>6.2  | 0.3              | 120<br>101 | 17.9<br>17.9 |               | 8.0<br>8.0 |         | 30.1<br>30.1 |         | 96.3<br>96.6   |                  | 7.6<br>7.7<br>7.7               | 3.9<br>4.5   | 4.5  | 5<br>4           |    | 79<br>82        |    | 000100                | 017700                | <0.2<br><0.2         | 0.5               |
| C3            | Cloudy      | Moderate   | 10:58    | 12.4      | Middle         | 6.2<br>11.4 | 0.3              | 106<br>156 | 17.9<br>17.8 | 17.9          | 8.0<br>8.0 | 8.0     | 30.1<br>30.3 | 30.1    | 96.7<br>98.2   | 96.7             | 7.7<br>7.8 7.9                  | 4.5<br>4.9   | 4.5  | 4<br>4           | 4  | 83<br>84        | 82 | 822128                | 817783                | <0.2<br><0.2<br><0.2 | 0.6<br>0.7<br>0.6 |
|               |             |            |          |           | Bottom         | 11.4        | 0.2              | 170        | 17.8<br>15.0 | 17.8          | 8.0<br>7.7 | 8.0     | 30.3<br>30.7 | 30.3    | 98.3<br>98.0   | 98.3             | 7.8<br>7.8<br>8.2               | 5.0<br>3.4   |      | 4 3              |    | 84<br>79        |    |                       |                       | <0.2<br><0.2         | 0.8               |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 191<br>180 | 15.0<br>14.8 | 15.0          | 7.7        | 7.7     | 30.7<br>31.6 | 30.7    | 98.0           | 98.0             | 8.2<br>8.2<br>8.2               | 3.5<br>12.0  | -    | 2 4              |    | 80              |    |                       |                       | <0.2                 | 1.4<br>0.7        |
| IM1           | Cloudy      | Rough      | 12:39    | 7.1       | Middle         | 3.6         | 0.4              | 195        | 14.8         | 14.8          | 7.8<br>7.8 | 7.8     | 31.7         | 31.7    | 98.7<br>98.7   | 98.7             | 8.2                             | 12.4         | 12.8 | 4                | 4  | 81<br>81        | 81 | 818341                | 806458                | <0.2 <0.2            | 0.5               |
|               |             |            |          |           | Bottom         | 6.1<br>6.1  | 0.4<br>0.4       | 187<br>187 | 14.7<br>14.7 | 14.7          | 7.8<br>7.8 | 7.8     | 33.4<br>33.4 | 33.4    | 98.8<br>98.9   | 98.9             | 8.2<br>8.2<br>8.2               | 22.9<br>22.8 | -    | 4                |    | 81<br>81        |    |                       |                       | <0.2<br><0.2         | 0.4 0.3           |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.6       | 197<br>200 | 15.0<br>15.0 | 15.0          | 7.7        | 7.7     | 30.4<br>30.4 | 30.4    | 98.9<br>99.0   | 99.0             | 8.3<br>8.3<br>8.3               | 3.2<br>3.2   | -    | 4                |    | 80<br>80        |    |                       |                       | <0.2<br><0.2         | 1.5<br>1.7        |
| IM2           | Cloudy      | Rough      | 12:51    | 8.1       | Middle         | 4.1         | 0.5              | 193<br>204 | 14.8<br>14.8 | 14.8          | 7.8<br>7.8 | 7.8     | 31.4<br>31.4 | 31.4    | 99.2<br>99.3   | 99.3             | 8.3<br>8.3                      | 6.2<br>6.4   | 5.6  | 3                | 4  | 81<br>81        | 81 | 818855                | 806176                | <0.2<br><0.2 <0.2    | 1.4<br>1.5<br>1.6 |
|               |             |            |          |           | Bottom         | 7.1         | 0.6              | 218<br>219 | 14.8<br>14.8 | 14.8          | 7.7        | 7.7     | 32.6<br>32.5 | 32.6    | 99.6<br>99.6   | 99.6             | 8.3<br>8.3<br>8.3               | 7.4<br>7.2   | -    | 6<br>6           |    | 82<br>82        |    |                       |                       | <0.2<br><0.2         | 1.7<br>1.6        |
|               |             |            |          |           | Surface        | 1.0         | 0.6<br>0.6       | 207<br>225 | 14.9<br>14.9 | 14.9          | 7.8<br>7.8 | 7.8     | 31.3<br>31.3 | 31.3    | 99.1<br>99.1   | 99.1             | 8.3<br>8.3                      | 8.3<br>8.3   | -    | 6<br>6           |    | 82<br>82        |    |                       |                       | <0.2<br><0.2         | 1.3<br>1.2        |
| IM3           | Rainy       | Rough      | 13:02    | 8.2       | Middle         | 4.1         | 0.5<br>0.5       | 212<br>229 | 14.9<br>14.9 | 14.9          | 7.7        | 7.7     | 31.3<br>31.3 | 31.3    | 99.6<br>99.6   | 99.6             | 8.3<br>8.3                      | 7.1<br>7.0   | 7.6  | 6<br>8           | 7  | 83<br>83        | 83 | 819430                | 806020                | <0.2<br><0.2 <0.2    | 1.3               |
|               |             |            |          |           | Bottom         | 7.2         | 0.5              | 218<br>220 | 14.9         | 14.9          | 7.7        | 7.7     | 31.4<br>31.4 | 31.4    | 100.1<br>100.1 | 100.1            | 8.3<br>8.3<br>8.3               | 7.5          | -    | 7                |    | 83<br>84        |    |                       |                       | <0.2<br><0.2         | 1.2               |
|               |             |            |          |           | Surface        | 1.0         | 0.6              | 189        | 15.0         | 15.0          | 7.7        | 7.7     | 31.0         | 31.0    | 98.4           | 98.4             | 8.2                             | 9.6          |      | 9                |    | 81              |    |                       |                       | <0.2                 | 1.3               |
| IM4           | Rainy       | Rough      | 13:12    | 7.5       | Middle         | 1.0<br>3.8  | 0.6              | 195<br>189 | 15.0<br>15.0 | 15.0          | 7.7        | 7.7     | 31.0<br>31.2 | 31.2    | 98.4<br>99.3   | 99.3             | 8.2<br>8.3<br>8.3               | 9.6<br>11.9  | 11.4 | 10<br>10         | 11 | 80<br>81        | 81 | 819569                | 805026                | <0.2<br><0.2<br><0.2 | 1.5<br>1.3<br>1.3 |
|               |             |            |          |           | Bottom         | 3.8<br>6.5  | 0.5<br>0.4       | 205<br>209 | 15.0<br>14.9 | 14.9          | 7.7        | 7.7     | 31.2<br>32.9 | 32.9    | 99.3<br>100.1  | 100.1            | 8.3<br>8.3<br>8.3               | 12.0<br>12.7 | -    | 11<br>12         |    | 81<br>82        |    |                       |                       | <0.2<br><0.2         | 1.4<br>1.0        |
|               |             |            |          |           | Surface        | 6.5<br>1.0  | 0.4<br>0.7       | 216<br>186 | 14.9<br>15.1 | 15.1          | 7.7<br>7.7 | 7.7     | 32.8<br>30.5 |         | 100.1<br>98.1  | 98.1             | 8.3<br>8.2                      | 12.7<br>5.9  |      | 13<br>6          |    | 82<br>80        |    |                       |                       | <0.2<br><0.2         | 1.2<br>1.4        |
| IM5           | Rainy       | Rough      | 13:25    | 6.6       | Middle         | 1.0         | 0.7              | 190<br>176 | 15.1<br>15.1 | 15.1          | 7.7        | 7.7     | 30.5<br>30.7 | 30.7    | 98.1<br>98.5   | 98.5             | 8.2<br>8.2<br>8.2               | 5.9<br>8.8   | 9.8  | 7<br>8           | 9  | 80<br>81        | 81 | 820568                | 804912                | <0.2                 | 1.5<br>1.6<br>1.4 |
| IIVIO         | пашу        | nough      | 13.25    | 0.0       |                | 3.3<br>5.6  | 0.6              | 181<br>186 | 15.1<br>15.1 |               | 7.7<br>7.7 |         | 30.7<br>31.7 |         | 98.5<br>99.7   |                  | 8.2<br>8.3                      | 8.9<br>14.6  | 5.0  | 6<br>13          | 5  | 81<br>81        | 01 | 020300                | 004912                | <0.2<br><0.2         | 1.5<br>1.3        |
|               |             |            |          |           | Bottom         | 5.6<br>1.0  | 0.5              | 189<br>188 | 15.1<br>15.2 | 15.1          | 7.7        | 7.7     | 31.7<br>30.5 | 31.7    | 99.8<br>98.0   | 99.8             | 8.3<br>8.2<br>8.2               | 14.6<br>5.1  |      | 14<br>5          |    | 82<br>81        |    |                       |                       | <0.2<br><0.2         | 1.2<br>1.6        |
|               |             |            |          |           | Surface        | 1.0         | 0.6              | 193<br>195 | 15.2<br>15.2 | 15.2          | 7.7<br>7.7 | 7.7     | 30.5<br>30.6 | 30.5    | 98.0<br>99.2   | 98.0             | 8.2<br>8.3<br>8.3               | 5.2<br>9.2   | ļ    | 7 6              |    | 81              |    |                       |                       | <0.2<br><0.2         | 1.8               |
| IM6           | Rainy       | Rough      | 13:37    | 6.5       | Middle         | 3.3<br>5.5  | 0.5              | 207        | 15.2<br>15.1 | 15.2          | 7.7        | 7.7     | 30.6<br>32.9 | 30.6    | 99.2<br>100.3  | 99.2             | 8.3<br>8.3                      | 9.3<br>11.5  | 8.6  | 7 6              | 7  | 82<br>82<br>82  | 82 | 821077                | 805809                | <0.2<br><0.2<br><0.2 | 1.6<br>1.6        |
|               |             |            |          |           | Bottom         | 5.5         | 0.5              | 203        | 15.1         | 15.1          | 7.7        | 7.7     | 32.9         | 32.9    | 100.3          | 100.3            | 8.3 0.3                         | 11.1         |      | 8                |    | 83              |    |                       |                       | <0.2                 | 1.6               |
|               |             |            |          |           | Surface        | 1.0         | 0.4              | 212<br>224 | 15.3<br>15.3 | 15.3          | 7.7        | 7.7     | 30.5<br>30.5 | 30.5    | 97.8<br>97.9   | 97.9             | 8.1<br>8.1<br>8.2               | 4.8          | ļ    | 4 5              |    | 83<br>83        |    |                       |                       | <0.2                 | 1.6<br>1.7        |
| IM7           | Rainy       | Rough      | 13:47    | 7.7       | Middle         | 3.9<br>3.9  | 0.3<br>0.3       | 205<br>205 | 15.3<br>15.3 | 15.3          | 7.7<br>7.7 | 7.7     | 30.7<br>30.7 | 30.7    | 99.0<br>99.1   | 99.1             | 8.2<br>8.2                      | 6.6<br>6.7   | 6.0  | 4<br>5           | 6  | 83<br>84        | 84 | 821360                | 806847                | <0.2<br><0.2<br><0.2 | 1.7               |
|               |             |            |          |           | Bottom         | 6.7<br>6.7  | 0.4              | 191<br>201 | 15.3<br>15.3 | 15.3          | 7.7<br>7.7 | 7.7     | 31.1<br>31.0 | 31.1    | 100.0<br>100.1 | 100.1            | 8.3<br>8.3<br>8.3               | 6.5<br>6.3   |      | 9<br>9           |    | 84<br>85        |    |                       |                       | <0.2<br><0.2         | 1.6<br>1.6        |
|               |             |            |          |           | Surface        | 1.0         | 0.7<br>0.7       | 154<br>165 | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.2<br>27.2 | 27.2    | 99.3<br>99.3   | 99.3             | 8.0<br>8.0                      | 10.2<br>10.2 |      | 8                |    | 76<br>76        |    |                       |                       | <0.2<br><0.2         | 1.6<br>1.6        |
| IM8           | Cloudy      | Moderate   | 12:35    | 8.0       | Middle         | 4.0         | 0.6              | 139<br>139 | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.5<br>27.5 | 27.5    | 99.5<br>99.5   | 99.5             | 8.0<br>8.0<br>8.0               | 12.7<br>12.7 | 13.2 | 10<br>10         | 10 | 81<br>81        | 80 | 821712                | 807842                | <0.2<br><0.2<br><0.2 | 1.6               |
|               |             |            |          |           | Bottom         | 7.0         | 0.8              | 149<br>155 | 18.1         | 18.1          | 8.0<br>8.0 | 8.0     | 28.4<br>28.4 | 28.4    | 100.4<br>100.4 | 100.4            | 8.0<br>8.0<br>8.0               | 16.6<br>16.6 | ŀ    | 15<br>13         |    | 83<br>84        |    |                       |                       | <0.2                 | 1.4               |
| DA: Depth-Ave | <u> </u>    |            | 1        |           | 1              | 1.0         | 0.9              | 100        | 10.1         |               | 0.0        | I       | ∠0.4         |         | 100.4          |                  | 0.0                             | 10.0         |      | 10               |    | 04              |    |                       | 1                     | SU.2                 | 1.4               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on24 February 17during 24 February 17 during Mid-Ebb tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 24 February 17 | during Mid  | I-Ebb tide       |                   |              |               | -          |         |              |          |                |                  |                     |              |      |                  |   |                 |  |                       |                       | <u> </u>           |               |
|---------------|-------------|------------|----------|-----------|----------------|-------------|------------------|-------------------|--------------|---------------|------------|---------|--------------|----------|----------------|------------------|---------------------|--------------|------|------------------|---|-----------------|--|-----------------------|-----------------------|--------------------|---------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling De    | oth (m)     | Current<br>Speed | Current           | Water Ter    | mperature (°C | ;)         | pН      | Salini       | ty (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity    | NTU) | Suspende<br>(mg/ |   | Total Al<br>(pp | lkalinity<br>om)                                     | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L) | Nickel (µg/L) |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction         | Value        | Average       | Value      | Average | Value        | Average  | Value          | Average          | Value DA            | Value        | DA   | Value            | DA                                      | Value           | DA   | (Northing)            | (Easting)             | Value DA           | Value DA      |
|               |             |            |          |           | Surface        | 1.0         | 0.7              | 128<br>130        | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.3<br>27.3 | 27.3     | 99.1<br>99.1   | 99.1             | 7.9                 | 9.8<br>9.8   | ŀ    | 10<br>8          |   | 78<br>78        |  | ł                     |                       | <0.2<br><0.2       | 1.6<br>1.6    |
| IM9           | Cloudy      | Moderate   | 12:25    | 7.1       | Middle         | 3.6<br>3.6  | 0.7              | 125<br>132        | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.3<br>27.3 | 27.3     | 99.5<br>99.5   | 99.5             | 8.0<br>8.0<br>8.0   | 10.1<br>10.1 | 11.0 | 8<br>9           | 9                                       | 81<br>82        | 81   | 822108                | 808793                | <0.2<br><0.2 <0.2  | 16            |
|               |             |            |          |           | Bottom         | 6.1         | 0.7              | 110               | 18.1         | 18.1          | 8.0        | 8.0     | 27.6         | 27.6     | 101.5          | 101.5            | 8.1 8.1             | 13.1         | ŀ    | 10               |   | 84              |  |                       |                       | <0.2               | 1.6           |
|               |             |            |          |           |                | 6.1         | 0.8              | <u>110</u><br>130 | 18.1<br>18.0 |               | 8.0<br>8.0 |         | 27.6<br>27.4 |          | 101.5<br>100.4 |                  | 8.1 0.1<br>8.1      | 13.1<br>9.1  |      | 9<br>9           | ļ                                       | 83<br>77        | $\vdash$   |                       | <u> </u>              | <0.2<br><0.2       | 1.7<br>1.2    |
|               |             |            |          |           | Surface        | 1.0<br>4.0  | 1.0<br>0.9       | 141<br>121        | 18.0<br>18.0 | 18.0          | 8.0<br>8.0 | 8.0     | 27.4<br>27.6 | 27.4     | 100.4<br>101.0 | 100.4            | 8.1<br>8.1 8.1      | 9.1<br>12.5  | ļ    | 10<br>9          | l t                                     | 77<br>81        | -  |                       |                       | <0.2<br><0.2       | 1.2<br>1.5    |
| IM10          | Cloudy      | Moderate   | 12:15    | 8.0       | Middle         | 4.0         | 0.9              | 122               | 18.0         | 18.0          | 8.0        | 8.0     | 27.6         | 27.6     | 101.0          | 101.0            | 8.1                 | 12.6         | 12.7 | 9                | 9                                       | 82              | 81   | 822238                | 809837                | <0.2               | 1.3           |
|               |             |            |          |           | Bottom         | 7.0 7.0     | 0.8              | 119<br>125        | 18.1<br>18.1 | 18.1          | 8.0<br>8.0 | 8.0     | 27.7<br>27.7 | 27.7     | 103.3<br>103.4 | 103.4            | 8.3<br>8.3          | 16.5<br>16.2 | -    | 9<br>9           |   | 84<br>84        |  |                       |                       | <0.2<br><0.2       | 1.2<br>1.4    |
|               |             |            |          |           | Surface        | 1.0         | 0.8              | 118<br>127        | 18.1<br>18.1 | 18.1          | 8.0<br>8.0 | 8.0     | 27.3<br>27.3 | 27.3     | 98.2<br>98.2   | 98.2             | 7.9<br>7.9<br>7.0   | 8.2<br>8.2   | -    | 5<br>6           |   | 78<br>78        | $\square$  |                       |                       | <0.2<br><0.2       | 1.4<br>1.5    |
| IM11          | Cloudy      | Moderate   | 12:05    | 8.0       | Middle         | 4.0         | 0.7              | 118               | 18.3         | 18.3          | 8.0        | 8.0     | 27.6<br>27.6 | 27.6     | 97.5           | 97.5             | 7.8                 | 10.6<br>10.6 | 10.1 | 6 8              | 8                                       | 82<br>82        | 81   | 821496                | 810529                | <0.2               | 1.9 1.7       |
|               |             |            |          |           | Bottom         | 7.0         | 0.8              | 129<br>135        | 18.3<br>18.3 | 18.3          | 8.0<br>8.0 | 8.0     | 27.8         | 27.8     | 97.5<br>98.1   | 98.1             | 7.8<br>7.8<br>7.8   | 11.6         |      | 13               |   | 84              |  | ł                     |                       | <0.2<br><0.2       | 1.8<br>1.8    |
|               |             |            |          |           |                | 7.0         | 0.7              | 138<br>107        | 18.3<br>18.2 |               | 8.0<br>8.0 |         | 27.8<br>27.4 |          | 98.1<br>97.6   |                  | 7.8<br>7.8          | 11.6<br>6.3  |      | 12<br>5          |   | 84<br>77        | $\vdash$   |                       |                       | <0.2<br><0.2       | 1.7<br>1.7    |
|               |             |            |          |           | Surface        | 1.0<br>4.3  | 0.8              | 115<br>114        | 18.2<br>18.3 | 18.2          | 8.0<br>8.0 | 8.0     | 27.4<br>27.8 | 27.4     | 97.6<br>97.7   | 97.6             | 7.8<br>7.8<br>7.8   | 6.3<br>6.2   | -    | 5<br>8           |   | 78<br>82        | 4  | ł                     |                       | <0.2               | 1.7           |
| IM12          | Cloudy      | Moderate   | 11:54    | 8.5       | Middle         | 4.3         | 0.9              | 114               | 18.3         | 18.3          | 8.0        | 8.0     | 27.8         | 27.8     | 97.7           | 97.7             | 7.8                 | 6.2          | 6.5  | 7                | 6                                       | 81              | 81   | 821173                | 811534                | <0.2               | 1.8           |
|               |             |            |          |           | Bottom         | 7.5<br>7.5  | 0.6              | 132<br>133        | 18.3<br>18.3 | 18.3          | 8.0<br>8.0 | 8.0     | 28.3<br>28.3 | 28.3     | 99.6<br>99.7   | 99.7             | 7.9<br>7.9<br>7.9   | 7.1<br>7.1   | -    | 7<br>6           |   | 84<br>83        |  |                       |                       | <0.2<br><0.2       | 1.5<br>1.5    |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 76<br>77          | 18.1<br>18.1 | 18.1          | 8.0<br>8.0 | 8.0     | 28.1<br>28.1 | 28.1     | 97.4<br>97.4   | 97.4             | 7.8<br>7.8<br>7.0   | 6.0<br>6.0   | -    | 5<br>5           |   | 80<br>79        |  |                       |                       | <0.2<br><0.2       | 1.5<br>1.4    |
| SR2           | Cloudy      | Moderate   | 11:26    | 4.6       | Middle         | 2.3         | -                | -                 | -            | -             | -          |         | -            | -        | -              | -                | - 7.8               | -            | 6.9  | -                | 5                                       | -               | 82   | 821461                | 814161                | - <0.2             | -             |
|               |             |            |          |           | Bottom         | 3.6         | 0.4              | 134               | 18.3         | 18.3          | 7.9        | 7.9     | 28.8         | 28.8     | 98.9           | 99.0             | 7.8 7.8             | 7.7          |      | 5                |   | 85              | -  | ł                     |                       | <0.2               | 1.4           |
|               |             |            |          |           |                | 3.6         | 0.4              | 134<br>172        | 18.3<br>18.3 | 18.3          | 7.9<br>8.0 | 8.0     | 28.8<br>26.9 | 26.9     | 99.0<br>97.6   | 97.7             | 7.8                 | 7.7<br>7.6   |      | 6<br>6           | ļ                                       | 85<br>-         | $\vdash$   |                       | <u> </u>              | <0.2               | 1.5           |
|               |             |            |          |           | Surface        | 1.0         | 0.8              | 181<br>179        | 18.3<br>18.3 |               | 8.0<br>8.0 |         | 26.9<br>27.0 |          | 97.7<br>98.2   |                  | 7.8<br>7.9<br>7.9   | 7.7<br>9.4   |      | 7<br>8           | _ [                                     | -               |  |                       |                       | -                  | -             |
| SR3           | Cloudy      | Moderate   | 12:42    | 8.2       | Middle         | 4.1         | 0.7              | 194               | 18.3         | 18.3          | 8.0        | 8.0     | 27.0         | 27.0     | 98.2           | 98.2             | 7.9                 | 9.4          | 10.2 | 6                | 7                                       | -               | -  | 822162                | 807570                |                    | -             |
|               |             |            |          |           | Bottom         | 7.2<br>7.2  | 1.0<br>1.0       | 135<br>144        | 18.2<br>18.2 | 18.2          | 8.0<br>8.0 | 8.0     | 27.6<br>27.6 | 27.6     | 99.3<br>99.3   | 99.3             | 7.9<br>7.9<br>7.9   | 13.5<br>13.5 | -    | 8                | <u> </u>                                | -               |  |                       | <u> </u>              | -                  | -             |
|               |             |            |          |           | Surface        | 1.0         | 0.4              | 99<br>103         | 15.1<br>15.1 | 15.1          | 7.7<br>7.7 | 7.7     | 30.4<br>30.4 | 30.4     | 97.0<br>97.0   | 97.0             | 8.1<br>8.1<br>8.1   | 12.1<br>12.2 | -    | 14<br>15         |   | -               | -  | ł                     |                       | -                  | -             |
| SR4A          | Cloudy      | Moderate   | 11:48    | 8.0       | Middle         | 4.0         | 0.3              | 105<br>112        | 15.1<br>15.1 | 15.1          | 7.7        | 7.7     | 30.7<br>30.7 | 30.7     | 97.0<br>97.0   | 97.0             | 8.1<br>8.1          | 17.8<br>17.9 | 17.7 | 18<br>17         | 19                                      | -               | -  | 817195                | 807824                |                    |               |
|               |             |            |          |           | Bottom         | 7.0         | 0.3              | 94<br>94          | 15.1<br>15.1 | 15.1          | 7.7        | 7.7     | 31.1<br>31.1 | 31.1     | 97.1<br>97.1   | 97.1             | 8.1<br>8.1<br>8.1   | 23.1<br>23.1 |      | 26<br>26         | l l                                     | -               | -  |                       |                       | -                  | -             |
|               |             |            |          |           | Surface        | 1.0         | 0.3<br>0.1       | 168               | 15.5         | 15.5          | 7.8        | 7.8     | 30.4         | 30.4     | 94.6           | 94.6             | 7.8                 | 9.7          |      | 12               | ł                                       |                 | ╞──╋   |                       | <u> </u>              | -                  |               |
| ODEA          | Clauste     | Madavata   | 11.07    | 4.0       |                | 1.0<br>2.1  | 0.1              | - 184             | 15.5<br>-    |               | 7.8        |         | - 30.4       |          | 94.6<br>-      |                  | 7.8 7.8             | 9.7          | 10.0 | - 14             | 10                                      | -               |  | 010570                | 010700                | -                  | -             |
| SR5A          | Cloudy      | Moderate   | 11:27    | 4.2       | Middle         | 2.1<br>3.2  | - 0.1            | -<br>184          | -<br>15.5    | -             | -<br>7.7   | -       | -<br>30.4    | -        | -<br>97.4      | -                | - 8.1 0.1           | -<br>12.1    | 10.9 | -<br>14          | 13                                      | -               | -  | 816576                | 810706                | -                  | -             |
|               |             |            |          |           | Bottom         | 3.2         | 0.2              | 200               | 15.5         | 15.5          | 7.7        | 7.7     | 30.4         | 30.4     | 97.3           | 97.4             | 8.1 8.1             | 12.1         |      | 13               | <sup> </sup>                            | -               |  |                       | <u> </u>              | -                  | -             |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.4              | 165<br>175        | 15.0<br>15.0 | 15.0          | 7.7<br>7.7 | 7.7     | 27.6<br>27.6 | 27.6     | 103.7<br>103.8 | 103.8            | 8.8<br>8.8<br>8.8   | 5.3<br>5.3   | -    | 9<br>8           |   | -               |  | ł                     | 1                     | -                  | -             |
| SR6           | Rainy       | Moderate   | 11:00    | 4.1       | Middle         | 2.1         | -                | -                 | -            | -             | -          |         | -            | -        | -              | -                | - 0.0               | -            | 5.4  | -                | 8                                       | -               | -  | 817900                | 814669                |                    |               |
|               |             |            |          |           | Bottom         | 3.1         | 0.5<br>0.5       | 186<br>199        | 15.0<br>15.0 | 15.0          | 7.6<br>7.6 | 7.6     | 26.8<br>26.8 | 26.8     | 108.5<br>108.5 | 108.5            | 9.3<br>9.3 9.3      | 5.5<br>5.5   | ļ    | 7 8              |   | -               |  | ſ                     | 1                     | -                  | -             |
|               |             |            |          |           | Surface        | 1.0         | 0.3              | 168               | 17.8         | 17.8          | 7.9        | 7.9     | 30.3         | 30.3     | 97.1           | 97.1             | 7.7                 | 4.5          |      | 4                | <del> </del>                            | -               |  |                       | <u> </u>              | -                  | -             |
| SR7           | Cloudy      | Moderate   | 10:24    | 15.5      | Middle         | 1.0<br>7.8  | 0.3              | 182<br>118        | 17.8<br>17.8 | 17.8          | 7.9<br>7.9 | 7.9     | 30.3<br>30.4 | 30.4     | 97.1<br>97.8   | 97.8             | 7.7<br>7.8<br>7.8   | 4.5<br>4.8   | 4.8  | 4<br>5           | 4                                       | -               |  | 823617                | 823723                | -                  | -             |
| on/           | Cloudy      | wouerale   | 10.24    | 10.0      |                | 7.8<br>14.5 | 0.3              | 126<br>136        | 17.8<br>17.8 |               | 7.9<br>7.9 |         | 30.4<br>30.4 |          | 97.8<br>99.6   |                  | 7.8<br>7.9<br>7.0   | 4.8<br>5.0   | 4.0  | 4                | 4                                       | -               | $\left  \begin{array}{c} - \\ - \end{array} \right $ | 02301/                | 023723                | -                  | -             |
|               |             |            |          |           | Bottom         | 14.5        | 0.2              | 143               | 17.8         | 17.8          | 7.9        | 7.9     | 30.4         | 30.4     | 99.6           | 99.6             | 7.9                 | 5.0          |      | 4                | ⊢ <sup>†</sup>                          | -               | $\square$  |                       | <b> </b>              | -                  | -             |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.6       | 180<br>197        | 18.4<br>18.4 | 18.4          | 8.0<br>8.0 | 8.0     | 28.1<br>28.1 | 28.1     | 97.5<br>97.5   | 97.5             | 7.7 7.7 7.7         | 9.8<br>9.8   | -    | 10<br>8          |   | -               | 1  | ſ                     | 1                     | -                  | -             |
| SR8           | Cloudy      | Moderate   | 11:45    | 5.1       | Middle         | 2.6<br>2.6  | -                | -                 | -            | -             | -          |         | -            | -        | -              | -                | - 1.1               | -            | 10.1 | -                | 9                                       | -               | -  | 820408                | 811601                |                    |               |
|               |             |            |          |           | Bottom         | 4.1         | 0.6              | 181<br>192        | 18.4<br>18.4 | 18.4          | 8.0<br>8.0 | 8.0     | 28.7<br>28.7 | 28.7     | 100.0          | 100.1            | 7.9<br>7.9<br>7.9   | 10.3<br>10.3 | ļ    | 9<br>8           |   | -               |  | ľ                     | 1                     | -                  | -             |
| DA: Depth-Ave | <u> </u>    |            |          |           | 1              | 4.1         | 0.0              | 192               | 10.4         |               | 0.0        | 1       | 20./         |          | 100.1          |                  | 1.3                 | 10.3         |      | 0                | لــــــــــــــــــــــــــــــــــــــ |                 | لحصل   | '                     | L                     |                    |               |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on26 February 17during 26 February 17 during Mid-Flood Tide

| Water Qua     | lity Monite | oring Resi | lits on  |           | 26 February 17 | during Mid   |                  | de         |              |               |            |         |              |         |               |                  |                           |              |      | _                |    |                 |    |                       | 1                     |                      |               |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|---------------|------------------|---------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|----------------------|---------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | mperature (°C | ;)         | pН      | Salinity     | r (ppt) |               | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L) |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average       | Value      | Average |              | verage  |               | Average          | Value DA                  | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA             | Value DA      |
|               |             |            |          |           | Surface        | 1.0          | 0.8              | 137<br>144 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 33.3<br>33.3 | 33.3    | 98.5<br>98.5  | 98.5             | 8.2<br>8.2                | 14.0<br>14.1 | F    | 14<br>13         |    | 83<br>83        |    |                       |                       | <0.2<br><0.2         | 0.5           |
| C1            | Cloudy      | Rough      | 07:05    | 8.8       | Middle         | 4.4          | 0.9              | 111<br>119 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 33.3         |         | 98.6<br>98.6  | 98.6             | 8.2<br>8.2<br>8.2         | 14.4<br>14.5 | 16.1 | 18               | 17 | 84<br>84        | 84 | 815606                | 804231                | <0.2<br><0.2 <0.2    | 0.5           |
|               |             |            |          |           | Bottom         | 7.8          | 1.0<br>1.0       | 106        | 14.2         | 14.2          | 7.8        | 7.8     | 33.6         | 22.6    | 98.6          | 98.6             | 8.2 8.2                   | 19.9         | ŀ    | 19<br>19         |    | 85              |    |                       |                       | <0.2                 | 0.6           |
|               |             |            |          |           |                | 7.8          | 1.0<br>0.5       | 114<br>168 | 14.2<br>17.7 |               | 7.8<br>8.0 |         | 33.6         |         | 98.5<br>95.4  |                  | 8.2 <sup>0.2</sup><br>7.7 | 19.9<br>6.0  |      | 18<br>3          |    | 85<br>76        |    |                       |                       | <0.2<br><0.2         | 0.7           |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 175        | 17.7         | 17.7          | 8.0        | 8.0     | 28.1         | 20.1    | 95.4          | 95.4             | 7.7 7.7                   | 6.0          |      | 5                |    | 77              |    |                       |                       | <0.2                 | 1.4           |
| C2            | Fine        | Moderate   | 08:16    | 12.2      | Middle         | 6.1<br>6.1   | 0.5<br>0.5       | 185<br>185 | 17.8<br>17.8 | 17.8          | 8.0<br>8.0 | 8.0     | 28.1<br>28.1 | 28.1    | 95.5<br>95.5  | 95.5             | 7.7                       | 8.0<br>8.1   | 8.3  | 4 4              | 5  | 82<br>82        | 81 | 825696                | 806930                | <0.2<br><0.2 <0.2    | 1.3           |
|               |             |            |          |           | Bottom         | 11.2<br>11.2 | 0.4              | 247<br>250 | 17.9<br>17.9 | 17.9          | 7.9<br>7.9 | 7.9     | 28.3<br>28.3 |         | 96.4<br>96.4  | 96.4             | 7.7 7.7                   | 10.7<br>10.7 | -    | 5<br>6           |    | 84<br>84        |    |                       |                       | <0.2<br><0.2         | 1.3           |
|               |             |            |          |           | Surface        | 1.0          | 0.3              | 240        | 17.5         | 17.5          | 8.0        | 8.0     | 29.9         |         | 96.8          | 96.8             | 7.7                       | 5.2          |      | 3                |    | 80              |    |                       |                       | <0.2                 | 0.6           |
| C3            | Fine        | Moderate   | 06:25    | 12.5      | Middle         | 1.0<br>6.3   | 0.3              | 261<br>261 | 17.5<br>17.6 | 17.6          | 8.0<br>8.0 | 8.0     | 29.9<br>30.1 | 30.1    | 96.7<br>98.0  | 98.0             | 7.7<br>7.8<br>7.8         | 5.3<br>7.7   | 7.1  | 5<br>5           | 5  | 81<br>83        | 83 | 822100                | 817810                | <0.2<br><0.2<br><0.2 | 0.6 0.6       |
| 00            | T IIIC      | Woderate   | 00.20    | 12.5      |                | 6.3<br>11.5  | 0.3              | 280<br>256 | 17.6<br>17.6 |               | 8.0<br>8.0 |         | 30.1         |         | 98.0<br>100.5 |                  | 7.8<br>8.0                | 7.7<br>8.4   | 7.1  | 7<br>6           | 5  | 82<br>85        | 00 | 022100                | 01/010                | <0.2<br><0.2         | 0.7           |
|               |             |            |          |           | Bottom         | 11.5         | 0.3              | 280        | 17.6         | 17.6          | 8.0        | 8.0     | 30.1         | 30.1    | 100.5         | 100.5            | 8.0 8.0                   | 8.4          |      | 6                |    | 85              |    |                       |                       | <0.2                 | 0.7           |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.8              | 145<br>156 | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 32.6<br>32.6 | 32.6    | 96.7<br>96.6  | 96.7             | 8.1<br>8.1<br>8.1         | 9.7<br>9.9   | _    | 11<br>10         |    | 81<br>81        |    |                       |                       | <0.2<br><0.2         | 0.8<br>0.8    |
| IM1           | Cloudy      | Rough      | 07:25    | 7.8       | Middle         | 3.9<br>3.9   | 0.9              | 140<br>149 | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 32.6<br>32.6 |         | 97.2<br>97.1  | 97.2             | 8.1<br>8.1                | 16.6<br>16.6 | 15.0 | 11<br>12         | 14 | 82<br>82        | 82 | 818360                | 806477                | <0.2<br><0.2 <0.2    | 0.7 0.7       |
|               |             |            |          |           | Bottom         | 6.8          | 0.8              | 144        | 14.5         | 14.5          | 7.8        | 7.8     | 32.7         | 22.7    | 97.4          | 97.4             | 8.1 8.1                   | 18.6         | ŀ    | 19               |    | 83              |    |                       |                       | <0.2                 | 0.7           |
|               |             |            |          |           | Surface        | 6.8<br>1.0   | 0.8              | 156<br>157 | 14.5<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 32.7<br>32.9 | 22.0    | 97.4<br>96.8  | 96.8             | 8.1 <sup>0.1</sup><br>8.1 | 18.5<br>11.6 |      | 19<br>13         |    | 83<br>81        |    |                       |                       | <0.2<br><0.2         | 0.6<br>0.6    |
|               |             |            |          |           |                | 1.0<br>4.4   | 0.6              | 158<br>133 | 14.4<br>14.5 |               | 7.8<br>7.8 | -       | 32.9         |         | 96.8<br>96.9  |                  | 8.1<br>8.1 8.1            | 11.6<br>13.3 | F    | 12<br>15         |    | 81<br>82        |    |                       |                       | <0.2<br><0.2         | 0.6           |
| IM2           | Cloudy      | Rough      | 07:32    | 8.7       | Middle         | 4.4          | 0.6              | 137        | 14.5         | 14.5          | 7.8        | 7.8     | 32.8         | 32.0    | 97.0          | 97.0             | 8.1                       | 13.4         | 13.5 | 15               | 18 | 81              | 82 | 818852                | 806175                | <0.2                 | 0.9           |
|               |             |            |          |           | Bottom         | 7.7          | 0.7<br>0.8       | 122<br>133 | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 32.8<br>32.8 |         | 97.3<br>97.4  | 97.4             | 8.1<br>8.1<br>8.1         | 15.6<br>15.7 |      | 25<br>25         |    | 82<br>82        |    |                       |                       | <0.2<br><0.2         | 0.7           |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 144<br>147 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 33.3<br>33.3 | 33.3    | 97.5<br>97.5  | 97.5             | 8.2<br>8.2                | 13.6<br>13.6 | -    | 22<br>22         |    | 80<br>80        |    |                       |                       | <0.2<br><0.2         | 0.8<br>0.7    |
| IM3           | Cloudy      | Rough      | 07:41    | 8.8       | Middle         | 4.4          | 0.7              | 127        | 14.2         | 14.2          | 7.8        | 7.8     | 33.3         | 22.2    | 98.0          | 98.1             | 8.2 0.2                   | 14.3         | 15.0 | 21               | 21 | 81              | 81 | 819405                | 806034                | <0.2                 | 0.6 0.8       |
|               |             |            |          |           | Bottom         | 4.4<br>7.8   | 0.8<br>0.7       | 129<br>152 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 33.3<br>33.4 | 22.4    | 98.1<br>98.7  | 98.7             | 8.2<br>8.3<br>8.3         | 14.4<br>17.3 |      | 20<br>21         |    | 81<br>81        |    |                       |                       | <0.2<br><0.2         | 0.8           |
|               |             |            |          |           |                | 7.8          | 0.7              | 160<br>141 | 14.2<br>14.2 |               | 7.8<br>7.8 |         | 33.3         |         | 98.7<br>97.8  |                  | 8.3 0.5<br>8.2            | 17.0<br>15.4 |      | 22<br>18         |    | 82<br>81        |    |                       |                       | <0.2<br><0.2         | 0.8           |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 144        | 14.2         | 14.2          | 7.8        | 7.8     | 33.4         | 33.4    | 97.8          | 97.8             | 8.2 8.2                   | 15.4<br>16.4 |      | 17               |    | 80              |    |                       |                       | <0.2                 | 0.7           |
| IM4           | Cloudy      | Rough      | 07:51    | 8.1       | Middle         | 4.1<br>4.1   | 0.6<br>0.6       | 142<br>154 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 33.4         |         | 97.7<br>97.8  | 97.8             | 8.2<br>8.2                | 16.4         | 19.2 | 20<br>19         | 21 | 82<br>82        | 82 | 819552                | 805037                | <0.2<br><0.2 <0.2    | 0.7           |
|               |             |            |          |           | Bottom         | 7.1          | 0.6              | 156<br>157 | 14.2<br>14.2 | 14.2          | 7.8        | 7.8     | 33.4<br>33.4 |         | 98.0<br>98.0  | 98.0             | 8.2<br>8.2<br>8.2         | 25.9<br>25.8 | ŀ    | 25<br>25         |    | 83<br>82        |    |                       |                       | <0.2<br><0.2         | 0.6           |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.6<br>0.6       | 149<br>161 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 33.1         | 00.1    | 97.8<br>97.7  | 97.8             | 8.2<br>8.2                | 8.5<br>8.5   |      | 11<br>10         |    | 80<br>80        |    |                       |                       | <0.2<br><0.2         | 0.8           |
| IM5           | Cloudy      | Rough      | 07:59    | 7.1       | Middle         | 3.6          | 0.5              | 118        | 14.2         | 14.2          | 7.8        | 7.8     | 33.2         | 33.2    | 97.7          | 97.7             | 8.2 0.2                   | 10.9         | 12.3 | 13               | 13 | 81              | 81 | 820571                | 804910                | <0.2                 | 0.7 0.8       |
|               | ,           |            |          |           |                | 3.6<br>6.1   | 0.5              | 126<br>138 | 14.2<br>14.3 |               | 7.8<br>7.8 |         | 33.2         |         | 97.7<br>98.4  |                  | 8.2<br>8.2                | 10.8<br>17.8 |      | 14<br>15         |    | 81<br>82        |    |                       |                       | <0.2                 | 0.7           |
|               |             |            |          |           | Bottom         | 6.1<br>1.0   | 0.5<br>0.5       | 144<br>116 | 14.3<br>14.2 | 14.3          | 7.8<br>7.8 | 7.8     | 33.3<br>33.1 | 33.3    | 98.4<br>97.4  | 98.4             | 8.2<br>8.2<br>8.1         | 17.5<br>9.7  |      | 14<br>11         |    | 81<br>82        |    |                       |                       | <0.2<br><0.2         | 0.8           |
|               |             |            |          |           | Surface        | 1.0          | 0.6              | 120        | 14.2         | 14.2          | 7.8        | 7.8     | 33.1         | 33.1    | 97.4          | 97.4             | 8.1 8.1                   | 9.8          |      | 12               |    | 83              |    |                       |                       | <0.2                 | 0.8           |
| IM6           | Cloudy      | Rough      | 08:09    | 7.2       | Middle         | 3.6<br>3.6   | 0.5              | 121<br>131 | 14.2<br>14.2 | 14.2          | 7.8        | 7.8     | 33.1<br>33.1 |         | 97.3<br>97.3  | 97.3             | 8.1<br>8.1                | 11.1<br>11.1 | 18.0 | 13<br>13         | 17 | 83<br>84        | 84 | 821058                | 805827                | <0.2 <0.2 <0.2       | 0.7 0.8       |
|               |             |            |          |           | Bottom         | 6.2<br>6.2   | 0.5<br>0.5       | 116<br>120 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 22.2         |         | 97.7<br>97.6  | 97.7             | 8.2<br>8.2<br>8.2         | 33.2<br>33.1 | F    | 28<br>27         |    | 84<br>85        |    |                       |                       | <0.2<br><0.2         | 0.8           |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 112        | 14.5         | 14.5          | 7.8        | 7.8     | 32.8         | 20.0    | 96.9          | 96.9             | 8.1                       | 13.1         |      | 14               |    | 83              |    |                       |                       | <0.2                 | 0.9           |
| 15.47         | Claust      | Daugh      | 09.17    | 0.0       |                | 1.0<br>4.3   | 0.8              | 122<br>124 | 14.5<br>14.5 |               | 7.8<br>7.8 |         | 32.8         |         | 96.9<br>97.4  |                  | 8.1<br>8.1                | 13.1<br>15.7 | 17.0 | 14<br>15         | 15 | 83<br>84        | 04 | 001050                | 000000                | <0.2<br><0.2         | 0.8           |
| IM7           | Cloudy      | Rough      | 08:17    | 8.6       | Middle         | 4.3<br>7.6   | 0.7<br>0.7       | 131<br>101 | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 32.7         | 32.1    | 97.4<br>99.1  | 97.4             | 8.1<br>8.3                | 15.9<br>22.1 | 17.0 | 15<br>17         | 15 | 84<br>85        | 84 | 821359                | 806829                | <0.2<br><0.2<br><0.2 | 0.8 0.8 0.8   |
|               |             |            |          |           | Bottom         | 7.6          | 0.7              | 102        | 14.5         | 14.5          | 7.8        | 7.8     | 32.9         |         | 99.1          | 99.1             | 8.3 0.3                   | 22.1         |      | 17               |    | 85              |    |                       |                       | <0.2                 | 0.7           |
|               |             |            |          |           | Surface        | 1.0          | 0.7              | 144<br>154 | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 28.8<br>28.8 | 28.8    | 96.7<br>96.7  | 96.7             | 7.8                       | 15.0<br>15.0 | ŀ    | 11<br>12         |    | 77<br>77        |    |                       |                       | <0.2<br><0.2         | 0.9           |
| IM8           | Rainy       | Moderate   | 07:47    | 8.4       | Middle         | 4.2          | 0.8              | 140<br>141 | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 28.8         |         | 96.9<br>96.9  | 96.9             | 7.8<br>7.8<br>7.8         | 19.8<br>19.8 | 18.0 | 14<br>13         | 15 | 82<br>82        | 81 | 821677                | 807845                | <0.2<br><0.2<br><0.2 | 11            |
|               |             |            |          |           | Bottom         | 7.4          | 0.7              | 174        | 17.5         | 17.5          | 8.0        | 8.0     | 28.8         | 28.8    | 98.6          | 98.6             | 7.9 7.9                   | 19.2         | E    | 20               |    | 84              |    |                       |                       | <0.2                 | 1.1           |
| DA: Depth-Ave |             |            |          |           | Dottom         | 7.4          | 0.7              | 174        | 17.5         | 17.5          | 8.0        | 0.0     | 28.8         | 20.0    | 98.6          | 55.0             | 7.9                       | 19.2         |      | 19               |    | 84              |    |                       |                       | <0.2                 | 1.2           |

# Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on26 February 17 26 February 17 during Mid-Flood Tide

| Water Qua             | lity Monit | oring Resi | lits on  |           | 26 February 17 | during Mid- | Flood I          | ide                  |              |               |                    |              |            |                |                  |                     |              |       |                  |    |          |    |                       |                       |                    |                |
|-----------------------|------------|------------|----------|-----------|----------------|-------------|------------------|----------------------|--------------|---------------|--------------------|--------------|------------|----------------|------------------|---------------------|--------------|-------|------------------|----|----------|----|-----------------------|-----------------------|--------------------|----------------|
| Monitoring<br>Station | Weather    | Sea        | Sampling | Water     | Sampling Dep   | th (m)      | Current<br>Speed | Current<br>Direction |              | nperature (°C | ;) pH              | -            | nity (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity    | (NTU) | Suspende<br>(mg/ |    | (pp      |    | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L) | Nickel (µg/L)  |
| Otation               | Condition  | Condition  | Time     | Depth (m) |                |             | (m/s)            |                      | Value        | Average       | Value Average      |              | Average    |                | Average          | Value DA            | Value        | DA    | Value            | DA | Value    | DA | (Northing)            | (Easting)             | Value DA           | Value DA       |
|                       |            |            |          |           | Surface        | 1.0         | 0.6              | 159<br>171           | 17.6<br>17.6 | 17.6          | 8.0<br>8.0         | 28.4<br>28.4 | 28.4       | 97.2<br>97.2   | 97.2             | 7.8                 | 6.2<br>6.2   | -     | 6<br>5           |    | 77<br>78 |    |                       |                       | <0.2<br><0.2       | 1.2            |
| IM9                   | Rainy      | Moderate   | 07:38    | 7.3       | Middle         | 3.7         | 0.6              | 165                  | 17.6         | 17.6          | 8.0 8.0            | 28.5         | 28.5       | 98.5           | 98.5             | 7.9                 | 8.0          | 7.7   | 6                | 6  | 82       | 81 | 822110                | 808827                | <0.2               | 1.4 1.4        |
|                       |            | moderate   | 07.00    |           |                | 3.7<br>6.3  | 0.7              | 175<br>169           | 17.6<br>17.7 |               | 8.0                | 28.5<br>28.6 |            | 98.5<br>100.5  |                  | 7.9<br>8.1          | 8.0<br>9.0   |       | 5<br>8           | Ū  | 83<br>83 |    | 022110                | 000021                | <0.2               | 1.4<br>1.5     |
|                       |            |            |          |           | Bottom         | 6.3         | 0.6              | 179                  | 17.7         | 17.7          | 8.0 8.0            | 28.6         | 28.6       | 100.5          | 100.5            | 8.1                 | 9.0          |       | 7                |    | 83       |    |                       |                       | <0.2               | 1.6            |
|                       |            |            |          |           | Surface        | 1.0         | 0.7              | 232<br>239           | 17.4<br>17.4 | 17.4          | 8.0<br>8.0         | 28.8<br>28.8 | 28.8       | 96.8<br>96.8   | 96.8             | 7.8<br>7.8 7.9      | 10.2<br>10.2 | -     | 7<br>9           |    | 77<br>78 |    |                       |                       | <0.2<br><0.2       | 1.2            |
| IM10                  | Rainy      | Moderate   | 07:29    | 8.2       | Middle         | 4.1         | 0.7              | 223                  | 17.5         | 17.5          | 8.0                | 28.8         | 28.8       | 97.0           | 97.0             | 7.8                 | 12.5         | 12.1  | 8                | 9  | 83       | 81 | 822240                | 809853                | <0.2               | 1.2 1.2        |
| -                     |            |            |          |           |                | 4.1         | 0.7              | 226<br>221           | 17.5<br>17.5 |               | 8.0                | 28.8<br>28.8 |            | 97.0<br>97.4   |                  | 7.8<br>7.8 7.9      | 12.5<br>13.6 | -     | 7<br>12          | -  | 83<br>84 | -  |                       |                       | <0.2<br><0.2       | 1.1            |
|                       |            |            |          |           | Bottom         | 7.2         | 0.6              | 228                  | 17.5         | 17.5          | 8.0 8.0            | 28.8         | 28.8       | 97.4           | 97.4             | 7.8                 | 13.6         |       | 12               |    | 83       |    |                       |                       | <0.2               | 1.2            |
|                       |            |            |          |           | Surface        | 1.0         | 0.5              | 232<br>234           | 17.5<br>17.5 | 17.5          | 8.0<br>8.0         | 28.8<br>28.8 | 28.8       | 97.9<br>97.9   | 97.9             | 7.9<br>7.9          | 8.6<br>8.6   | -     | 9<br>10          |    | 78<br>78 |    |                       |                       | <0.2<br><0.2       | 0.9            |
| IM11                  | Rainy      | Moderate   | 07:20    | 8.3       | Middle         | 4.2         | 0.4              | 244                  | 17.5         | 17.5          | 8.0 8.0            | 28.8         | 28.8       | 99.2           | 99.3             | 8.0                 | 9.3          | 9.3   | 12               | 11 | 83       | 82 | 821491                | 810528                | <0.2               | 1.0 1.0        |
|                       |            |            |          |           | Dettem         | 4.2<br>7.3  | 0.5              | 261<br>240           | 17.5<br>17.5 | 17.5          | 8.0 8.0            | 28.8<br>28.8 | 00.0       | 99.3<br>103.1  | 102.0            | 8.0<br>8.3          | 9.4<br>10.0  | -     | 12<br>11         |    | 83<br>84 |    |                       |                       | <0.2<br><0.2       | 1.0<br>1.0     |
|                       |            |            |          |           | Bottom         | 7.3         | 0.5              | 254<br>229           | 17.5         | 17.5          | 8.0 8.0            | 28.8         | 28.8       | 103.3          | 103.2            | 8.3 8.3             | 9.9          |       | 11               |    | 84       |    |                       |                       | <0.2               | 0.9            |
|                       |            |            |          |           | Surface        | 1.0         | 0.5<br>0.5       | 229                  | 17.6<br>17.6 | 17.6          | 8.0<br>8.0         | 28.8<br>28.8 | 28.8       | 96.7<br>96.7   | 96.7             | 7.8<br>7.8<br>7.9   | 10.3<br>10.3 | -     | 10<br>11         |    | 80<br>79 |    |                       |                       | <0.2<br><0.2       | 0.9            |
| IM12                  | Rainy      | Moderate   | 07:12    | 9.1       | Middle         | 4.6         | 0.5              | 232<br>243           | 17.6<br>17.6 | 17.6          | 8.0<br>8.0<br>8.0  | 28.8<br>28.8 | 28.8       | 97.7<br>97.7   | 97.7             | 7.9<br>7.9          | 11.4<br>11.4 | 10.9  | 10<br>10         | 11 | 83<br>82 | 82 | 821150                | 811501                | <0.2<br><0.2 <0.2  | 1.0<br>1.2 1.0 |
|                       |            |            |          |           | Bottom         | 8.1         | 0.3              | 215                  | 17.6         | 17.6          | 8.0 8.0            | 28.8         | 28.8       | 101.0          | 101.1            | 8.1 8.1             | 11.2         |       | 12               |    | 84       |    |                       |                       | <0.2               | 1.1            |
|                       |            |            |          |           |                | 8.1<br>1.0  | 0.4              | 230<br>250           | 17.6<br>17.6 |               | 8.0                | 28.8<br>29.1 |            | 101.1<br>98.4  |                  | 8.1 0.1<br>7.9      | 10.9<br>11.0 |       | 14<br>10         |    | 84<br>81 |    |                       |                       | <0.2<br><0.2       | 1.0<br>0.9     |
|                       |            |            |          |           | Surface        | 1.0         | 0.5              | 268                  | 17.6         | 17.6          | 8.0 8.0            | 29.1         | 29.1       | 98.4           | 98.4             | 7.9 7.9             | 11.0         | _     | 10               |    | 81       |    |                       |                       | <0.2               | 0.8            |
| SR2                   | Fine       | Moderate   | 06:49    | 4.3       | Middle         | 2.2         | -                | -                    | -            | -             |                    | -            |            | -              | -                | -                   | -            | 11.2  | -                | 11 | -        | 83 | 821457                | 814166                | - <0.2             | - 0.9          |
|                       |            |            |          |           | Bottom         | 3.3         | 0.5              | 235                  | 17.7         | 17.7          | 8.0 8.0            | 29.1         | 29.1       | 102.3          | 102.3            | 8.2 8.2             | 11.4         | -     | 12               |    | 85       |    |                       |                       | <0.2               | 0.9            |
|                       |            |            |          |           | Quitaa         | 3.3         | 0.5              | 242<br>74            | 17.7<br>17.5 | 17 5          | 8.0 0.0<br>8.0 0.0 | 29.1<br>28.7 | 00.7       | 102.3<br>97.9  |                  | 8.2 0.2<br>7.9      | 11.4<br>9.7  |       | 12<br>9          |    | 85<br>-  |    |                       |                       | <0.2               | 1.0            |
|                       |            |            |          |           | Surface        | 1.0<br>4.5  | 0.8<br>0.7       | 77<br>110            | 17.5<br>17.5 | 17.5          | 8.0 8.0            | 28.7<br>28.8 | 28.7       | 98.0<br>99.5   | 98.0             | 7.9<br>8.0<br>8.0   | 9.7<br>12.2  | -     | 8<br>11          |    | -        |    |                       |                       | -                  | -              |
| SR3                   | Rainy      | Moderate   | 07:53    | 9.0       | Middle         | 4.5         | 0.7              | 110                  | 17.5         | 17.5          | 8.0<br>8.0         | 28.8         | 28.8       | 99.5<br>99.6   | 99.6             | 8.0                 | 12.2         | 11.4  | 11               | 11 | -        | -  | 822153                | 807580                |                    |                |
|                       |            |            |          |           | Bottom         | 8.0<br>8.0  | 0.6              | 147<br>155           | 17.4<br>17.4 | 17.4          | 8.0<br>8.0         | 28.9<br>28.9 | 28.9       | 102.2<br>102.2 | 102.2            | 8.2<br>8.2<br>8.2   | 12.3<br>12.3 | -     | 12<br>12         |    | -        |    |                       |                       | -                  | -              |
|                       |            |            |          |           | Surface        | 1.0         | 0.3              | 184                  | 14.5         | 14.5          | 7.8 7.8            | 31.1         | 31.1       | 94.1           | 94.1             | 7.9                 | 9.3          |       | 10               |    | -        |    |                       |                       | -                  | -              |
|                       |            |            |          |           |                | 1.0<br>4.1  | 0.3              | 200<br>162           | 14.5<br>14.5 |               | 7.8                | 31.1<br>31.1 |            | 94.1<br>94.5   |                  | 7.9<br>8.0<br>8.0   | 9.2<br>8.9   | -     | 10<br>11         |    | -        |    |                       |                       | -                  | -              |
| SR4A                  | Fine       | Moderate   | 06:42    | 8.2       | Middle         | 4.1         | 0.3              | 165                  | 14.5         | 14.5          | 7.8                | 31.1         | - 31.1     | 94.5           | 94.5             | 8.0                 | 9.0          | 10.1  | 11               | 12 | -        | -  | 817197                | 807803                | -                  | -              |
|                       |            |            |          |           | Bottom         | 7.2         | 0.3              | 141<br>141           | 14.4<br>14.4 | 14.4          | 7.8<br>7.8<br>7.8  | 31.4<br>31.4 | 31.4       | 95.7<br>95.8   | 95.8             | 8.1<br>8.1<br>8.1   | 11.9<br>12.0 | -     | 14<br>15         |    | -        |    |                       |                       | -                  | -              |
|                       |            |            |          |           | Surface        | 1.0         | 0.2              | 252                  | 14.8         | 14.8          | 7.8 7.8            | 30.1         | 30.1       | 93.0<br>92.9   | 93.0             | 7.8                 | 15.1         | -     | 15               |    | -        |    |                       |                       | -                  | -              |
| SR5A                  | Fine       | Colm       | 00:04    | 4.6       | Middle         | 1.0<br>2.3  | 0.2              | 272                  | - 14.8       |               | 7.8                | 30.1         |            | 92.9           |                  | 7.8 7.8             | 14.8         | 14.0  | 15<br>-          | 15 | -        |    | 010500                | 810000                | -                  | -              |
| SHOA                  | Fine       | Calm       | 06:24    | 4.6       | Middle         | 2.3<br>3.6  | -                | -                    | -            | -             |                    | -            | -          | -              | -                | -                   | -<br>14.2    | 14.6  | -                | 15 | -        | -  | 816583                | 810696                | -                  | -              |
|                       |            |            |          |           | Bottom         | 3.6         | 0.2              | 203<br>220           | 14.7<br>14.7 | 14.7          | 7.7 7.7            | 30.0<br>30.0 | 30.0       | 95.5<br>95.5   | 95.5             | 8.1<br>8.1<br>8.1   | 14.2         |       | 15<br>16         |    | -        |    |                       |                       | -                  | -              |
|                       |            |            |          |           | Surface        | 1.0         | 0.2              | 186<br>200           | 14.4<br>14.4 | 14.4          | 7.9<br>7.9<br>7.9  | 28.0<br>28.0 | 28.0       | 98.8<br>98.9   | 98.9             | 8.5<br>8.5          | 4.7<br>4.7   | -     | 8<br>7           |    |          |    |                       |                       | -                  | -              |
| SR6                   | Fine       | Calm       | 06:01    | 4.3       | Middle         | 2.2         | -                | -                    | -            | -             |                    | -            |            | -              |                  | - 8.5               | -            | 5.2   | -                | 7  | -        | _  | 817913                | 814674                |                    | -              |
| onto                  | 1 110      | Ouiiii     | 00.01    | 1.0       |                | 2.2<br>3.3  | - 0.2            | -<br>189             | -<br>14.5    |               | 7.8 7.0            | -<br>27.5    |            | -<br>104.2     |                  | 9.0                 | - 5.7        | 0.2   | - 7              | ,  | -        |    | 017010                | 011071                | -                  | -              |
|                       |            |            |          |           | Bottom         | 3.3         | 0.2              | 198                  | 14.5         | 14.5          | 7.8 7.8            | 26.7         | 27.1       | 107.2          | 105.7            | 9.3 9.2             | 5.6          | -     | 6                |    | -        |    |                       |                       | -                  | -              |
|                       |            |            |          |           | Surface        | 1.0         | 0.3              | 188<br>189           | 17.5<br>17.5 | 17.5          | 8.0<br>8.0         | 29.8<br>29.8 | 29.8       | 95.9<br>95.9   | 95.9             | 7.7                 | 4.7          | -     | 5<br>5           |    | -        |    |                       |                       | -                  | -              |
| SR7                   | Fine       | Moderate   | 05:54    | 15.2      | Middle         | 7.6         | 0.3              | 110                  | 17.6         | 17.6          | 8.0 8.0            | 30.4         | 30.4       | 97.2           | 97.2             | 7.7                 | 6.0          | 5.7   | 6                | 6  | -        | _  | 823645                | 823744                | <u> </u>           |                |
|                       |            |            |          |           | Detterre       | 7.6         | 0.3              | 114<br>106           | 17.6<br>17.5 |               | 8.0                | 30.4<br>30.4 |            | 97.2<br>100.6  |                  | 7.7<br>8.0          | 6.1<br>6.3   | -     | 6<br>6           |    | -        |    |                       |                       | -                  | -              |
|                       |            |            |          |           | Bottom         | 14.2        | 0.3              | 111                  | 17.5         | 17.5          | 8.0 8.0            | 30.4         | .30.4      | 100.8          | 100.7            | 8.0 8.0             | 6.4          |       | 7                |    | -        | 1  |                       |                       |                    | -              |
|                       |            |            |          |           | Surface        | 1.0<br>1.0  | 0.4              | 132<br>141           | 17.5<br>17.5 | 17.5          | 8.0<br>8.0         | 28.7<br>28.7 | 28.7       | 101.3<br>101.4 | 101.4            | 8.2<br>8.2<br>8.2   | 6.6<br>6.6   | -     | 6<br>5           |    | -        |    |                       |                       | -                  | -              |
| SR8                   | Cloudy     | Moderate   | 07:04    | 5.5       | Middle         | 2.8<br>2.8  | -                | -                    | -            | -             |                    | -            |            | -              | -                | - 8.2               | -            | 6.8   | -                | 6  | -        | -  | 820417                | 811593                |                    |                |
|                       |            |            |          |           | Bottom         | 4.5         | 0.4              | 178                  | 17.6         | 17.6          | 8.0 8.0            | 28.8         | 28.8       | 104.7          | 104.7            | 8.4 8.4             | 7.0          |       | 8                |    | -        |    |                       |                       | -                  | -              |
| DA: Depth-Aver        |            |            |          |           | Dottoin        | 4.5         | 0.4              | 179                  | 17.6         | 17.0          | 8.0                | 28.8         | 20.0       | 104.7          | .04.7            | 8.4 0.4             | 7.0          |       | 6                |    | -        |    |                       |                       | <u>  -  </u>       | -              |

## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on26 February 17during 26 February 17 during Mid-Ebb tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 26 February 17 | during Mid  |                  |            |              |               |            |         |              |         |                |                  |                     |              |      |                  |                 |                   |    |                       |                       |                                 |                   |
|---------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|---------|----------------|------------------|---------------------|--------------|------|------------------|-----------------|-------------------|----|-----------------------|-----------------------|---------------------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling De    | oth (m)     | Current<br>Speed | Current    | Water Ter    | nperature (°C | ;)         | рН      | Salinit      | y (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity(   | NTU) | Suspende<br>(mg/ |                 | Total All<br>(ppi | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)              | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                | -           | (m/s)            | Direction  | Value        | Average       | Value      | Average |              | Average |                | Average          | Value DA            | Value        | DA   | Value            | DA              | Value             | DA | (Northing)            | (Easting)             | Value DA                        |                   |
|               |             |            |          |           | Surface        | 1.0         | 0.7              | 197<br>213 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 34.3<br>34.3 | 34.3    | 99.2<br>99.3   | 99.3             | 8.2<br>8.2          | 7.4<br>7.5   | -    | 7<br>8           |                 | 83<br>84          |    |                       |                       | <0.2<br><0.2                    | 0.5               |
| C1            | Cloudy      | Moderate   | 12:36    | 8.8       | Middle         | 4.4         | 0.7              | 201<br>214 | 14.2<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 34.3<br>34.3 | 34.3    | 99.6<br>99.7   | 99.7             | 8.3<br>8.3<br>8.3   | 7.9<br>8.0   | 8.0  | 7<br>9           | 8               | 84<br>84          | 84 | 815630                | 804235                | <0.2 <0.2 <0.2                  | 2 0.6 0.6         |
|               |             |            |          |           | Bottom         | 7.8<br>7.8  | 0.7              | 218<br>235 | 14.3<br>14.3 | 14.3          | 7.8        | 7.8     | 34.4<br>34.4 | 34.4    | 100.8<br>100.8 | 100.8            | 8.4<br>8.4<br>8.4   | 8.5<br>8.4   | -    | 8                |                 | 85<br>85          |    |                       |                       | <0.2<br><0.2                    | 0.7               |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.6              | 137        | 17.7         | 17.7          | 8.0<br>8.0 | 8.0     | 28.1<br>28.1 | 28.1    | 95.2<br>95.2   | 95.2             | 7.7                 | 9.1<br>9.2   | -    | 8                | <del> </del>    | 76                |    |                       |                       | <0.2<br><0.2<br><0.2            | 1.8<br>1.6        |
| C2            | Cloudy      | Moderate   | 11:28    | 12.7      | Middle         | 6.4         | 0.6              | 145<br>219 | 17.7         | 17.7          | 8.0        | 8.0     | 28.4         | 28.4    | 95.3           | 95.3             | 7.7                 | 10.4         | 10.3 | 8<br>9           | 8               | 76<br>83          | 81 | 825676                | 806957                | <0.2                            | 1.6               |
|               | -           |            |          |           | Bottom         | 6.4<br>11.7 | 0.7<br>0.6       | 237<br>252 | 17.7<br>17.6 | 17.6          | 8.0<br>8.0 | 8.0     | 28.4<br>29.0 | 29.0    | 95.3<br>94.8   | 94.8             | 7.7<br>7.6<br>7.6   | 10.4<br>11.4 | -    | 8<br>7           |                 | 83<br>83          |    |                       |                       | <0.2                            | 1.6               |
|               |             |            |          |           | Surface        | 11.7<br>1.0 | 0.6              | 265<br>90  | 17.6<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 29.0<br>29.9 | 29.9    | 94.8<br>97.0   | 97.0             | 7.6                 | 11.4<br>4.0  |      | 7 4              | ļ               | 83<br>79          |    |                       |                       | <0.2<br><0.2                    | 1.7<br>0.8        |
| 00            | Olaustu     | Madavata   | 10.17    | 10.4      |                | 1.0<br>6.2  | 0.4              | 90<br>74   | 17.5<br>17.6 |               | 8.0<br>8.0 |         | 29.9<br>30.0 |         | 97.0<br>97.6   |                  | 7.8<br>7.8<br>7.8   | 4.0<br>3.9   | 4.0  | 4                |                 | 79<br>83          |    | 000110                | 017017                | <0.2                            | 0.8               |
| C3            | Cloudy      | Moderate   | 13:17    | 12.4      | Middle         | 6.2<br>11.4 | 0.4              | 75<br>96   | 17.6<br>17.5 | 17.6          | 8.0<br>8.0 | 8.0     | 30.0<br>30.2 | 30.0    | 97.6<br>99.9   | 97.6             | 7.8<br>8.0          | 3.9<br>4.1   | 4.0  | 5<br>4           | 4               | 83<br>86          | 83 | 822119                | 817817                | <0.2<br><0.2<br><0.2            | 0.8               |
|               |             |            |          |           | Bottom         | 11.4        | 0.2              | 103<br>184 | 17.5<br>14.3 | 17.5          | 8.0<br>7.8 | 8.0     | 30.2<br>33.1 | 30.2    | 99.9<br>97.2   | 99.9             | 8.0<br>8.1          | 4.1          |      | 5                | <sup> </sup>    | 85<br>82          |    |                       |                       | <0.2                            | 0.7               |
|               |             |            |          |           | Surface        | 1.0<br>3.7  | 0.6              | 202        | 14.3<br>14.4 | 14.3          | 7.8        | 7.8     | 33.1<br>33.1 | 33.1    | 97.3           | 97.3             | 8.1<br>8.2<br>8.2   | 6.1<br>7.1   | -    | 7 6              |                 | 83                |    |                       |                       | <0.2                            | 0.8               |
| IM1           | Cloudy      | Moderate   | 12:17    | 7.4       | Middle         | 3.7         | 0.6              | 188        | 14.4         | 14.4          | 7.8        | 7.8     | 33.1         | 33.1    | 97.8<br>97.8   | 97.8             | 8.2                 | 7.1          | 7.5  | 7                | 8               | 83<br>84          | 83 | 818337                | 806460                | <0.2<br><0.2<br><0.2            | 0.8               |
|               |             |            |          |           | Bottom         | 6.4<br>6.4  | 0.7<br>0.8       | 162<br>169 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.8<br>33.8 | 33.8    | 99.1<br>99.1   | 99.1             | 8.2<br>8.2<br>8.2   | 9.2<br>9.3   | -    | 11<br>9          |                 | 84<br>84          |    |                       |                       | <0.2<br><0.2                    | 0.9 0.7           |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5              | 216<br>234 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 32.8<br>32.8 | 32.8    | 97.1<br>97.2   | 97.2             | 8.1<br>8.1<br>8.2   | 5.4<br>5.4   | -    | 6<br>5           |                 | 80<br>80          |    |                       |                       | <0.2<br><0.2                    | 1.0<br>1.0        |
| IM2           | Cloudy      | Moderate   | 12:11    | 8.3       | Middle         | 4.2         | 0.4              | 184<br>198 | 14.5<br>14.5 | 14.5          | 7.8<br>7.8 | 7.8     | 32.8<br>32.8 | 32.8    | 97.8<br>97.8   | 97.8             | 8.2<br>8.2          | 6.3<br>6.4   | 6.6  | 6<br>6           | 6               | 81<br>81          | 81 | 818837                | 806201                | <0.2 <0.2 <0.2                  | 2 1.0 0.9         |
|               |             |            |          |           | Bottom         | 7.3<br>7.3  | 0.4              | 141<br>151 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.6<br>33.6 | 33.6    | 99.7<br>99.8   | 99.8             | 8.3<br>8.3<br>8.3   | 7.9<br>7.9   | -    | 8<br>7           | l [             | 82<br>81          |    |                       |                       | <0.2<br><0.2                    | 0.9<br>0.8        |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 212<br>214 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.1<br>33.1 | 33.1    | 96.9<br>96.9   | 96.9             | 8.1<br>8.1          | 6.3<br>6.4   |      | 7 8              |                 | 81<br>81          |    |                       |                       | <0.2<br><0.2                    | 1.0<br>0.9        |
| IM3           | Cloudy      | Moderate   | 12:03    | 8.4       | Middle         | 4.2         | 0.5<br>0.5       | 165<br>181 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.3<br>33.3 | 33.3    | 97.2<br>97.1   | 97.2             | 8.1<br>8.1<br>8.1   | 8.2<br>8.1   | 9.2  | 9<br>10          | 9               | 82<br>82          | 82 | 819406                | 806021                | <0.2<br><0.2 <0.2               | 0.7               |
|               |             |            |          |           | Bottom         | 7.4         | 0.4              | 165<br>170 | 14.4         | 14.4          | 7.8        | 7.8     | 33.6<br>33.6 | 33.6    | 97.7<br>97.7   | 97.7             | 8.1<br>8.1<br>8.1   | 13.2<br>13.2 | -    | 9                |                 | 82<br>84          |    |                       |                       | <0.2                            | 0.6               |
|               |             |            |          |           | Surface        | 1.0         | 0.6              | 167        | 14.4         | 14.4          | 7.8        | 7.8     | 33.4         | 33.4    | 98.0           | 98.0             | 8.2                 | 8.2          | -    | 8                | , <del></del> † | 81                |    |                       |                       | <0.2                            | 0.7               |
| IM4           | Cloudy      | Moderate   | 11:55    | 8.0       | Middle         | 1.0         | 0.7              | 178<br>184 | 14.4         | 14.4          | 7.8<br>7.8 | 7.8     | 33.4<br>33.5 | 33.5    | 98.0<br>98.9   | 98.9             | 8.2<br>8.2<br>8.2   | 8.2<br>11.3  | 10.3 | 8<br>9           | 10              | 81<br>82<br>82    | 82 | 819574                | 805057                | <0.2<br><0.2<br><0.2<br><0.2    | 0.8               |
|               | -           |            |          |           | Bottom         | 4.0<br>7.0  | 0.6<br>0.7       | 201<br>173 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.5<br>33.4 | 33.4    | 98.9<br>99.8   | 99.8             | 8.2<br>8.3<br>8.3   | 11.3<br>11.6 | -    | 9<br>14          |                 | 82                |    |                       |                       | <0.2                            | 0.7               |
|               |             |            |          |           | Surface        | 7.0         | 0.8<br>0.6       | 182<br>167 | 14.4<br>14.2 | 14.2          | 7.8<br>7.8 | 7.8     | 33.4<br>33.2 |         | 99.8<br>98.0   | 98.1             | 8.3<br>8.2          | 11.4<br>7.1  |      | 14<br>8          |                 | 82<br>80          |    |                       |                       | <0.2<br><0.2                    | 0.8<br>0.8        |
| IM5           | Cloudy      | Moderate   | 11:47    | 6.9       | Middle         | 1.0<br>3.5  | 0.7              | 170<br>158 | 14.2<br>14.3 |               | 7.8<br>7.8 |         | 33.2<br>33.3 | 33.3    | 98.1<br>98.6   | 98.6             | 8.2<br>8.2 8.2      | 7.2<br>8.6   | 8.3  | 9<br>7           | 9               | 80<br>81          | 81 | 820564                | 804909                | <0.2                            | 0.6               |
| IIVIS         | Cloudy      | Woderate   | 11.47    | 0.9       |                | 3.5<br>5.9  | 0.6              | 170<br>161 | 14.3<br>14.3 | 14.3          | 7.8<br>7.8 | 7.8     | 33.3<br>33.4 |         | 98.6<br>99.5   |                  | 8.2<br>8.3          | 8.6<br>9.2   | 0.5  | 9<br>9           | 3               | 81<br>82          | 01 | 820304                | 004909                | <0.2<br><0.2                    | 0.8               |
|               |             |            |          |           | Bottom         | 5.9<br>1.0  | 0.7              | 168<br>162 | 14.3<br>14.3 | 14.3          | 7.8<br>7.8 | 7.8     | 33.4<br>33.5 | 33.4    | 99.5<br>97.5   | 99.5             | 8.3<br>8.1          | 9.2<br>12.1  |      | 11<br>12         | <u> </u>        | 82<br>80          |    |                       |                       | <0.2<br><0.2                    | 0.8               |
|               |             |            |          |           | Surface        | 1.0         | 0.7              | 168<br>147 | 14.3<br>14.3 | 14.3          | 7.8        | 7.8     | 33.5<br>33.5 | 33.5    | 97.5<br>97.8   | 97.5             | 8.1<br>8.2<br>8.2   | 12.1<br>12.2 | -    | 12<br>11         |                 | 81<br>81          |    |                       |                       | <0.2                            | 0.8               |
| IM6           | Cloudy      | Moderate   | 11:38    | 7.0       | Middle         | 3.5<br>6.0  | 0.7              | 158<br>154 | 14.3<br>14.3 | 14.3          | 7.8        | 7.8     | 33.5         | 33.5    | 97.8           | 97.8             | 8.2                 | 12.3<br>16.6 | 13.7 | 12<br>12         | 12              | 81<br>82          | 81 | 821061                | 805822                | <0.2<br><0.2<br><0.2            | 2 0.8 0.8 0.8 0.8 |
|               |             |            |          |           | Bottom         | 6.0         | 0.7              | 169        | 14.3         | 14.3          | 7.8        | 7.8     | 33.5<br>33.5 | 33.5    | 98.6<br>98.7   | 98.7             | 8.2<br>8.2<br>8.2   | 16.6         |      | 14               | <u> </u>        | 82                |    |                       |                       | <0.2                            | 0.8               |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5              | 115<br>122 | 14.4<br>14.4 | 14.4          | 7.8        | 7.8     | 32.9<br>32.9 | 32.9    | 97.6<br>97.7   | 97.7             | 8.2<br>8.2<br>8.2   | 9.9<br>10.0  | ŀ    | 10<br>10         |                 | 82<br>83          |    |                       |                       | <0.2<br><0.2                    | 0.9               |
| IM7           | Cloudy      | Moderate   | 11:28    | 8.2       | Middle         | 4.1<br>4.1  | 0.5<br>0.5       | 110<br>111 | 14.4<br>14.4 | 14.4          | 7.8<br>7.8 | 7.8     | 33.0<br>33.0 | 33.0    | 98.1<br>98.1   | 98.1             | 8.2<br>8.2          | 11.6<br>11.8 | 12.4 | 10<br>12         | 17              | 84<br>84          | 84 | 821341                | 806826                | <0.2<br><0.2<br><0.2            | 0.9               |
|               |             |            |          |           | Bottom         | 7.2<br>7.2  | 0.5<br>0.5       | 106<br>109 | 14.3<br>14.3 | 14.3          | 7.8        | 7.8     | 33.1<br>33.1 | 33.1    | 99.4<br>99.5   | 99.5             | 8.3<br>8.3          | 15.4<br>15.4 |      | 31<br>29         | <br>            | 84<br>85          |    |                       |                       | <0.2<br><0.2                    | 0.9<br>0.9        |
|               |             |            |          |           | Surface        | 1.0         | 0.8<br>0.9       | 131<br>142 | 17.3<br>17.3 | 17.3          | 8.1<br>8.1 | 8.1     | 28.9<br>28.9 | 28.9    | 97.8<br>98.1   | 98.0             | 7.9<br>7.9<br>7.0   | 14.4<br>14.9 | -    | 13<br>14         |                 | 77<br>77          |    |                       |                       | <0.2<br><0.2                    | 1.2<br>1.0        |
| IM8           | Rainy       | Moderate   | 11:55    | 8.4       | Middle         | 4.2         | 0.7              | 144<br>146 | 17.3<br>17.3 | 17.3          | 8.1<br>8.1 | 8.1     | 28.9<br>28.9 | 28.9    | 98.4<br>98.4   | 98.4             | 7.9<br>7.9<br>7.9   | 15.2<br>15.2 | 15.1 | 15<br>13         | 14              | 82<br>82          | 81 | 821678                | 807848                | <0.2<br><0.2 <0.2               | 0.8               |
|               |             |            |          |           | Bottom         | 7.4         | 0.7              | 149<br>151 | 17.3         | 17.3          | 8.0<br>8.0 | 8.0     | 29.0<br>29.0 | 29.0    | 99.8<br>99.9   | 99.9             | 8.1<br>8.1<br>8.1   | 15.5<br>15.4 | F    | 15<br>14         |                 | 83<br>84          |    |                       |                       | <0.2                            | 0.9               |
| DA: Depth-Ave |             |            | 1        |           |                | /.4         | 0.7              | 101        | 17.3         |               | 0.0        | L       | 23.0         |         | 59.9           |                  | 0.1                 | 13.4         |      | 14               |                 | 04                |    |                       |                       | <u.2< td=""><td>0.3</td></u.2<> | 0.3               |

# Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on26 February 17during 26 February 17 during Mid-Ebb tide

| Water Qua     | lity Monite | oring Resu | ults on  |           | 26 February 17 | during Mid  | -Ebb tide        |            |              |               | -          |         |              |           |                |                  |                           |              |      |                  |    |                 |    |                       |                       | <u> </u>             |                   |
|---------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|-----------|----------------|------------------|---------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|----------------------|-------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling De    | oth (m)     | Current<br>Speed | Current    | Water Ter    | mperature (°C | <b>;</b> ) | pН      | Salini       | ity (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity    | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)     |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average   | Value          | Average          | Value DA                  | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA             | Value DA          |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 127<br>129 | 17.4<br>17.4 | 17.4          | 8.0<br>8.0 | 8.0     | 28.6<br>28.6 | 28.6      | 97.6<br>97.6   | 97.6             | 7.9<br>7.9                | 7.8<br>7.8   | -    | 8<br>7           |    | 77<br>78        |    |                       |                       | <0.2<br><0.2         | 1.0               |
| IM9           | Rainy       | Moderate   | 12:04    | 7.5       | Middle         | 3.8<br>3.8  | 0.6<br>0.6       | 124<br>125 | 17.4<br>17.4 | 17.4          | 8.0<br>8.0 | 8.0     | 28.6<br>28.6 | 28.6      | 98.9<br>99.0   | 99.0             | 8.0<br>8.0                | 9.8<br>9.9   | 9.6  | 7<br>8           | 7  | 82<br>83        | 81 | 822113                | 808791                | <0.2<br><0.2 <0.2    | 1.0<br>1.0        |
|               |             |            |          |           | Bottom         | 6.5         | 0.6              | 112        | 17.4         | 17.4          | 8.0<br>8.0 | 8.0     | 28.8         | 28.8      | 101.9          | 102.0            | 8.2 8.2                   | 11.2         | -    | 7                |    | 84              |    |                       |                       | <0.2                 | 1.2               |
|               |             |            |          |           | Surface        | 6.5<br>1.0  | 0.6              | 119<br>127 | 17.4<br>17.5 | 17.5          | 8.0        | 8.0     | 28.8<br>28.6 | 28.6      | 102.0<br>97.5  | 97.5             | 8.2 <sup>0.2</sup><br>7.9 | 11.2<br>6.0  |      | 7 4              |    | 84<br>78        |    |                       |                       | <0.2<br><0.2         | 1.0<br>1.1        |
|               |             |            | 10.11    |           |                | 1.0         | 0.8              | 135<br>136 | 17.5<br>17.5 |               | 8.0<br>8.0 |         | 28.6<br>28.6 |           | 97.5<br>98.1   | -                | 7.9<br>7.9<br>7.9         | 6.0<br>6.5   |      | 4                |    | 78<br>83        |    |                       |                       | <0.2<br><0.2         | 0.9               |
| IM10          | Rainy       | Moderate   | 12:14    | 8.2       | Middle         | 4.1         | 0.7<br>0.8       | 136<br>151 | 17.5<br>17.4 | 17.5          | 8.0<br>8.0 | 8.0     | 28.7<br>28.8 | 28.7      | 98.1<br>99.6   | 98.1             | 7.9                       | 6.5<br>6.6   | 6.4  | 8<br>7           | 6  | 82<br>84        | 82 | 822225                | 809820                | <0.2<br><0.2<br><0.2 | 1.1<br>1.2<br>1.4 |
|               |             |            |          |           | Bottom         | 7.2         | 0.9              | 158        | 17.4         | 17.4          | 8.0        | 8.0     | 28.8         | 28.8      | 99.6           | 99.6             | 8.0                       | 6.6          |      | 7                |    | 84              |    |                       |                       | <0.2                 | 1.2               |
|               |             |            |          |           | Surface        | 1.0         | 0.7              | 130<br>131 | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 28.8<br>28.8 | 28.8      | 97.5<br>97.6   | 97.6             | 7.9<br>7.9<br>7.9         | 7.1<br>7.1   | -    | 6<br>4           |    | 78<br>78        |    |                       |                       | <0.2<br><0.2         | 0.9               |
| IM11          | Rainy       | Moderate   | 12:21    | 8.2       | Middle         | 4.1         | 0.6              | 129<br>137 | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 28.8<br>28.8 | 28.8      | 98.5<br>98.6   | 98.6             | 7.9<br>7.9                | 7.7<br>7.7   | 9.7  | 6<br>7           | 7  | 83<br>82        | 81 | 821505                | 810555                | <0.2<br><0.2 <0.2    | 1.1<br>0.9        |
|               |             |            |          |           | Bottom         | 7.2         | 0.7<br>0.7       | 130<br>132 | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 28.9<br>28.9 | 28.9      | 101.0<br>101.0 | 101.0            | 8.1<br>8.1 8.1            | 14.3<br>14.3 | ŀ    | 8                |    | 84<br>83        |    |                       |                       | <0.2<br><0.2         | 1.2               |
|               |             |            |          |           | Surface        | 1.0         | 0.7              | 113        | 17.5         | 17.5          | 8.0        | 8.0     | 28.8         | 28.8      | 96.8           | 96.8             | 7.8                       | 7.6          |      | 9                |    | 77              |    |                       |                       | <0.2                 | 1.0               |
| IM12          | Rainy       | Moderate   | 12:30    | 8.0       | Middle         | 1.0<br>4.0  | 0.7              | 113<br>124 | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 28.8<br>28.9 | 28.9      | 96.8<br>97.5   | 97.5             | 7.8<br>7.8<br>7.8         | 7.7<br>8.3   | 8.4  | 9<br>10          | 10 | 78<br>83        | 82 | 821160                | 811518                | <0.2<br><0.2<br><0.2 | 1.0<br>1.2<br>1.1 |
|               | . iaiiiy    | mouorato   | 12.00    | 0.0       |                | 4.0 7.0     | 0.7              | 124<br>115 | 17.5<br>17.6 |               | 8.0<br>8.0 |         | 28.9<br>29.1 |           | 97.5<br>99.7   |                  | 7.8<br>8.0                | 8.3<br>9.1   |      | 10<br>9          |    | 83<br>84        | 01 | 021100                | 011010                | <0.2                 | 1.0<br>1.1        |
|               |             |            |          |           | Bottom         | 7.0         | 0.7              | 118<br>82  | 17.6<br>17.6 | 17.6          | 8.0<br>8.0 | 8.0     | 29.1<br>28.9 | 29.1      | 99.7<br>97.8   | 99.7             | 8.0<br>8.0<br>7.8         | 9.1<br>6.5   |      | 11<br>9          |    | 84<br>80        |    |                       |                       | <0.2<br><0.2         | 1.1               |
|               |             |            |          |           | Surface        | 1.0         | 0.4              | 83         | 17.6         | 17.6          | 8.0        | 8.0     | 28.9         | 28.9      | 97.8           | 97.8             | 7.9 7.9                   | 6.5          | -    | 8                |    | 79              |    |                       |                       | <0.2                 | 1.1               |
| SR2           | Rainy       | Moderate   | 12:54    | 4.9       | Middle         | 2.5         | -                | -          | -            | -             | -          | -       | -            | -         | -              | -                | -                         | -            | 6.7  | -                | 8  | -               | 82 | 821476                | 814169                | - <0.2               | -                 |
|               |             |            |          |           | Bottom         | 3.9<br>3.9  | 0.4              | 107<br>114 | 17.6<br>17.6 | 17.6          | 8.0<br>8.0 | 8.0     | 29.2<br>29.2 | 29.2      | 100.2<br>100.2 | 100.2            | 8.0<br>8.0<br>8.0         | 6.9<br>6.9   | -    | 8<br>7           |    | 85<br>85        |    |                       |                       | <0.2<br><0.2         | 1.0<br>1.0        |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.7              | 129<br>137 | 17.3<br>17.3 | 17.3          | 8.0<br>8.0 | 8.0     | 28.9<br>28.9 | 28.9      | 97.8<br>97.8   | 97.8             | 7.9<br>7.9<br>7.9         | 15.9<br>15.9 | ŀ    | 12<br>10         |    | -               |    |                       |                       | -                    | -                 |
| SR3           | Cloudy      | Moderate   | 11:49    | 9.0       | Middle         | 4.5<br>4.5  | 0.8              | 113<br>113 | 17.3<br>17.3 | 17.3          | 8.0<br>8.0 | 8.0     | 28.9<br>28.9 | 28.9      | 97.9<br>97.9   | 97.9             | 7.9<br>7.9<br>7.9         | 17.7<br>17.7 | 16.5 | 14<br>14         | 12 | -               | -  | 822143                | 807588                |                      |                   |
|               |             |            |          |           | Bottom         | 8.0         | 0.7              | 115<br>125 | 17.3         | 17.3          | 8.0<br>8.0 | 8.0     | 28.9<br>28.9 | 28.9      | 98.6<br>98.6   | 98.6             | 8.0<br>8.0<br>8.0         | 16.0<br>16.0 | -    | 12<br>12         |    | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.3              | 118        | 14.3         | 14.3          | 7.8        | 7.8     | 33.0         | 33.0      | 97.0           | 97.0             | 8.1                       | 12.5         |      | 14               |    | -               |    |                       |                       | -                    | -                 |
| SR4A          | Cloudy      | Moderate   | 13:01    | 7.9       | Middle         | 1.0         | 0.3              | 120<br>114 | 14.3<br>14.3 | 14.3          | 7.8<br>7.8 | 7.8     | 33.0<br>33.1 | 33.1      | 97.0<br>97.6   | 97.6             | 8.1<br>8.1<br>8.1         | 12.6<br>12.1 | 12.4 | 15<br>14         | 15 | -               | -  | 817199                | 807799                | -                    | -                 |
| UT IN         | Cloudy      | modorato   | 10.01    | 1.0       |                | 4.0         | 0.3              | 115<br>124 | 14.3<br>14.4 |               | 7.8<br>7.8 | -       | 33.1<br>33.1 |           | 97.6<br>99.1   |                  | 8.1<br>8.3                | 12.1<br>12.4 |      | 15<br>15         | 10 | -               |    | 011100                | 001100                | -                    | -                 |
|               |             |            |          |           | Bottom         | 6.9<br>1.0  | 0.3              | 133<br>251 | 14.4<br>14.8 | 14.4          | 7.8<br>7.7 | 7.8     | 33.1<br>31.7 | 33.1      | 99.1<br>94.9   | 99.1             | 8.3<br>8.3<br>7.9         | 12.4<br>12.3 |      | 14<br>10         |    | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.2              | 255        | 14.8         | 14.8          | 7.7        | 7.7     | 31.7         | 31.7      | 94.9           | 94.9             | 7.9 7.9                   | 12.2         | -    | 11               |    | -               |    |                       |                       | -                    | -                 |
| SR5A          | Cloudy      | Calm       | 13:20    | 4.6       | Middle         | 2.3<br>2.3  | -                | -          | -            | -             | -          | -       | -            | -         | -              | -                | -                         | -            | 12.9 | -                | 10 | -               | -  | 816596                | 810679                |                      |                   |
|               |             |            |          |           | Bottom         | 3.6<br>3.6  | 0.1              | 230<br>236 | 14.7<br>14.7 | 14.7          | 7.7        | 7.7     | 31.6<br>31.6 | 31.6      | 99.3<br>99.3   | 99.3             | 8.3<br>8.3<br>8.3         | 13.7<br>13.5 | -    | 10<br>10         |    | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.2              | 135<br>148 | 14.7<br>14.7 | 14.7          | 7.8<br>7.8 | 7.8     | 31.4<br>31.4 | 31.4      | 94.0<br>94.1   | 94.1             | 7.9<br>7.9<br>7.9         | 8.1<br>8.3   | -    | 7<br>5           |    | -               |    |                       |                       | -                    | -                 |
| SR6           | Cloudy      | Calm       | 13:46    | 4.1       | Middle         | 2.1<br>2.1  | -                |            | -            | -             | -          |         | -            | -         | -              | -                | - 7.9                     | -            | 9.4  | -                | 7  | -               | -  | 817908                | 814681                |                      |                   |
|               |             |            |          |           | Bottom         | 3.1         | 0.1              | 147        | 14.9         | 14.9          | 7.7        | 7.7     | 31.7         | 31.7      | 95.1           | 95.1             | 7.9 7.9                   | 10.5         |      | 7                |    | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 3.1         | 0.2              | 159<br>76  | 14.9<br>17.5 | 17.5          | 7.7        | 8.0     | 31.7<br>30.3 | 30.3      | 95.1<br>96.4   | 96.4             | 7.9                       | 10.5<br>4.0  |      | 7 4              |    | -               |    |                       |                       | -                    | -                 |
| SR7           | Cloudy      | Moderate   | 12:40    | 15 4      |                | 1.0         | 0.3              | 79<br>88   | 17.5<br>17.5 |               | 8.0<br>8.0 |         | 30.3<br>30.3 |           | 96.4<br>96.7   | 96.7             | 7.7<br>7.7<br>7.7         | 4.0<br>4.2   |      | 4 4              | 5  | -               |    | 803603                | 823723                | -                    | -                 |
| 3H/           | Cloudy      | Moderate   | 13:49    | 15.4      | Middle         | 7.7<br>14.4 | 0.3<br>0.2       | 93<br>174  | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 30.3<br>30.4 | 30.3      | 96.7<br>98.0   |                  | 7.7<br>7.8 7.9            | 4.2<br>4.9   | 4.4  | 6<br>4           | 3  | -               | -  | 823623                | 023/23                | -                    | -                 |
|               |             |            |          |           | Bottom         | 14.4        | 0.2              | 189<br>171 | 17.5         | 17.5          | 8.0<br>8.0 | 8.0     | 30.4<br>28.8 | 30.4      | 98.0<br>98.1   | 98.0             | 7.8<br>7.8<br>7.9         | 4.9          |      | 5                |    | -               |    |                       |                       | -                    | -                 |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 176        | 17.6         | 17.6          | 8.0        | 8.0     | 28.8         | 28.8      | 98.1           | 98.1             | 7.9 7.9                   | 12.1         | ŀ    | 12               |    | -               |    |                       |                       | -                    | -                 |
| SR8           | Rainy       | Moderate   | 12:38    | 5.2       | Middle         | 2.6<br>2.6  | -                | -          | -            | -             | -          | -       | -            | -         | -              | -                | -                         | -            | 12.8 | -                | 12 | -               | -  | 820424                | 811604                |                      |                   |
|               |             |            |          |           | Bottom         | 4.2         | 0.5              | 172<br>177 | 17.6<br>17.6 | 17.6          | 8.0<br>8.0 | 8.0     | 28.9<br>28.9 | 28.9      | 101.1<br>101.1 | 101.1            | 8.1<br>8.1<br>8.1         | 13.4<br>13.4 | F    | 12<br>11         |    | -               |    |                       |                       | -                    | -                 |
| DA: Depth-Ave | · · · ·     |            |          |           |                |             |                  |            |              |               |            |         |              |           |                |                  |                           |              |      |                  |    |                 |    |                       |                       | ·                    |                   |

# Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on28 February 17during 28 February 17 during Mid-Flood Tide

| Water Qua      | lity Monito | oring Resu | lits on  |           | 28 February 17 | during Mid   |                  | de         |              |               |            |         |              |          |              |                  |                           | 1            |      |                  |    |                 |    |                       |                       |                              |                         |
|----------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|--------------|------------------|---------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|------------------------------|-------------------------|
| Monitoring     | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | nperature (°C | C)         | рН      | Salini       | ty (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)           | Nickel (µg/L)           |
| Station        | Condition   | Condition  | Time     | Depth (m) | Camping Dor    |              | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  | Value        | Average          | Value DA                  | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA                     | Value DA                |
|                |             |            |          |           | Surface        | 1.0          | 0.8              | 69<br>71   | 14.3<br>14.3 | 14.3          | 7.9<br>7.9 | 7.9     | 33.3<br>33.3 | 33.3     | 98.4<br>98.4 | 98.4             | 8.2<br>8.2                | 16.0<br>16.0 | -    | 19<br>20         |    | 87<br>88        |    |                       |                       | <0.2<br><0.2                 | 0.8                     |
| C1             | Fine        | Moderate   | 07:53    | 8.7       | Middle         | 4.4          | 0.7<br>0.8       | 60<br>63   | 14.3<br>14.3 | 14.3          | 7.9<br>7.9 | 7.9     | 33.2<br>33.2 | 33.2     | 98.1<br>98.1 | 98.1             | 8.2<br>8.2<br>8.2         | 18.1<br>18.1 | 19.8 | 21<br>22         | 21 | 90<br>89        | 90 | 815626                | 804259                | <0.2<br><0.2 <0.2            | 0.7                     |
|                |             |            |          |           | Bottom         | 7.7          | 0.7              | 71         | 14.2         | 14.2          | 7.9        | 7.9     | 33.4         | 33.4     | 97.8         | 97.8             | 8.2 8.2                   | 25.2         | -    | 22               |    | 93              |    |                       |                       | <0.2                         | 0.8                     |
|                |             |            |          |           | Surface        | 7.7          | 0.7              | 75<br>269  | 14.2<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 33.4<br>28.6 | 00.0     | 97.8<br>94.1 | 94.1             | 8.2 <sup>0.2</sup><br>7.6 | 25.2<br>10.2 |      | 22<br>8          |    | 94<br>85        |    |                       |                       | <0.2<br><0.2                 | 0.8                     |
|                |             |            |          | 10.0      |                | 1.0<br>6.3   | 0.4              | 271<br>146 | 17.6<br>17.4 |               | 7.9<br>7.9 |         | 28.6<br>28.7 |          | 94.1<br>93.6 |                  | 7.6<br>7.6<br>7.6         | 10.3<br>14.0 |      | 9<br>12          |    | 86<br>91        |    |                       |                       | <0.2<br><0.2                 | 1.6                     |
| C2             | Sunny       | Moderate   | 09:10    | 12.6      | Middle         | 6.3<br>11.6  | 0.3              | 160<br>73  | 17.4<br>17.3 | 17.4          | 7.9<br>7.9 | 7.9     | 28.7<br>29.0 | 20.7     | 93.6<br>93.4 | 93.6             | 7.6<br>7.5 7.5            | 14.0<br>20.2 | 14.8 | 11<br>14         | 11 | 92<br>93        | 90 | 825686                | 806933                | <0.2<br><0.2<br><0.2         | $\frac{1.0}{1.3}$ 1.4   |
|                |             |            |          |           | Bottom         | 11.6         | 0.3              | 78         | 17.3         | 17.3          | 7.9        | 7.9     | 29.0         | 29.0     | 93.4         | 93.4             | 7.5                       | 20.2         |      | 14               |    | 94              |    |                       |                       | <0.2                         | 1.4                     |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.6<br>0.6       | 269<br>275 | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.3<br>30.3 | 30.3     | 95.4<br>95.4 | 95.4             | 7.6<br>7.6<br>7.6         | 10.2<br>10.2 | -    | 15<br>15         |    | 89<br>89        |    |                       |                       | <0.2<br><0.2                 | 0.8                     |
| C3             | Cloudy      | Moderate   | 07:15    | 11.5      | Middle         | 5.8<br>5.8   | 0.5              | 270<br>280 | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.3<br>30.3 | 30.3     | 95.1<br>95.1 | 95.1             | 7.6<br>7.6                | 14.1<br>14.1 | 14.4 | 14<br>16         | 17 | 93<br>93        | 92 | 822115                | 817810                | <0.2<br><0.2 <0.2            | 2 0.8 0.9<br>0.8        |
|                |             |            |          |           | Bottom         | 10.5<br>10.5 | 0.5              | 272<br>275 | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.3<br>30.3 | 30.3     | 95.2<br>95.2 | 95.2             | 7.6 7.6                   | 19.0<br>19.0 |      | 21<br>22         |    | 95<br>95        |    |                       |                       | <0.2<br><0.2                 | 1.1                     |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.6              | 166<br>176 | 14.3<br>14.3 | 14.3          | 7.9<br>7.9 | 7.9     | 33.6<br>33.6 |          | 97.3<br>97.3 | 97.3             | 8.1<br>8.1                | 14.9<br>15.0 | -    | 16<br>16         |    | 87<br>87        |    |                       |                       | <0.2<br><0.2                 | 0.7                     |
| IM1            | Fine        | Moderate   | 08:10    | 7.6       | Middle         | 3.8          | 0.5              | 214        | 14.3         | 14.3          | 7.9        | 7.9     | 33.5         |          | 97.1         | 97.1             | 8.1 8.1                   | 21.9         | 19.8 | 20               | 18 | 90              | 89 | 818357                | 806445                | <0.2                         | 0.5 0.6                 |
|                |             |            |          |           | Bottom         | 3.8<br>6.6   | 0.5<br>0.4       | 222<br>191 | 14.3<br>14.3 | 14.3          | 7.9<br>7.9 | 7.9     | 33.5<br>33.5 |          | 97.1<br>97.1 | 97.1             | 8.1<br>8.1<br>8.1         | 21.9<br>22.6 | -    | 18<br>19         |    | 89<br>90        |    |                       |                       | <0.2                         | 0.6                     |
|                |             |            |          |           |                | 6.6<br>1.0   | 0.5              | 196<br>95  | 14.3<br>14.5 |               | 7.9<br>8.0 |         | 33.5<br>33.7 |          | 97.1<br>97.6 |                  | 8.1 <sup>0.1</sup><br>8.1 | 22.6<br>20.0 |      | 18<br>23         |    | 92<br>87        |    |                       |                       | <0.2<br><0.2                 | 0.7<br>0.5              |
|                |             |            |          |           | Surface        | 1.0<br>4.4   | 0.7              | 103<br>100 | 14.5<br>14.4 | 14.5          | 8.0<br>7.9 | 8.0     | 33.7<br>33.8 | 33.7     | 97.6<br>97.9 | 97.6             | 8.1<br>8.1 8.1            | 20.3<br>21.7 |      | 24<br>23         |    | 88<br>90        |    |                       |                       | <0.2                         | 0.5                     |
| IM2            | Fine        | Moderate   | 08:19    | 8.7       | Middle         | 4.4          | 0.6              | 104<br>108 | 14.4<br>14.3 | 14.4          | 7.9<br>7.9 | 7.9     | 33.8<br>33.7 | 33.0     | 97.9<br>97.6 | 97.9             | 8.1<br>8.1                | 21.7<br>23.5 | 21.8 | 23<br>21         | 23 | 91<br>93        | 90 | 818842                | 806175                | <0.2<br><0.2<br><0.2         | 2 0.0<br>0.7<br>0.6     |
|                |             |            |          |           | Bottom         | 7.7          | 0.5              | 109        | 14.3         | 14.3          | 7.9        | 7.9     | 33.7         | 33.7     | 97.6         | 97.6             | 8.1 8.1                   | 23.5         | -    | 23               |    | 92              |    |                       |                       | <0.2                         | 0.8                     |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.6<br>0.6       | 94<br>101  | 14.5<br>14.5 | 14.5          | 8.0<br>8.0 | 8.0     | 33.7<br>33.7 | 33.7     | 97.9<br>97.9 | 97.9             | 8.1<br>8.1<br>8.1         | 19.2<br>19.3 | -    | 22<br>24         |    | 85<br>87        |    |                       |                       | <0.2<br><0.2                 | 1.0<br>0.9              |
| IM3            | Fine        | Moderate   | 08:29    | 8.9       | Middle         | 4.5<br>4.5   | 0.6              | 135<br>143 | 14.5<br>14.5 | 14.5          | 8.0<br>8.0 | 8.0     | 33.7<br>33.7 | 33.7     | 97.8<br>97.8 | 97.8             | 8.1<br>8.1                | 20.7<br>20.7 | 20.6 | 23<br>24         | 23 | 91<br>90        | 90 | 819414                | 806028                | <0.2 <0.2 <0.2               | 2 1.0 1.2               |
|                |             |            |          |           | Bottom         | 7.9<br>7.9   | 0.6              | 95<br>100  | 14.5<br>14.5 | 14.5          | 7.9<br>7.9 | 7.9     | 33.7<br>33.7 | 33.7     | 97.9<br>97.9 | 97.9             | 8.1<br>8.1<br>8.1         | 21.7<br>21.7 | -    | 24<br>23         |    | 93<br>94        |    |                       |                       | <0.2<br><0.2                 | 1.7<br>1.7              |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.5<br>0.5       | 123<br>134 | 14.5<br>14.5 | 14.5          | 7.9<br>7.9 | 7.9     | 33.8<br>33.8 | 33.8     | 98.2<br>98.2 | 98.2             | 8.1<br>8.1                | 18.2<br>18.2 | -    | 21<br>20         |    | 86<br>87        |    |                       |                       | <0.2<br><0.2                 | 0.6                     |
| IM4            | Fine        | Moderate   | 08:34    | 8.4       | Middle         | 4.2          | 0.5              | 110        | 14.4         | 14.5          | 7.9        | 7.9     | 33.8<br>33.8 | 33.8     | 98.0<br>98.0 | 98.0             | 8.1 8.1                   | 20.0         | 20.7 | 23               | 24 | 90              | 90 | 819558                | 805046                | <0.2<br><0.2<br><0.2<br><0.2 | 0.6                     |
|                |             |            |          |           | Bottom         | 7.4          | 0.6<br>0.5       | 111<br>132 | 14.4         | 14.4          | 7.9        | 7.9     | 33.8         | 33.8     | 97.8         | 97.8             | 8.1<br>8.1<br>8.1         | 23.7         | -    | 25<br>26         |    | 89<br>92        |    |                       |                       | <0.2                         | 0.6                     |
|                |             |            |          |           | Surface        | 7.4          | 0.5<br>0.6       | 141<br>159 | 14.4<br>14.5 | 14.5          | 7.9<br>7.9 | 7.9     | 33.8<br>33.9 |          | 97.8<br>97.9 | 97.9             | 8.1 <sup>0.1</sup><br>8.1 | 23.7<br>16.9 |      | 27<br>22         |    | 94<br>85        |    |                       |                       | <0.2<br><0.2                 | 0.7                     |
|                | File        | Maria      | 00.40    | 7.4       |                | 1.0<br>3.7   | 0.6              | 168<br>165 | 14.5<br>14.4 |               | 7.9<br>7.9 |         | 33.9<br>33.9 |          | 97.9<br>97.4 |                  | 8.1<br>8.1 8.1            | 16.9<br>21.5 | 10.0 | 22<br>21         |    | 87<br>91        |    | 000544                | 004007                | <0.2                         | 0.8                     |
| IM5            | Fine        | Moderate   | 08:40    | 7.4       | Middle         | 3.7<br>6.4   | 0.6<br>0.5       | 174<br>169 | 14.4<br>14.4 | 14.4          | 7.9<br>7.9 | 7.9     | 33.9<br>33.9 | 33.9     | 97.5<br>97.6 | 97.5             | 8.1<br>8.1                | 21.4<br>21.2 | 19.9 | 21<br>30         | 24 | 90<br>93        | 90 | 820544                | 804907                | <0.2<br><0.2<br><0.2         | 2 <u>0.9</u> 0.9<br>1.0 |
|                |             |            |          |           | Bottom         | 6.4<br>1.0   | 0.5              | 177        | 14.4         | 14.4          | 7.9        | 7.9     | 33.9         |          | 97.6         | 97.6             | 8.1 0.1                   | 21.2         |      | 30               |    | 93              |    |                       |                       | <0.2                         | 0.9                     |
|                |             |            |          |           | Surface        | 1.0          | 0.8              | 103<br>108 | 14.7<br>14.7 | 14.7          | 7.9        | 7.9     | 33.2<br>33.2 | 33.2     | 96.3<br>96.3 | 96.3             | 8.0<br>8.0<br>8.0         | 18.2         | -    | 23<br>23         |    | 88<br>88        |    |                       |                       | <0.2<br><0.2                 | 1.2                     |
| IM6            | Fine        | Moderate   | 08:48    | 7.2       | Middle         | 3.6<br>3.6   | 0.8<br>0.8       | 93<br>94   | 14.6<br>14.6 | 14.6          | 7.9<br>7.9 | 7.9     | 33.2<br>33.2 | 33.2     | 96.2<br>96.1 | 96.2             | 8.0<br>8.0                | 20.3<br>20.3 | 19.7 | 22<br>22         | 22 | 91<br>89        | 90 | 821063                | 805815                | <0.2<br><0.2 <0.2            | 2 1.2 1.2               |
|                |             |            |          |           | Bottom         | 6.2<br>6.2   | 0.8              | 115<br>122 | 14.6<br>14.6 | 14.6          | 7.9<br>7.9 | 7.9     | 33.2<br>33.2 | 33.2     | 96.3<br>96.3 | 96.3             | 8.0<br>8.0<br>8.0         | 20.6<br>20.6 | -    | 23<br>21         |    | 92<br>93        |    |                       |                       | <0.2<br><0.2                 | 1.1                     |
|                |             |            |          |           | Surface        | 1.0<br>1.0   | 0.5              | 90<br>96   | 14.7<br>14.7 | 14.7          | 7.9<br>7.9 | 7.9     | 33.2<br>33.2 |          | 95.7<br>95.8 | 95.8             | 7.9                       | 18.3<br>18.3 |      | 23<br>22         |    | 86<br>88        |    |                       |                       | <0.2<br><0.2                 | 1.1                     |
| IM7            | Fine        | Moderate   | 08:57    | 8.8       | Middle         | 4.4          | 0.5              | 95         | 14.6         | 14.6          | 7.9        | 7.9     | 33.2         | 22.2     | 95.5         | 95.5             | 7.9                       | 20.8         | 20.5 | 23               | 23 | 91              | 90 | 821358                | 806849                | <0.2                         | 1.3 1.2                 |
|                |             |            |          |           | Bottom         | 4.4<br>7.8   | 0.5              | 99<br>92   | 14.6<br>14.6 | 14.6          | 7.9<br>7.9 | 7.9     | 33.2<br>33.3 |          | 95.5<br>95.6 | 95.6             | 7.9<br>7.9<br>7.9<br>7.9  | 21.1<br>22.2 | ŀ    | 24<br>23         |    | 89<br>92        |    |                       |                       | <0.2<br><0.2                 | 1.3<br>1.2              |
|                |             |            |          |           |                | 7.8<br>1.0   | 0.5<br>0.4       | 94<br>140  | 14.6<br>17.4 |               | 7.9<br>8.0 |         | 33.3<br>29.2 |          | 95.6<br>96.6 |                  | 7.9 7.3<br>7.8            | 22.2<br>10.7 |      | 23<br>9          |    | 93<br>86        |    |                       |                       | <0.2<br><0.2                 | 1.1<br>1.3              |
|                |             |            |          |           | Surface        | 1.0<br>4.3   | 0.4<br>0.5       | 146<br>78  | 17.4<br>17.2 | 17.4          | 8.0<br>8.0 | 8.0     | 29.2<br>29.7 | 29.2     | 96.6<br>96.3 | 96.6             | 7.8<br>7.8<br>7.8         | 10.8<br>13.9 |      | 8<br>9           |    | 86<br>91        |    |                       | <b></b>               | <0.2                         | 1.4                     |
| IM8            | Sunny       | Moderate   | 08:44    | 8.5       | Middle         | 4.3          | 0.6              | 81         | 17.2         | 17.2          | 8.0        | 8.0     | 29.7         | 29.7     | 96.3         | 96.3             | 7.8                       | 13.9         | 15.1 | 11               | 10 | 92              | 90 | 821694                | 807857                | <0.2                         | 1.5                     |
| DA: Depth-Aver |             |            |          |           | Bottom         | 7.5<br>7.5   | 0.5<br>0.5       | 67<br>72   | 17.1<br>17.1 | 17.1          | 8.0<br>8.0 | 8.0     | 29.9<br>29.9 | 29.9     | 96.6<br>96.6 | 96.6             | 7.8<br>7.8<br>7.8         | 20.7<br>20.7 | -    | 11<br>10         |    | 94<br>93        |    |                       |                       | <0.2<br><0.2                 | 1.3<br>1.2              |

# Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on28 February 17during 28 February 17 during Mid-Flood Tide

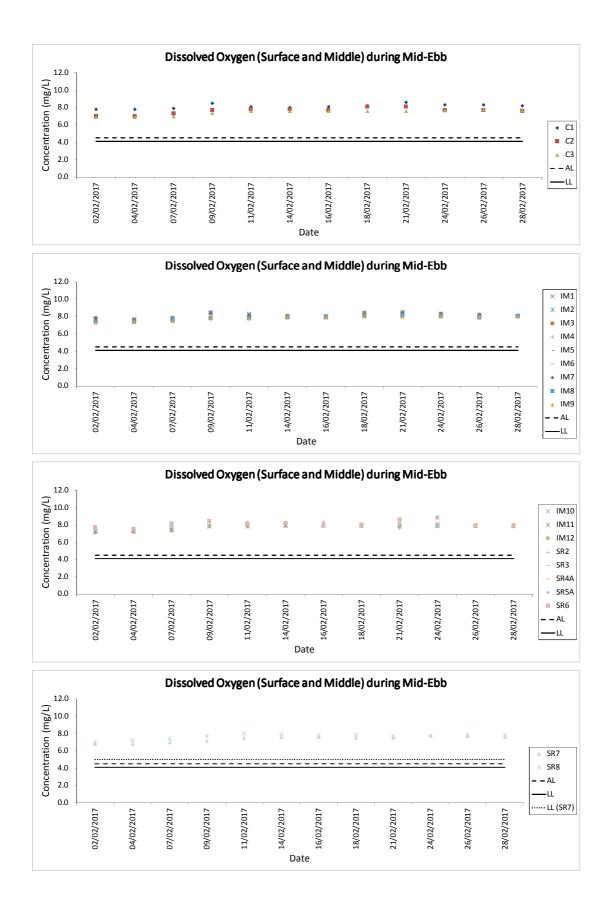
| Water Qua     | lity Monite | oring Resi | ults on  |           | 28 February 17 | during Mid  |                  | de         | -            |               |            |         |              |          |              |                  |                           |              |      | _                |    |                 |    |                       |                       |                      |                           |
|---------------|-------------|------------|----------|-----------|----------------|-------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|--------------|------------------|---------------------------|--------------|------|------------------|----|-----------------|----|-----------------------|-----------------------|----------------------|---------------------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)     | Current<br>Speed | Current    | Water Ter    | mperature (°C | ;)         | рН      | Salini       | ty (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity    | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | -  | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)             |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |             | (m/s)            | Direction  | Value        | Average       | Value      | Average | Value        | Average  |              | Average          | Value DA                  | Value        | DA   | Value            | DA | Value           | DA | (Northing)            | (Easting)             | Value DA             | Value DA                  |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 251<br>252 | 17.4<br>17.4 | 17.4          | 8.0<br>8.0 | 8.0     | 29.1<br>29.1 | 29.1     | 95.6<br>95.6 | 95.6             | 7.7                       | 9.3<br>9.3   | -    | 5<br>7           |    | 86<br>87        |    |                       |                       | <0.2<br><0.2         | 1.3<br>1.3                |
| IM9           | Sunny       | Moderate   | 08:37    | 7.5       | Middle         | 3.8<br>3.8  | 0.4              | 254<br>275 | 17.3<br>17.3 | 17.3          | 8.0<br>8.0 | 8.0     | 29.2<br>29.2 | 29.2     | 95.3<br>95.3 | 95.3             | 7.7<br>7.7<br>7.7         | 10.4<br>10.4 | 10.7 | 8<br>10          | 8  | 91<br>92        | 91 | 822076                | 808822                | <0.2<br><0.2 <0.2    | 1.3<br>1.4                |
|               |             |            |          |           | Bottom         | 6.5         | 0.4              | 244        | 17.3         | 17.3          | 8.0<br>8.0 | 8.0     | 29.4         | 29.4     | 95.0         | 95.0             | 7.7 77                    | 12.3         | -    | 9                |    | 93              |    |                       |                       | <0.2                 | 1.2                       |
|               |             |            |          |           | Surface        | 6.5<br>1.0  | 0.4              | 260<br>256 | 17.3<br>17.2 | 17.2          | 8.0        | 8.0     | 29.4<br>30.3 | 30.3     | 95.0<br>97.3 | 97.3             | 7.7 <sup>7.7</sup><br>7.8 | 12.3<br>14.8 |      | 10<br>16         |    | 94<br>87        |    |                       |                       | <0.2<br><0.2         | 1.1                       |
|               |             |            |          |           |                | 1.0         | 0.5              | 281<br>255 | 17.2<br>17.1 |               | 8.0<br>8.0 |         | 30.3<br>30.3 |          | 97.2<br>97.2 |                  | 7.8<br>7.8<br>7.8         | 14.8<br>17.1 |      | 17<br>18         |    | 87<br>92        |    |                       |                       | <0.2<br><0.2         | 0.9                       |
| IM10          | Sunny       | Moderate   | 08:27    | 8.2       | Middle         | 4.1<br>7.2  | 0.4              | 279<br>244 | 17.1<br>17.1 | 17.1          | 8.0<br>8.0 | 8.0     | 30.3<br>30.3 | 30.3     | 97.2<br>97.1 | 97.2             | 7.8                       | 17.1<br>19.0 | 17.0 | 20<br>18         | 18 | 91<br>94        | 91 | 822231                | 809847                | <0.2<br><0.2<br><0.2 | 0.9<br>1.1                |
|               |             |            |          |           | Bottom         | 7.2         | 0.4              | 246        | 17.1         | 17.1          | 8.0        | 8.0     | 30.3         | 30.3     | 97.1         | 97.1             | 7.8                       | 19.0         |      | 20               |    | 93              |    |                       |                       | <0.2                 | 0.9                       |
|               |             |            |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.5       | 268<br>289 | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.1<br>30.1 | 30.1     | 96.9<br>96.9 | 96.9             | 7.8<br>7.8<br>7.8         | 13.0<br>13.0 | E    | 14<br>13         |    | 87<br>87        |    |                       |                       | <0.2<br><0.2         | 1.4<br>1.5                |
| IM11          | Sunny       | Moderate   | 08:19    | 8.3       | Middle         | 4.2         | 0.4              | 264<br>272 | 17.1<br>17.1 | 17.1          | 8.0<br>8.0 | 8.0     | 30.1<br>30.1 | 30.1     | 96.3<br>96.3 | 96.3             | 7.8<br>7.8                | 16.6<br>16.6 | 16.1 | 16<br>17         | 18 | 92<br>91        | 91 | 821497                | 810538                | <0.2<br><0.2 <0.2    | 1.6<br>1.4 1.5            |
|               |             |            |          |           | Bottom         | 7.3<br>7.3  | 0.4              | 233<br>248 | 17.1<br>17.1 | 17.1          | 8.0<br>8.0 | 8.0     | 30.2<br>30.2 | 30.2     | 96.2<br>96.2 | 96.2             | 7.7 7.7                   | 18.8<br>18.8 | F    | 24<br>22         |    | 94<br>94        |    |                       |                       | <0.2<br><0.2         | 1.4                       |
|               |             |            |          |           | Surface        | 1.0         | 0.5              | 249        | 17.1         | 17.1          | 8.0<br>8.0 | 8.0     | 30.2         | 30.2     | 97.1         | 97.1             | 7.8                       | 15.4         |      | 16               |    | 88              |    |                       |                       | <0.2                 | 1.2                       |
| IM12          | Sunny       | Moderate   | 08:09    | 8.7       | Middle         | 1.0<br>4.4  | 0.5<br>0.4       | 266<br>256 | 17.1<br>17.1 | 17.1          | 8.0        | 8.0     | 30.2<br>30.2 | 30.2     | 97.1<br>96.8 | 96.8             | 7.8<br>7.8<br>7.8         | 15.4<br>17.8 | 17.5 | 16<br>18         | 18 | 87<br>92        | 91 | 821155                | 811528                | <0.2<br><0.2<br><0.2 | 1.1<br>1.3<br>1.2         |
|               | Carriy      | modorato   | 00.00    | 0         |                | 4.4         | 0.5              | 279<br>246 | 17.1<br>17.1 |               | 8.0<br>8.0 |         | 30.2<br>30.2 |          | 96.8<br>97.0 |                  | 7.8<br>7.8 7.9            | 17.8<br>19.4 |      | 17<br>20         |    | 92<br>95        |    | 021100                | 011020                | <0.2                 | 1.2 <sup>1.2</sup><br>1.3 |
|               |             |            |          |           | Bottom         | 7.7         | 0.4              | 247<br>239 | 17.1<br>17.1 | 17.1          | 8.0<br>8.0 | 8.0     | 30.2<br>30.2 | 30.2     | 97.0<br>97.2 | 97.0             | 7.8<br>7.8<br>7.8         | 19.4<br>12.3 |      | 21<br>12         |    | 94<br>89        |    |                       |                       | <0.2<br><0.2         | 1.2<br>1.0                |
|               |             |            |          |           | Surface        | 1.0         | 0.2              | 262        | 17.1         | 17.1          | 8.0        | 8.0     | 30.2         | 30.2     | 97.2         | 97.2             | 7.8 7.8                   | 12.4         | F    | 14               |    | 88              |    |                       |                       | <0.2                 | 1.1                       |
| SR2           | Cloudy      | Moderate   | 07:36    | 4.6       | Middle         | 2.3         | -                | -          | -            | -             | -          | -       | -            | -        | -            | -                | -                         | -            | 13.1 | -                | 13 | -               | 92 | 821449                | 814148                | - <0.2               | -                         |
|               |             |            |          |           | Bottom         | 3.6<br>3.6  | 0.2              | 209<br>220 | 17.1<br>17.1 | 17.1          | 8.0<br>8.0 | 8.0     | 30.3<br>30.3 | 30.3     | 97.4<br>97.4 | 97.4             | 7.8<br>7.8<br>7.8         | 13.8<br>13.8 |      | 13<br>12         |    | 95<br>94        |    |                       |                       | <0.2<br><0.2         | 1.3<br>1.5                |
|               |             |            |          |           | Surface        | 1.0         | 0.6<br>0.6       | 65<br>65   | 17.3<br>17.3 | 17.3          | 8.0<br>8.0 | 8.0     | 29.7<br>29.8 | 29.8     | 96.2<br>96.1 | 96.2             | 7.7                       | 12.7<br>12.9 | -    | 9<br>10          |    | -               |    |                       |                       | -                    | -                         |
| SR3           | Sunny       | Moderate   | 08:51    | 9.2       | Middle         | 4.6<br>4.6  | 0.5<br>0.5       | 71<br>75   | 17.1<br>17.1 | 17.1          | 8.0<br>8.0 | 8.0     | 29.9<br>29.9 | 29.9     | 95.7<br>95.7 | 95.7             | 7.7                       | 16.6<br>16.6 | 17.8 | 11<br>11         | 12 | -               | -  | 822132                | 807551                |                      |                           |
|               |             |            |          |           | Bottom         | 8.2         | 0.4              | 110<br>118 | 17.1         | 17.1          | 8.0<br>8.0 | 8.0     | 30.0<br>30.0 | 30.0     | 95.6<br>95.6 | 95.6             | 7.7<br>7.7<br>7.7         | 23.9<br>23.9 | -    | 15<br>15         |    | -               |    |                       |                       | -                    | -                         |
|               |             |            |          |           | Surface        | 1.0         | 0.3              | 199        | 14.3         | 14.3          | 7.8        | 7.8     | 32.1         | 32.1     | 95.0         | 95.0             | 8.0                       | 14.9         |      | 16               |    | -               |    |                       |                       | -                    | -                         |
| SR4A          | Cloudy      | Calm       | 07:31    | 8.4       | Middle         | 1.0<br>4.2  | 0.3              | 209<br>138 | 14.3<br>14.3 | 14.3          | 7.8<br>7.8 | 7.8     | 32.1<br>32.2 | 32.2     | 95.0<br>95.1 | 95.1             | 8.0<br>8.0                | 14.8<br>16.3 | 15.9 | 16<br>16         | 16 | -               | _  | 817180                | 807808                | -                    | -                         |
| on <i>in</i>  | Cloudy      | Guin       | 07.01    | 0.1       |                | 4.2         | 0.3              | 145<br>146 | 14.3<br>14.3 |               | 7.8<br>7.8 |         | 32.2<br>32.2 |          | 95.1<br>95.4 |                  | 8.0<br>8.0                | 16.2<br>16.5 | 10.0 | 14<br>17         | 10 | -               |    | 017100                | 007000                | -                    | -                         |
|               |             |            |          |           | Bottom         | 7.4         | 0.3              | 148<br>143 | 14.3<br>14.3 | 14.3          | 7.8<br>7.8 | 7.8     | 32.2<br>31.5 | 32.2     | 95.4<br>95.6 | 95.4             | 8.0<br>8.1                | 16.5<br>8.3  |      | 18<br>9          |    | -               |    |                       |                       | -                    | -                         |
|               |             |            |          |           | Surface        | 1.0         | 0.2              | 151        | 14.3         | 14.3          | 7.8        | 7.8     | 31.5         | 31.5     | 95.7         | 95.7             | 8.1 8.1                   | 8.3          | ļ    | 10               |    | -               |    |                       |                       | -                    | -                         |
| SR5A          | Cloudy      | Calm       | 07:13    | 4.6       | Middle         | 2.3<br>2.3  | -                | -          | -            | -             | -          | -       | -            | -        | -            | -                | -                         | -            | 8.6  | -                | 10 | -               | -  | 816593                | 810690                |                      |                           |
|               |             |            |          |           | Bottom         | 3.6<br>3.6  | 0.3              | 137<br>147 | 14.3<br>14.3 | 14.3          | 7.8<br>7.8 | 7.8     | 31.6<br>31.6 | 31.6     | 96.2<br>96.2 | 96.2             | 8.1<br>8.1<br>8.1         | 8.8<br>8.8   |      | 10<br>10         |    | -               |    |                       |                       | -                    | -                         |
|               |             |            |          |           | Surface        | 1.0         | 0.2              | 263<br>266 | 14.2<br>14.2 | 14.2          | 7.7        | 7.7     | 30.3<br>30.3 | 30.3     | 95.9<br>95.9 | 95.9             | 8.2<br>8.2                | 17.8<br>17.8 | -    | 16<br>17         |    | -               |    |                       |                       | -                    | -                         |
| SR6           | Cloudy      | Calm       | 06:45    | 3.7       | Middle         | 1.9<br>1.9  | -                | -          | -            | -             | -          | -       | -            | -        | -            | -                | - 8.2                     | -            | 18.9 | -                | 16 | -               | -  | 817909                | 814656                |                      |                           |
|               |             |            |          |           | Bottom         | 2.7         | 0.2              | 237        | 14.1         | 14.1          | 7.7        | 7.7     | 30.2         | 30.2     | 96.7         | 96.7             | 8.3 8.3                   | 19.9         | -    | 15               |    | -               |    |                       |                       | -                    | -                         |
|               |             |            |          |           | Surface        | 2.7         | 0.2              | 253<br>271 | 14.1<br>17.2 | 17.2          | 7.7        | 8.0     | 30.2<br>30.3 | 30.3     | 96.7<br>94.0 | 94.0             | 8.3<br>7.5                | 19.9<br>6.5  |      | 17<br>7          |    | -               |    |                       | 1                     | -                    | -                         |
| SR7           | Cloudy      | Moderate   | 06:42    | 16.0      |                | 1.0<br>8.1  | 0.2              | 281<br>105 | 17.2<br>17.2 |               | 8.0<br>8.0 |         | 30.3<br>30.4 |          | 94.0<br>93.7 | 93.7             | 7.5<br>7.5<br>7.5         | 6.5<br>7.3   | 7.2  | 7<br>10          | 9  | -               |    | 803600                | 823748                | -                    | -                         |
| 357           | Cloudy      | Moderate   | 06:42    | 16.2      | Middle         | 8.1<br>15.2 | 0.3              | 110<br>107 | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.4<br>30.4 | 30.4     | 93.7<br>95.4 |                  | 7.5<br>7.6 7.6            | 7.2<br>7.9   | 1.2  | 8<br>9           | Э  | -               |    | 823628                | 023/40                | -                    | -                         |
|               |             |            |          |           | Bottom         | 15.2        | 0.3              | 109        | 17.2         | 17.2          | 8.0<br>8.0 | 8.0     | 30.4<br>29.8 | 30.4     | 95.4<br>97.1 | 95.4             | 7.6<br>7.8<br>7.8         | 7.8          | [    | 10<br>10         |    | -               |    |                       |                       | -                    | -                         |
|               |             |            |          |           | Surface        | 1.0         | 0.2              | 151        | 17.2         | 17.2          | 8.0        | 8.0     | 29.8<br>29.8 | 29.8     | 97.1         | 97.1             | 7.8 7.8                   | 12.0         | ŀ    | 10               |    | -               |    |                       |                       | -                    | -                         |
| SR8           | Sunny       | Moderate   | 07:50    | 5.3       | Middle         | 2.7<br>2.7  | -                | -          | -            | -             | -          | -       | -            | -        | -            | -                | -                         | -            | 12.9 | -                | 14 | -               | -  | 820436                | 811608                |                      |                           |
|               |             |            |          |           | Bottom         | 4.3<br>4.3  | 0.2              | 150<br>151 | 17.1<br>17.1 | 17.1          | 8.0<br>8.0 | 8.0     | 29.9<br>29.9 | 29.9     | 97.4<br>97.4 | 97.4             | 7.8<br>7.8<br>7.8         | 13.9<br>13.6 | F    | 17<br>19         |    | -               |    |                       |                       | -                    | -                         |
| DA: Depth-Ave | · · · ·     |            |          |           |                |             |                  |            |              |               |            |         |              |          |              | 1                |                           |              |      |                  |    |                 |    |                       |                       | <del>، السا</del>    |                           |

