

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

Construction Phase Monthly EM&A
Report No. 82
(For October 2022)

November 2022

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This Monthly EM&A Report No. 82 has been reviewed and certified by

the Environmental Team Leader (ETL) in accordance with

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

Certified by:

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

Terence Kong
Environmental Team Leader (ETL)
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Date

14 November 2022



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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, Principal Manager, Environmental Compliance

14 November 2022

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 82 (October 2022)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 82 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 November 2022.

We would like to inform you that we have no adverse comment and 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 the undersigned at 3922 9141.

Yours faithfully,
AECOM Asia Co. Ltd.

Roy Man
Independent Environmental Checker

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Abbreviations

3RS	Three-Runway System
AAHK	Airport Authority Hong Kong
AECOM	AECOM Asia Company Limited
AFCD	Agriculture, Fisheries and Conservation Department
AIS	Automatic Information System
ANI	Encounter Rate of Number of Dolphins
APM	Automated People Mover
AW	Airport West
BHS	Baggage Handling System
C&D	Construction and Demolition
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
CTCC	Construction Traffic Control Centre
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
EPSS	Emergency Power Supply Systems
ET	Environmental Team
FCZ	Fish Culture Zone
HKBCF	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities
HKIA	Hong Kong International Airport
HOKLAS	Hong Kong Laboratory Accreditation Scheme
HSF	High Speed Ferry
HVS	High Volume Sampler
IEC	Independent Environmental Checker
LKC	Lung Kwu Chau
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Maritime Surveillance System
MTRMP-CAV	Marine Travel Routes and Management Plan for Construction and Associated Vessel
NEL	Northeast Lantau
NWL	Northwest Lantau
PAM	Passive Acoustic Monitoring
PM	Project Manager
SC	Sha Chau
SCZ	Speed Control Zone
SCLKCMP	Sha Chau and Lung Kwu Chau Marine Park
SS	Suspended Solids
SSSI	Site of Special Scientific Interest
STG	Encounter Rate of Number of Dolphin Sightings

SWL	Southwest Lantau
T2	Terminal 2
The Project	The Expansion of Hong Kong International Airport into a Three-Runway System
The SkyPier Plan	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier
The Manual	The Updated EM&A Manual
TSP	Total Suspended Particulates
WL	West Lantau
WMP	Waste Management Plan

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 (the Manual).

This is the 82nd Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 October 2022.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included filling and land-based ground improvement works, together with taxiways, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include road and drainage works, cable ducting, demolition, piling, and excavation works.

EM&A Activities Conducted in the Reporting Period

The monthly EM&A programme was undertaken in accordance with the Manual of the Project. Summary of the monitoring activities during this reporting period is presented as below:

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	30
Noise monitoring	18
Water quality monitoring	12
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

Environmental auditing works, including weekly site inspections of construction works conducted by the ET and bi-weekly site inspections conducted by the Independent Environmental Checker (IEC), audit of SkyPier High Speed Ferries (HSF), audit of construction and associated vessels, and audit of implementation of Marine Mammal Watching Plan (MMWP) and Dolphin Exclusion Zone (DEZ) Plan, were conducted in the reporting period. Based on the information including ET’s observations, records of Maritime Surveillance System (MSS), and contractors’ site records, it is noted that environmental pollution control and mitigation measures were properly implemented and construction activities of the Project in the reporting period did not introduce adverse impacts to the sensitive receivers.

Snapshots of EM&A Activities in the Reporting Period

		
<p>Vessel Line-transect Survey of CWD conducted by ET</p>	<p>Inspection of Contractor's Wastewater Treatment Facility by ET</p>	<p>Dust Suppression Measure conducted by Contractor</p>

Results of Impact Monitoring

The monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, and CWD were conducted during the reporting period in accordance with the Manual.

Monitoring results of construction dust, construction noise, water quality, construction waste and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3206 Main Reclamation Works

- Seawall construction; and
- Backfilling works.

Airfield Works

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Utilities and backfilling works; and
- Stockpiling.

Contract 3303 Third Runway and Associated Works

- Excavation and concreting works;
- Cable laying and ducting works; and
- Pavement work.

Contract 3305 Airfield Ground Lighting System

- Software development.

Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS

- Equipment installation.

Contract 3307 Fire Training Facility

- Architectural, builder's and finishing works;
- Drainage and utilities works; and
- Building construction.

Contract 3308 Foreign Object Debris Detection System

- Rectification work for handover sensor system.

Contract 3310 North Runway Modification Works

- Architectural, builder's work and finishing works;
- Excavation works;
- Seawall construction;
- Construction of stormwater drainage;
- Construction of walls and slabs;
- Installation of pipe piles; and
- Backfilling works.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Roofing installation and steel frame erection of covered walkway; and
- Alterations and additions works.