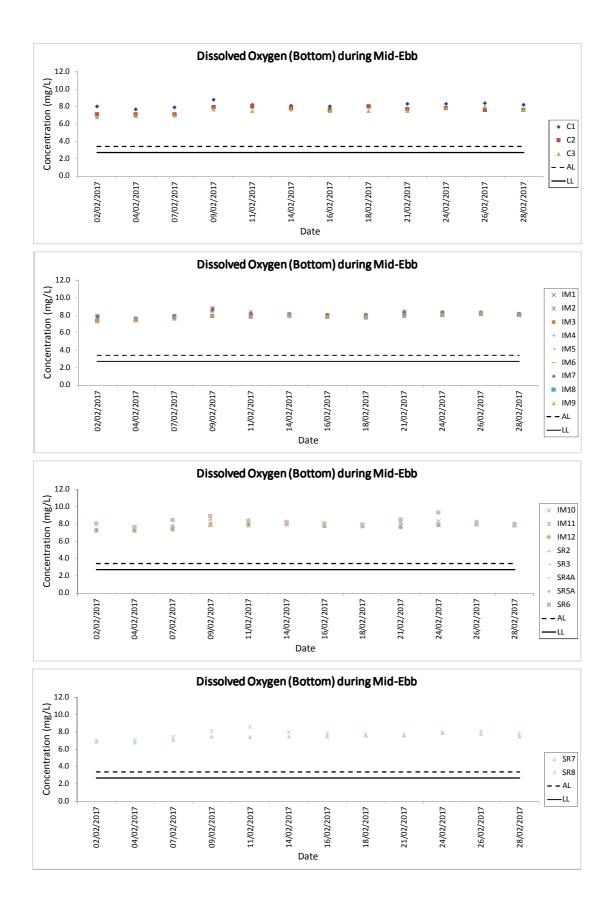
# Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on28 February 17during 28 February 17 during Mid-Ebb tide

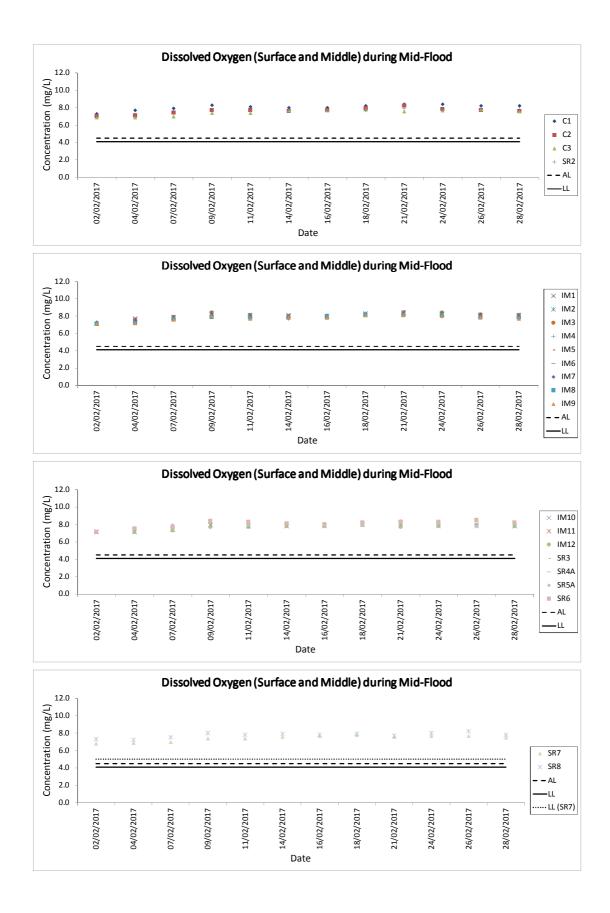
| Water Qua     | lity Monite | oring Resi | ults on  |           | 28 February 17 | during Mid   |                  | •          | 1            |               | -          |         |              |          |                | -                |                           |              |      |                  |    |                 |                  |                       | 1                     |                      |                |
|---------------|-------------|------------|----------|-----------|----------------|--------------|------------------|------------|--------------|---------------|------------|---------|--------------|----------|----------------|------------------|---------------------------|--------------|------|------------------|----|-----------------|------------------|-----------------------|-----------------------|----------------------|----------------|
| Monitoring    | Weather     | Sea        | Sampling | Water     | Sampling Dep   | oth (m)      | Current<br>Speed | Current    | Water Ter    | mperature (°C | ;)         | pН      | Salinit      | ty (ppt) |                | aturation<br>(%) | Dissolved<br>Oxygen       | Turbidity(   | NTU) | Suspende<br>(mg/ |    | Total Al<br>(pp | lkalinity<br>om) | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L)   | Nickel (µg/L)  |
| Station       | Condition   | Condition  | Time     | Depth (m) |                |              | (m/s)            | Direction  | Value        | Average       | Value      | Average |              | Average  |                | Average          | Value DA                  | Value        | DA   | Value            | DA | Value           | DA               | (Northing)            | (Easting)             | Value DA             |                |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.3              | 213<br>218 | 14.7<br>14.7 | 14.7          | 7.9<br>7.9 | 7.9     | 35.1<br>35.1 | 35.1     | 100.6<br>100.5 | 100.6            | 8.2<br>8.2                | 6.8<br>6.8   | -    | 9<br>9           |    | 88<br>88        |                  |                       |                       | <0.2<br><0.2         | 0.4            |
| C1            | Fine        | Moderate   | 13:45    | 8.8       | Middle         | 4.4          | 0.4              | 218<br>229 | 14.3<br>14.3 | 14.3          | 7.9<br>7.9 | 7.9     | 35.2<br>35.2 | 35.2     | 99.3<br>99.3   | 99.3             | 8.2<br>8.2<br>8.2         | 8.6<br>8.6   | 8.6  | 8<br>10          | 9  | 90<br>89        | 91               | 815609                | 804260                | <0.2<br><0.2 <0.2    | 0.4 0.4        |
|               |             |            |          |           | Bottom         | 7.8          | 0.0              | -          | 14.1         | 14.1          | 7.9        | 7.9     | 35.3         | 35.3     | 99.1           | 99.1             | 8.2 8.2                   | 10.5         | -    | 9                |    | 94              |                  |                       |                       | <0.2                 | 0.3            |
|               |             |            |          |           | Surface        | 7.8          | 0.0              | -<br>118   | 14.1<br>17.6 | 17.6          | 7.9<br>7.9 | 7.9     | 35.3<br>28.7 | 28.7     | 99.1<br>95.1   | 95.1             | 8.2 <sup>0.2</sup><br>7.6 | 10.5<br>12.8 |      | 10               |    | 94<br>85        |                  |                       |                       | <0.2<br><0.2         | 1.3            |
|               |             |            | 10.10    |           |                | 1.0<br>7.1   | 0.3              | 119<br>128 | 17.6<br>17.5 |               | 7.9<br>8.0 |         | 28.7<br>29.0 |          | 95.1<br>95.1   |                  | 7.6<br>7.6<br>7.6         | 12.8<br>18.5 |      | 10<br>24         |    | 85<br>92        |                  | 005004                |                       | <0.2<br><0.2         | 1.4            |
| C2            | Cloudy      | Moderate   | 12:46    | 14.2      | Middle         | 7.1<br>13.2  | 0.2              | 139<br>200 | 17.5<br>17.2 | 17.5          | 8.0<br>8.0 | 8.0     | 29.0<br>29.5 | 29.0     | 95.1<br>94.7   | 95.1             | 7.6<br>7.6 7.0            | 18.5<br>21.1 | 17.5 | 26<br>24         | 20 | 92<br>93        | 90               | 825691                | 806926                | <0.2<br><0.2<br><0.2 | 1.1<br>1.2     |
|               |             |            |          |           | Bottom         | 13.2         | 0.2              | 218        | 17.2         | 17.2          | 8.0        | 8.0     | 29.5         | 29.5     | 94.7           | 94.7             | 7.6                       | 21.1         | -    | 24               |    | 94              |                  |                       |                       | <0.2                 | 1.3            |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.4              | 61<br>65   | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 30.3<br>30.3 | 30.3     | 96.1<br>96.1   | 96.1             | 7.7 7.7 7.7               | 6.6<br>6.6   | _    | 10<br>9          |    | 90<br>90        |                  |                       |                       | <0.2<br>0.2          | 1.0<br>0.8     |
| C3            | Sunny       | Moderate   | 14:27    | 12.3      | Middle         | 6.2<br>6.2   | 0.3              | 90<br>91   | 17.4<br>17.4 | 17.4          | 8.0<br>8.0 | 8.0     | 30.4<br>30.4 | 30.4     | 95.1<br>95.1   | 95.1             | 7.6<br>7.6                | 10.9<br>10.9 | 11.0 | 8                | 9  | 93<br>92        | 93               | 822110                | 817815                | <0.2<br><0.2 0       | 0.7<br>0.7 0.8 |
|               |             |            |          |           | Bottom         | 11.3<br>11.3 | 0.4              | 114<br>122 | 17.4<br>17.4 | 17.4          | 8.0<br>8.0 | 8.0     | 30.5<br>30.5 | 30.5     | 94.8<br>94.8   | 94.8             | 7.6 7.6                   | 15.6<br>15.6 | -    | 8                |    | 95<br>95        |                  |                       |                       | <0.2<br><0.2         | 0.7            |
|               |             |            |          |           | Surface        | 1.0          | 0.4              | 186        | 15.5<br>15.5 | 15.5          | 8.0<br>8.0 | 8.0     | 34.2<br>34.2 | 34.2     | 100.0          | 100.0            | 8.1                       | 7.7          |      | 14               |    | 89              |                  |                       |                       | <0.2<br><0.2<br><0.2 | 0.7            |
| IM1           | Cloudy      | Moderate   | 13:24    | 7.6       | Middle         | 1.0<br>3.8   | 0.4              | 200<br>174 | 14.8         | 14.8          | 7.9        | 7.9     | 34.5         | 34.5     | 99.9<br>98.7   | 98.7             | 8.1<br>8.1<br>8.1         | 8.4          | 8.2  | 13<br>12         | 13 | 90<br>91        | 91               | 818357                | 806444                | <0.2                 | 0.5            |
|               | ciculy      | mouorato   |          |           |                | 3.8<br>6.6   | 0.4              | 180<br>168 | 14.8<br>14.6 |               | 7.9<br>7.9 |         | 34.5<br>34.6 |          | 98.7<br>98.5   | 98.6             | 8.1<br>8.1                | 8.3<br>8.7   |      | 13<br>13         |    | 90<br>93        |                  | 010007                |                       | <0.2                 | 0.4 0.5        |
|               |             |            |          |           | Bottom         | 6.6<br>1.0   | 0.4              | 183<br>157 | 14.6<br>15.3 | 14.6          | 7.9<br>7.9 | 7.9     | 34.6<br>34.3 | 34.6     | 98.6<br>99.6   |                  | 8.1<br>8.1<br>8.1         | 8.6<br>8.5   |      | 12<br>9          |    | 94<br>87        |                  |                       |                       | <0.2<br><0.2         | 0.6<br>0.6     |
|               |             |            |          |           | Surface        | 1.0<br>4.4   | 0.3              | 171<br>152 | 15.3<br>14.6 | 15.3          | 7.9<br>7.9 | 7.9     | 34.3<br>34.5 | 34.3     | 99.6<br>98.0   | 99.6             | 8.1<br>8.1<br>8.1         | 8.6<br>11.9  | -    | 10<br>15         |    | 88<br>91        |                  |                       |                       | <0.2<br><0.2         | 0.5            |
| IM2           | Cloudy      | Moderate   | 13:17    | 8.7       | Middle         | 4.4          | 0.3              | 162        | 14.6         | 14.6          | 7.9        | 7.9     | 34.5         | 34.5     | 98.0           | 98.0             | 8.1                       | 12.0         | 12.0 | 14               | 13 | 90              | 90               | 818865                | 806200                | <0.2                 | 0.6            |
|               |             |            |          |           | Bottom         | 7.7<br>7.7   | 0.3              | 181<br>191 | 14.5<br>14.5 | 14.5          | 7.9<br>7.9 | 7.9     | 34.6<br>34.6 | 34.6     | 97.9<br>97.9   | 97.9             | 8.1<br>8.1<br>8.1         | 15.8<br>14.9 | _    | 14<br>14         |    | 92<br>92        |                  |                       |                       | <0.2<br><0.2         | 0.4            |
|               |             |            |          |           | Surface        | 1.0<br>1.0   | 0.4              | 126<br>131 | 14.8<br>14.8 | 14.8          | 7.9<br>7.9 | 7.9     | 34.4<br>34.4 | 34.4     | 98.7<br>98.6   | 98.7             | 8.1<br>8.1<br>8.1         | 10.5<br>10.5 | -    | 14<br>12         |    | 87<br>86        |                  |                       |                       | <0.2<br><0.2         | 0.4            |
| IM3           | Cloudy      | Moderate   | 13:10    | 8.8       | Middle         | 4.4          | 0.4              | 144<br>148 | 14.5<br>14.5 | 14.5          | 7.9<br>7.9 | 7.9     | 34.5<br>34.5 | 34.5     | 97.6<br>97.7   | 97.7             | 8.0<br>8.1                | 13.9<br>14.1 | 12.8 | 15<br>15         | 16 | 90<br>89        | 90               | 819397                | 806031                | <0.2<br><0.2 <0.2    | 0.5 0.4        |
|               |             |            |          |           | Bottom         | 7.8<br>7.8   | 0.4              | 152<br>164 | 14.5<br>14.5 | 14.5          | 7.9        | 7.9     | 34.6<br>34.6 | 34.6     | 97.7<br>97.7   | 97.7             | 8.1<br>8.1<br>8.1         | 14.0<br>14.0 | -    | 19<br>18         |    | 94<br>93        |                  |                       |                       | <0.2                 | 0.4            |
|               |             |            |          |           | Surface        | 1.0          | 0.4              | 181        | 14.7         | 14.7          | 7.9        | 7.9     | 34.4         | 34.4     | 98.4           | 98.4             | 8.1                       | 11.6         |      | 11               |    | 86              |                  |                       |                       | <0.2                 | 0.4            |
| IM4           | Cloudy      | Moderate   | 13:01    | 8.0       | Middle         | 1.0<br>4.0   | 0.4              | 181<br>194 | 14.7<br>14.6 | 14.6          | 7.9<br>7.9 | 7.9     | 34.4<br>34.5 | 34.5     | 98.4<br>98.0   | 98.0             | 8.1<br>8.1<br>8.1         | 11.6<br>13.9 | 14.8 | 12<br>16         | 17 | 86<br>91        | 90               | 819582                | 805036                | <0.2<br><0.2<br><0.2 | 0.5            |
|               | ciculy      | mouorato   |          | 0.0       |                | 4.0 7.0      | 0.4              | 200<br>188 | 14.6<br>14.4 | 14.4          | 7.9<br>7.9 |         | 34.5<br>34.6 |          | 98.0<br>97.8   | 97.8             | 8.1<br>8.1                | 13.9<br>18.9 |      | 14<br>23         |    | 88<br>94        |                  | 0.0001                |                       | <0.2<br><0.2         | 0.4 0.5        |
|               |             |            |          |           | Bottom         | 7.0<br>1.0   | 0.5<br>0.4       | 195<br>180 | 14.4<br>14.7 |               | 7.9<br>7.9 | 7.9     | 34.6<br>34.5 | 34.6     | 97.8<br>98.8   |                  | 8.1 <sup>0.1</sup><br>8.1 | 18.9<br>13.3 |      | 23<br>12         |    | 93<br>89        |                  |                       |                       | <0.2<br><0.2         | 0.6<br>0.6     |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 193        | 14.7         | 14.7          | 7.9        | 7.9     | 34.5         | 34.5     | 98.8           | 98.8             | 8.1 8.1                   | 13.3         | -    | 13               |    | 90              |                  |                       |                       | <0.2                 | 0.5            |
| IM5           | Cloudy      | Moderate   | 12:53    | 68.0      | Middle         | 34.0<br>34.0 | 0.4              | 188<br>203 | 14.7<br>14.7 | 14.7          | 7.9<br>7.9 | 7.9     | 34.5<br>34.5 | 34.5     | 98.5<br>98.5   | 98.5             | 8.1<br>8.1                | 14.7<br>14.7 | 14.9 | 14<br>16         | 19 | 91<br>90        | 91               | 820569                | 804911                | <0.2<br><0.2<br><0.2 | 0.5            |
|               |             |            |          |           | Bottom         | 67.0<br>67.0 | 0.5<br>0.5       | 204<br>204 | 14.7<br>14.7 | 14.7          | 8.0<br>8.0 | 8.0     | 34.5<br>34.5 | 34.5     | 98.3<br>98.3   | 98.3             | 8.1<br>8.1<br>8.1         | 16.8<br>16.8 | _    | 30<br>30         |    | 93<br>92        |                  |                       |                       | <0.2<br><0.2         | 0.4            |
|               |             |            |          |           | Surface        | 1.0          | 0.3              | 175<br>188 | 14.6<br>14.6 | 14.6          | 7.9<br>7.9 | 7.9     | 34.3<br>34.3 | 34.3     | 98.1<br>98.1   | 98.1             | 8.1<br>8.1                | 17.6<br>17.7 | -    | 20<br>20         |    | 90<br>89        | -                |                       |                       | <0.2<br><0.2         | 0.5<br>0.5     |
| IM6           | Cloudy      | Moderate   | 12:44    | 7.2       | Middle         | 3.6<br>3.6   | 0.3              | 156<br>171 | 14.5<br>14.5 | 14.5          | 7.9<br>7.9 | 7.9     | 34.3<br>34.3 | 34.3     | 97.9<br>97.9   | 97.9             | 8.1<br>8.1<br>8.1         | 18.4<br>18.4 | 20.0 | 23<br>22         | 22 | 91<br>90        | 91               | 821059                | 805836                | <0.2<br><0.2 <0.2    | 0.5            |
|               |             |            |          |           | Bottom         | 6.2          | 0.3              | 163        | 14.5         | 14.5          | 7.9        | 7.9     | 34.3<br>34.3 | 34.3     | 97.7           | 97.7             | 8.1 8.1                   | 23.8         | -    | 22               |    | 91              |                  |                       |                       | <0.2                 | 0.5            |
|               |             |            |          |           | Surface        | 6.2<br>1.0   | 0.4              | 169<br>140 | 14.5<br>14.6 | 14.6          | 8.0        | 8.0     | 34.2         | 34.2     | 97.7<br>98.1   | 98.2             | 8.1 0.1<br>8.1            | 23.8<br>14.1 |      | 23<br>17         |    | 94<br>89        |                  |                       |                       | <0.2                 | 0.5            |
| IM7           | Cloudy      | Moderate   | 12:35    | 9.0       | Middle         | 1.0<br>4.5   | 0.5<br>0.5       | 147<br>114 | 14.6<br>14.5 | 14.5          | 7.9<br>7.9 | 7.9     | 34.2<br>34.2 | 34.2     | 98.2<br>97.7   | 97.7             | 8.1<br>8.1<br>8.1         | 14.2<br>19.0 | 18.0 | 19<br>24         | 24 | 90<br>90        | 91               | 821355                | 806854                | <0.2<br><0.2<br><0.2 | 0.5            |
| 11117         | Cioudy      | WOUGIALE   | 12.00    | 5.0       |                | 4.5<br>8.0   | 0.5<br>0.7       | 120<br>153 | 14.5<br>14.5 |               | 7.9<br>7.9 |         | 34.2<br>34.2 |          | 97.7<br>97.6   |                  | 8.1<br>8.1                | 19.0<br>20.8 | 10.0 | 25<br>27         | 24 | 88<br>93        | 51               | 021000                | 000034                | <0.2<br><0.2         | 0.5            |
|               |             |            |          |           | Bottom         | 8.0<br>1.0   | 0.7              | 155<br>97  | 14.5<br>17.3 | 14.5          | 7.9        | 7.9     | 34.2<br>30.7 | 34.2     | 97.6<br>100.2  | 97.6             | 8.1<br>8.0                | 20.8<br>15.7 |      | 29<br>13         |    | 94<br>86        |                  |                       |                       | <0.2                 | 0.9            |
|               |             |            |          |           | Surface        | 1.0          | 0.5              | 104        | 17.3         | 17.3          | 8.1        | 8.1     | 30.7         | 30.7     | 100.1          | 100.2            | 8.0 8.0                   | 15.9         | -    | 13               |    | 87              |                  |                       |                       | <0.2                 | 0.8            |
| IM8           | Cloudy      | Moderate   | 13:17    | 8.2       | Middle         | 4.1<br>4.1   | 0.5<br>0.5       | 85<br>91   | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.7<br>30.7 | 30.7     | 99.5<br>99.5   | 99.5             | 8.0<br>8.0                | 18.3<br>18.3 | 18.4 | 11<br>13         | 14 | 92<br>91        | 91               | 821686                | 807857                | <0.2<br><0.2 <0.2    | 1.0            |
|               |             |            |          |           | Bottom         | 7.2          | 0.4              | 87<br>90   | 17.1<br>17.1 | 17.1          | 8.0<br>8.0 | 8.0     | 30.7<br>30.7 | 30.7     | 99.7<br>99.7   | 99.7             | 8.0<br>8.0<br>8.0         | 21.0<br>21.0 | -    | 16<br>18         |    | 94<br>94        |                  |                       |                       | <0.2<br><0.2         | 0.8            |
| DA: Depth-Ave |             |            |          |           |                |              |                  |            |              |               |            |         |              |          |                |                  |                           |              |      |                  |    |                 |                  |                       |                       |                      | ·              |

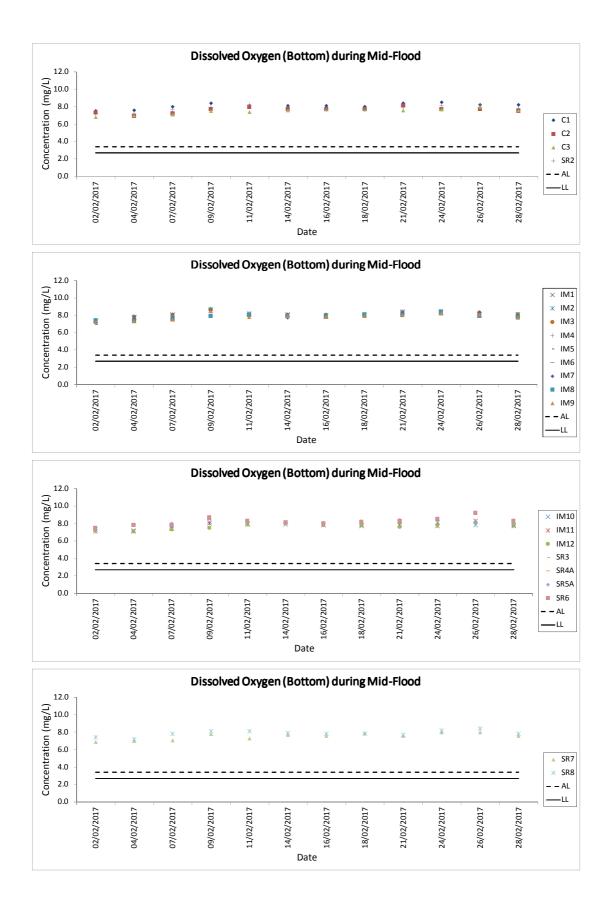
## Expansion of Hong Kong International Airport into a Three-Runway SystemWater Quality MonitoringWater Quality Monitoring Results on28 February 17during 28 February 17 during Mid-Ebb tide

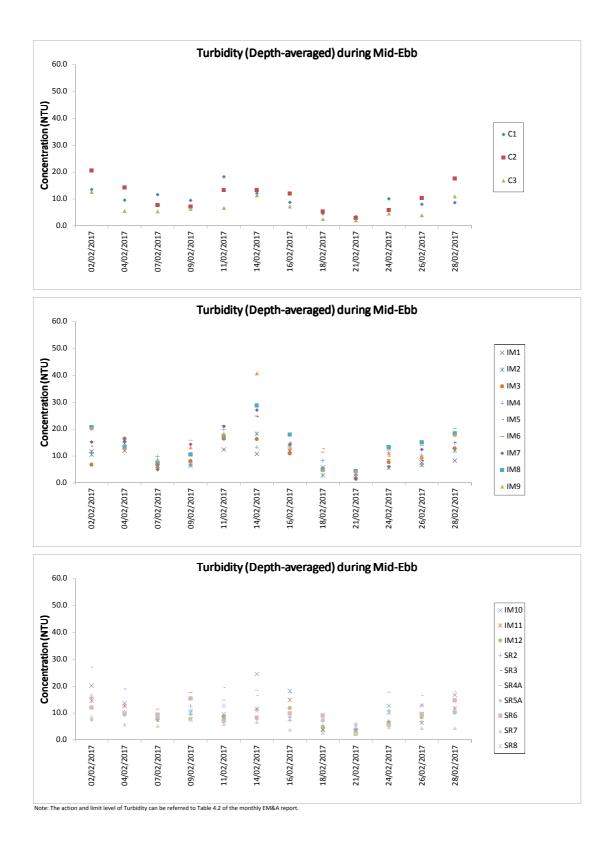
| Water Qua             | lity Monit | ioring Resu | ults on  |           | 28 February 17 | during Mid- | Ebb tide         | 9                    |              |               |            |         |              |           |              |                  |                     |              |       |                  |    |                   |    |                       |                       |                    |                            |
|-----------------------|------------|-------------|----------|-----------|----------------|-------------|------------------|----------------------|--------------|---------------|------------|---------|--------------|-----------|--------------|------------------|---------------------|--------------|-------|------------------|----|-------------------|----|-----------------------|-----------------------|--------------------|----------------------------|
| Monitoring<br>Station | Weather    | Sea         | Sampling | Water     | Sampling De    | oth (m)     | Current<br>Speed | Current<br>Direction | Water Ten    | nperature (°C | C) P       | Н       | Salin        | ity (ppt) |              | aturation<br>(%) | Dissolved<br>Oxygen | Turbidity    | (NTU) | Suspende<br>(mg/ |    | Total All<br>(ppi |    | Coordinate<br>HK Grid | Coordinate<br>HK Grid | Chromium<br>(µg/L) | <sup>1</sup> Nickel (μg/L) |
| Otation               | Condition  | Condition   | Time     | Depth (m) |                | -           | (m/s)            |                      | Value        | Average       |            | Average | Value        | Average   |              | Average          | Value DA            | Value        | DA    | Value            | DA | Value             | DA | (Northing)            | (Easting)             | Value DA           |                            |
|                       |            |             |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.5       | 94<br>96             | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 30.4<br>30.4 | 30.4      | 99.8<br>99.8 | 99.8             | 8.0<br>8.0          | 13.2<br>13.3 |       | 14<br>14         |    | 86<br>87          |    |                       |                       | <0.2<br><0.2       | 0.8                        |
| IM9                   | Cloudy     | Moderate    | 13:27    | 7.6       | Middle         | 3.8         | 0.6              | 94                   | 17.2         | 17.2          | 8.0        | 8.0     | 30.6         | 30.6      | 99.2         | 99.2             | 7.9 8.0             | 14.1         | 17.9  | 13               | 20 | 92                | 91 | 822092                | 808797                | <0.2               | 0.8                        |
|                       |            |             |          |           | Dettern        | 3.8<br>6.6  | 0.6<br>0.5       | 102<br>95            | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 |         | 30.6<br>30.6 | 20.6      | 99.2<br>99.3 | 99.3             | 7.9<br>8.0<br>8.0   | 14.1<br>26.4 |       | 12<br>33         |    | 93<br>94          |    |                       |                       | <0.2               | 0.7                        |
|                       |            |             |          |           | Bottom         | 6.6<br>1.0  | 0.6              | 96<br>114            | 17.2<br>17.6 |               | 8.0        | 8.0     | 30.6<br>29.8 | 30.6      | 99.3<br>98.7 |                  | 8.0                 | 26.4         |       | 35<br>9          |    | 93<br>86          |    |                       |                       | <0.2<br><0.2       | 0.7                        |
|                       |            |             |          |           | Surface        | 1.0         | 0.5              | 114                  | 17.6         | 17.6          | 8.0<br>8.0 | 8.0     | 29.8         | 29.0      | 98.7         | 98.7             | 7.9<br>7.9<br>7.9   | 10.1<br>10.2 |       | 10               |    | 87                |    |                       |                       | <0.2               | 1.4                        |
| IM10                  | Cloudy     | Moderate    | 13:34    | 7.7       | Middle         | 3.9<br>3.9  | 0.5              | 104<br>112           | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.1<br>30.1 | 30.1      | 97.8<br>97.8 | 97.8             | 7.9<br>7.9          | 15.9<br>15.6 | 16.7  | 11<br>11         | 10 | 93<br>92          | 91 | 822252                | 809823                | <0.2<br>0.2 0      | 1.2<br>1.0                 |
|                       |            |             |          |           | Bottom         | 6.7         | 0.5              | 97                   | 17.2         | 17.2          | 8.0        | 8.0     | 30.2         | 30.2      | 97.6         | 97.6             | 7.8 7.9             | 24.3         |       | 9                |    | 94                |    |                       |                       | 0.2                | 1.3                        |
|                       |            |             |          |           |                | 6.7         | 0.5              | 101<br>111           | 17.2<br>17.6 |               | 8.0<br>8.0 |         | 30.2<br>29.9 |           | 97.6<br>98.6 |                  | 7.8<br>7.9          | 24.3<br>8.4  |       | 9<br>8           |    | 94<br>87          |    |                       |                       | <0.2<br><0.2       | 1.3<br>1.2                 |
|                       |            |             |          |           | Surface        | 1.0<br>4.4  | 0.5<br>0.5       | 114<br>105           | 17.6         | 17.6          | 8.0        | 8.0     | 29.9         | 29.9      | 98.6         | 98.6             | 7.9 7.9             | 8.4          |       | 9                |    | 88                |    |                       |                       | 0.3                | 1.3                        |
| IM11                  | Cloudy     | Moderate    | 13:41    | 8.7       | Middle         | 4.4         | 0.5              | 105                  | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.0<br>30.0 | 30.0      | 97.3<br>97.3 | 97.3             | 7.8<br>7.8          | 11.9<br>11.9 | 11.7  | 10<br>11         | 11 | 92<br>93          | 91 | 821515                | 810541                | <0.2<br><0.2 0     | 0.9                        |
|                       |            |             |          |           | Bottom         | 7.7         | 0.4              | 97<br>105            | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.1<br>30.1 | 30.1      | 97.6<br>97.6 | 97.6             | 7.8<br>7.8<br>7.8   | 14.9<br>14.9 |       | 13<br>12         |    | 94<br>94          |    |                       |                       | <0.2<br><0.2       | 1.1<br>0.9                 |
|                       |            |             |          |           | Surface        | 1.0         | 0.6              | 98                   | 17.4         | 17.4          | 8.0        | 8.0     | 30.0         | 30.0      | 97.9         | 97.9             | 7.8                 | 8.9          |       | 8                |    | 88                |    |                       |                       | <0.2               | 1.1                        |
|                       |            |             |          |           |                | 1.0<br>4.6  | 0.6              | 102<br>114           | 17.4<br>17.3 |               | 8.0<br>8.0 |         | 30.0<br>30.0 |           | 97.9<br>97.4 |                  | 7.8<br>7.8<br>7.8   | 9.0<br>10.0  |       | 10<br>10         |    | 87<br>92          |    |                       |                       | <0.2               | 1.0<br>0.9 1.0             |
| IM12                  | Cloudy     | Moderate    | 13:49    | 9.2       | Middle         | 4.6         | 0.5              | 119                  | 17.3         | 17.3          | 8.0        | 8.0     | 30.0         | 30.0      | 97.4         | 97.4             | 7.8                 | 10.0         | 10.0  | 10               | 10 | 92                | 91 | 821158                | 811533                | <0.2               | 1.1                        |
|                       |            |             |          |           | Bottom         | 8.2<br>8.2  | 0.4<br>0.5       | 109<br>117           | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.2<br>30.2 | 30.2      | 97.2<br>97.2 | 97.2             | 7.8<br>7.8<br>7.8   | 11.1<br>11.1 |       | 10<br>10         |    | 93<br>94          |    |                       |                       | <0.2<br><0.2       | 0.9                        |
|                       |            |             |          |           | Surface        | 1.0         | 0.4              | 87<br>92             | 17.5<br>17.5 | 17.5          | 8.0<br>8.0 | 8.0     | 30.2<br>30.2 | 30.2      | 97.7<br>97.7 | 97.7             | 7.8<br>7.8<br>7.8   | 10.2<br>9.9  |       | 9<br>8           |    | 90<br>89          | -  |                       |                       | <0.2<br><0.2       | 0.9                        |
| SR2                   | Sunny      | Moderate    | 14:08    | 4.9       | Middle         | 2.5         | -                | -                    | -            | -             | -          | -       | -            | -         | -            | -                | - 7.8               | -            | 10.5  | -                | 11 | -                 | 92 | 821480                | 814152                | - <0.2             | 2 - 1.0                    |
| •••=                  |            |             |          |           |                | 2.5<br>3.9  | - 0.3            | -<br>94              | - 17.4       |               | - 8.0      |         | -<br>30.2    |           | -<br>97.9    |                  | -<br>7.8 7.8        | - 10.9       |       | -<br>14          |    | -<br>95           |    |                       | •••••                 | <0.2               | 1.0                        |
|                       |            |             |          |           | Bottom         | 3.9         | 0.4              | 96                   | 17.4         | 17.4          | 8.0        | 8.0     | 30.2         | 30.2      | 97.9         | 97.9             | 7.8                 | 10.9         |       | 13               |    | 95                |    |                       |                       | <0.2               | 1.1                        |
|                       |            |             |          |           | Surface        | 1.0<br>1.0  | 0.5<br>0.5       | 130<br>131           | 17.6<br>17.6 | 17.6          | 8.0<br>8.0 | 8.0     | 29.5<br>29.5 | 29.5      | 99.0<br>99.0 | 99.0             | 7.9<br>7.9<br>7.9   | 14.2<br>14.2 |       | 14<br>14         | ·  | -                 |    |                       |                       | -                  | -                          |
| SR3                   | Cloudy     | Moderate    | 13:06    | 9.2       | Middle         | 4.6<br>4.6  | 0.5<br>0.5       | 105<br>112           | 17.4<br>17.4 | 17.4          | 8.0<br>8.0 | 8.0     | 30.3<br>30.3 | 30.3      | 99.4<br>99.4 | 99.4             | 7.9<br>7.9          | 17.2<br>17.4 | 17.8  | 17<br>15         | 18 | -                 | -  | 822165                | 807565                |                    |                            |
|                       |            |             |          |           | Bottom         | 8.2         | 0.4              | 111                  | 17.2         | 17.2          | 8.0        | 8.0     | 30.5         | 30.5      | 99.1         | 99.1             | 7.9 7.9             | 21.8         |       | 22               |    | -                 |    |                       |                       | -                  | -                          |
|                       |            |             |          |           |                | 8.2         | 0.5              | 116<br>100           | 17.2<br>14.8 |               | 8.0<br>7.9 |         | 30.5<br>34.6 |           | 99.1<br>99.1 |                  | 7.9<br>8.1          | 21.8<br>9.3  |       | 24<br>11         |    | -                 |    |                       |                       | -                  | -                          |
|                       |            |             |          |           | Surface        | 1.0<br>4.4  | 0.5<br>0.5       | 109<br>96            | 14.8<br>14.7 | 14.8          | 7.9<br>7.9 | 7.9     | 34.6<br>34.7 | 34.6      | 99.1<br>98.6 | 99.1             | 8.1<br>8.1<br>8.1   | 9.3<br>10.1  |       | 12<br>15         |    | -                 |    |                       |                       | -                  | -                          |
| SR4A                  | Fine       | Calm        | 14:11    | 8.7       | Middle         | 4.4         | 0.5              | 98                   | 14.7         | 14.7          | 7.9        | 7.9     | 34.7         | 34.7      | 98.6         | 98.6             | 8.1                 | 10.1         | 10.2  | 13               | 14 | -                 | -  | 817173                | 807798                | -                  | -                          |
|                       |            |             |          |           | Bottom         | 7.7         | 0.5              | 90<br>94             | 14.6<br>14.6 | 14.6          | 7.9<br>7.9 | 7.9     | 34.7<br>34.7 | 34.7      | 98.5<br>98.5 | 98.5             | 8.1<br>8.1<br>8.1   | 11.2<br>11.3 |       | 16<br>14         |    | -                 | -  |                       |                       | -                  | -                          |
|                       |            |             |          |           | Surface        | 1.0         | 0.2              | 219                  | 15.1         | 15.1          | 7.9        | 7.9     | 33.5         | 33.5      | 98.1         | 98.1             | 8.0                 | 8.6          |       | 10               |    |                   |    |                       |                       | -                  | -                          |
| SR5A                  | Fine       | Colm        | 14:07    | 4.1       | Middle         | 1.0<br>2.1  | 0.2              | - 225                | 15.1<br>-    |               | 7.9        |         | 33.5         |           | 98.1<br>-    |                  | 8.0 8.0             | 8.6          | 10.0  | - 11             | 10 | -                 |    | 010500                | 810715                | -                  | -                          |
| ShJA                  | Fine       | Calm        | 14:27    | 4.1       | Middle         | 2.1<br>3.1  | - 0.2            | - 146                | - 14.6       | -             | - 7.9      | -       | -<br>33.9    | -         | -<br>97.4    | -                | -<br>8.1 o.1        | -<br>11.4    | 10.0  | -<br>14          | 13 | -                 | -  | 816593                | 810715                | -                  | -                          |
|                       |            |             |          |           | Bottom         | 3.1         | 0.2              | 150                  | 14.6         | 14.6          | 7.9        | 7.9     | 33.9         | 33.9      | 97.4         | 97.4             | 8.1 8.1             | 11.4         |       | 15               |    |                   | -  |                       |                       |                    | -                          |
|                       |            |             |          |           | Surface        | 1.0         | 0.2              | 118<br>123           | 14.7<br>14.7 | 14.7          | 7.9<br>7.9 | 7.9     | 33.6<br>33.6 | 33.6      | 95.3<br>95.3 | 95.3             | 7.9<br>7.9          | 15.1<br>15.3 |       | 15<br>13         |    | -                 |    |                       |                       | -                  | -                          |
| SR6                   | Fine       | Calm        | 14:48    | 3.9       | Middle         | 2.0         | -                | -                    | -            | -             | -          | -       | -            | -         | -            | -                | - 7.9               | -            | 14.7  | -                | 16 | -                 | -  | 817882                | 814659                |                    |                            |
|                       |            |             |          |           | Dettern        | 2.0<br>2.9  | - 0.2            | -<br>155             | - 14.5       | 145           | - 7.9      | 7.0     | -<br>33.6    | 22.6      | -<br>95.1    | 05.1             | -<br>7.9<br>7.9     | - 14.2       |       | -<br>18          |    | -                 |    |                       |                       | -                  | -                          |
|                       |            |             |          |           | Bottom         | 2.9         | 0.2              | 157                  | 14.5         | 14.5          | 7.9        | 7.9     | 33.6         | 33.6      | 95.1         | 95.1             | 7.9                 | 14.2         |       | 16               |    | -                 |    |                       |                       | -                  | -                          |
|                       |            |             |          |           | Surface        | 1.0         | 0.6<br>0.6       | 67<br>68             | 17.3<br>17.3 | 17.3          | 8.0<br>8.0 | 8.0     | 30.6<br>30.6 | 30.6      | 94.7<br>94.6 | 94.7             | 7.6<br>7.6<br>7.6   | 4.2<br>4.3   |       | 2<br>4           |    | -                 |    |                       |                       | -                  | -                          |
| SR7                   | Sunny      | Moderate    | 14:54    | 15.7      | Middle         | 7.9<br>7.9  | 0.5<br>0.5       | 63<br>65             | 17.3<br>17.3 | 17.3          | 8.0<br>8.0 | 8.0     | 30.6<br>30.6 | 30.6      | 94.3<br>94.3 | 94.3             | 7.5<br>7.5          | 4.5<br>4.5   | 4.4   | 4                | 4  | -                 | -  | 823642                | 823739                |                    |                            |
|                       |            |             |          |           | Bottom         | 14.7        | 0.3              | 80                   | 17.3         | 17.3          | 8.0        | 8.0     | 30.6         | 30.6      | 94.4         | 94.4             | 7.5 7.5             | 4.5          |       | 6                |    | -                 |    |                       |                       | -                  | -                          |
|                       |            |             |          |           |                | 14.7<br>1.0 | 0.3              | 86<br>145            | 17.3<br>17.4 |               | 8.0<br>8.0 |         | 30.6<br>30.1 |           | 94.4<br>97.7 |                  | 7.5 7.8             | 4.5<br>9.5   |       | 6<br>9           |    | -                 |    |                       |                       | -                  | -                          |
|                       |            |             |          |           | Surface        | 1.0         | 0.3              | 158                  | 17.4         | 17.4          | 8.0        | 8.0     | 30.1         | 30.1      | 97.7         | 97.7             | 7.8 7.8             | 9.6          |       | 10               |    |                   |    |                       |                       | -                  | -                          |
| SR8                   | Sunny      | Moderate    | 13:54    | 5.2       | Middle         | 2.6<br>2.6  | -                | -                    | -            | -             | -          | -       | -            | -         | -            | -                | -                   | -            | 10.7  | -                | 11 | -                 | -  | 820411                | 811605                |                    |                            |
|                       |            |             |          |           | Bottom         | 4.2         | 0.3<br>0.3       | 154<br>163           | 17.2<br>17.2 | 17.2          | 8.0<br>8.0 | 8.0     | 30.2<br>30.2 | 30.2      | 97.3<br>97.3 | 97.3             | 7.8<br>7.8<br>7.8   | 11.8<br>11.8 |       | 12<br>11         |    | -                 |    |                       |                       | -                  | -                          |
| DA: Denth-Aver        | <u>ا</u>   |             | 1        |           | 1              | 4.2         | 0.3              | 103                  | 17.2         |               | 0.0        |         | JU.2         |           | 31.3         |                  | 1.0                 | 11.0         |       | 11               |    |                   |    |                       | 1                     |                    |                            |

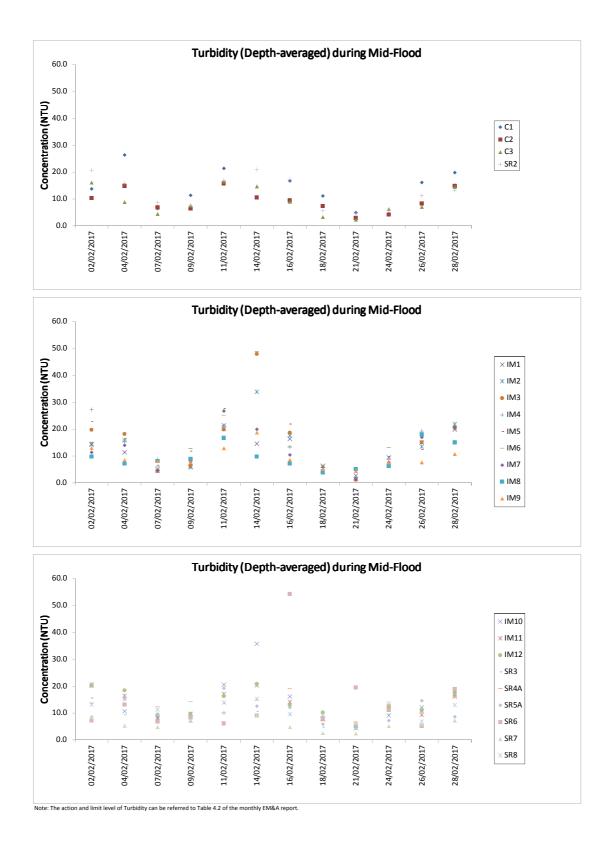


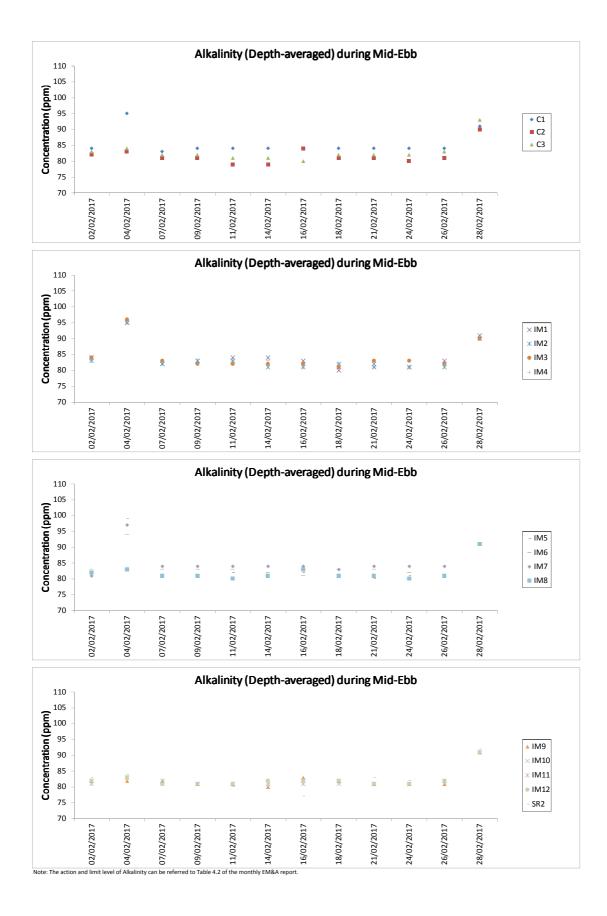


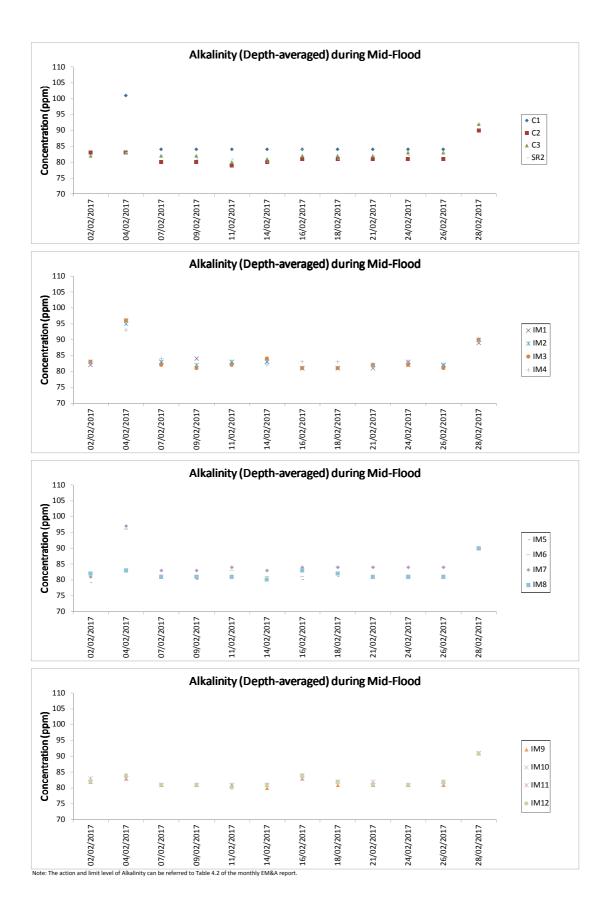


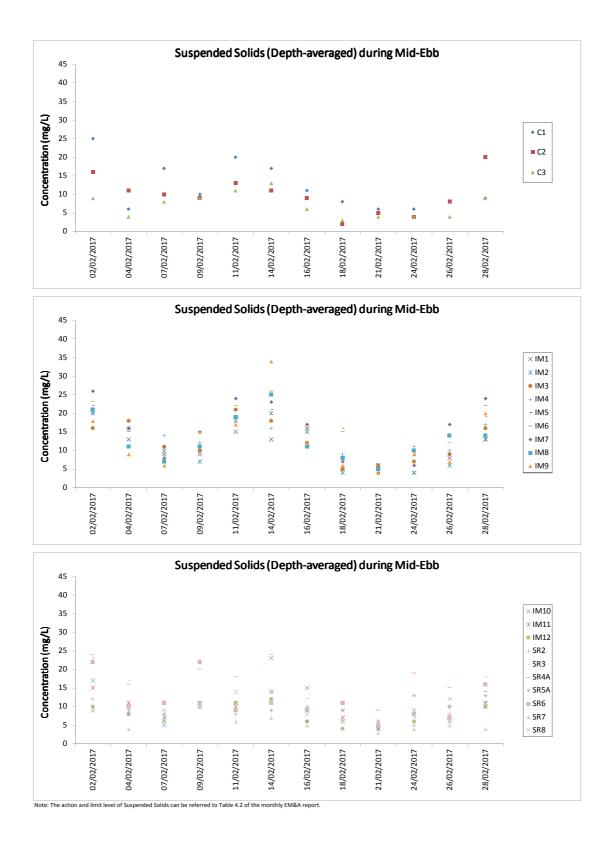


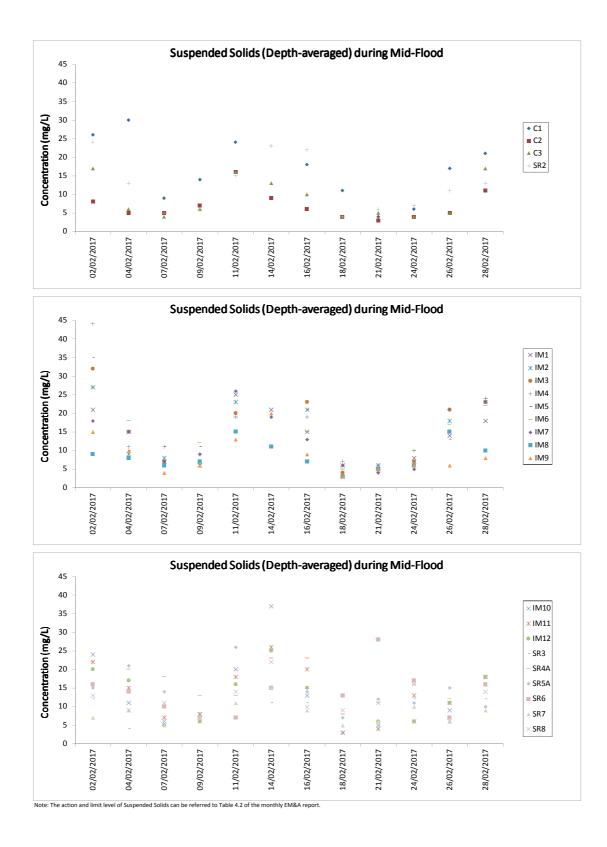


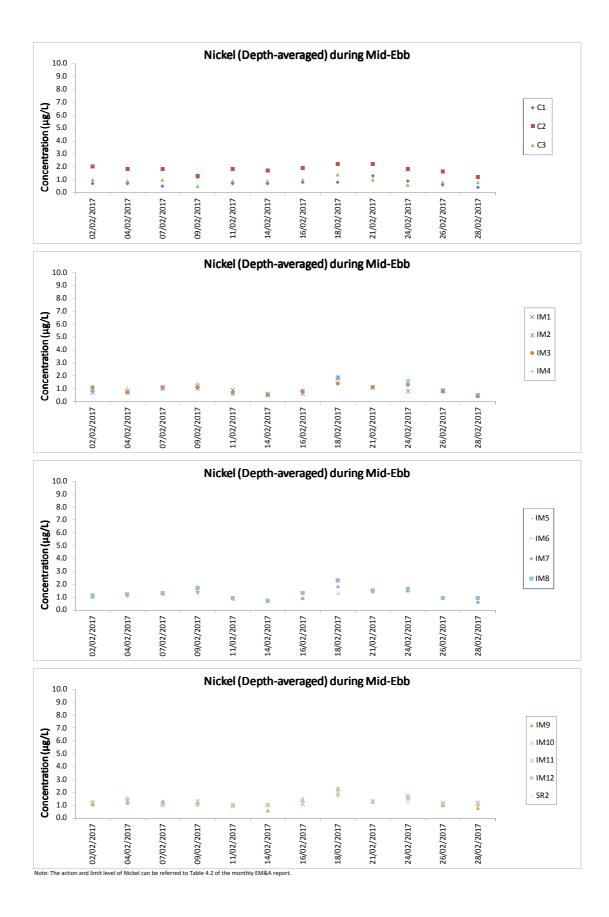


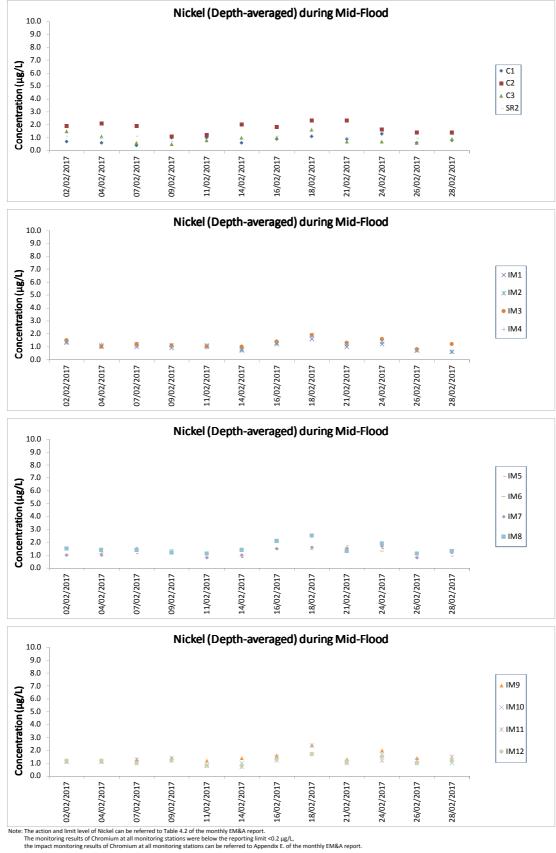












Mott MacDonald | Expansion of Hong Kong International Airport into a Three-Runway System

# **Chinese White Dolphin Monitoring Results**

#### **CWD Small Vessel Line-transect Survey**

#### Survey Effort Data

| DATE      | AREA | BEAU | KM SEARCHED | SEASON | VESSEL | TYPE   |
|-----------|------|------|-------------|--------|--------|--------|
| 02-Dec-16 | NWL  | 2    | 24.31       | WINTER | 32166  | 3RS ET |
| 02-Dec-16 | NWL  | 3    | 54.34       | WINTER | 32166  | 3RS ET |
| 02-Dec-16 | NWL  | 4    | 3.20        | WINTER | 32166  | 3RS ET |
| 05-Dec-16 | AW   | 2    | 4.86        | WINTER | 32166  | 3RS ET |
| 05-Dec-16 | WL   | 2    | 9.23        | WINTER | 32166  | 3RS ET |
| 05-Dec-16 | WL   | 3    | 23.91       | WINTER | 32166  | 3RS ET |
| 05-Dec-16 | SWL  | 2    | 5.52        | WINTER | 32166  | 3RS ET |
| 05-Dec-16 | SWL  | 3    | 1.31        | WINTER | 32166  | 3RS ET |
| 13-Dec-16 | SWL  | 2    | 52.96       | WINTER | 32166  | 3RS ET |
| 13-Dec-16 | SWL  | 3    | 7.50        | WINTER | 32166  | 3RS ET |
| 14-Dec-16 | AW   | 3    | 1.96        | WINTER | 32166  | 3RS ET |
| 14-Dec-16 | AW   | 4    | 2.96        | WINTER | 32166  | 3RS ET |
| 14-Dec-16 | WL   | 3    | 13.26       | WINTER | 32166  | 3RS ET |
| 14-Dec-16 | WL   | 4    | 18.34       | WINTER | 32166  | 3RS ET |
| 14-Dec-16 | WL   | 5    | 2.20        | WINTER | 32166  | 3RS ET |
| 14-Dec-16 | SWL  | 3    | 2.29        | WINTER | 32166  | 3RS ET |
| 14-Dec-16 | SWL  | 4    | 4.41        | WINTER | 32166  | 3RS ET |
| 19-Dec-16 | NWL  | 2    | 39.79       | WINTER | 32166  | 3RS ET |
| 19-Dec-16 | NWL  | 3    | 22.34       | WINTER | 32166  | 3RS ET |
| 19-Dec-16 | NWL  | 4    | 3.20        | WINTER | 32166  | 3RS ET |
| 20-Dec-16 | NWL  | 2    | 7.59        | WINTER | 32166  | 3RS ET |
| 20-Dec-16 | NEL  | 1    | 3.67        | WINTER | 32166  | 3RS ET |
| 20-Dec-16 | NEL  | 2    | 17.41       | WINTER | 32166  | 3RS ET |
| 20-Dec-16 | NEL  | 3    | 22.32       | WINTER | 32166  | 3RS ET |
| 20-Dec-16 | NEL  | 4    | 3.00        | WINTER | 32166  | 3RS ET |
| 22-Dec-16 | SWL  | 2    | 0.90        | WINTER | 32166  | 3RS ET |
| 22-Dec-16 | SWL  | 3    | 25.80       | WINTER | 32166  | 3RS ET |
| 22-Dec-16 | SWL  | 4    | 23.20       | WINTER | 32166  | 3RS ET |
| 22-Dec-16 | SWL  | 5    | 13.20       | WINTER | 32166  | 3RS ET |
| 23-Dec-16 | NEL  | 1    | 7.40        | WINTER | 32166  | 3RS ET |
| 23-Dec-16 | NEL  | 2    | 27.00       | WINTER | 32166  | 3RS ET |
| 23-Dec-16 | NEL  | 3    | 12.80       | WINTER | 32166  | 3RS ET |
| 05-Jan-17 | AW   | 2    | 4.86        | WINTER | 32166  | 3RS ET |
| 05-Jan-17 | WL   | 1    | 12.53       | WINTER | 32166  | 3RS ET |
| 05-Jan-17 | WL   | 2    | 14.38       | WINTER | 32166  | 3RS ET |
| 05-Jan-17 | SWL  | 2    | 6.01        | WINTER | 32166  | 3RS ET |
| 06-Jan-17 | SWL  | 1    | 1.30        | WINTER | 32166  | 3RS ET |
| 06-Jan-17 | SWL  | 2    | 61.20       | WINTER | 32166  | 3RS ET |
| 06-Jan-17 | SWL  | 3    | 1.80        | WINTER | 32166  | 3RS ET |
| 09-Jan-17 | NWL  | 1    | 6.90        | WINTER | 32166  | 3RS ET |
| 09-Jan-17 | NWL  | 2    | 60.46       | WINTER | 32166  | 3RS ET |
| 09-Jan-17 | NWL  | 3    | 15.64       | WINTER | 32166  | 3RS ET |
| 10-Jan-17 | NEL  | 2    | 2.10        | WINTER | 32166  | 3RS ET |
| 10-Jan-17 | NEL  | 3    | 29.22       | WINTER | 32166  | 3RS ET |
| 10-Jan-17 | NEL  | 4    | 16.68       | WINTER | 32166  | 3RS ET |
| 12-Jan-17 | NWL  | 2    | 20.09       | WINTER | 32166  | 3RS ET |
| 12-Jan-17 | NWL  | 3    | 61.01       | WINTER | 32166  | 3RS ET |

| DATE      | AREA | BEAU | KM SEARCHED | SEASON | VESSEL | TYPE   |
|-----------|------|------|-------------|--------|--------|--------|
| 12-Jan-17 | NWL  | 4    | 0.70        | WINTER | 32166  | 3RS ET |
| 13-Jan-17 | SWL  | 2    | 27.52       | WINTER | 32166  | 3RS ET |
| 13-Jan-17 | SWL  | 3    | 28.90       | WINTER | 32166  | 3RS ET |
| 13-Jan-17 | SWL  | 4    | 5.33        | WINTER | 32166  | 3RS ET |
| 19-Jan-17 | AW   | 1    | 4.59        | WINTER | 32166  | 3RS ET |
| 19-Jan-17 | WL   | 2    | 7.20        | WINTER | 32166  | 3RS ET |
| 19-Jan-17 | WL   | 3    | 14.13       | WINTER | 32166  | 3RS ET |
| 19-Jan-17 | WL   | 4    | 11.03       | WINTER | 32166  | 3RS ET |
| 19-Jan-17 | SWL  | 3    | 5.88        | WINTER | 32166  | 3RS ET |
| 19-Jan-17 | SWL  | 4    | 1.00        | WINTER | 32166  | 3RS ET |
| 20-Jan-17 | NEL  | 2    | 23.30       | WINTER | 32166  | 3RS ET |
| 20-Jan-17 | NEL  | 3    | 22.00       | WINTER | 32166  | 3RS ET |
| 20-Jan-17 | NEL  | 4    | 1.60        | WINTER | 32166  | 3RS ET |
| 06-Feb-17 | AW   | 2    | 2.94        | WINTER | 32166  | 3RS ET |
| 06-Feb-17 | AW   | 3    | 1.93        | WINTER | 32166  | 3RS ET |
| 06-Feb-17 | WL   | 2    | 17.00       | WINTER | 32166  | 3RS ET |
| 06-Feb-17 | WL   | 3    | 9.79        | WINTER | 32166  | 3RS ET |
| 06-Feb-17 | WL   | 4    | 3.53        | WINTER | 32166  | 3RS ET |
| 06-Feb-17 | SWL  | 4    | 2.54        | WINTER | 32166  | 3RS ET |
| 06-Feb-17 | SWL  | 5    | 4.35        | WINTER | 32166  | 3RS ET |
| 07-Feb-17 | NEL  | 2    | 5.80        | WINTER | 32166  | 3RS ET |
| 07-Feb-17 | NEL  | 3    | 25.76       | WINTER | 32166  | 3RS ET |
| 07-Feb-17 | NEL  | 4    | 11.47       | WINTER | 32166  | 3RS ET |
| 07-Feb-17 | NEL  | 5    | 4.27        | WINTER | 32166  | 3RS ET |
| 09-Feb-17 | SWL  | 2    | 0.90        | WINTER | 32166  | 3RS ET |
| 09-Feb-17 | SWL  | 3    | 14.17       | WINTER | 32166  | 3RS ET |
| 09-Feb-17 | SWL  | 4    | 15.23       | WINTER | 32166  | 3RS ET |
| 09-Feb-17 | SWL  | 5    | 32.40       | WINTER | 32166  | 3RS ET |
| 10-Feb-17 | NEL  | 1    | 3.30        | WINTER | 32166  | 3RS ET |
| 10-Feb-17 | NEL  | 2    | 8.03        | WINTER | 32166  | 3RS ET |
| 10-Feb-17 | NEL  | 3    | 34.17       | WINTER | 32166  | 3RS ET |
| 10-Feb-17 | NEL  | 4    | 2.00        | WINTER | 32166  | 3RS ET |
| 16-Feb-17 | AW   | 1    | 4.73        | WINTER | 32166  | 3RS ET |
| 16-Feb-17 | WL   | 1    | 18.36       | WINTER | 32166  | 3RS ET |
| 16-Feb-17 | WL   | 2    | 3.10        | WINTER | 32166  | 3RS ET |
| 16-Feb-17 | WL   | 3    | 6.07        | WINTER | 32166  | 3RS ET |
| 17-Feb-17 | SWL  | 1    | 37.70       | WINTER | 32166  | 3RS ET |
| 17-Feb-17 | SWL  | 2    | 29.26       | WINTER | 32166  | 3RS ET |
| 20-Feb-17 | NWL  | 1    | 27.20       | WINTER | 32166  | 3RS ET |
| 20-Feb-17 | NWL  | 2    | 48.10       | WINTER | 32166  | 3RS ET |
| 21-Feb-17 | NWL  | 3    | 14.17       | WINTER | 32166  | 3RS ET |
| 21-Feb-17 | NWL  | 4    | 38.72       | WINTER | 32166  | 3RS ET |
| 21-Feb-17 | NWL  | 5    | 21.81       | WINTER | 32166  | 3RS ET |

Notes:

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

#### CWD Small Vessel Line-transect Survey

| DATE      | STG<br># | ТІМЕ | CWD/FP | GP<br>SZ | AREA | BEAU | PSD  | EFFORT | ТҮРЕ   | DEC LAT | DEC LON  | SEASON | BOAT ASSOC.  |
|-----------|----------|------|--------|----------|------|------|------|--------|--------|---------|----------|--------|--------------|
| 02-Dec-16 | 1        | 1129 | CWD    | 2        | NWL  | 3    | 172  | ON     | 3RS ET | 22.3780 | 113.8768 | WINTER | NONE         |
| 02-Dec-16 | 2        | 1234 | CWD    | 2        | NWL  | 3    | 187  | ON     | 3RS ET | 22.3664 | 113.8876 | WINTER | NONE         |
| 05-Dec-16 | 1        | 1028 | CWD    | 2        | WL   | 2    | 34   | ON     | 3RS ET | 22.2683 | 113.8608 | WINTER | NONE         |
| 05-Dec-16 | 2        | 1045 | CWD    | 1        | WL   | 3    | 100  | ON     | 3RS ET | 22.2606 | 113.8480 | WINTER | NONE         |
| 05-Dec-16 | 3        | 1110 | CWD    | 5        | WL   | 3    | 171  | ON     | 3RS ET | 22.2506 | 113.8363 | WINTER | NONE         |
| 05-Dec-16 | 4        | 1154 | CWD    | 1        | WL   | 3    | 42   | ON     | 3RS ET | 22.2412 | 113.8365 | WINTER | NONE         |
| 05-Dec-16 | 5        | 1250 | CWD    | 11       | WL   | 2    | 276  | ON     | 3RS ET | 22.2056 | 113.8398 | WINTER | NONE         |
| 13-Dec-16 | 4        | 1239 | CWD    | 2        | SWL  | 2    | 611  | ON     | 3RS ET | 22.1771 | 113.9056 | WINTER | NONE         |
| 13-Dec-16 | 5        | 1350 | CWD    | 5        | SWL  | 3    | 87   | ON     | 3RS ET | 22.1480 | 113.8884 | WINTER | PAIR TRAWLER |
| 13-Dec-16 | 6        | 1413 | CWD    | 1        | SWL  | 3    | 297  | ON     | 3RS ET | 22.1691 | 113.8878 | WINTER | NONE         |
| 13-Dec-16 | 7        | 1436 | CWD    | 1        | SWL  | 2    | 72   | ON     | 3RS ET | 22.1998 | 113.8876 | WINTER | NONE         |
| 13-Dec-16 | 8        | 1452 | CWD    | 1        | SWL  | 2    | 280  | ON     | 3RS ET | 22.2039 | 113.8779 | WINTER | PURSE SEINE  |
| 13-Dec-16 | 9        | 1544 | CWD    | 2        | SWL  | 2    | 90   | ON     | 3RS ET | 22.1956 | 113.8685 | WINTER | NONE         |
| 19-Dec-16 | 2        | 0943 | CWD    | 6        | NWL  | 3    | 687  | ON     | 3RS ET | 22.4160 | 113.8686 | WINTER | NONE         |
| 19-Dec-16 | 3        | 1026 | CWD    | 2        | NWL  | 2    | 358  | ON     | 3RS ET | 22.3696 | 113.8679 | WINTER | NONE         |
| 19-Dec-16 | 4        | 1036 | CWD    | 4        | NWL  | 2    | 460  | ON     | 3RS ET | 22.3689 | 113.8685 | WINTER | NONE         |
| 19-Dec-16 | 5        | 1224 | CWD    | 1        | NWL  | 2    | 50   | ON     | 3RS ET | 22.3817 | 113.8760 | WINTER | NONE         |
| 19-Dec-16 | 6        | 1234 | CWD    | 4        | NWL  | 2    | 497  | ON     | 3RS ET | 22.3893 | 113.8778 | WINTER | NONE         |
| 19-Dec-16 | 7        | 1255 | CWD    | 9        | NWL  | 2    | 119  | ON     | 3RS ET | 22.3903 | 113.8888 | WINTER | PURSE SEINE  |
| 05-Jan-17 | 1        | 1010 | CWD    | 9        | WL   | 2    | 822  | ON     | 3RS ET | 22.2934 | 113.8612 | WINTER | NONE         |
| 05-Jan-17 | 2        | 1051 | CWD    | 2        | WL   | 2    | 1361 | ON     | 3RS ET | 22.2738 | 113.8482 | WINTER | NONE         |
| 05-Jan-17 | 3        | 1118 | CWD    | 2        | WL   | 2    | 118  | ON     | 3RS ET | 22.2584 | 113.8381 | WINTER | NONE         |
| 05-Jan-17 | 4        | 1150 | CWD    | 1        | WL   | 2    | 65   | ON     | 3RS ET | 22.2413 | 113.8339 | WINTER | NONE         |
| 05-Jan-17 | 5        | 1208 | CWD    | 1        | WL   | 2    | 86   | ON     | 3RS ET | 22.2321 | 113.8316 | WINTER | NONE         |
| 05-Jan-17 | 6        | 1223 | CWD    | 1        | WL   | 1    | 115  | ON     | 3RS ET | 22.2248 | 113.8374 | WINTER | NONE         |
| 05-Jan-17 | 7        | 1315 | CWD    | 11       | WL   | 1    | 84   | ON     | 3RS ET | 22.2049 | 113.8249 | WINTER | PAIR TRAWLER |
| 05-Jan-17 | 8        | 1347 | CWD    | 1        | WL   | 1    | 49   | ON     | 3RS ET | 22.1961 | 113.8317 | WINTER | NONE         |
| 05-Jan-17 | 9        | 1356 | CWD    | 1        | WL   | 1    | 59   | ON     | 3RS ET | 22.1960 | 113.8416 | WINTER | NONE         |
| 05-Jan-17 | 10       | 1436 | CWD    | 5        | SWL  | 2    | 190  | ON     | 3RS ET | 22.1726 | 113.8527 | WINTER | PAIR TRAWLER |
| 06-Jan-17 | 1        | 1006 | CWD    | 2        | SWL  | 2    | N/A  | OFF    | 3RS ET | 22.1938 | 113.8471 | WINTER | NONE         |
| 06-Jan-17 | 2        | 1453 | CWD    | 1        | SWL  | 1    | N/A  | OFF    | 3RS ET | 22.2230 | 113.9451 | WINTER | NONE         |

#### Sighting Data

| DATE      | STG<br># | ТІМЕ | CWD/FP | GP<br>SZ | AREA | BEAU | PSD  | EFFORT | ТҮРЕ   | DEC LAT | DEC LON  | SEASON | BOAT ASSOC. |
|-----------|----------|------|--------|----------|------|------|------|--------|--------|---------|----------|--------|-------------|
| 12-Jan-17 | 1        | 1121 | CWD    | 5        | NWL  | 2    | 260  | ON     | 3RS ET | 22.3739 | 113.8775 | WINTER | NONE        |
| 13-Jan-17 | 1        | 1016 | CWD    | 3        | SWL  | 3    | N/A  | OFF    | 3RS ET | 22.1948 | 113.8538 | WINTER | NONE        |
| 13-Jan-17 | 2        | 1036 | CWD    | 11       | SWL  | 3    | 435  | ON     | 3RS ET | 22.1998 | 113.8688 | WINTER | NONE        |
| 13-Jan-17 | 3        | 1334 | CWD    | 2        | SWL  | 2    | 41   | ON     | 3RS ET | 22.1547 | 113.9030 | WINTER | NONE        |
| 13-Jan-17 | 4        | 1434 | CWD    | 1        | SWL  | 3    | 44   | ON     | 3RS ET | 22.1847 | 113.9278 | WINTER | NONE        |
| 19-Jan-17 | 1        | 0926 | CWD    | 3        | AW   | 1    | 23   | ON     | 3RS ET | 22.3010 | 113.8864 | WINTER | NONE        |
| 19-Jan-17 | 2        | 1022 | CWD    | 1        | WL   | 3    | 383  | ON     | 3RS ET | 22.2791 | 113.8613 | WINTER | NONE        |
| 19-Jan-17 | 3        | 1107 | CWD    | 6        | WL   | 2    | 690  | ON     | 3RS ET | 22.2594 | 113.8430 | WINTER | GILLNET     |
| 19-Jan-17 | 4        | 1131 | CWD    | 1        | WL   | 3    | 950  | ON     | 3RS ET | 22.2504 | 113.8413 | WINTER | NONE        |
| 19-Jan-17 | 5        | 1217 | CWD    | 2        | WL   | 3    | N/A  | OFF    | 3RS ET | 22.2234 | 113.8320 | WINTER | NONE        |
| 19-Jan-17 | 6        | 1403 | CWD    | 4        | SWL  | 3    | 69   | ON     | 3RS ET | 22.1951 | 113.8587 | WINTER | NONE        |
| 19-Jan-17 | 7        | 1436 | CWD    | 2        | WL   | 3    | N/A  | OFF    | 3RS ET | 22.2198 | 113.8341 | WINTER | NONE        |
| 19-Jan-17 | 8        | 1439 | CWD    | 3        | WL   | 3    | N/A  | OFF    | 3RS ET | 22.2218 | 113.8351 | WINTER | NONE        |
| 06-Feb-17 | 1        | 1013 | CWD    | 3        | WL   | 3    | 854  | ON     | 3RS ET | 22.2826 | 113.8613 | WINTER | NONE        |
| 06-Feb-17 | 2        | 1140 | CWD    | 3        | WL   | 2    | 243  | ON     | 3RS ET | 22.2237 | 113.8323 | WINTER | NONE        |
| 06-Feb-17 | 3        | 1218 | CWD    | 3        | WL   | 3    | 23   | ON     | 3RS ET | 22.2147 | 113.8300 | WINTER | NONE        |
| 16-Feb-17 | 1        | 0957 | CWD    | 2        | AW   | 1    | 16   | ON     | 3RS ET | 22.2920 | 113.8749 | WINTER | GILLNET     |
| 16-Feb-17 | 2        | 1037 | CWD    | 5        | WL   | 1    | 220  | ON     | 3RS ET | 22.2953 | 113.8612 | WINTER | NONE        |
| 16-Feb-17 | 3        | 1121 | CWD    | 4        | WL   | 1    | 58   | ON     | 3RS ET | 22.2628 | 113.8564 | WINTER | NONE        |
| 16-Feb-17 | 4        | 1147 | CWD    | 3        | WL   | 1    | 244  | ON     | 3RS ET | 22.2602 | 113.8470 | WINTER | NONE        |
| 16-Feb-17 | 5        | 1206 | CWD    | 2        | WL   | 1    | 53   | ON     | 3RS ET | 22.2535 | 113.8348 | WINTER | NONE        |
| 16-Feb-17 | 6        | 1215 | CWD    | 3        | WL   | 1    | 20   | ON     | 3RS ET | 22.2504 | 113.8378 | WINTER | NONE        |
| 16-Feb-17 | 7        | 1231 | CWD    | 7        | WL   | 1    | 173  | ON     | 3RS ET | 22.2418 | 113.8473 | WINTER | NONE        |
| 16-Feb-17 | 8        | 1304 | CWD    | 2        | WL   | 1    | 19   | ON     | 3RS ET | 22.2414 | 113.8428 | WINTER | NONE        |
| 16-Feb-17 | 9        | 1315 | CWD    | 2        | WL   | 1    | 31   | ON     | 3RS ET | 22.2382 | 113.8266 | WINTER | NONE        |
| 16-Feb-17 | 10       | 1333 | CWD    | 14       | WL   | 1    | 226  | ON     | 3RS ET | 22.2308 | 113.8381 | WINTER | PURSE SEINE |
| 16-Feb-17 | 11       | 1420 | CWD    | 2        | WL   | 2    | 452  | ON     | 3RS ET | 22.2139 | 113.8244 | WINTER | NONE        |
| 16-Feb-17 | 12       | 1449 | CWD    | 1        | WL   | 2    | 29   | ON     | 3RS ET | 22.2051 | 113.8191 | WINTER | NONE        |
| 17-Feb-17 | 1        | 1048 | FP     | 2        | SWL  | 2    | 174  | ON     | 3RS ET | 22.1586 | 113.9356 | WINTER | NONE        |
| 17-Feb-17 | 2        | 1238 | CWD    | 3        | SWL  | 1    | 1380 | ON     | 3RS ET | 22.2005 | 113.9079 | WINTER | PURSE SEINE |
| 17-Feb-17 | 3        | 1349 | CWD    | 2        | SWL  | 1    | 50   | ON     | 3RS ET | 22.1889 | 113.8879 | WINTER | NONE        |
| 17-Feb-17 | 4        | 1551 | CWD    | 1        | SWL  | 1    | N/A  | OFF    | 3RS ET | 22.2009 | 113.8934 | WINTER | NONE        |

| DATE      | STG<br># | TIME | CWD/FP | GP<br>SZ | AREA | BEAU | PSD | EFFORT | ТҮРЕ   | DEC LAT | DEC LON  | SEASON | BOAT ASSOC. |
|-----------|----------|------|--------|----------|------|------|-----|--------|--------|---------|----------|--------|-------------|
| 17-Feb-17 | 5        | 1559 | CWD    | 1        | SWL  | 1    | N/A | OFF    | 3RS ET | 22.2025 | 113.9121 | WINTER | NONE        |
| 20-Feb-17 | 1        | 1137 | CWD    | 1        | NWL  | 2    | 259 | ON     | 3RS ET | 22.3819 | 113.8760 | WINTER | NONE        |
| 21-Feb-17 | 1        | 1137 | CWD    | 4        | NWL  | 3    | 64  | ON     | 3RS ET | 22.3866 | 113.8776 | WINTER | 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. December 2016 and January 2017) 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 February 2017 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 312.48 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 19 on-effort sightings and total number of 66 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in February 2017 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in February 2017

$$STG = \frac{19}{312.48} \times 100 = 6.08$$

Encounter Rate by Number of Dolphins (ANI) in February 2017  $ANI = \frac{66}{312.48} \times 100 = 21.12$ 

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

A total of 1131.97 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 57 on-effort sightings and total number of 196 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 by Number of Dolphin Sightings (STG)

$$STG = \frac{57}{1131.97} \ x \ 100 = 5.04$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

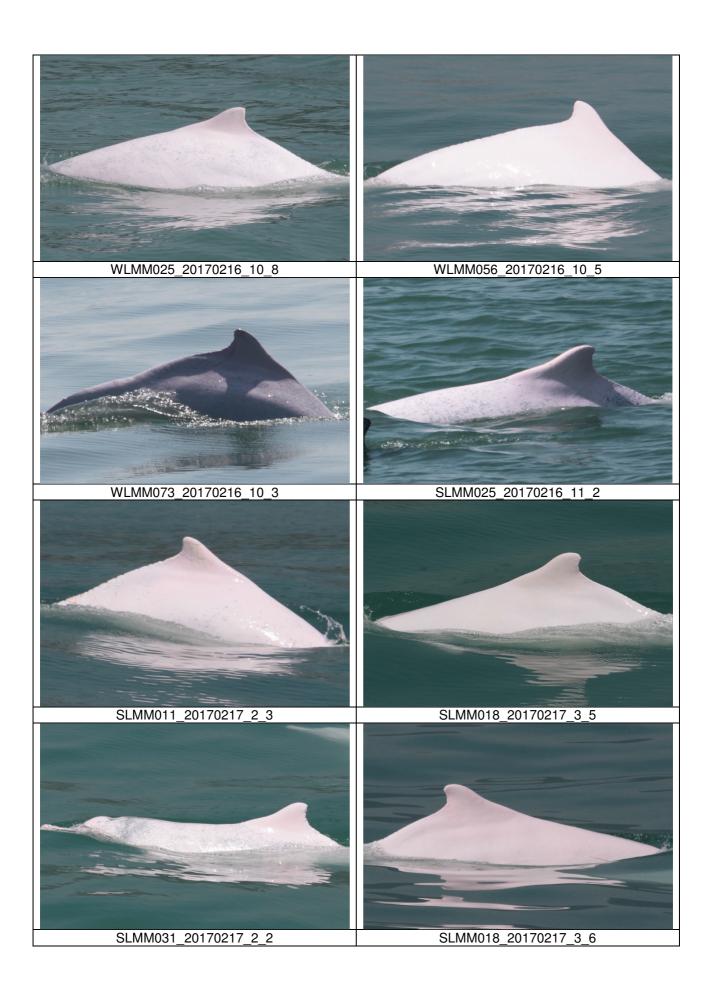
$$ANI = \frac{196}{1131.97} \ x \ 100 = 17.31$$

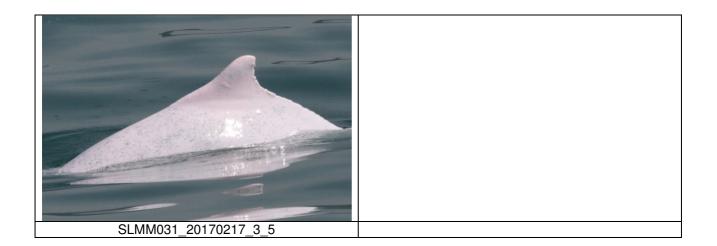
CWD Small Vessel Line-transect Survey

**Photo Identification** 









#### CWD Land-based Theodolite Tracking

#### CWD Groups by Survey Date

| Date      | Station       | Start<br>Time | End<br>Time | Duration | Beaufort<br>Range | Visibility | No. of Focal<br>Follow Dolphin<br>Groups Tracked | Dolphin Group<br>Size Range |
|-----------|---------------|---------------|-------------|----------|-------------------|------------|--|-----------------------------|
| 14/Feb/17 | Sha Chau      | 8:34          | 14:34       | 6:00     | 2-3               | 1          | 0  | 0                           |
| 15/Feb/17 | Lung Kwu Chau | 8:38          | 14:38       | 6:00     | 2-3               | 2          | 12   | 1-4                         |
| 20/Feb/17 | Lung Kwu Chau | 8:45          | 14:45       | 6:00     | 1                 | 3-4        | 0  | 0                           |
| 27/Feb/17 | Sha Chau      | 8:45          | 14:45       | 6:00     | 2-4               | 2          | 0  | 0                           |
| 28/Feb/17 | Lung Kwu Chau | 8:47          | 15:02       | 6:15     | 1-2               | 2          | 12   | 1-7                         |

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

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

**Ecological Monitoring** 

Ecological Monitoring – site photos and location map regarding the monthly ecological monitoring for the egretry area on Sheung Sha Chau and the HDD works



# Appendix D. Status of Environmental Permits and Licences

| Statutory<br>Reference | Description                                     |                    | Permit/ Reference<br>No.  | Status   |
|------------------------|---|--------------------|---------------------------|--|
| EIAO                   | Environmental Permit                            |                    | EP-489/2014               | Approved on 7<br>Nov 2014  |
| Contract<br>No.        | Description                                     | Location           | Permit/ Reference No.     | Status   |
| P560 (R)               | Notification of Construction<br>Work under APCO | Launching Site     | 397150                    | Receipt<br>acknowledged by   |
|                        |   | Site Office        | 397151                    | EPD on 15 Jan<br>2016  |
|                        |   | Stockpiling Area   | 398015                    | Receipt<br>acknowledged by<br>EPD on 18 Jan<br>2016  |
|                        |   | Sheung Sha Chau    | 405860                    | Receipt<br>acknowledged by<br>EPD on 5 Aug<br>2016   |
|                        | Construction Noise Permit<br>(General Works)    | Launching Site     | GW-RS0968-16              | Valid from 21 Sep<br>2016 to 20 Mar<br>2017  |
|                        |   | Stockpiling Area   | GW-RS0974-16              | Valid from 23 Sep<br>2016 to 22 Mar<br>2017  |
|                        |   | Sheung Sha Chau    | GW-RW0642-16              | Valid from 13 Nov<br>2016 to 26 Mar<br>2017  |
|                        | Discharge License under<br>WPCO                 | Launching Site     | WT00024249-2016           | Approved on 25<br>Apr 2016   |
|                        |   | Stockpiling Area   | WT00024250-2016           | Approved on 25<br>Apr 2016   |
|                        | Registration as Chemical<br>Waste Producer      | Launching Site     | WPN 5213-951-L2902-<br>01 | Update the<br>Registration on 3<br>Oct 2016  |
|                        |   | Stockpiling Area   | WPN 5213-951-L2902-<br>02 | Update the<br>Registration on 3<br>Oct 2016  |
|                        | Bill Account for disposal                       |                    | A/C 7023982               | Approval granted<br>from EPD on 14<br>Dec 2015   |
| 3201                   | Notification of Construction<br>Work under APCO | Works area of 3201 | 406004                    | Receipt<br>acknowledged by<br>EPD on 10 Aug<br>2016  |
|                        | Construction Noise Permit<br>(General Works)    | Works area of 3201 | GW-RS1276-16              | Valid from 14 Dec<br>2016 to 13 Jun<br>2017 (Supersedec<br>by GW-RS123-17<br>on 12 Feb 2017) |

| Statutory<br>Reference | Description                                     |                     | Permit/ Reference<br>No.  | Status   |  |
|------------------------|---|---------------------|---------------------------|--|--|
|                        | Construction Noise Permit<br>(General Works)    | Works area of 3201  | GW-RS0123-17              | Valid from 12 Feb<br>2017 to 11 Aug<br>2017  |  |
|                        | Registration as Chemical<br>Waste Producer      | Works area of 3201  | WPN 5213-951-P3231-<br>01 | Completion of<br>Registration on 9<br>Sep 2016   |  |
|                        | Bill Account for disposal                       |                     | A/C 7025760               | Approval granted<br>from EPD on 31<br>Aug 2016   |  |
| 3202                   | Notification of Construction<br>Work under APCO | Works area of 3202  | 407624                    | Receipt<br>acknowledged by<br>EPD on 15 Sep<br>2016  |  |
|                        | Construction Noise Permit<br>(General Works)    | Works area of 3202  | GW-RS155-17               | Valid from 24 Feb<br>2017 to 23 Aug<br>2017  |  |
|                        | Construction Noise Permit<br>(General Works)    | Site Office of 3202 | GW-RS145-17               | Valid from 21 Feb<br>2017 to 20 Aug<br>2017  |  |
|                        | Bill Account for disposal                       |                     | A/C 7025739               | Approval granted<br>from EPD on 31<br>August 2016  |  |
| 3203                   | Notification of Construction<br>Work under APCO | Works area of 3203  | 407053                    | Receipt<br>acknowledged by<br>EPD on 2 Sep<br>2016   |  |
|                        | Construction Noise Permit<br>(General Works)    | Works area of 3203  | GW-RS0014-17              | Valid from 12 Jan<br>2017 to 11 Jun<br>2017  |  |
|                        | Registration as Chemical<br>Waste Producer      | Works area of 3203  | WPN 5213-951-S3954-<br>01 | Update the<br>Registration on 12<br>Dec 2016   |  |
|                        | Bill Account for disposal                       |                     | 7025846                   | Approval granted<br>from EPD on 9<br>Sep 2016  |  |
| 3204                   | Notification of Construction<br>Work under APCO | Works area of 3204  | 406446                    | Receipt<br>acknowledged by<br>EPD on 19 Aug<br>2016  |  |
|                        |   | Site Office of 3204 | 407726                    | Receipt<br>acknowledged by<br>EPD on 19 Sep<br>2016  |  |
|                        |   | Site Office of 3204 | 413046                    | Receipt<br>acknowledged by<br>EPD on 3 Feb<br>2017   |  |
|                        | Construction Noise Permit<br>(General Works)    | Works Area of 3204  | GW-RS1365-16              | Valid from 4 Jan<br>2017 to 3 Jul 2017<br>(Superseded by<br>GW-RS135-17 on<br>17 Feb 2017) |  |
|                        | Construction Noise Permit<br>(General Works)    | Works Area of 3204  | GW-RS135-17               | Valid from 17 Feb<br>2017 to 16 Aug<br>2017  |  |
|                        | Construction Noise Permit<br>(General Works)    | Site Office of 3204 | GW-RS136-17               | Valid from 17 Feb<br>2017 to 16 Aug<br>2017  |  |

| Statutory<br>Reference | Description  |                     | Permit/ Reference Status No. |   |  |
|------------------------|--|---------------------|------------------------------|---|--|
|                        | Registration as Chemical Waste Producer                            | Works Area of 3204  | WPN 5213-951-C4102-<br>01    | Completion of<br>Registration on 15<br>Sep 2016   |  |
|                        | Bill Account for disposal  |                     | A/C 7025969                  | Approval granted<br>from EPD on 21<br>Sep 2016  |  |
| 3205                   | Notification of Construction Works area of 3205<br>Work under APCO |                     | 409041                       | Receipt<br>acknowledged by<br>EPD on 19 Oct<br>2016   |  |
|                        | Registration as Chemical Waste Producer                            | Works Area of 3205  | WPN 5213-951-B2502-<br>01    | Completion of<br>Registration on 13<br>Jan 2017   |  |
|                        | Construction Noise Permit<br>(General Works)                       | Works Area of 3205  | GW-RS0076-17                 | Valid from 26 Jan<br>2017 to 25 Jul<br>2017 (Superseded<br>by GW-RS0152-<br>17 on 23 Feb<br>2017) |  |
|                        | Construction Noise Permit<br>(General Works)                       | Works Area of 3205  | GW-RS0152-17                 | Valid from 23 Feb<br>2017 to 22 Aug<br>2017   |  |
|                        | Bill Account for disposal  | Works area of 3205  | A/C 7026295                  | Approval granted<br>from EPD on 9<br>Nov 2016   |  |
| 3206                   | Notification of Construction<br>Work under APCO                    | Works area of 3206  | 409237                       | Receipt<br>acknowledged by<br>EPD on 25 Oct<br>2016   |  |
|                        | Registration as Chemical<br>Waste Producer                         | Site office of 3206 | WPN 5213-951-Z4035-<br>01    | Completion of<br>Registration on 18<br>Nov 2016   |  |
|                        | Registration as Chemical<br>Waste Producer                         | Works area of 3206  | WPN 5213-951-Z4035-<br>02    | Completion of<br>Registration on 18<br>Nov 2016   |  |
|                        | Construction Noise Permit<br>(General Works)                       | Works Area of 3206  | GW-RS1280-16                 | Valid from 14 Dec<br>2016 to 13 Mar<br>2017 (Superseded<br>by GW-RS0119-<br>17 on 10 Feb<br>2017) |  |
|                        | Construction Noise Permit<br>(General Works)                       | Works Area of 3206  | GW-RS0119-17                 | Valid from 10 Feb<br>2017 to 10 Jun<br>2017   |  |
|                        | Construction Noise Permit<br>(General Works)                       | Site Office of 3206 | GW-RS0148-17                 | Valid from 27 Feb<br>2017 to 10 Jun<br>2017   |  |
|                        | Bill Account for disposal  | Works area of 3206  | 70263986                     | Approval granted<br>from EPD on 16<br>Nov 2016  |  |

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

#### Statistics for Exceedances for 1-hour TSP, Noise, Water, Waste and CWD 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  |
| Water    | Action | 0   | 0  |
|          | Limit  | 0   | 0  |
| Waste    | 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<br>Summons | Prosecutions |  |
| This reporting month                                | 0                     | 0                           | 0            |  |
| From 28 December 2015 to end of the reporting month | 2                     | 0                           | 0            |  |

# Appendix F. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 28 February 2017)

### Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 28 February 2017)

| 01-Fab.         08:31         3AB61         YFT         Arreal         11.1         -         -           01-Fab.         10:91         9A071         MFM         Arreal         11.9         -         -           01-Fab.         10:51         3A031         ZUI         Arreal         11.6         -         -           01-Fab.         10:52         85212         MFM         Arreal         12.6         -         -           01-Fab.         11:16         3A031         ZUI         Arreal         12.6         -         -           01-Fab.         11:22         3A181         ZUI         Arreal         13.4         -         -           01-Fab.         12:21         3A181         ZUI         Arreal         13.1         -         -           01-Fab.         13:13         85123         MFM         Arreal         13.4         -         -           01-Fab.         13:13         85123         MFM         Departure         13.1         -         -         -           01-Fab.         13:34         3A022         ZUI         Arreal         13.3         -         -         -         -         -         -  | Date   | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No. | Connecting Port<br>[ <u>MFM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|---|--------|---|-----------|---|--|--|--|---|
| 01-Feb         1051         34071         MFM         Artical         12.5         -           01-Feb         1051         34081         ZUI         Artical         11.8         -         -           01-Feb         1152         85212         MFM         Departure         12.0         -         -           01-Feb         1153         34083         VFT         Artical         12.6         -         -           01-Feb         1221         34.181         ZUI         Artical         13.4         -         -           01-Feb         1221         34.181         ZUI         Artical         13.1         -         -           01-Feb         13.31         85123         MFM         Departure         13.1         -         -           01-Feb         13.31         85123         MFM         Departure         13.4         -         -           01-Feb         13.31         85123         MFM         Departure         13.3         -         -         -           01-Feb         15.01         34.063         YFT         Artical         13.3         -         -         -         -         -         -         -  | 01-Feb | 08:19   | 3A061     | YFT   | Arrival  | 11.1   | -  | -   |
| OT-Feb         1951         3081         ZUI         Artival         115         -           OT-Feb         11052         85212         MFM         Artival         116         -         -           OT-Feb         11109         85121         MFM         Departure         12.0         -         -           OT-Feb         11115         3A668         YPT         Artival         12.6         -         -           OT-Feb         1221         3A168         YPT         Artival         13.1         -         -           OT-Feb         1251         85215         MFM         Artival         13.1         -         -           OT-Feb         1348         3A082         ZUI         Artival         13.4         -         -           OT-Feb         1348         3A082         ZUI         Artival         13.3         -         -           OT-Feb         1617         3A167         YFT         Departure         13.7         -         -         -           OT-Feb         1638         3A083         ZUI         Artival         13.3         -         -         -           OT-Feb         1638         3A085   | 01-Feb | 08:31   | 8S210     | MFM   | Arrival  | 10.9   | -  | -   |
| OT-Fab         10-52         85212         MFM         Arrival         11.6         -           01-Fab         11:09         85212         MFM         Departure         12.0         -           01-Fab         11:15         SA063         YFT         Arrival         12.6         -           01-Fab         12:24         SA168         YFT         Departure         13.4         -           01-Fab         12:57         SA064         YFT         Arrival         13.1         -           01-Fab         13:18         SS123         MFM         Departure         13.1         -           01-Fab         13:18         SS123         MFM         Departure         13.1         -           01-Fab         14:19         SA164         YFT         Arrival         13.3         -           01-Fab         16:17         SA162         YFT         Arrival         13.3         -           01-Fab         16:35         SA083         ZUI         Arrival         13.3         -           01-Fab         16:36         SA083         ZUI         Arrival         13.3         -           01-Fab         17:08         SS126         MFM  | 01-Feb | 10:01   | 3A071     | MFM   | Arrival  | 12.0   | -  | -   |
| 01-Feb         11:09         68121         MFM         Departure         12:0         -           01-Feb         11:15         3A083         YFT         Arrival         12:6         -         -           01-Feb         12:21         3A188         YFT         Departure         13:4         -         -           01-Feb         12:51         85:15         MFM         Arrival         13:1         -         -           01-Feb         13:13         85:123         MFM         Departure         13:1         -         -           01-Feb         13:48         3A082         ZUI         Arrival         13:3         -         -           01-Feb         14:19         3A167         YFT         Departure         12:7         -         -           01-Feb         16:17         3A167         YFT         Departure         12:7         -         -           01-Feb         16:17         3A167         YFT         Departure         13:3         -         -           01-Feb         16:33         3A067         YTT         Arrival         11:7         -         -         -         -         -         -         -         - </td <td>01-Feb</td> <td>10:51</td> <td>3A081</td> <td>ZUI</td> <td>Arrival</td> <td>12.5</td> <td>-</td> <td>-</td> | 01-Feb | 10:51   | 3A081     | ZUI   | Arrival  | 12.5   | -  | -   |
| 01-Feb         11:15         3A668         YFT         Arrival         12.6         -           01-Feb         12.21         3A168         YFT         Departure         13.4         -         -           01-Feb         12.24         3A181         ZUI         Departure         13.4         -         -           01-Feb         12.57         3A064         YFT         Arrival         13.1         -         -           01-Feb         13.18         S123         MFM         Departure         13.1         -         -           01-Feb         13.48         3A062         ZUI         Arrival         13.3         -         -           01-Feb         14.25         3A182         ZUI         Departure         13.7         -         -           01-Feb         16.33         SA067         YFT         Departure         13.3         -         -           01-Feb         16.33         SA067         YFT         Arrival         13.3         -         -           01-Feb         17.08         SE26         MFM         Departure         13.3         -         -           01-Feb         19.07         3A166         YFT  | 01-Feb | 10:52   | 8S212     | MFM   | Arrival  | 11.6   | -  | -   |
| 01-Feb         12.21         9A168         YFT         Departure         13.4         -           01-Feb         12.24         3A181         ZUI         Departure         13.1         -           01-Feb         12.51         8S215         MFM         Arrival         13.1         -           01-Feb         12.57         3A064         YFT         Arrival         13.1         -           01-Feb         13.48         3A082         ZUI         Arrival         13.4         -           01-Feb         14.19         3A164         YFT         Departure         11.5         -           01-Feb         14.25         3A182         ZUI         Departure         13.6         -           01-Feb         16.36         3A067         YFT         Arrival         12.3         -           01-Feb         16.33         3A067         YFT         Arrival         12.3         -           01-Feb         17.10         3A183         ZUI         Departure         13.3         -           01-Feb         19.48         3A084         ZUI         Arrival         12.6         -           01-Feb         21.03         3A165         YFT <td>01-Feb</td> <td>11:09</td> <td>8S121</td> <td>MFM</td> <td>Departure</td> <td>12.0</td> <td>-</td> <td>-</td>    | 01-Feb | 11:09   | 8S121     | MFM   | Departure  | 12.0   | -  | -   |
| 01-Feb         12.24         9A181         ZUI         Departure         13.4         ·         -           01-Feb         12.51         85215         MFM         Arrival         13.1         -         -           01-Feb         12.57         3A064         YFT         Arrival         11.5         -         -           01-Feb         13.13         85123         MFM         Departure         13.1         -         -           01-Feb         13.48         3A062         ZUI         Arrival         13.4         -         -           01-Feb         14.25         3A162         ZUI         Departure         13.7         -         -           01-Feb         16.17         3A167         YFT         Arrival         13.3         -         -           01-Feb         16.38         3A083         ZUI         Arrival         11.7         -   | 01-Feb | 11:15   | 3A063     | YFT   | Arrival  | 12.6   | -  | -   |
| 01-Feb         12:51         8:5215         MFM         Arrival         13:1         ·         -           01-Feb         12:57         3A064         YFT         Arrival         11:5         -           01-Feb         13:18         36123         MFM         Departure         13:1         -           01-Feb         13:48         3A062         ZUI         Arrival         13:3         -           01-Feb         14:25         3A162         ZUI         Departure         11:5         -           01-Feb         16:17         3A167         YFT         Departure         12:7         -         -           01-Feb         16:43         8S218         MFM         Arrival         12:3         -         -           01-Feb         17:00         3A183         ZUI         Departure         13:3         -         -           01-Feb         17:00         3A183         ZUI         Departure         13:3         -         -           01-Feb         19:07         3A166         YFT         Departure         12:4         -         -           01-Feb         21:03         3A169         YFT         Departure         12:4  | 01-Feb | 12:21   | 3A168     | YFT   | Departure  | 13.4   | -  | -   |
| 01-Feb         12:57         3A064         YFT         Arrval         11.5         -         -           01-Feb         13:13         85123         MFM         Departure         13:1         -         -           01-Feb         13:48         3A082         ZUI         Arrival         13:4         -         -           01-Feb         14:25         3A182         ZUI         Departure         11.7         -         -           01-Feb         16:37         3A167         YFT         Arrival         13:3         -         -           01-Feb         16:36         3A065         YFT         Arrival         12:3         -         -           01-Feb         16:36         3A067         YFT         Arrival         11:7         -         -           01-Feb         17:08         85126         MFM         Departure         13:3         -         -           01-Feb         19:07         3A166         YFT         Departure         12:4         -         -           01-Feb         21:03         85213         MFM         Arrval         12:4         -         -           01-Feb         21:03         85213         <  | 01-Feb | 12:24   | 3A181     | ZUI   | Departure  | 13.4   | -  | -   |
| 01-Feb         13.13         88123         MFM         Departure         13.1         -           01-Feb         13.48         30.062         ZUI         Arrival         13.4         -           01-Feb         14.29         33.164         VFT         Departure         11.5         -           01-Feb         14.25         33.162         ZUI         Departure         13.7         -         -           01-Feb         16.17         3A.167         YFT         Departure         12.7         -         -           01-Feb         16.36         3A.067         YFT         Arrival         12.3         -         -           01-Feb         17.08         85126         MFM         Departure         13.3         -         -           01-Feb         17.10         3A.183         ZUI         Departure         13.3         -         -           01-Feb         19.48         3A.084         ZUI         Arrival         12.4         -         -           01-Feb         21.03         3A.169         YFT         Departure         13.8         -         -           01-Feb         21.57         85221         MFM         Arrival  | 01-Feb | 12:51   | 8S215     | MFM   | Arrival  |  | -  | -   |
| 01-Feb         13:48         30:082         ZUI         Arrival         13:4         -           01-Feb         14:25         3A:164         YFT         Departure         11:5         -         -           01-Feb         11:25         3A:182         ZUI         Departure         13:7         -         -           01-Feb         16:30         30:065         YFT         Arrival         13:3         -         -           01-Feb         16:43         38:218         MFM         Arrival         13:6         -         -           01-Feb         16:43         8:5218         MFM         Arrival         11:7         -         -         -           01-Feb         17:08         8:526         MFM         Departure         13:3         -         -         -           01-Feb         17:01         3A:166         YFT         Departure         12:4         -  | 01-Feb | 12:57   | 3A064     | YFT   | Arrival  | 11.5   | -  | -   |
| 01-Feb         14:19         3A164         YFT         Departure         11.5         -           01-Feb         14:25         3A182         ZUI         Departure         13.7         -         -           01-Feb         15:00         3A065         YFT         Arrival         13.3         -         -           01-Feb         16:36         3A083         ZUI         Arrival         13.6         -         -           01-Feb         16:43         8S218         MFM         Arrival         11.7         -         -           01-Feb         17:00         3A183         ZUI         Arrival         11.3         -         -           01-Feb         17:10         3A183         ZUI         Departure         13.3         -         -           01-Feb         19:48         3A084         ZUI         Arrival         12.8         -         -           01-Feb         21:03         3A189         YFT         Departure         13.8         -         -           01-Feb         21:03         3A199         YFT         Arrival         11.9         -         -           01-Feb         21:03         3A061         YFT  | 01-Feb | 13:13   | 8S123     | MFM   | Departure  |  | -  | -   |
| 01-Feb         14.25         3A182         ZUI         Departure         13.7         -           01-Feb         15.00         3A.065         YFT         Arrival         13.3         -         -           01-Feb         16.17         3A.167         YFT         Departure         12.7         -         -           01-Feb         16.36         3A.083         ZUI         Arrival         13.6         -         -           01-Feb         16.53         3A.067         YFT         Arrival         11.7         -         -           01-Feb         16.53         3A.067         YFT         Arrival         11.3         -         -           01-Feb         17.10         A.183         ZUI         Departure         13.3         -         -           01-Feb         19.97         3A.166         YFT         Departure         12.4         -         -           01-Feb         21.03         8S213         MFM         Arrival         12.8         -         -           01-Feb         21.57         8S522         MFM         Departure         12.4         -         -           02-Feb         08.27         8S210         MFM <td></td> <td></td> <td></td> <td></td> <td>Arrival</td> <td></td> <td>-</td> <td>-</td>                             |        |   |           |   | Arrival  |  | -  | -   |
| 01-Feb         15:00         3A065         YFT         Arrval         13.3         -         -           01-Feb         16:17         3A167         YFT         Depature         12.7         -         -           01-Feb         16:36         3A083         ZUI         Arrval         13.6         -         -           01-Feb         16:43         85218         MFM         Arrval         12.3         -         -           01-Feb         17:08         85126         MFM         Depature         13.3         -         -           01-Feb         17:03         3A165         YFT         Depature         13.3         -         -           01-Feb         19:07         3A166         YFT         Depature         12.4         -         -           01-Feb         21:03         3A169         YFT         Depature         12.4         -         -           01-Feb         21:03         3A169         YFT         Arrval         11.9         -         -           02-Feb         08:18         3A061         YFT         Arrval         11.9         -         -           02-Feb         10:046         8S212         MF  |        |   |           |   | •  | _  |  |   |
| 01-Feb         18:17         3A167         YFT         Departure         12.7         -         -           01-Feb         16:36         3A033         ZUI         Arrival         13.6         -         -           01-Feb         16:33         3A067         YFT         Arrival         11.7         -         -           01-Feb         17:08         8S126         MFM         Departure         13.3         -         -           01-Feb         17:08         8S126         MFM         Departure         13.3         -         -           01-Feb         19:07         3A166         YFT         Departure         13.3         -         -         -           01-Feb         20:14         3A185         ZUI         Departure         13.8         -         -         -           01-Feb         21:03         8S213         MFM         Arrival         12.1         -         <   |        |   |           |   |  |  | -  |   |
| 01-Feb         16:36         3A083         ZUI         Arrival         13.6         -         -           01-Feb         16:63         3A067         YFT         Arrival         12.3         -         -           01-Feb         17:08         8S126         MFM         Departure         13.3         -         -           01-Feb         17:10         3A186         YFT         Departure         13.3         -         -           01-Feb         19:07         3A166         YFT         Departure         13.3         -         -           01-Feb         20:14         3A165         ZUI         Departure         13.8         -         -           01-Feb         21:03         3A169         YFT         Departure         12.4         -         -           01-Feb         21:03         3A169         YFT         Arrival         11.9         -         -           02-Feb         08:18         3A061         YFT         Arrival         11.9         -         -         -           02-Feb         10:01         3A071         MFM         Arrival         12.4         -         -         -         -         -         -   |        |   |           |   |  |  | -  |   |
| 01-Feb         16.43         85218         MFM         Arrival         12.3         -           01-Feb         16.53         3A067         YFT         Arrival         11.7         -           01-Feb         17.08         88126         MFM         Departure         13.3         -           01-Feb         17.10         3A166         YFT         Departure         13.3         -           01-Feb         19.48         3A064         ZUI         Arrival         12.8         -           01-Feb         20.14         3A165         ZUI         Departure         13.8         -           01-Feb         21.03         3A169         YFT         Departure         12.1         -           01-Feb         21.57         85522         MFM         Arrival         11.9         -           02-Feb         08:27         85210         MFM         Arrival         13.0         -           02-Feb         10.46         85212         MFM         Arrival         10.9         -           02-Feb         10.47         3A081         ZUI         Arrival         12.4         -           02-Feb         10.47         3A083         YFT  |        |   |           |   |  |  | -  |   |
| 01-Feb         16:53         3A067         YFT         Arrival         11.7         -           01-Feb         17:08         88126         MFM         Departure         13.3         -           01-Feb         19:07         3A166         YFT         Departure         12.4         -           01-Feb         19:07         3A166         YFT         Departure         12.4         -           01-Feb         20:14         3A185         ZUI         Departure         13.8         -           01-Feb         21:03         3A169         YFT         Departure         12.4         -           01-Feb         21:03         3A169         YFT         Departure         12.4         -           02-Feb         08:18         3A061         YFT         Arrival         11.9         -           02-Feb         10:04         8S212         MFM         Arrival         10.9         -           02-Feb         10:46         8S212         MFM         Arrival         12.4         -           02-Feb         10:47         3A081         ZUI         Arrival         12.6         -           02-Feb         10:47         3A081         ZUI </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>                               |        |   |           |   |  |  |  |   |
| 01-Feb         17.08         85126         MFM         Departure         13.3         -           01-Feb         17.10         3A186         YFT         Departure         13.3         -         -           01-Feb         19.07         3A166         YFT         Departure         12.4         -         -           01-Feb         20.14         3A165         ZUI         Arrival         12.8         -         -           01-Feb         21.03         385213         MFM         Arrival         12.4         -         -           01-Feb         21.03         3A169         YFT         Departure         12.4         -         -           01-Feb         21.57         85522         MFM         Departure         12.4         -         -           02-Feb         06:18         3A061         YFT         Arrival         13.0         -         -           02-Feb         10.01         3A071         MFM         Arrival         13.0         -         -         -           02-Feb         10.01         3A071         MFM         Arrival         12.4         -         -         -         -         -         -         - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>  |        |   |           |   |  |  |  |   |
| 01-Feb         17:10         3A183         ZUI         Departure         13.3         -         -           01-Feb         19:07         3A166         YFT         Departure         12.4         -         -           01-Feb         19:48         3A084         ZUI         Arrival         12.4         -         -           01-Feb         20:14         3A185         ZUI         Departure         13.8         -         -           01-Feb         21:03         852113         MFM         Arrival         12.4         -         -           01-Feb         21:03         3A169         YFT         Departure         12.4         -         -           01-Feb         21:57         8S522         MFM         Departure         12.4         -         -           02-Feb         08:73         8S5210         MFM         Arrival         13.0         -         -           02-Feb         10:01         3A061         YFT         Arrival         10.9         -         -         -           02-Feb         10:46         8S212         MFM         Arrival         12.6         -         -         -           02-Feb <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></td<>   |        |   |           |   |  |  | -  |   |
| 01-Feb         19.07         3A166         YFT         Departure         12.4         -           01-Feb         19.48         3A084         ZUI         Arrival         12.8         -         -           01-Feb         20.14         3A185         ZUI         Departure         13.8         -         -           01-Feb         21.03         8S2113         MFM         Arrival         12.4         -         -           01-Feb         21.03         3A169         YFT         Departure         12.1         -         -           01-Feb         21.57         8S522         MFM         Departure         12.4         -         -           02-Feb         08:18         3A061         YFT         Arrival         11.9         -         -           02-Feb         10.01         3A071         MFM         Arrival         12.4         -         -           02-Feb         10.47         3A061         ZUI         Arrival         12.6         -         -           02-Feb         11.03         8S121         MFM         Arrival         13.0         -         -           02-Feb         12.22         3A168         YFT   |        |   |           |   | •  |  | -  | -   |
| 01-Feb         19:48         3A084         ZUI         Arrival         12.8         -         -           01-Feb         20:14         3A185         ZUI         Departure         13.8         -         -           01-Feb         21:03         3A169         YFT         Departure         12.4         -         -           01-Feb         21:57         85522         MFM         Departure         12.4         -         -           02-Feb         08:18         3A061         YFT         Arrival         11.9         -         -           02-Feb         08:27         8S210         MFM         Arrival         13.0         -         -           02-Feb         10:01         3A071         MFM         Arrival         12.4         -         -           02-Feb         10:46         85212         MFM         Arrival         12.4         -         -           02-Feb         10:47         3A081         ZUI         Arrival         13.0         -         -           02-Feb         12:16         3A181         ZUI         Departure         13.1         -         -           02-Feb         12:22         3A166  |        |   |           |   | •  |  | -  | -   |
| 01-Feb         20:14         3A185         ZUI         Departure         13.8         -         -           01-Feb         21:03         852113         MFM         Arrival         12.4         -         -           01-Feb         21:03         3A169         YFT         Departure         12.1         -         -           01-Feb         21:57         8S522         MFM         Departure         12.4         -         -           02-Feb         08:18         3A061         YFT         Arrival         11.9         -         -           02-Feb         08:27         8S210         MFM         Arrival         10.9         -         -           02-Feb         10:46         8S212         MFM         Arrival         12.4         -         -           02-Feb         10:47         3A081         ZUI         Arrival         12.4         -         -           02-Feb         11:03         8S121         MFM         Departure         13.1         -         -           02-Feb         12:16         3A181         ZUI         Departure         13.1         -         -           02-Feb         12:26         3A168   |        |   |           |   | •  |  |  |   |
| 01-Feb         21:03         8S2113         MFM         Arrival         12.4         -         -           01-Feb         21:03         3A169         YFT         Departure         12.1         -         -           01-Feb         21:57         8S522         MFM         Departure         12.4         -         -           02-Feb         08:18         3A061         YFT         Arrival         11.9         -         -           02-Feb         08:27         8S210         MFM         Arrival         10.9         -         -           02-Feb         10:01         3A071         MFM         Arrival         12.4         -         -           02-Feb         10:46         8S212         MFM         Arrival         12.4         -         -           02-Feb         10:47         3A081         ZUI         Arrival         12.4         -         -           02-Feb         11:13         3A063         YFT         Arrival         13.0         -         -           02-Feb         12:22         3A168         YFT         Departure         13.1         -         -           02-Feb         12:25         3A064   |        |   |           |   |  |  |  |   |
| 01-Feb         21:03         3A169         YFT         Departure         12.1         -         -           01-Feb         21:57         8S522         MFM         Departure         12.4         -         -           02-Feb         08:18         3A061         YFT         Arrival         11.9         -         -           02-Feb         08:27         8S210         MFM         Arrival         13.0         -         -           02-Feb         10:01         3A071         MFM         Arrival         10.9         -         -           02-Feb         10:46         8S212         MFM         Arrival         12.4         -         -           02-Feb         10:47         3A063         YFT         Arrival         13.0         -         -           02-Feb         11:03         8S121         MFM         Departure         13.1         -         -           02-Feb         12:22         3A168         YFT         Departure         13.1         -         -           02-Feb         12:24         8S123         MFM         Departure         13.4         -         -           02-Feb         13:21         8S123  |        |   |           |   |  |  |  |   |
| 01-Feb         21:57         88522         MFM         Departure         12.4         -           02-Feb         08:18         3A061         YFT         Arrival         11.9         -         -           02-Feb         08:27         88210         MFM         Arrival         13.0         -         -           02-Feb         10:01         3A071         MFM         Arrival         10.9         -         -           02-Feb         10:46         85212         MFM         Arrival         12.4         -         -           02-Feb         10:47         3A063         ZUI         Arrival         13.0         -         -           02-Feb         11:03         8S121         MFM         Departure         13.1         -         -           02-Feb         12:26         3A168         YFT         Departure         13.1         -         -           02-Feb         12:22         3A168         YFT         Arrival         12.7         -         -           02-Feb         13:21         8S123         MFM         Departure         13.4         -         -           02-Feb         13:21         8S123         MFM  |        |   |           |   |  |  |  |   |
| 02-Feb         08:18         3A061         YFT         Arrival         11.9         -         -           02-Feb         08:27         85210         MFM         Arrival         13.0         -         -           02-Feb         10:01         3A071         MFM         Arrival         11.2         -         -           02-Feb         10:46         85212         MFM         Arrival         12.4         -         -           02-Feb         11:03         85121         MFM         Departure         12.4         -         -           02-Feb         11:13         3A063         YFT         Arrival         13.0         -         -           02-Feb         11:13         3A063         YFT         Arrival         13.1         -         -           02-Feb         12:16         3A181         ZUI         Departure         13.1         -         -         -           02-Feb         12:46         85215         MFM         Arrival         12.7         -         -         -           02-Feb         12:45         3A064         YFT         Arrival         12.6         -         -         -           02-Feb  |        |   |           |   |  |  |  |   |
| D2-Feb         D8-27         BS210         MFM         Arrival         13.0         -         -           02-Feb         10.01         3A071         MFM         Arrival         10.9         -         -           02-Feb         10.46         8S212         MFM         Arrival         12.4         -         -           02-Feb         10.47         3A081         ZUI         Arrival         12.6         -         -           02-Feb         11:03         8S121         MFM         Departure         12.4         -         -           02-Feb         11:13         3A063         YFT         Arrival         13.0         -         -           02-Feb         12:22         3A168         YFT         Departure         13.1         -         -           02-Feb         12:22         3A168         YFT         Departure         13.1         -         -           02-Feb         13:21         8S123         MFM         Arrival         12.7         -         -           02-Feb         13:21         8S123         MFM         Departure         13.4         -         -           02-Feb         13:25         3A062  |        |   |           |   | •  |  |  |   |
| 02-Feb         10:01         3A071         MFM         Arrival         10.9         -         -           02-Feb         10:46         85212         MFM         Arrival         12.4         -         -           02-Feb         10:47         3A081         ZUI         Arrival         12.6         -         -           02-Feb         11:03         8S121         MFM         Departure         12.4         -         -           02-Feb         11:13         3A063         YFT         Arrival         13.0         -         -           02-Feb         12:16         3A181         ZUI         Departure         13.1         -         -           02-Feb         12:22         3A168         YFT         Departure         13.1         -         -           02-Feb         12:55         3A064         YFT         Arrival         12.6         -         -           02-Feb         13:55         3A082         ZUI         Arrival         12.6         -         -           02-Feb         14:28         3A162         YFT         Departure         13.0         -         -           02-Feb         14:28         3A167  |        |   |           |   |  |  |  | -   |
| 02-Feb         10:46         8S212         MFM         Arrival         12.4             02-Feb         10:47         3A081         ZUI         Arrival         12.6             02-Feb         11:03         8S121         MFM         Depature         12.4             02-Feb         11:13         3A063         YFT         Arrival         13.0             02-Feb         12:16         3A181         ZUI         Depature         13.1             02-Feb         12:22         3A168         YFT         Depature         13.1             02-Feb         12:26         3A064         YFT         Arrival         12.6             02-Feb         13:21         8S123         MFM         Depature         13.4             02-Feb         13:55         3A064         YFT         Depature         13.0             02-Feb         13:53         SA082         ZUI         Arrival         12.5             02-Feb         14:21         3   |        |   |           |   |  |  |  |   |
| 02-Feb         10:47         3A081         ZUI         Arrival         12.6         -         -           02-Feb         11:03         8S121         MFM         Departure         12.4         -         -           02-Feb         11:13         3A063         YFT         Arrival         13.0         -         -           02-Feb         12:16         3A181         ZUI         Departure         13.1         -         -           02-Feb         12:22         3A168         YFT         Departure         13.1         -         -           02-Feb         12:22         3A168         YFT         Departure         13.1         -         -           02-Feb         12:25         3A064         YFT         Arrival         12.6         -         -           02-Feb         13:21         8S123         MFM         Departure         13.4         -         -           02-Feb         13:21         8S123         MFM         Departure         13.0         -         -           02-Feb         14:21         3A164         YFT         Departure         13.0         -         -           02-Feb         14:28         3A182  |        |   |           |   |  |  | _  | -   |
| 02-Feb         11:03         8S121         MFM         Departure         12.4             02-Feb         11:13         3A063         YFT         Arrival         13.0             02-Feb         12:16         3A181         ZUI         Departure         13.1             02-Feb         12:22         3A168         YFT         Departure         13.1             02-Feb         12:46         8S215         MFM         Arrival         12.7             02-Feb         12:55         3A064         YFT         Arrival         12.6             02-Feb         13:21         8S123         MFM         Departure         13.4             02-Feb         13:55         3A082         ZUI         Arrival         12.5             02-Feb         14:28         3A162         ZUI         Departure         13.0             02-Feb         14:28         3A167         YFT         Departure         14.0         -         -           02-Feb         16:18  |        |   |           |   |  |  | -  | -   |
| 02-Feb         11:13         3A063         YFT         Arrival         13.0         -         -           02-Feb         12:16         3A181         ZUI         Departure         13.1         -         -           02-Feb         12:22         3A168         YFT         Departure         13.1         -         -           02-Feb         12:22         3A168         YFT         Departure         13.1         -         -           02-Feb         12:25         3A064         YFT         Arrival         12.6         -         -           02-Feb         12:55         3A084         YFT         Arrival         12.5         -         -           02-Feb         13:55         3A082         ZUI         Arrival         12.5         -         -           02-Feb         14:21         3A164         YFT         Departure         13.0         -         -           02-Feb         14:28         3A182         ZUI         Departure         12.8         -         -           02-Feb         14:58         3A065         YFT         Arrival         13.3         -         -           02-Feb         16:18         3A167  | 02-Feb | 11:03   | 8S121     | MFM   | Departure  |  | -  | -   |
| 02-Feb         12:16         3A181         ZUI         Departure         13.1             02-Feb         12:22         3A168         YFT         Departure         13.1             02-Feb         12:26         3A168         YFT         Departure         13.1             02-Feb         12:46         8S215         MFM         Arrival         12.7             02-Feb         13:21         8S123         MFM         Departure         13.4             02-Feb         13:21         8S123         MFM         Departure         13.4             02-Feb         13:55         3A082         ZUI         Arrival         12.5             02-Feb         14:21         3A164         YFT         Departure         13.0             02-Feb         14:58         3A065         YFT         Arrival         13.5             02-Feb         16:18         3A167         YFT         Departure         14.0             02-Feb         16:39  |        |   |           |   |  |  | -  | -   |
| 02-Feb         12:22         3A168         YFT         Departure         13.1             02-Feb         12:46         8S215         MFM         Arrival         12.7             02-Feb         12:55         3A064         YFT         Arrival         12.6             02-Feb         13:21         8S123         MFM         Departure         13.4             02-Feb         13:55         3A082         ZUI         Arrival         12.5             02-Feb         14:21         3A164         YFT         Departure         13.0             02-Feb         14:28         3A182         ZUI         Departure         13.5             02-Feb         14:28         3A167         YFT         Departure         14.0             02-Feb         16:18         3A167         YFT         Departure         14.0         -         -           02-Feb         16:39         8S218         MFM         Arrival         13.3         -         -           02-Feb         16:43 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>13.1</td><td>-</td><td>-</td></t<>  |        |   |           |   |  | 13.1   | -  | -   |
| 02-Feb         12:55         3A064         YFT         Arrival         12.6         -         -           02-Feb         13:21         8S123         MFM         Departure         13.4         -         -           02-Feb         13:55         3A082         ZUI         Arrival         12.5         -         -           02-Feb         14:21         3A164         YFT         Departure         13.0         -         -           02-Feb         14:28         3A182         ZUI         Departure         12.8         -         -           02-Feb         14:58         3A065         YFT         Arrival         13.5         -         -           02-Feb         16:18         3A167         YFT         Departure         14.0         -         -           02-Feb         16:18         3A167         YFT         Departure         14.0         -         -           02-Feb         16:39         8S218         MFM         Arrival         12.8         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.3         -         -           02-Feb         17:02         8S126  |        |   |           |   | •  |  | -  | -   |
| 02-Feb         13:21         8S123         MFM         Departure         13.4             02-Feb         13:55         3A082         ZUI         Arrival         12.5             02-Feb         14:21         3A164         YFT         Departure         13.0             02-Feb         14:28         3A182         ZUI         Departure         12.8             02-Feb         14:58         3A065         YFT         Arrival         13.5             02-Feb         16:18         3A167         YFT         Departure         14.0             02-Feb         16:39         8S218         MFM         Arrival         12.8             02-Feb         16:43         3A083         ZUI         Arrival         12.8             02-Feb         16:43         3A083         ZUI         Arrival         13.3             02-Feb         16:52         3A067         YFT         Arrival         13.4             02-Feb         17:02 <t< td=""><td>02-Feb</td><td>12:46</td><td>8S215</td><td>MFM</td><td>Arrival</td><td>12.7</td><td>-</td><td>-</td></t<>  | 02-Feb | 12:46   | 8S215     | MFM   | Arrival  | 12.7   | -  | -   |
| 02-Feb         13:21         8S123         MFM         Departure         13.4             02-Feb         13:55         3A082         ZUI         Arrival         12.5             02-Feb         14:21         3A164         YFT         Departure         13.0             02-Feb         14:28         3A182         ZUI         Departure         12.8             02-Feb         14:58         3A065         YFT         Arrival         13.5             02-Feb         16:18         3A167         YFT         Departure         14.0             02-Feb         16:39         8S218         MFM         Arrival         12.8             02-Feb         16:43         3A083         ZUI         Arrival         13.3             02-Feb         16:52         3A067         YFT         Arrival         13.4             02-Feb         17:02         8S126         MFM         Departure         13.1             02-Feb         19:07  |        |   |           |   |  | 12.6   | -  |   |
| 02-Feb         14:21         3A164         YFT         Departure         13.0             02-Feb         14:28         3A182         ZUI         Departure         12.8             02-Feb         14:58         3A065         YFT         Arrival         13.5             02-Feb         16:18         3A167         YFT         Departure         14.0             02-Feb         16:39         8S218         MFM         Arrival         12.8             02-Feb         16:39         8S218         MFM         Arrival         12.8             02-Feb         16:43         3A083         ZUI         Arrival         13.3             02-Feb         16:52         3A067         YFT         Arrival         13.4             02-Feb         17:02         8S126         MFM         Departure         13.2             02-Feb         17:07         3A183         ZUI         Departure         13.1         -         -           02-Feb         19:07 <t< td=""><td></td><td>13:21</td><td>8S123</td><td>MFM</td><td></td><td>13.4</td><td>-</td><td>-</td></t<>   |        | 13:21   | 8S123     | MFM   |  | 13.4   | -  | -   |
| 02-Feb         14:28         3A182         ZUI         Departure         12.8         -         -           02-Feb         14:58         3A065         YFT         Arrival         13.5         -         -           02-Feb         16:18         3A167         YFT         Departure         14.0         -         -           02-Feb         16:39         8S218         MFM         Arrival         12.8         -         -           02-Feb         16:43         3A083         ZUI         Arrival         12.8         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.3         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.4         -         -           02-Feb         17:02         8S126         MFM         Departure         13.2         -         -         -           02-Feb         17:07         3A183         ZUI         Departure         13.1         -         -         -           02-Feb         19:07         3A166         YFT         Departure         13.1         -         -         -           02-Feb  | 02-Feb | 13:55   | 3A082     | ZUI   | Arrival  | 12.5   | -  | -   |
| 02-Feb         14:58         3A065         YFT         Arrival         13.5         -         -           02-Feb         16:18         3A167         YFT         Departure         14.0         -         -           02-Feb         16:39         8S218         MFM         Arrival         12.8         -         -           02-Feb         16:43         3A083         ZUI         Arrival         13.3         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.3         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.4         -         -           02-Feb         17:02         8S126         MFM         Departure         13.2         -         -           02-Feb         17:07         3A183         ZUI         Departure         13.1         -         -           02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185  | 02-Feb | 14:21   | 3A164     | YFT   | Departure  | 13.0   | -  | -   |
| O2-Feb         16:18         3A167         YFT         Departure         14.0         -         -           02-Feb         16:39         8S218         MFM         Arrival         12.8         -         -           02-Feb         16:43         3A083         ZUI         Arrival         13.3         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.4         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.4         -         -           02-Feb         17:02         8S126         MFM         Departure         13.2         -         -           02-Feb         17:07         3A183         ZUI         Departure         13.1         -         -           02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185         ZUI         Departure         13.8         -         -           02-Feb         20:56         8S2113   | 02-Feb | 14:28   | 3A182     | ZUI   | Departure  | 12.8   | -  | -   |
| 02-Feb         16:39         8S218         MFM         Arrival         12.8         -         -           02-Feb         16:43         3A083         ZUI         Arrival         13.3         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.4         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.4         -         -           02-Feb         17:02         8S126         MFM         Departure         13.2         -         -           02-Feb         17:07         3A183         ZUI         Departure         13.1         -         -           02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185         ZUI         Departure         13.8         -         -           02-Feb         21:04         3A169  | 02-Feb | 14:58   | 3A065     | YFT   | Arrival  | 13.5   | -  | -   |
| 02-Feb         16:43         3A083         ZUI         Arrival         13.3         -         -           02-Feb         16:52         3A067         YFT         Arrival         13.4         -         -           02-Feb         17:02         8S126         MFM         Departure         13.2         -         -           02-Feb         17:07         3A183         ZUI         Departure         13.1         -         -           02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185         ZUI         Departure         13.8         -         -           02-Feb         20:56         8S2113         MFM         Arrival         10.5         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:59         8S522   | 02-Feb | 16:18   | 3A167     | YFT   | Departure  | 14.0   | -  | -   |
| 02-Feb         16:52         3A067         YFT         Arrival         13.4         -         -           02-Feb         17:02         8S126         MFM         Departure         13.2         -         -           02-Feb         17:07         3A183         ZUI         Departure         13.1         -         -           02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185         ZUI         Departure         13.8         -         -           02-Feb         20:56         8S2113         MFM         Arrival         10.5         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:59         8S522   | 02-Feb | 16:39   | 8S218     | MFM   | Arrival  | 12.8   | -  | -   |
| 02-Feb         17:02         8S126         MFM         Departure         13.2         -         -           02-Feb         17:07         3A183         ZUI         Departure         13.1         -         -           02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185         ZUI         Departure         13.8         -         -           02-Feb         20:56         8S2113         MFM         Arrival         10.5         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:59         8S522         MFM         Departure         12.2         -         -           03-Feb         08:19         3A061   | 02-Feb | 16:43   | 3A083     | ZUI   | Arrival  | 13.3   | -  | -   |
| 02-Feb         17:07         3A183         ZUI         Departure         13.1         -         -           02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185         ZUI         Departure         13.8         -         -           02-Feb         20:56         8S2113         MFM         Arrival         10.5         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:59         8S522         MFM         Departure         12.2         -         -           03-Feb         08:19         3A061         YFT         Arrival         12.9         -         -  | 02-Feb |   | 3A067     | YFT   | Arrival  |  | -  | -   |
| 02-Feb         19:07         3A166         YFT         Departure         12.2         -         -           02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185         ZUI         Departure         13.8         -         -           02-Feb         20:56         8S2113         MFM         Arrival         10.5         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:59         8S522         MFM         Departure         12.2         -         -           02-Feb         08:19         3A061         YFT         Arrival         12.9         -         -  |        |   |           |   |  |  | -  | -   |
| 02-Feb         19:48         3A084         ZUI         Arrival         12.2         -         -           02-Feb         20:18         3A185         ZUI         Departure         13.8         -         -           02-Feb         20:56         8S2113         MFM         Arrival         10.5         -         -           02-Feb         20:56         8S2113         MFM         Arrival         10.5         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:59         8S522         MFM         Departure         12.2         -         -           02-Feb         08:19         3A061         YFT         Arrival         12.9         -         -   |        |   |           |   | •  |  | -  | -   |
| 02-Feb         20:18         3A185         ZUI         Departure         13.8         -         -           02-Feb         20:56         8S2113         MFM         Arrival         10.5         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:59         8S522         MFM         Departure         12.2         -         -           03-Feb         08:19         3A061         YFT         Arrival         12.9         -         -  |        |   |           |   | •  |  | -  | -   |
| 02-Feb         20:56         8S2113         MFM         Arrival         10.5         -         -           02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:59         8S522         MFM         Departure         12.2         -         -           03-Feb         08:19         3A061         YFT         Arrival         12.9         -         -  |        |   |           |   |  |  |  | -   |
| 02-Feb         21:04         3A169         YFT         Departure         13.1         -         -           02-Feb         21:59         8S522         MFM         Departure         12.2         -         -           03-Feb         08:19         3A061         YFT         Arrival         12.9         -         -   |        |   |           |   |  |  | -  | -   |
| 02-Feb         21:59         8S522         MFM         Departure         12.2         -         -           03-Feb         08:19         3A061         YFT         Arrival         12.9         -         -   |        |   |           |   |  |  |  |   |
| 03-Feb 08:19 3A061 YFT Arrival 12.9   |        |   |           |   | •  |  |  |   |
|   |        |   |           |   | •  |  |  |   |
| 03-Feb 08:27 8S210 MFM Arrival 12.1   |        |   |           |   |  |  |  |   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.      | Connecting Port<br>[ <u>MEM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|----------------|---|--|--|--|---|
| 03-Feb           | 10:04   | 3A071          | MFM   | Arrival  | 11.5   | -  | -   |
| 03-Feb           | 10:40   | 3A081          | ZUI   | Arrival  | 12.6   | -  | -   |
| 03-Feb           | 10:44   | 8S212          | MFM   | Arrival  | 11.6   | -  | -   |
| 03-Feb           | 11:10   | 8S121          | MFM   | Departure  | 11.7   | -  | -   |
| 03-Feb           | 11:19   | 3A063          | YFT   | Arrival  | 12.2   | -  | -   |
| 03-Feb           | 12:14   | 3A168          | YFT   | Departure  | 12.8   | -  | -   |
| 03-Feb           | 12:19   | 3A181          | ZUI   | Departure  | 14.1   | -  | -   |
| 03-Feb           | 12:44   | 8S215          | MFM   | Arrival  | 13.1   | -  | -   |
| 03-Feb           | 13:07   | 3A064          | YFT   | Arrival  | 13.4   | -  | -   |
| 03-Feb           | 13:18   | 8S123          | MFM   | Departure  | 12.7   | -  | -   |
| 03-Feb           | 13:50   | 3A082          | ZUI   | Arrival  | 13.9   | -  | -   |
| 03-Feb           | 14:21   | 3A164          | YFT   | Departure  | 13.9   | -  | -   |
| 03-Feb<br>03-Feb | 14:36<br>14:50  | 3A182<br>3A065 | ZUI<br>YFT  | Departure<br>Arrival   | 13.2<br>12.8   |  |   |
| 03-Feb<br>03-Feb | 14.50   | 3A065<br>3A167 | YFT   | Departure  | 13.1   | -  | -   |
| 03-Feb           | 16:39   | 3A083          | ZUI   | Arrival  | 13.1   |  |   |
| 03-Feb           | 16:50   | 8S218          | MFM   | Arrival  | 13.0   | _  | _   |
| 03-Feb           | 16:56   | 3A067          | YFT   | Arrival  | 13.5   | _  | -   |
| 03-Feb           | 17:09   | 8S126          | MFM   | Departure  | 13.5   | -  | -   |
| 03-Feb           | 17:10   | 3A183          | ZUI   | Departure  | 13.9   | -  | -   |
| 03-Feb           | 19:17   | 3A166          | YFT   | Departure  | 13.2   | -  | -   |
| 03-Feb           | 19:44   | 3A084          | ZUI   | Arrival  | 13.1   | -  | -   |
| 03-Feb           | 20:16   | 3A185          | ZUI   | Departure  | 13.9   | -  | -   |
| 03-Feb           | 20:55   | 8S2113         | MFM   | Arrival  | 12.3   | -  | -   |
| 03-Feb           | 21:02   | 3A169          | YFT   | Departure  | 11.8   | -  | -   |
| 03-Feb           | 22:03   | 8S522          | MFM   | Departure  | 13.6   | -  | -   |
| 04-Feb           | 08:13   | 3A061          | YFT   | Arrival  | 12.4   | -  | -   |
| 04-Feb           | 08:23   | 8S210          | MFM   | Arrival  | 13.4   | -  | -   |
| 04-Feb           | 09:56   | 3A071          | MFM   | Arrival  | 11.6   | -  | -   |
| 04-Feb           | 10:45   | 3A081          | ZUI   | Arrival  | 12.7   | -  | -   |
| 04-Feb           | 10:47   | 8S212          | MFM   | Arrival  | 10.7   | -  | -   |
| 04-Feb           | 11:02   | 8S121          | MFM   | Departure  | 12.7   | -  | -   |
| 04-Feb           | 11:20   | 3A063          | YFT   | Arrival  | 12.7   | -  | -   |
| 04-Feb           | 12:25   | 3A181          | ZUI   | Departure  | 14.0   | -  | -   |
| 04-Feb           | 12:31<br>12:58  | 3A168<br>3A064 | YFT<br>YFT  | Departure<br>Arrival   | 12.4<br>12.2   | -  | -   |
| 04-Feb<br>04-Feb | 12:58   | 8S215          | MFM   | Arrival  | 12.2   |  | -   |
| 04-Feb           | 13:18   | 8S123          | MFM   | Departure  | 12.0   |  | _   |
| 04-Feb           | 13:50   | 3A082          | ZUI   | Arrival  | 12.0   |  | -   |
| 04-Feb           | 14:14   | 3A182          | ZUI   | Departure  | 13.3   | -  | -   |
| 04-Feb           | 14:14   | 3A164          | YFT   | Departure  | 13.2   | -  | -   |
| 04-Feb           | 15:00   | 3A065          | YFT   | Arrival  | 12.6   | -  | -   |
| 04-Feb           | 16:15   | 3A167          | YFT   | Departure  | 11.9   | -  | -   |
| 04-Feb           | 16:35   | 3A083          | ZUI   | Arrival  | 13.6   | -  | -   |
| 04-Feb           | 16:40   | 8S218          | MFM   | Arrival  | 12.2   | -  | -   |
| 04-Feb           | 16:56   | 3A067          | YFT   | Arrival  | 12.7   | -  | -   |
| 04-Feb           | 17:07   | 3A183          | ZUI   | Departure  | 13.8   | -  | -   |
| 04-Feb           | 17:09   | 8S126          | MFM   | Departure  | 11.7   | -  | -   |
| 04-Feb           | 19:10   | 3A166          | YFT   | Departure  | 12.0   | -  | -   |
| 04-Feb           | 19:33   | 3A084          | ZUI   | Arrival  | 13.0   | ≤5   | <1  |
| 04-Feb           | 20:15   | 3A185          | ZUI   | Departure  | 13.9   | -  | -   |
| 04-Feb           | 20:54   | 8S2113         | MFM   | Arrival  | 13.0   | -  | -   |
| 04-Feb           | 21:05   | 3A169          | YFT   | Departure  | 12.4   | -  | -   |
| 04-Feb           | 21:59   | 8S522          | MFM   | Departure  | 12.7   | -  | -   |
| 05-Feb           | 08:23   | 3A061          | YFT   | Arrival  | 11.9   | -  | -   |
| 05-Feb           | 08:29   | 8S210          | MFM   | Arrival  | 12.1   | -  | -   |
| 05-Feb           | 09:52   | 3A071          | MFM   | Arrival  | 13.1   | -  | -   |
| 05-Feb           | 10:39<br>10:42  | 8S212<br>3A081 | MFM<br>ZUI  | Arrival<br>Arrival   | 12.2<br>13.2   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.      | Connecting Port<br>[ <u>MEM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|----------------|---|--|--|--|---|
| 05-Feb           | 11:10   | 8S121          | MFM   | Departure  | 13.6   | -  | -   |
| 05-Feb           | 11:19   | 3A063          | YFT   | Arrival  | 11.7   | -  | -   |
| 05-Feb           | 12:22   | 3A168          | YFT   | Departure  | 12.1   | -  | -   |
| 05-Feb           | 12:25   | 3A181          | ZUI   | Departure  | 14.0   | -  | -   |
| 05-Feb           | 12:45   | 8S215          | MFM   | Arrival  | 12.9   | -  | -   |
| 05-Feb           | 13:05   | 3A064          | YFT   | Arrival  | 11.6   | -  | -   |
| 05-Feb           | 13:14   | 8S123          | MFM   | Departure  | 13.4   | -  | -   |
| 05-Feb           | 13:23   | 3A082          | ZUI   | Arrival  | 12.9   | ≤5   | <1  |
| 05-Feb<br>05-Feb | 14:18<br>14:21  | 3A182<br>3A164 | ZUI<br>YFT  | Departure  | 12.9<br>11.6   | -  | -   |
| 05-Feb<br>05-Feb | 14:56   | 3A065          | YFT   | Departure<br>Arrival   | 11.0   | -  | -   |
| 05-Feb           | 16:23   | 3A167          | YFT   | Departure  | 12.4   |  | -   |
| 05-Feb           | 16:37   | 3A083          | ZUI   | Arrival  | 13.0   | _  | -   |
| 05-Feb           | 16:51   | 8S218          | MFM   | Arrival  | 11.9   | -  | -   |
| 05-Feb           | 17:02   | 3A067          | YFT   | Arrival  | 11.8   | -  | -   |
| 05-Feb           | 17:04   | 3A183          | ZUI   | Departure  | 13.9   | -  | -   |
| 05-Feb           | 17:11   | 8S126          | MFM   | Departure  | 13.5   | -  | -   |
| 05-Feb           | 19:15   | 3A166          | YFT   | Departure  | 12.8   | -  | -   |
| 05-Feb           | 19:46   | 3A084          | ZUI   | Arrival  | 13.0   | -  | -   |
| 05-Feb           | 20:11   | 3A185          | ZUI   | Departure  | 13.7   | -  | -   |
| 05-Feb           | 20:56   | 8S2113         | MFM   | Arrival  | 12.0   | -  | -   |
| 05-Feb           | 21:18   | 3A169          | YFT   | Departure  | 12.4   | -  | -   |
| 05-Feb           | 21:58   | 8S522          | MFM   | Departure  | 12.2   | -  | -   |
| 06-Feb           | 08:21   | 3A061          | YFT   | Arrival  | 12.9   | -  | -   |
| 06-Feb           | 08:23   | 8S210          | MFM   | Arrival  | 12.7<br>12.5   | -  | -   |
| 06-Feb<br>06-Feb | 09:58<br>10:45  | 3A071<br>8S212 | MFM<br>MFM  | Arrival<br>Arrival   | 12.5   | -  | -   |
| 06-Feb           | 10:43   | 3A081          | ZUI   | Arrival  | 13.2   | -  | -   |
| 06-Feb           | 11:04   | 8S121          | MFM   | Departure  | 12.0   | -  | -   |
| 06-Feb           | 11:23   | 3A063          | YFT   | Arrival  | 12.8   | -  | -   |
| 06-Feb           | 12:12   | 3A181          | ZUI   | Departure  | 13.7   | -  | -   |
| 06-Feb           | 12:15   | 3A168          | YFT   | Departure  | 12.6   | -  | -   |
| 06-Feb           | 12:47   | 8S215          | MFM   | Arrival  | 10.2   | -  | -   |
| 06-Feb           | 12:59   | 3A064          | YFT   | Arrival  | 12.7   | -  | -   |
| 06-Feb           | 13:16   | 8S123          | MFM   | Departure  | 11.8   | -  | -   |
| 06-Feb           | 13:51   | 3A082          | ZUI   | Arrival  | 11.7   | -  | -   |
| 06-Feb           | 14:27   | 3A164          | YFT   | Departure  | 11.8   | -  | -   |
| 06-Feb           | 14:29   | 3A182          | ZUI   | Departure  | 12.5   | -  | -   |
| 06-Feb           | 14:57   | 3A065          | YFT   | Arrival  | 11.7   | -  | -   |
| 06-Feb<br>06-Feb | 16:32<br>16:38  | 3A167<br>3A083 | YFT<br>ZUI  | Departure<br>Arrival   | 13.3<br>12.8   | -  | -   |
| 06-Feb<br>06-Feb | 16:38   | 3A083<br>8S218 | ZUI<br>MFM  | Arrival  | 12.8   | -  | -   |
| 06-Feb           | 17:05   | 3A067          | YFT   | Arrival  | 12.8   |  | -   |
| 06-Feb           | 17:15   | 3A183          | ZUI   | Departure  | 13.3   | _  | -   |
| 06-Feb           | 17:19   | 8S126          | MFM   | Departure  | 11.7   | -  | -   |
| 06-Feb           | 19:38   | 3A166          | YFT   | Departure  | 12.4   | ≤5   | <1  |
| 06-Feb           | 19:52   | 3A084          | ZUI   | Arrival  | 13.3   | -  | -   |
| 06-Feb           | 20:20   | 3A185          | ZUI   | Departure  | 12.6   | -  | -   |
| 06-Feb           | 20:54   | 8S2113         | MFM   | Arrival  | 12.5   | -  | -   |
| 06-Feb           | 21:17   | 3A169          | YFT   | Departure  | 11.6   | -  | -   |
| 06-Feb           | 22:00   | 8S522          | MFM   | Departure  | 12.5   | -  | -   |
| 07-Feb           | 08:19   | 3A061          | YFT   | Arrival  | 12.7   | -  | -   |
| 07-Feb           | 08:32   | 8S210          | MFM   | Arrival  | 10.3   | -  | -   |
| 07-Feb           | 10:13   | 3A071          | MFM   | Arrival  | 12.7   | -  | -   |
| 07-Feb           | 10:38<br>10:50  | 8S212<br>3A081 | MFM<br>ZUI  | Arrival  | 12.5<br>13.3   | -  | -   |
| 07-Feb<br>07-Feb | 10:50   | 8S121          | MFM   | Arrival<br>Departure   | 13.3   | -  | -   |
| 07-Feb<br>07-Feb | 11:19   | 3A063          | YFT   | Arrival  | 13.0   | -  | -   |
| 07-Feb           | 12:12   | 3A181          | ZUI   | Departure  | 13.8   |  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.      | Connecting Port<br>[ <u>MFM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|----------------|---|--|--|--|---|
| 07-Feb           | 12:18   | 3A168          | YFT   | Departure  | 12.3   | -  | -   |
| 07-Feb           | 12:50   | 8S215          | MFM   | Arrival  | 12.1   | -  | -   |
| 07-Feb           | 13:01   | 3A064          | YFT   | Arrival  | 12.6   | -  | -   |
| 07-Feb           | 13:15   | 8S123          | MFM   | Departure  | 12.9   | -  | -   |
| 07-Feb           | 13:56   | 3A082          | ZUI   | Arrival  | 12.7   | -  | -   |
| 07-Feb           | 14:20   | 3A164          | YFT   | Departure  | 11.4   | -  | -   |
| 07-Feb           | 14:22   | 3A182          | ZUI   | Departure  | 13.1   | -  | -   |
| 07-Feb           | 15:00   | 3A065          | YFT   | Arrival  | 11.9   | -  | -   |
| 07-Feb           | 16:30   | 3A167          | YFT   | Departure  | 12.4   | ≤5   | <1  |
| 07-Feb           | 16:43   | 3A083          | ZUI   | Arrival  | 13.2   | -  | -   |
| 07-Feb           | 16:48   | 8S218          | MFM   | Arrival  | 11.6   | -  | -   |
| 07-Feb           | 17:01   | 3A067          | YFT   | Arrival  | 12.3<br>12.7   | -  | -   |
| 07-Feb<br>07-Feb | 17:12<br>17:14  | 8S126<br>3A183 | MFM<br>ZUI  | Departure<br>Departure   | 13.5   |  |   |
| 07-Feb<br>07-Feb | 17.14   | 3A165          | YFT   | Departure  | 13.5   | -  | -   |
| 07-Feb<br>07-Feb | 19:45   | 3A084          | ZUI   | Arrival  | 12.7   |  | -   |
| 07-Feb<br>07-Feb | 20:24   | 3A185          | ZUI   | Departure  | 13.6   | -  | _   |
| 07-Feb           | 20:54   | 3A169          | YFT   | Departure  | 12.2   | -  | -   |
| 07-Feb           | 20:54   | 8S2113         | MFM   | Arrival  | 11.4   | -  | -   |
| 07-Feb           | 22:08   | 8S522          | MFM   | Departure  | 12.7   | -  | -   |
| 08-Feb           | 08:20   | 3A061          | YFT   | Arrival  | 12.2   | -  | -   |
| 08-Feb           | 08:33   | 8S210          | MFM   | Arrival  | 12.1   | -  | -   |
| 08-Feb           | 09:59   | 3A071          | MFM   | Arrival  | 6.4  | -  | -   |
| 08-Feb           | 10:37   | 8S212          | MFM   | Arrival  | 12.3   | -  | -   |
| 08-Feb           | 10:46   | 3A081          | ZUI   | Arrival  | 12.4   | -  | -   |
| 08-Feb           | 11:17   | 3A063          | YFT   | Arrival  | 11.4   | -  | -   |
| 08-Feb           | 11:18   | 8S121          | MFM   | Departure  | 12.9   | -  | -   |
| 08-Feb           | 12:23   | 3A181          | ZUI   | Departure  | 12.2   | -  | -   |
| 08-Feb           | 12:23   | 3A168          | YFT   | Departure  | 11.9   | -  | -   |
| 08-Feb           | 12:46   | 8S215          | MFM   | Arrival  | 12.6   | -  | -   |
| 08-Feb           | 13:01   | 3A064          | YFT   | Arrival  | 11.8   | -  | -   |
| 08-Feb           | 13:13   | 8S123          | MFM   | Departure  | 13.0   | -  | -   |
| 08-Feb           | 13:47   | 3A082          | ZUI   | Arrival  | 12.9   | -  | -   |
| 08-Feb           | 14:16   | 3A182          | ZUI   | Departure  | 13.5   | -  | -   |
| 08-Feb           | 14:20<br>15:01  | 3A164<br>3A065 | YFT<br>YFT  | Departure<br>Arrival   | 11.3<br>11.7   | -  | -   |
| 08-Feb<br>08-Feb | 16:23   | 3A065<br>3A167 | YFT   | Departure  | 11.7   |  |   |
| 08-Feb           | 16:38   | 3A083          | ZUI   | Arrival  | 12.3   |  | _   |
| 08-Feb           | 16:41   | 8S218          | MFM   | Arrival  | 11.9   |  | _   |
| 08-Feb           | 17:02   | 8S126          | MFM   | Departure  | 13.9   | -  | -   |
| 08-Feb           | 17:02   | 3A183          | ZUI   | Departure  | 13.5   | -  | -   |
| 08-Feb           | 17:10   | 3A067          | YFT   | Arrival  | 11.6   | -  | -   |
| 08-Feb           | 19:15   | 3A166          | YFT   | Departure  | 12.3   | -  | -   |
| 08-Feb           | 19:54   | 3A084          | ZUI   | Arrival  | 12.4   | -  | -   |
| 08-Feb           | 20:23   | 3A185          | ZUI   | Departure  | 11.0   | -  | -   |
| 08-Feb           | 20:58   | 8S2113         | MFM   | Arrival  | 12.0   | -  | -   |
| 08-Feb           | 21:06   | 3A169          | YFT   | Departure  | 12.6   | -  | -   |
| 08-Feb           | 22:12   | 8S522          | MFM   | Departure  | 11.6   | -  | -   |
| 09-Feb           | 08:17   | 3A061          | YFT   | Arrival  | 11.3   | -  | -   |
| 09-Feb           | 08:29   | 8S210          | MFM   | Arrival  | 11.5   | -  | -   |
| 09-Feb           | 10:09   | 3A071          | MFM   | Arrival  | 11.7   | -  | -   |
| 09-Feb           | 10:43   | 3A081          | ZUI   | Arrival  | 12.7   | -  | -   |
| 09-Feb           | 10:47   | 8S212          | MFM   | Arrival  | 10.8   | -  | -   |
| 09-Feb           | 11:05   | 8S121          | MFM   | Departure  | 11.4   | -  | -   |
| 09-Feb           | 11:19   | 3A063          | YFT   | Arrival  | 12.0   | -  | -   |
| 09-Feb           | 12:25   | 3A168          | YFT   | Departure  | 11.6   | -  | -   |
| 09-Feb           | 12:26   | 3A181          | ZUI   | Departure  | 13.2   | -  | -   |
| 09-Feb           | 12:42<br>13:03  | 8S215<br>3A064 | MFM<br>YFT  | Arrival<br>Arrival   | 13.5<br>12.1   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.      | Connecting Port<br>[ <u>MEM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|----------------|---|--|--|--|---|
| 09-Feb           | 13:18   | 8S123          | MFM   | Departure  | 12.2   | -  | -   |
| 09-Feb           | 13:57   | 3A082          | ZUI   | Arrival  | 13.1   | -  | -   |
| 09-Feb           | 14:17   | 3A164          | YFT   | Departure  | 11.6   | -  | -   |
| 09-Feb           | 14:19   | 3A182          | ZUI   | Departure  | 13.1   | -  | -   |
| 09-Feb           | 14:58   | 3A065          | YFT   | Arrival  | 11.9   | -  | -   |
| 09-Feb           | 16:17   | 3A167          | YFT   | Departure  | 12.6   | -  | -   |
| 09-Feb           | 16:36   | 8S218          | MFM   | Arrival  | 12.1   | -  | -   |
| 09-Feb           | 16:39   | 3A083          | ZUI   | Arrival  | 13.1   | -  | -   |
| 09-Feb           | 17:06   | 3A067          | YFT   | Arrival  | 11.5   | -  | -   |
| 09-Feb           | 17:08   | 8S126          | MFM   | Departure  | 12.0   | -  | -   |
| 09-Feb<br>09-Feb | 17:15<br>19:00  | 3A183<br>3A166 | ZUI<br>YFT  | Departure<br>Departure   | 13.5<br>13.5   | -  | -   |
| 09-Feb           | 19:56   | 3A084          | ZUI   | Arrival  | 13.1   | _  | -   |
| 09-Feb           | 20:12   | 3A185          | ZUI   | Departure  | 13.3   | _  | -   |
| 09-Feb           | 21:00   | 8S2113         | MFM   | Arrival  | 11.3   | -  | -   |
| 09-Feb           | 21:00   | 3A169          | YFT   | Departure  | 13.9   | -  | -   |
| 09-Feb           | 22:00   | 8\$522         | MFM   | Departure  | 11.8   | -  | -   |
| 10-Feb           | 08:20   | 3A061          | YFT   | Arrival  | 11.8   | -  | -   |
| 10-Feb           | 08:25   | 8S210          | MFM   | Arrival  | 12.5   | -  | -   |
| 10-Feb           | 09:57   | 3A071          | MFM   | Arrival  | 11.9   | -  | -   |
| 10-Feb           | 10:40   | 8S212          | MFM   | Arrival  | 12.1   | -  | -   |
| 10-Feb           | 10:53   | 3A081          | ZUI   | Arrival  | 13.1   | -  | -   |
| 10-Feb           | 10:59   | 3A063          | YFT   | Arrival  | 13.4   | ≤5   | <1  |
| 10-Feb           | 11:04   | 8S121          | MFM   | Departure  | 12.9   | -  | -   |
| 10-Feb           | 12:08   | 3A181          | ZUI   | Departure  | 13.9   | -  | -   |
| 10-Feb           | 12:19   | 3A168          | YFT   | Departure  | 12.9   | -  | -   |
| 10-Feb           | 12:43   | 8S215          | MFM   | Arrival  | 12.7   | -  | -   |
| 10-Feb           | 13:04   | 3A064          | YFT   | Arrival  | 12.3   | -  | -   |
| 10-Feb           | 13:11   | 8S123          | MFM   | Departure  | 12.1   | -  | -   |
| 10-Feb           | 13:44   | 3A082          | ZUI   | Arrival  | 12.7   | -  | -   |
| 10-Feb           | 14:12   | 3A182          | ZUI<br>YFT  | Departure  | 13.9<br>11.1   | -  | -   |
| 10-Feb<br>10-Feb | 14:17<br>14:57  | 3A164<br>3A065 | YFT   | Departure<br>Arrival   | 12.8   | -  | -   |
| 10-Feb           | 16:23   | 3A167          | YFT   | Departure  | 12.9   |  | -   |
| 10-Feb           | 16:36   | 3A083          | ZUI   | Arrival  | 12.7   | _  | -   |
| 10-Feb           | 16:46   | 8S218          | MFM   | Arrival  | 12.3   | _  | _   |
| 10-Feb           | 16:59   | 3A067          | YFT   | Arrival  | 12.8   | -  | -   |
| 10-Feb           | 17:04   | 8S126          | MFM   | Departure  | 12.3   | -  | -   |
| 10-Feb           | 17:06   | 3A183          | ZUI   | Departure  | 13.3   | -  | -   |
| 10-Feb           | 19:08   | 3A166          | YFT   | Departure  | 12.9   | -  | -   |
| 10-Feb           | 19:53   | 3A084          | ZUI   | Arrival  | 13.2   | -  | -   |
| 10-Feb           | 20:17   | 3A185          | ZUI   | Departure  | 12.2   | -  | -   |
| 10-Feb           | 20:57   | 8S2113         | MFM   | Arrival  | 12.2   | -  | -   |
| 10-Feb           | 21:00   | 3A169          | YFT   | Departure  | 12.3   | -  | -   |
| 10-Feb           | 22:02   | 8S522          | MFM   | Departure  | 11.8   | -  | -   |
| 11-Feb           | 07:58   | 3A061          | YFT   | Arrival  | 13.2   | ≤5   | <1  |
| 11-Feb           | 08:29   | 8S210          | MFM   | Arrival  | 11.8   | -  | -   |
| 11-Feb           | 10:05   | 3A071          | MFM   | Arrival  | 11.6   | -  | -   |
| 11-Feb           | 10:40   | 8S212          | MFM   | Arrival  | 12.7   | -  | -   |
| 11-Feb           | 10:49   | 3A081          | ZUI   | Arrival  | 13.4   | -  | -   |
| 11-Feb           | 11:03   | 8S121          | MFM   | Departure  | 13.2   | -  | -   |
| 11-Feb           | 11:24   | 3A063          | YFT   | Arrival  | 13.3   | -  | -   |
| 11-Feb           | 12:14   | 3A168          | YFT   | Departure  | 12.6   | -  | -   |
| 11-Feb           | 12:16   | 3A181<br>8S215 |   | Departure  | 13.5<br>11.8   | -  | -   |
| 11-Feb<br>11-Feb | 12:43<br>12:58  | 8S215<br>3A064 | MFM<br>YFT  | Arrival<br>Arrival   | 11.8   | -  | -   |
| 11-Feb<br>11-Feb | 12:58   | 3A064<br>8S123 | MFM   | Departure  | 12.5   | -  | -   |
| 11-Feb           | 13:24   | 3A082          | ZUI   | Arrival  | 11.0   | -  | -   |
| 11-Feb           | 13.24   | 3A062<br>3A164 | YFT   | Departure  | 12.9   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.       | Connecting Port<br>[ <u>MEM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|-----------------|---|--|--|--|---|
| 11-Feb           | 14:18   | 3A182           | ZUI   | Departure  | 13.3   | -  | -   |
| 11-Feb           | 14:55   | 3A065           | YFT   | Arrival  | 13.0   | -  | -   |
| 11-Feb           | 16:15   | 3A167           | YFT   | Departure  | 13.2   | -  | -   |
| 11-Feb           | 16:41   | 3A083           | ZUI   | Arrival  | 12.7   | -  | -   |
| 11-Feb           | 16:41   | 8S218           | MFM   | Arrival  | 13.5   | -  | -   |
| 11-Feb           | 16:58   | 3A067           | YFT   | Arrival  | 11.9   | -  | -   |
| 11-Feb           | 17:06   | 8S126           | MFM   | Departure  | 12.6   | -  | -   |
| 11-Feb           | 17:10   | 3A183           | ZUI   | Departure  | 13.9   | -  | -   |
| 11-Feb           | 19:08   | 3A166           | YFT   | Departure  | 12.7   | -  | -   |
| 11-Feb           | 19:51   | 3A084           | ZUI   | Arrival  | 12.5   | -  | -   |
| 11-Feb           | 20:09   | 3A185           | ZUI   | Departure  | 14.0   | -  | -   |
| 11-Feb<br>11-Feb | 20:52<br>21:02  | 8S2113<br>3A169 | MFM<br>YFT  | Arrival  | 12.1<br>12.7   | -  | -   |
| 11-Feb           | 21:02   | 8S522           | MFM   | Departure<br>Departure   | 12.7   |  |   |
| 12-Feb           | 08:14   | 3A061           | YFT   | Arrival  | 12.9   | -  | -   |
| 12-Feb           | 08:25   | 8S210           | MFM   | Arrival  | 9.2  |  |   |
| 12-Feb           | 10:02   | 3A071           | MFM   | Arrival  | 11.6   | _  | -   |
| 12-Feb           | 10:32   | 8S212           | MFM   | Arrival  | 12.9   | _  | -   |
| 12-Feb           | 10:40   | 3A081           | ZUI   | Arrival  | 13.1   | -  | -   |
| 12-Feb           | 11:13   | 8S121           | MFM   | Departure  | 12.7   | -  | -   |
| 12-Feb           | 11:18   | 3A063           | YFT   | Arrival  | 12.4   | -  | -   |
| 12-Feb           | 12:18   | 3A181           | ZUI   | Departure  | 13.3   | -  | -   |
| 12-Feb           | 12:18   | 3A168           | YFT   | Departure  | 12.3   | -  | -   |
| 12-Feb           | 12:45   | 8S215           | MFM   | Arrival  | 11.8   | -  | -   |
| 12-Feb           | 12:55   | 3A064           | YFT   | Arrival  | 13.6   | -  | -   |
| 12-Feb           | 13:16   | 8S123           | MFM   | Departure  | 11.5   | -  | -   |
| 12-Feb           | 13:45   | 3A082           | ZUI   | Arrival  | 12.1   | -  | -   |
| 12-Feb           | 14:16   | 3A182           | ZUI   | Departure  | 11.5   | -  | -   |
| 12-Feb           | 14:17   | 3A164           | YFT   | Departure  | 13.4   | -  | -   |
| 12-Feb           | 14:52   | 3A065           | YFT   | Arrival  | 12.3   | -  | -   |
| 12-Feb           | 16:15   | 3A167           | YFT   | Departure  | 12.7   | -  | -   |
| 12-Feb           | 16:36   | 3A083           | ZUI   | Arrival  | 13.4   | -  | -   |
| 12-Feb           | 16:45   | 8S218           | MFM   | Arrival  | 12.0   | -  | -   |
| 12-Feb<br>12-Feb | 16:55<br>17:05  | 3A067<br>8S126  | YFT<br>MFM  | Arrival  | 13.1<br>12.4   | -  | -   |
| 12-Feb           | 17:05   | 3A183           | ZUI   | Departure<br>Departure   | 13.2   | -  | -   |
| 12-Feb           | 19:05   | 3A166           | YFT   | Departure  | 12.7   | -  | _   |
| 12-Feb           | 19:47   | 3A084           | ZUI   | Arrival  | 12.9   | _  | -   |
| 12-Feb           | 20:13   | 3A185           | ZUI   | Departure  | 13.8   | _  | -   |
| 12-Feb           | 21:00   | 8S2113          | MFM   | Arrival  | 11.9   | -  | -   |
| 12-Feb           | 21:00   | 3A169           | YFT   | Departure  | 13.7   | -  | -   |
| 12-Feb           | 22:01   | 8\$522          | MFM   | Departure  | 12.4   | -  | -   |
| 13-Feb           | 08:16   | 3A061           | YFT   | Arrival  | 11.7   | -  | -   |
| 13-Feb           | 08:26   | 8S210           | MFM   | Arrival  | 11.6   | -  | -   |
| 13-Feb           | 10:13   | 3A071           | MFM   | Arrival  | 11.8   | -  | -   |
| 13-Feb           | 10:37   | 8S212           | MFM   | Arrival  | 12.7   | -  | -   |
| 13-Feb           | 10:44   | 3A081           | ZUI   | Arrival  | 13.4   | -  | -   |
| 13-Feb           | 11:13   | 8S121           | MFM   | Departure  | 12.1   | -  | -   |
| 13-Feb           | 11:22   | 3A063           | YFT   | Arrival  | 12.1   | -  | -   |
| 13-Feb           | 12:18   | 3A168           | YFT   | Departure  | 12.5   | -  | -   |
| 13-Feb           | 12:19   | 3A181           | ZUI   | Departure  | 13.4   | -  | -   |
| 13-Feb           | 12:51   | 8S215           | MFM   | Arrival  | 11.5   | -  | -   |
| 13-Feb           | 12:58   | 3A064           | YFT   | Arrival  | 12.3   | -  | -   |
| 13-Feb           | 13:20   | 8S123           | MFM   | Departure  | 11.8   | -  | -   |
| 13-Feb           | 13:44   | 3A082           | ZUI   | Arrival  | 12.3   | -  | -   |
| 13-Feb           | 14:18   | 3A182           | ZUI   | Departure  | 13.0   | -  | -   |
| 13-Feb           | 14:23   | 3A164           | YFT   | Departure  | 12.2   | -  | -   |
| 13-Feb           | 14:53<br>16:30  | 3A065<br>3A167  | YFT<br>YFT  | Arrival<br>Departure   | 12.1<br>12.6   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.       | Connecting Port<br>[ <u>MFM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> -<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|-----------------|---|--|--|--|---|
| 13-Feb           | 16:39   | 8S218           | MFM   | Arrival  | 11.8   | -  | -   |
| 13-Feb           | 16:54   | 3A083           | ZUI   | Arrival  | 13.2   | -  | -   |
| 13-Feb           | 16:56   | 3A067           | YFT   | Arrival  | 12.1   | -  | -   |
| 13-Feb           | 17:23   | 8S126           | MFM   | Departure  | 12.9   | -  | -   |
| 13-Feb           | 17:25   | 3A183           | ZUI   | Departure  | 13.0   | -  | -   |
| 13-Feb           | 19:13   | 3A166           | YFT   | Departure  | 13.8   | -  | -   |
| 13-Feb           | 19:56   | 3A084           | ZUI   | Arrival  | 12.8   | -  | -   |
| 13-Feb<br>13-Feb | 20:20<br>20:57  | 3A185<br>8S2113 | ZUI<br>MFM  | Departure<br>Arrival   | 13.3<br>11.9   | -  | -   |
| 13-Feb           | 21:09   | 3A169           | YFT   | Departure  | 12.6   |  | _   |
| 13-Feb           | 21:56   | 8S522           | MFM   | Departure  | 12.3   | _  | -   |
| 14-Feb           | 08:12   | 3A061           | YFT   | Arrival  | 11.9   | -  | -   |
| 14-Feb           | 08:29   | 8S210           | MFM   | Arrival  | 11.4   | -  | -   |
| 14-Feb           | 09:58   | 3A071           | MFM   | Arrival  | 12.5   | -  | -   |
| 14-Feb           | 10:40   | 8S212           | MFM   | Arrival  | 12.3   | -  | -   |
| 14-Feb           | 10:47   | 3A081           | ZUI   | Arrival  | 12.6   | -  | -   |
| 14-Feb           | 11:07   | 8S121           | MFM   | Departure  | 12.1   | -  | -   |
| 14-Feb           | 11:29   | 3A063           | YFT   | Arrival  | 12.5   | -  | -   |
| 14-Feb           | 12:15   | 3A181           | ZUI   | Departure  | 13.5   | -  | -   |
| 14-Feb           | 12:17   | 3A168           | YFT   | Departure  | 12.3   | -  | -   |
| 14-Feb           | 12:41   | 8S215           | MFM   | Arrival  | 12.6   | -  | -   |
| 14-Feb<br>14-Feb | 12:56<br>13:25  | 3A064<br>8S123  | YFT<br>MFM  | Arrival  | 12.6<br>13.3   | -  | -   |
| 14-Feb           | 13:52   | 3A082           | ZUI   | Departure<br>Arrival   | 13.3   | -  |   |
| 14-Feb           | 14:15   | 3A182           | ZUI   | Departure  | 12.7   | -  | -   |
| 14-Feb           | 14:23   | 3A164           | YFT   | Departure  | 12.5   | -  | -   |
| 14-Feb           | 14:54   | 3A065           | YFT   | Arrival  | 13.3   | -  | -   |
| 14-Feb           | 16:21   | 3A167           | YFT   | Departure  | 13.2   | -  | -   |
| 14-Feb           | 16:37   | 3A083           | ZUI   | Arrival  | 13.4   | -  | -   |
| 14-Feb           | 16:38   | 8S218           | MFM   | Arrival  | 12.7   | -  | -   |
| 14-Feb           | 16:58   | 3A067           | YFT   | Arrival  | 12.7   | -  | -   |
| 14-Feb           | 16:59   | 3A183           | ZUI   | Departure  | 13.1   | -  | -   |
| 14-Feb           | 17:02   | 8S126           | MFM   | Departure  | 13.1   | -  | -   |
| 14-Feb           | 19:00   | 3A166           | YFT   | Departure  | 11.6   | -  | -   |
| 14-Feb           | 19:47<br>20:13  | 3A084           | ZUI<br>ZUI  | Arrival  | 12.7<br>13.2   | -  | -   |
| 14-Feb<br>14-Feb | 21:00   | 3A185<br>8S2113 | MFM   | Departure<br>Arrival   | 13.2   |  | _   |
| 14-Feb           | 21:00   | 3A169           | YFT   | Departure  | 13.5   | -  | -   |
| 14-Feb           | 21:57   | 8\$522          | MFM   | Departure  | 13.1   | -  | -   |
| 15-Feb           | 08:16   | 3A061           | YFT   | Arrival  | 12.5   | -  | -   |
| 15-Feb           | 08:25   | 8S210           | MFM   | Arrival  | 12.5   | -  | -   |
| 15-Feb           | 10:02   | 3A071           | MFM   | Arrival  | 11.5   | -  | -   |
| 15-Feb           | 10:38   | 3A081           | ZUI   | Arrival  | 13.0   | -  | -   |
| 15-Feb           | 10:41   | 8S212           | MFM   | Arrival  | 11.5   | -  | -   |
| 15-Feb           | 11:11   | 8S121           | MFM   | Departure  | 12.9   | -  | -   |
| 15-Feb           | 11:28   | 3A063           | YFT   | Arrival  | 11.4   | -  | -   |
| 15-Feb           | 12:13   | 3A168           | YFT   | Departure  | 12.3   | -  | -   |
| 15-Feb           | 12:20   | 3A181           | ZUI   | Departure  | 13.5   | -  | -   |
| 15-Feb<br>15-Feb | 12:49<br>13:07  | 8S215<br>3A064  | MFM<br>YFT  | Arrival<br>Arrival   | 13.0<br>12.8   | -  | -   |
| 15-Feb           | 13:14   | 8S123           | MFM   | Departure  | 12.8   | -  | -   |
| 15-Feb           | 13:54   | 3A082           | ZUI   | Arrival  | 12.9   | -  | -   |
| 15-Feb           | 14:24   | 3A164           | YFT   | Departure  | 13.5   | -  | -   |
| 15-Feb           | 14:36   | 3A182           | ZUI   | Departure  | 12.2   | -  | -   |
| 15-Feb           | 14:54   | 3A065           | YFT   | Arrival  | 12.4   | -  | -   |
| 15-Feb           | 16:12   | 3A167           | YFT   | Departure  | 12.2   | -  | -   |
| 15-Feb           | 16:41   | 3A083           | ZUI   | Arrival  | 12.9   | -  | -   |
| 15-Feb           | 16:44   | 8S218           | MFM   | Arrival  | 13.2   | -  | -   |
| 15-Feb           | 17:05   | 3A183           | ZUI   | Departure  | 13.3   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.      | Connecting Port<br>[ <u>MEM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|----------------|---|--|--|--|---|
| 15-Feb           | 17:07   | 3A067          | YFT   | Arrival  | 13.0   | -  | -   |
| 15-Feb           | 17:11   | 8S126          | MFM   | Departure  | 13.7   | -  | -   |
| 15-Feb           | 19:06   | 3A166          | YFT   | Departure  | 13.1   | -  | -   |
| 15-Feb           | 19:49   | 3A084          | ZUI   | Arrival  | 12.8   | -  | -   |
| 15-Feb           | 20:10   | 3A185          | ZUI   | Departure  | 13.5   | -  | -   |
| 15-Feb           | 20:57   | 8S2113         | MFM   | Arrival  | 12.3   | -  | -   |
| 15-Feb           | 21:03   | 3A169          | YFT   | Departure  | 12.5   | -  | -   |
| 15-Feb           | 21:55   | 8\$522         | MFM   | Departure  | 13.3   | -  | -   |
| 16-Feb<br>16-Feb | 08:21<br>08:22  | 3A061<br>8S210 | YFT<br>MFM  | Arrival<br>Arrival   | 11.8<br>12.9   | -  | -   |
| 16-Feb           | 09:53   | 3A071          | MFM   | Arrival  | 12.9   | -  | -   |
| 16-Feb           | 10:40   | 8S212          | MFM   | Arrival  | 12.1   | -  | _   |
| 16-Feb           | 10:43   | 3A081          | ZUI   | Arrival  | 12.6   | -  | -   |
| 16-Feb           | 11:07   | 8S121          | MFM   | Departure  | 12.5   | -  | -   |
| 16-Feb           | 11:15   | 3A063          | YFT   | Arrival  | 11.3   | -  | -   |
| 16-Feb           | 12:12   | 3A168          | YFT   | Departure  | 13.1   | -  | -   |
| 16-Feb           | 12:17   | 3A181          | ZUI   | Departure  | 13.1   | -  | -   |
| 16-Feb           | 12:47   | 8S215          | MFM   | Arrival  | 12.4   | -  | -   |
| 16-Feb           | 12:52   | 3A064          | YFT   | Arrival  | 12.2   | -  | -   |
| 16-Feb           | 13:13   | 8S123          | MFM   | Departure  | 12.5   | -  | -   |
| 16-Feb           | 13:55   | 3A082          | ZUI   | Arrival  | 13.2   | -  | -   |
| 16-Feb           | 14:16   | 3A164          | YFT   | Departure  | 12.4   | -  | -   |
| 16-Feb           | 14:17   | 3A182          | ZUI   | Departure  | 13.2   | -  | -   |
| 16-Feb           | 14:52   | 3A065          | YFT   | Arrival  | 12.3   | -  | -   |
| 16-Feb           | 16:14<br>16:34  | 3A167          | YFT<br>MFM  | Departure  | 13.0<br>12.3   | -  | -   |
| 16-Feb<br>16-Feb | 16:36   | 8S218<br>3A083 | ZUI   | Arrival<br>Arrival   | 12.3   | -  |   |
| 16-Feb           | 16:53   | 3A183          | ZUI   | Departure  | 13.6   | -  | -   |
| 16-Feb           | 16:59   | 8S126          | MFM   | Departure  | 12.9   | -  | -   |
| 16-Feb           | 17:00   | 3A067          | YFT   | Arrival  | 12.3   | -  | -   |
| 16-Feb           | 19:02   | 3A166          | YFT   | Departure  | 13.1   | -  | -   |
| 16-Feb           | 19:47   | 3A084          | ZUI   | Arrival  | 12.6   | -  | -   |
| 16-Feb           | 20:11   | 3A185          | ZUI   | Departure  | 13.4   | -  | -   |
| 16-Feb           | 20:56   | 8S2113         | MFM   | Arrival  | 12.8   | -  | -   |
| 16-Feb           | 21:01   | 3A169          | YFT   | Departure  | 12.9   | -  | -   |
| 16-Feb           | 21:54   | 8S522          | MFM   | Departure  | 12.9   | -  | -   |
| 17-Feb           | 08:13   | 3A061          | YFT   | Arrival  | 12.6   | -  | -   |
| 17-Feb           | 08:28   | 8S210          | MFM   | Arrival  | 12.7   | -  | -   |
| 17-Feb           | 10:01   | 3A071          | MFM   | Arrival  | 11.8   | -  | -   |
| 17-Feb<br>17-Feb | 10:40<br>10:47  | 8S212<br>3A081 | MFM<br>ZUI  | Arrival<br>Arrival   | 11.2<br>12.1   | -  | -   |
| 17-Feb           | 11:06   | 8S121          | MFM   | Departure  | 11.9   |  | -   |
| 17-Feb           | 11:13   | 3A063          | YFT   | Arrival  | 13.0   | -  | -   |
| 17-Feb           | 12:08   | 3A181          | ZUI   | Departure  | 13.0   | -  | -   |
| 17-Feb           | 12:16   | 3A168          | YFT   | Departure  | 13.6   | -  | -   |
| 17-Feb           | 12:49   | 8S215          | MFM   | Arrival  | 11.5   | -  | -   |
| 17-Feb           | 12:57   | 3A064          | YFT   | Arrival  | 12.9   | -  | -   |
| 17-Feb           | 13:15   | 8S123          | MFM   | Departure  | 10.9   | -  | -   |
| 17-Feb           | 13:43   | 3A082          | ZUI   | Arrival  | 12.4   | -  | -   |
| 17-Feb           | 14:12   | 3A182          | ZUI   | Departure  | 13.3   | -  | -   |
| 17-Feb           | 14:15   | 3A164          | YFT   | Departure  | 13.4   | -  | -   |
| 17-Feb           | 14:50   | 3A065          | YFT   | Arrival  | 13.3   | -  | -   |
| 17-Feb           | 16:40   | 3A167          | YFT   | Departure  | 13.4<br>13.1   | -  | -   |
| 17-Feb<br>17-Feb | 16:45<br>16:47  | 3A083<br>8S218 | ZUI<br>MFM  | Arrival<br>Arrival   | 12.2   | -  | -   |
| 17-Feb<br>17-Feb | 16:59   | 3A067          | YFT   | Arrival  | 12.2   |  | -   |
| 17-Feb<br>17-Feb | 17:10   | 3A183          | ZUI   | Departure  | 13.2   |  | -   |
| 17-Feb           | 17:10   | 8S126          | MFM   | Departure  | 12.4   | _  | -   |
| 17-Feb           | 19:07   | 3A166          | YFT   | Departure  | 12.4   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.       | Connecting Port<br>[ <u>MEM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|-----------------|---|--|--|--|---|
| 17-Feb           | 19:45   | 3A084           | ZUI   | Arrival  | 12.9   | -  | -   |
| 17-Feb           | 20:13   | 3A185           | ZUI   | Departure  | 12.9   | -  | -   |
| 17-Feb           | 20:52   | 8S2113          | MFM   | Arrival  | 11.8   | -  | -   |
| 17-Feb           | 21:02   | 3A169           | YFT   | Departure  | 12.1   | -  | -   |
| 17-Feb           | 22:00   | 8S522           | MFM   | Departure  | 11.9   | -  | -   |
| 18-Feb           | 08:21   | 3A061           | YFT   | Arrival  | 13.0   | -  | -   |
| 18-Feb           | 08:27   | 8S210           | MFM   | Arrival  | 11.8   | -  | -   |
| 18-Feb           | 09:54   | 3A071           | MFM   | Arrival  | 11.9   | -  | -   |
| 18-Feb           | 10:30   | 8S212           | MFM   | Arrival  | 12.3   | -  | -   |
| 18-Feb           | 10:52   | 3A081           | ZUI   | Arrival  | 12.6   | -  | -   |
| 18-Feb           | 11:04   | 8S121           | MFM   | Departure  | 12.3   | -  | -   |
| 18-Feb<br>18-Feb | 11:17<br>12:12  | 3A063<br>3A168  | YFT<br>YFT  | Arrival  | 12.7<br>12.9   | -  | -   |
| 18-Feb           | 12:12   | 3A180           | ZUI   | Departure<br>Departure   | 13.9   |  |   |
| 18-Feb           | 12:46   | 8S215           | MFM   | Arrival  | 12.9   | -  | -   |
| 18-Feb           | 12:40   | 3A064           | YFT   | Arrival  | 12.9   |  | -   |
| 18-Feb           | 13:14   | 8S123           | MFM   | Departure  | 13.3   | _  | -   |
| 18-Feb           | 13:49   | 3A082           | ZUI   | Arrival  | 12.7   | -  | -   |
| 18-Feb           | 14:22   | 3A182           | ZUI   | Departure  | 13.4   | -  | -   |
| 18-Feb           | 14:23   | 3A164           | YFT   | Departure  | 13.9   | -  | -   |
| 18-Feb           | 14:50   | 3A065           | YFT   | Arrival  | 12.9   | -  | -   |
| 18-Feb           | 16:22   | 3A167           | YFT   | Departure  | 13.3   | -  | -   |
| 18-Feb           | 16:31   | 8S218           | MFM   | Arrival  | 13.2   | -  | -   |
| 18-Feb           | 16:36   | 3A083           | ZUI   | Arrival  | 13.1   | -  | -   |
| 18-Feb           | 16:52   | 3A067           | YFT   | Arrival  | 13.2   | -  | -   |
| 18-Feb           | 16:59   | 3A183           | ZUI   | Departure  | 13.7   | -  | -   |
| 18-Feb           | 17:12   | 8S126           | MFM   | Departure  | 13.1   | -  | -   |
| 18-Feb           | 19:03   | 3A166           | YFT   | Departure  | 11.9   | -  | -   |
| 18-Feb           | 19:45   | 3A084           | ZUI   | Arrival  | 12.9   | -  | -   |
| 18-Feb           | 20:21   | 3A185           | ZUI   | Departure  | 13.0   | -  | -   |
| 18-Feb           | 20:50   | 8S2113          | MFM   | Arrival  | 13.2   | -  | -   |
| 18-Feb           | 20:59   | 3A169           | YFT   | Departure  | 12.2   | -  | -   |
| 18-Feb           | 21:52   | 8S522           | MFM   | Departure  | 13.4   | -  | -   |
| 19-Feb           | 08:12   | 3A061           | YFT   | Arrival  | 12.5   | -  | -   |
| 19-Feb           | 08:27   | 8S210           | MFM   | Arrival  | 11.4   | -  | -   |
| 19-Feb<br>19-Feb | 09:57<br>10:34  | 3A071<br>8S212  | MFM<br>MFM  | Arrival<br>Arrival   | 11.6<br>12.7   |  | _   |
| 19-Feb           | 10:45   | 3A081           | ZUI   | Arrival  | 12.7   |  | -   |
| 19-Feb           | 11:01   | 8S121           | MFM   | Departure  | 12.9   | -  | -   |
| 19-Feb           | 11:18   | 3A063           | YFT   | Arrival  | 12.9   | -  | -   |
| 19-Feb           | 12:13   | 3A168           | YFT   | Departure  | 12.4   | -  | -   |
| 19-Feb           | 12:16   | 3A181           | ZUI   | Departure  | 13.3   | -  | -   |
| 19-Feb           | 12:48   | 8S215           | MFM   | Arrival  | 12.3   | -  | -   |
| 19-Feb           | 12:53   | 3A064           | YFT   | Arrival  | 12.2   | -  | -   |
| 19-Feb           | 13:17   | 8S123           | MFM   | Departure  | 12.7   | -  | -   |
| 19-Feb           | 13:46   | 3A082           | ZUI   | Arrival  | 12.6   | -  | -   |
| 19-Feb           | 14:16   | 3A164           | YFT   | Departure  | 12.7   | -  | -   |
| 19-Feb           | 14:24   | 3A182           | ZUI   | Departure  | 13.4   | -  | -   |
| 19-Feb           | 15:00   | 3A065           | YFT   | Arrival  | 12.7   | -  | -   |
| 19-Feb           | 16:15   | 3A167           | YFT   | Departure  | 12.7   | -  | -   |
| 19-Feb           | 16:38   | 8S218           | MFM   | Arrival  | 12.8   | -  | -   |
| 19-Feb           | 16:47   | 3A083           | ZUI   | Arrival  | 13.5   | -  | -   |
| 19-Feb           | 16:55   | 3A067           | YFT   | Arrival  | 12.9   | -  | -   |
| 19-Feb           | 17:02   | 8S126           | MFM   | Departure  | 13.3   | -  | -   |
| 19-Feb           | 17:07   | 3A183           | ZUI   | Departure  | 13.2   | -  | -   |
| 19-Feb           | 19:05   | 3A166           | YFT   | Departure  | 12.5   | -  | -   |
| 19-Feb           | 19:51   | 3A084           | ZUI   | Arrival  | 13.3   | -  | -   |
| 19-Feb           | 20:10<br>20:55  | 3A185<br>8S2113 | ZUI<br>MFM  | Departure<br>Arrival   | 13.1<br>12.1   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.      | Connecting Port<br>[ <u>MEM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|----------------|---|--|--|--|---|
| 19-Feb           | 20:56   | 3A169          | YFT   | Departure  | 12.8   | -  | -   |
| 19-Feb           | 21:58   | 8S522          | MFM   | Departure  | 12.8   | -  | -   |
| 20-Feb           | 08:01   | 3A061          | YFT   | Arrival  | 12.9   | ≤5   | <1  |
| 20-Feb           | 08:29   | 8S210          | MFM   | Arrival  | 12.5   | -  | -   |
| 20-Feb           | 09:56   | 3A071          | MFM   | Arrival  | 13.3   | -  | -   |
| 20-Feb           | 10:41   | 3A081          | ZUI   | Arrival  | 12.9   | -  | -   |
| 20-Feb           | 10:42   | 8S212          | MFM   | Arrival  | 10.6   | -  | -   |
| 20-Feb           | 11:14   | 8S121          | MFM   | Departure  | 11.3   | >15  | <1  |
| 20-Feb           | 11:20   | 3A063          | YFT   | Arrival  | 12.4   | -  | -   |
| 20-Feb           | 12:16   | 3A181          | ZUI   | Departure  | 13.3   | -  | -   |
| 20-Feb           | 12:21   | 3A168          | YFT   | Departure  | 12.0   | -  | -   |
| 20-Feb<br>20-Feb | 12:43<br>13:08  | 8S215<br>3A064 | MFM<br>YFT  | Arrival<br>Arrival   | 12.5<br>12.3   | -  | -   |
| 20-Feb<br>20-Feb | 13:18   | 8S123          | MFM   | Departure  | 12.3   |  |   |
| 20-Feb<br>20-Feb | 13:46   | 3A082          | ZUI   | Arrival  | 12.1   |  |   |
| 20-Feb<br>20-Feb | 14:14   | 3A082<br>3A182 | ZUI   | Departure  | 12.3   | -  | -   |
| 20-Feb           | 14:20   | 3A164          | YFT   | Departure  | 12.3   | -  | -   |
| 20-Feb           | 14:59   | 3A065          | YFT   | Arrival  | 12.6   | -  | -   |
| 20-Feb           | 16:14   | 3A083          | ZUI   | Arrival  | 13.1   | ≤5   | <1  |
| 20-Feb           | 16:33   | 3A167          | YFT   | Departure  | 11.7   | -  | -   |
| 20-Feb           | 16:38   | 8S218          | MFM   | Arrival  | 12.7   | -  | -   |
| 20-Feb           | 16:56   | 3A067          | YFT   | Arrival  | 13.3   | -  | -   |
| 20-Feb           | 17:03   | 8S126          | MFM   | Departure  | 13.3   | -  | -   |
| 20-Feb           | 17:09   | 3A183          | ZUI   | Departure  | 12.9   | -  | -   |
| 20-Feb           | 19:01   | 3A166          | YFT   | Departure  | 12.7   | -  | -   |
| 20-Feb           | 19:44   | 3A084          | ZUI   | Arrival  | 12.5   | -  | -   |
| 20-Feb           | 20:05   | 3A185          | ZUI   | Departure  | 13.2   | -  | -   |
| 20-Feb           | 20:59   | 8S2113         | MFM   | Arrival  | 12.5   | -  | -   |
| 20-Feb           | 21:00   | 3A169          | YFT   | Departure  | 12.1   | -  | -   |
| 20-Feb           | 21:55   | 8S522          | MFM   | Departure  | 11.9   | -  | -   |
| 21-Feb           | 08:17   | 3A061          | YFT   | Arrival  | 12.3   | -  | -   |
| 21-Feb           | 08:27   | 8S210          | MFM   | Arrival  | 12.0   | -  | -   |
| 21-Feb           | 09:53<br>10:39  | 3A071          | MFM<br>MFM  | Arrival  | 13.0<br>11.8   | -  | -   |
| 21-Feb<br>21-Feb | 10:45   | 8S212<br>3A081 | ZUI   | Arrival<br>Arrival   | 13.1   | -  | -   |
| 21-Feb<br>21-Feb | 11:04   | 8S121          | MFM   | Departure  | 13.1   | -  | -   |
| 21-Feb<br>21-Feb | 11:21   | 3A063          | YFT   | Arrival  | 12.4   |  | -   |
| 21-Feb           | 12:12   | 3A181          | ZUI   | Departure  | 13.4   | _  | -   |
| 21-Feb           | 12:12   | 3A168          | YFT   | Departure  | 12.4   | _  | -   |
| 21-Feb           | 12:49   | 8S215          | MFM   | Arrival  | 12.7   | -  | -   |
| 21-Feb           | 13:04   | 3A064          | YFT   | Arrival  | 12.3   | -  | -   |
| 21-Feb           | 13:20   | 8S123          | MFM   | Departure  | 13.0   | -  | -   |
| 21-Feb           | 13:58   | 3A082          | ZUI   | Arrival  | 11.2   |  | -   |
| 21-Feb           | 14:21   | 3A164          | YFT   | Departure  | 12.4   | -  | -   |
| 21-Feb           | 14:45   | 3A182          | ZUI   | Departure  | 13.2   | -  | -   |
| 21-Feb           | 14:59   | 3A065          | YFT   | Arrival  | 11.5   | -  | -   |
| 21-Feb           | 16:21   | 3A167          | YFT   | Departure  | 12.7   | -  | -   |
| 21-Feb           | 16:43   | 3A083          | ZUI   | Arrival  | 12.8   | -  | -   |
| 21-Feb           | 16:49   | 8S218          | MFM   | Arrival  | 12.9   | -  | -   |
| 21-Feb           | 16:55   | 3A067          | YFT   | Arrival  | 13.3   | -  | -   |
| 21-Feb           | 17:08   | 8S126          | MFM   | Departure  | 13.4   | -  | -   |
| 21-Feb           | 17:13   | 3A183          | ZUI   | Departure  | 13.5   | -  | -   |
| 21-Feb           | 18:58   | 3A166          | YFT   | Departure  | 12.0   | -  | -   |
| 21-Feb           | 19:48   | 3A084          | ZUI   | Arrival  | 12.7   | -  | -   |
| 21-Feb           | 20:04   | 3A185          | ZUI   | Departure  | 13.5   | -  | -   |
| 21-Feb           | 21:00   | 3A169          | YFT   | Departure  | 12.1   | -  | -   |
| 21-Feb           | 21:04   | 8S2113         | MFM   | Arrival  | 11.9   | -  | -   |
| 21-Feb<br>22-Feb | 21:56<br>08:21  | 8S522<br>3A061 | MFM<br>YFT  | Departure<br>Arrival   | 11.8<br>12.8   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.      | Connecting Port<br>[ <u>MFM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|----------------|---|--|--|--|---|
| 22-Feb           | 08:22   | 8S210          | MFM   | Arrival  | 12.9   | -  | -   |
| 22-Feb           | 09:54   | 3A071          | MFM   | Arrival  | 12.7   | -  | -   |
| 22-Feb           | 10:38   | 8S212          | MFM   | Arrival  | 11.6   | -  | -   |
| 22-Feb           | 10:46   | 3A081          | ZUI   | Arrival  | 12.5   | -  | -   |
| 22-Feb           | 11:04   | 8S121          | MFM   | Departure  | 11.3   | -  | -   |
| 22-Feb           | 11:27   | 3A063          | YFT   | Arrival  | 12.3   | -  | -   |
| 22-Feb           | 12:16   | 3A181          | ZUI   | Departure  | 13.0   | -  | -   |
| 22-Feb           | 12:18   | 3A168          | YFT   | Departure  | 12.6   | -  | -   |
| 22-Feb           | 12:26   | 8S215          | MFM   | Arrival  | 13.6   | >5 and ≤15   | <1  |
| 22-Feb           | 13:09   | 3A064          | YFT   | Arrival  | 13.1   | -  | -   |
| 22-Feb           | 13:20   | 8S123          | MFM   | Departure  | 12.0   | -  | -   |
| 22-Feb<br>22-Feb | 14:02<br>14:16  | 3A082<br>3A182 | ZUI<br>ZUI  | Arrival<br>Departure   | 13.1<br>12.9   | -  | -   |
| 22-Feb<br>22-Feb | 14:18   | 3A164          | YFT   | Departure  | 13.0   |  |   |
| 22-Feb<br>22-Feb | 14:55   | 3A065          | YFT   | Arrival  | 11.4   |  | -   |
| 22-Feb<br>22-Feb | 16:24   | 3A167          | YFT   | Departure  | 12.7   | -  | -   |
| 22-Feb           | 16:33   | 8S218          | MFM   | Arrival  | 11.0   | _  | -   |
| 22-Feb           | 16:35   | 3A083          | ZUI   | Arrival  | 12.9   | -  | -   |
| 22-Feb           | 17:02   | 8S126          | MFM   | Departure  | 13.1   | -  | -   |
| 22-Feb           | 17:06   | 3A067          | YFT   | Arrival  | 12.3   | -  | -   |
| 22-Feb           | 17:08   | 3A183          | ZUI   | Departure  | 13.4   | -  | -   |
| 22-Feb           | 19:17   | 3A166          | YFT   | Departure  | 10.6   | -  | -   |
| 22-Feb           | 19:50   | 3A084          | ZUI   | Arrival  | 12.8   | -  | -   |
| 22-Feb           | 20:07   | 3A185          | ZUI   | Departure  | 13.7   | -  | -   |
| 22-Feb           | 20:56   | 8S2113         | MFM   | Arrival  | 11.6   | -  | -   |
| 22-Feb           | 21:20   | 3A169          | YFT   | Departure  | 13.4   | ≤5   | <1  |
| 23-Feb           | 08:25   | 3A061          | YFT   | Arrival  | 12.0   | -  | -   |
| 23-Feb           | 09:04   | 8S210          | MFM   | Arrival  | 12.6   | -  | -   |
| 23-Feb           | 10:02   | 3A071          | MFM   | Arrival  | 12.4   | -  | -   |
| 23-Feb           | 10:40   | 8S212          | MFM   | Arrival  | 11.4   | -  | -   |
| 23-Feb           | 10:41   | 3A081          | ZUI   | Arrival  | 12.0   | -  | -   |
| 23-Feb           | 11:11   | 8S121          | MFM<br>YFT  | Departure  | 12.6   | -  | -   |
| 23-Feb<br>23-Feb | 11:34<br>12:13  | 3A063<br>3A181 | ZUI   | Arrival<br>Departure   | 11.4<br>12.9   | -  | -   |
| 23-Feb<br>23-Feb | 12:13   | 3A168          | YFT   | Departure  | 12.9   |  | -   |
| 23-Feb           | 12:54   | 8S215          | MFM   | Arrival  | 11.2   | -  | -   |
| 23-Feb           | 13:05   | 3A064          | YFT   | Arrival  | 12.0   | _  | -   |
| 23-Feb           | 13:21   | 8S123          | MFM   | Departure  | 11.4   | -  | -   |
| 23-Feb           | 14:00   | 3A082          | ZUI   | Arrival  | 12.9   | -  | -   |
| 23-Feb           | 14:17   | 3A182          | ZUI   | Departure  | 12.7   | -  | -   |
| 23-Feb           | 14:19   | 3A164          | YFT   | Departure  | 12.3   | -  | -   |
| 23-Feb           | 15:03   | 3A065          | YFT   | Arrival  | 11.7   | -  | -   |
| 23-Feb           | 16:22   | 3A167          | YFT   | Departure  | 11.8   | -  | -   |
| 23-Feb           | 16:45   | 3A083          | ZUI   | Arrival  | 12.8   | -  | -   |
| 23-Feb           | 16:46   | 8S218          | MFM   | Arrival  | 11.2   | -  | -   |
| 23-Feb           | 17:00   | 3A067          | YFT   | Arrival  | 12.2   | -  | -   |
| 23-Feb           | 17:04   | 3A183          | ZUI   | Departure  | 12.6   | -  | -   |
| 23-Feb           | 17:09   | 8S126          | MFM   | Departure  | 11.8   | -  | -   |
| 23-Feb           | 19:01   | 3A166          | YFT   | Departure  | 12.8   | -  | -   |
| 23-Feb           | 19:58   | 3A084          | ZUI   | Arrival  | 12.9   | -  | -   |
| 23-Feb           | 20:08   | 3A185          | ZUI   | Departure  | 12.6   | -  | -   |
| 23-Feb           | 20:52   | 8S2113         | MFM   | Arrival  | 12.5   | -  | -   |
| 23-Feb           | 21:03   | 3A169          | YFT   | Departure  | 12.5   | -  | -   |
| 23-Feb           | 21:56   | 8S522<br>3A061 |   | Departure  | 11.6   | -  | -   |
| 24-Feb<br>24-Feb | 08:16<br>08:37  | 3A061<br>8S210 | YFT<br>MFM  | Arrival<br>Arrival   | 11.6<br>12.4   | -  | -   |
| 24-Feb<br>24-Feb | 08:37   | 3A071          | MFM   | Arrival  | 12.4   | -  | -   |
| 24-Feb<br>24-Feb | 10:39   | 8S212          | MFM   | Arrival  | 11.9   | -  | -   |
| 24-Feb<br>24-Feb | 10:49   | 3A081          | ZUI   | Arrival  | 12.2   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.      | Connecting Port<br>[ <u>MEM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|----------------|---|--|--|--|---|
| 24-Feb           | 11:09   | 8S121          | MFM   | Departure  | 12.3   | -  | -   |
| 24-Feb           | 11:22   | 3A063          | YFT   | Arrival  | 11.8   | -  | -   |
| 24-Feb           | 12:20   | 3A181          | ZUI   | Departure  | 13.8   | -  | -   |
| 24-Feb           | 12:27   | 3A168          | YFT   | Departure  | 11.4   | -  | -   |
| 24-Feb           | 12:53   | 8S215          | MFM   | Arrival  | 11.4   | -  | -   |
| 24-Feb           | 13:00   | 3A064          | YFT   | Arrival  | 11.9   | -  | -   |
| 24-Feb           | 13:18   | 8S123          | MFM   | Departure  | 10.3   | -  | -   |
| 24-Feb           | 13:48   | 3A082          | ZUI   | Arrival  | 13.5   | -  | -   |
| 24-Feb           | 14:16   | 3A164          | YFT   | Departure  | 11.0   | -  | -   |
| 24-Feb<br>24-Feb | 14:16<br>15:05  | 3A182<br>3A065 | ZUI<br>YFT  | Departure<br>Arrival   | 12.1<br>11.7   | -  | -   |
| 24-Feb<br>24-Feb | 16:30   | 3A065<br>3A167 | YFT   | Departure  | 12.0   |  | -   |
| 24-Feb           | 16:43   | 3A083          | ZUI   | Arrival  | 11.7   | _  | -   |
| 24-Feb           | 16:46   | 8S218          | MFM   | Arrival  | 10.1   | _  | -   |
| 24-Feb           | 17:03   | 3A067          | YFT   | Arrival  | 11.3   | -  | -   |
| 24-Feb           | 17:03   | 3A183          | ZUI   | Departure  | 13.0   | -  | -   |
| 24-Feb           | 17:08   | 8S126          | MFM   | Departure  | 10.4   | -  | -   |
| 24-Feb           | 18:56   | 3A166          | YFT   | Departure  | 13.1   | -  | -   |
| 24-Feb           | 19:48   | 3A084          | ZUI   | Arrival  | 12.6   | -  | -   |
| 24-Feb           | 20:07   | 3A185          | ZUI   | Departure  | 12.8   | -  | -   |
| 24-Feb           | 21:02   | 8S2113         | MFM   | Arrival  | 11.9   | -  | -   |
| 24-Feb           | 21:03   | 3A169          | YFT   | Departure  | 12.5   | -  | -   |
| 24-Feb           | 21:58   | 8S522          | MFM   | Departure  | 12.2   | -  | -   |
| 25-Feb           | 08:22   | 3A061          | YFT   | Arrival  | 12.2   | -  | -   |
| 25-Feb           | 08:43   | 8S210          | MFM   | Arrival  | 10.4   | -  | -   |
| 25-Feb           | 09:54   | 3A071          | MFM   | Arrival  | 11.1   | -  | -   |
| 25-Feb           | 10:34   | 8S212          | MFM   | Arrival  | 11.7   | -  | -   |
| 25-Feb           | 10:51   | 3A081          | ZUI<br>MFM  | Arrival  | 12.0   | -  | -   |
| 25-Feb<br>25-Feb | 11:06<br>11:30  | 8S121<br>3A063 | YFT   | Departure<br>Arrival   | 12.6<br>12.5   | -  | -   |
| 25-Feb<br>25-Feb | 12:13   | 3A168          | YFT   | Departure  | 12.3   |  | -   |
| 25-Feb           | 12:32   | 3A181          | ZUI   | Departure  | 13.5   | _  | _   |
| 25-Feb           | 12:52   | 8S215          | MFM   | Arrival  | 12.7   | -  | -   |
| 25-Feb           | 12:57   | 3A064          | YFT   | Arrival  | 12.9   | -  | -   |
| 25-Feb           | 13:16   | 8S123          | MFM   | Departure  | 12.5   | -  | -   |
| 25-Feb           | 13:39   | 3A082          | ZUI   | Arrival  | 11.6   | -  | -   |
| 25-Feb           | 14:18   | 3A182          | ZUI   | Departure  | 11.8   | -  | -   |
| 25-Feb           | 14:21   | 3A164          | YFT   | Departure  | 13.0   | -  | -   |
| 25-Feb           | 14:43   | 3A065          | YFT   | Arrival  | 12.0   | -  | -   |
| 25-Feb           | 16:17   | 3A167          | YFT   | Departure  | 12.0   | -  | -   |
| 25-Feb           | 16:35   | 3A083          | ZUI   | Arrival  | 12.7   | -  | -   |
| 25-Feb           | 16:40   | 8S218          | MFM   | Arrival  | 12.4   | -  | -   |
| 25-Feb           | 16:57   | 3A183          | ZUI   | Departure  | 12.4   | -  | -   |
| 25-Feb           | 17:02   | 3A067          | YFT   | Arrival  | 12.0   | -  | -   |
| 25-Feb<br>25-Feb | 17:02<br>18:58  | 8S126<br>3A166 | MFM<br>YFT  | Departure  | 13.0<br>12.3   | -  | -   |
| 25-Feb<br>25-Feb | 19:46   | 3A166<br>3A084 | ZUI   | Departure<br>Arrival   | 12.3   | _  | -   |
| 25-Feb<br>25-Feb | 20:03   | 3A185          | ZUI   | Departure  | 13.3   | _  | -   |
| 25-Feb           | 20:54   | 8S2113         | MFM   | Arrival  | 12.4   | -  | -   |
| 25-Feb           | 21:14   | 3A169          | YFT   | Departure  | 13.3   | >5 and ≤15   | <1  |
| 25-Feb           | 21:55   | 8S522          | MFM   | Departure  | 12.2   | -  | -   |
| 26-Feb           | 08:19   | 3A061          | YFT   | Arrival  | 12.4   | -  | -   |
| 26-Feb           | 08:22   | 8S210          | MFM   | Arrival  | 10.5   |  | -   |
| 26-Feb           | 09:59   | 3A071          | MFM   | Arrival  | 11.8   | -  | -   |
| 26-Feb           | 10:39   | 8S212          | MFM   | Arrival  | 11.6   | -  | -   |
| 26-Feb           | 10:51   | 3A081          | ZUI   | Arrival  | 13.0   | -  | -   |
| 26-Feb           | 11:04   | 8S121          | MFM   | Departure  | 11.8   | -  | -   |
| 26-Feb           | 11:23   | 3A063          | YFT   | Arrival  | 10.8   | -  | -   |

| Date             | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No.       | Connecting Port<br>[ <u>MEM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|------------------|---|-----------------|---|--|--|--|---|
| 26-Feb           | 12:23   | 3A181           | ZUI   | Departure  | 12.4   | -  | -   |
| 26-Feb           | 12:52   | 8S215           | MFM   | Arrival  | 12.7   | -  | -   |
| 26-Feb           | 13:02   | 3A064           | YFT   | Arrival  | 12.9   | -  | -   |
| 26-Feb           | 13:18   | 8S123           | MFM   | Departure  | 12.7   | -  | -   |
| 26-Feb           | 13:43   | 3A082           | ZUI   | Arrival  | 13.4   | -  | -   |
| 26-Feb           | 14:16   | 3A182           | ZUI   | Departure  | 11.8   | -  | -   |
| 26-Feb           | 14:21   | 3A164           | YFT   | Departure  | 12.5   | -  | -   |
| 26-Feb           | 15:01   | 3A065           | YFT   | Arrival  | 12.0   | -  | -   |
| 26-Feb           | 16:19   | 3A167           | YFT   | Departure  | 10.9   | -  | -   |
| 26-Feb<br>26-Feb | 16:38<br>17:04  | 8S218<br>3A083  | MFM<br>ZUI  | Arrival<br>Arrival   | 12.7<br>13.3   | -  | -   |
| 26-Feb<br>26-Feb | 17:04   | 3A065           | YFT   | Arrival  | 11.8   |  | -   |
| 26-Feb           | 17:14   | 8S126           | MFM   | Departure  | 13.1   | _  | -   |
| 26-Feb           | 17:14   | 3A183           | ZUI   | Departure  | 13.6   | _  | -   |
| 26-Feb           | 19:15   | 3A166           | YFT   | Departure  | 12.2   | -  | -   |
| 26-Feb           | 19:47   | 3A084           | ZUI   | Arrival  | 12.8   | -  | -   |
| 26-Feb           | 20:20   | 3A185           | ZUI   | Departure  | 13.9   | -  | -   |
| 26-Feb           | 20:50   | 8S2113          | MFM   | Arrival  | 12.5   | -  | -   |
| 26-Feb           | 21:20   | 3A169           | YFT   | Departure  | 11.7   | -  | -   |
| 26-Feb           | 21:58   | 8S522           | MFM   | Departure  | 13.3   | -  | -   |
| 27-Feb           | 08:23   | 3A061           | YFT   | Arrival  | 11.5   | -  | -   |
| 27-Feb           | 08:29   | 8S210           | MFM   | Arrival  | 12.1   | -  | -   |
| 27-Feb           | 09:54   | 3A071           | MFM   | Arrival  | 13.1   | -  | -   |
| 27-Feb           | 10:44   | 8S212           | MFM   | Arrival  | 12.5   | -  | -   |
| 27-Feb           | 10:46   | 3A081           | ZUI   | Arrival  | 12.6   | -  | -   |
| 27-Feb           | 11:20   | 3A063           | YFT   | Arrival  | 12.2<br>13.0   | -  | - <1  |
| 27-Feb           | 11:21   | 8S121           | MFM   | Departure  |  | <u>≤5</u>  | -   |
| 27-Feb<br>27-Feb | 12:16<br>12:17  | 3A181<br>3A168  | ZUI<br>YFT  | Departure<br>Departure   | 13.5<br>12.9   | -  |   |
| 27-Feb<br>27-Feb | 12:35   | 8S215           | MFM   | Arrival  | 12.9   | -  | -   |
| 27-Feb<br>27-Feb | 13:05   | 3A064           | YFT   | Arrival  | 12.0   |  | -   |
| 27-Feb           | 13:11   | 8S123           | MFM   | Departure  | 12.4   | _  | -   |
| 27-Feb           | 13:46   | 3A082           | ZUI   | Arrival  | 12.4   | -  | -   |
| 27-Feb           | 14:19   | 3A164           | YFT   | Departure  | 12.0   | -  | -   |
| 27-Feb           | 14:25   | 3A182           | ZUI   | Departure  | 13.3   | -  | -   |
| 27-Feb           | 14:59   | 3A065           | YFT   | Arrival  | 12.5   | -  | -   |
| 27-Feb           | 16:18   | 3A167           | YFT   | Departure  | 12.7   | -  | -   |
| 27-Feb           | 16:38   | 3A083           | ZUI   | Arrival  | 12.6   | -  | -   |
| 27-Feb           | 16:38   | 8S218           | MFM   | Arrival  | 12.9   | -  | -   |
| 27-Feb           | 16:59   | 3A183           | ZUI   | Departure  | 13.0   | -  | -   |
| 27-Feb           | 17:00   | 8S126           | MFM   | Departure  | 13.0   | -  | -   |
| 27-Feb           | 17:04   | 3A067           | YFT   | Arrival  | 12.2   | -  | -   |
| 27-Feb           | 19:00   | 3A166           | YFT   | Departure  | 12.7   | -  | -   |
| 27-Feb           | 19:41   | 3A084           | ZUI   | Arrival  | 12.5<br>13.3   | -  | -   |
| 27-Feb<br>27-Feb | 20:07<br>20:52  | 3A185<br>8S2113 | ZUI<br>MFM  | Departure<br>Arrival   | 13.3   | -  | -   |
| 27-Feb<br>27-Feb | 20.52   | 3A169           | YFT   | Departure  | 12.0   | _  | -   |
| 27-Feb           | 21:52   | 8\$522          | MFM   | Departure  | 13.5   | _  | -   |
| 28-Feb           | 08:13   | 8S210           | MFM   | Arrival  | 13.2   | -  | -   |
| 28-Feb           | 08:16   | 3A061           | YFT   | Arrival  | 12.3   | -  | -   |
| 28-Feb           | 09:53   | 3A071           | MFM   | Arrival  | 11.5   | -  | -   |
| 28-Feb           | 10:36   | 8S212           | MFM   | Arrival  | 12.3   | -  | -   |
| 28-Feb           | 10:42   | 3A081           | ZUI   | Arrival  | 13.6   | -  | -   |
| 28-Feb           | 11:03   | 8S121           | MFM   | Departure  | 12.3   | -  | -   |
| 28-Feb           | 11:23   | 3A063           | YFT   | Arrival  | 12.7   | -  | -   |
| 28-Feb           | 12:11   | 3A181           | ZUI   | Departure  | 13.1   | -  | -   |
| 28-Feb           | 12:14   | 3A168           | YFT   | Departure  | 12.7   | -  | -   |
| 28-Feb           | 12:56   | 8S215           | MFM   | Arrival  | 12.6   | -  | -   |

| Date   | Time [Arrival at /<br>Departure from HKIA<br>SkyPier] | Ferry No. | Connecting Port<br>[ <u>MFM</u> - Macao<br>(Maritime Ferry<br>Terminal) <u>YFT</u> –<br>Macao (Taipa) <u>ZUI</u> -<br>Zhuhai Jiuzhou] | Travel Direction<br>[Arrival at /<br>Departure from<br>HKIA SkyPier] | Average Speed<br>within Speed<br>Control Zone<br>(knots) | Extent of<br>Instantaneous<br>Speeding by<br>SkyPier HSFs<br>across SCZ<br>(knots) | Duration of the<br>Instantaneous<br>Speeding<br>(min) |
|--------|---|-----------|---|--|--|--|---|
| 28-Feb | 13:29   | 8S123     | MFM   | Departure  | 12.5   | -  | -   |
| 28-Feb | 14:00   | 3A082     | ZUI   | Arrival  | 11.0   | -  | -   |
| 28-Feb | 14:16   | 3A182     | ZUI   | Departure  | 12.8   | -  | -   |
| 28-Feb | 14:18   | 3A164     | YFT   | Departure  | 12.7   | -  | -   |
| 28-Feb | 15:00   | 3A065     | YFT   | Arrival  | 12.5   | -  | -   |
| 28-Feb | 16:17   | 3A167     | YFT   | Departure  | 12.6   | -  | -   |
| 28-Feb | 16:38   | 3A083     | ZUI   | Arrival  | 13.8   | -  | -   |
| 28-Feb | 16:40   | 8S218     | MFM   | Arrival  | 12.2   | -  | -   |
| 28-Feb | 17:04   | 3A067     | YFT   | Arrival  | 12.0   | -  | -   |
| 28-Feb | 17:04   | 3A183     | ZUI   | Departure  | 13.1   | -  | -   |
| 28-Feb | 17:04   | 8S126     | MFM   | Departure  | 12.9   | -  | -   |
| 28-Feb | 18:54   | 3A166     | YFT   | Departure  | 12.9   | -  | -   |
| 28-Feb | 19:45   | 3A084     | ZUI   | Arrival  | 13.4   | -  | -   |
| 28-Feb | 20:08   | 3A185     | ZUI   | Departure  | 13.3   | -  | -   |
| 28-Feb | 20:51   | 8S2113    | MFM   | Arrival  | 12.4   | -  | -   |
| 28-Feb | 21:01   | 3A169     | YFT   | Departure  | 13.5   | -  | -   |
| 28-Feb | 21:58   | 8S522     | MFM   | Departure  | 13.3   | -  | -   |

## Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in February 2017, 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 13 HSF movements. The duration of instantaneous speeding of all the movements were less than one minute. After investigation, the AIS data and ferry operators' responses showed the cases were due to local strong water currents / giving way to other vessels, which are public safety / emergency reasons. The captain had reduced speed and maintained the speed at less than 15 knots after the public safety / emergency incidents.

Three HSF movements with insufficient transmission of AIS data received in February 2017. 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.

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