Contract 3404 Integrated Airport Control System

- System maintenance.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Bored piling;
- Structure works;
- Excavation; and
- Road formation.

Contract 3408 Third Runway Concourse and Apron Works

- Reinforced concrete works;
- Site setup works;
- Excavation; and
- Building construction.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Viaduct pier and temporary road construction;
- Pump station and electrical station construction;
- Demolition works; and
- Architectural, builder's work and finishing works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Guidebeam installation.

Contract 3602 Existing APM System Modification Works

- Erection and fixing of power rail; and
- Concrete plinth construction.

Contract 3603 Baggage Handling System (BHS)

- BHS installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Watermain connection works.

Contract 3723 Construction Support Facilities

- Clearance works.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Ventilation ducts construction;
- Rebar fixing and concreting;
- Erection of scaffolding and falseworks; and
- Mass concreting.

Contract 3802 APM and BHS Tunnels and Related Works

- Demolition works;
- Excavation and lateral supports; and
- Tunnel construction.

Construction Support (Services / Licences):

Contract 3901A Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3901B Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3913 Asphalt Batching Plant

- Operation of asphalt batching plant.

Summary Table

The following table summarises the key findings of the EM&A programme during the reporting period:

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level [^]		√	No breach of Limit Level was recorded.	Nil
Breach of Action Level [^]		√	No breach of Action Level was recorded.	Nil
Complaint Received	√		A complaint regarding dust issue at Tuen Mun Public Cargo Working Area (TMPCWA) was received on 3 October 2022.	ET requested the relevant contractor to provide information related to the complaint. During regular site inspections and ad-hoc site inspections, wheel washing facility was observed malfunctioning at Western Quay and manual wheel washing with high pressure water jet for vehicles was deployed. The contractor was reminded to repair the wheel washing facility and also to ensure the cleanliness of the deck of RoRo barge. During an off-site inspections at TMPCWA, it was observed the wheels of disembarking vehicles from 3RS RoRo barges were noted washed and the general condition of TMPCWA was dusty. Nevertheless, all 3RS contractors were reminded to ensure the wheels and body of their vehicles are washed before leaving their respective site boundaries. Hence, the case was considered closed.
Notification of any summons and status of prosecutions		√	No notification of summons nor prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

Note:

[^] Only triggering of Action or Limit Level found related to Project works is counted as Breach of Action or Limit Level.

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 3.1¹. 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 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 summary of construction works programme can be referred to **Section 1.4**.

1.2 Scope of this Report

This is the 82nd Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 31 October 2022.

1.3 Project Organisation

The Project’s organisation structure presented in Appendix B of the Construction Phase Monthly EM&A Report No.1 remained unchanged during the reporting period. Contact details of the key personnel are presented in **Table 1.1**.

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager’s Representative (Airport Authority Hong Kong)	Principal Manager, Environmental Compliance, Sustainability	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919

¹ The Manual is available on the Project’s dedicated website (accessible at: <http://env.threerunwaysystem.com/en/index.html>).

Party	Position	Name	Telephone
	Deputy Environmental Team Leaders	Heidi Yu	2828 5704
		Ken Wong	2828 5817
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Roy Man	3922 9141
		Deputy Independent Environmental Checker	Jackel Law

Reclamation Works:

Party	Position	Name	Telephone
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Alan Mong	3763 1352
	Environmental Officer	Zhang Bin Wang	3763 1525

Airfield Works:

Party	Position	Name	Telephone
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Dickey Yau	5699 4503
	Environmental Officer	Dennis Ho	5645 0563
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Andrew Keung	6277 6628
	Environmental Officer	Gabriel Wong	6114 9590
Contract 3305 Airfield Ground Lighting System (ADB Safegate Hong Kong Limited)	Project Manager	Allam Al-Turk	2944 9725
	Environmental Officer	Calvin Sze	9205 9277
Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS (Chinney Alliance Engineering Limited)	Project Director	Dennis Yam	9551 9920
	Environmental Officer	Richard Liu	9216 8990
Contract 3307 Fire Training Facility (Paul Y. Construction Company Limited)	Project Manager	Ken Tang	9640 5397
	Environmental Officer	Ferddy Leung	5585 6746
Contract 3308 Foreign Object Debris Detection System (DAS Aviation Services Group)	Project Manager	Jeffrey Yau	9873 7422
Contract 3310 North Runway Modification Works (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Kingsley Chiang	9424 8437
	Environmental Officer	Federick Wong	9842 2703

Third Runway Concourse:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Project Manager	Wyman Lau	6112 9753
	Health Safety Environmental Manager	Mike Leung	6625 2550
Contract 3403 New Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Project Manager	Alice Leung	9220 3162
	Environmental Officer	Ray Cheung	9785 1566
Contract 3404 Integrated Airport Control System (Shun Hing Systems Integration Co., Ltd.)	Project Manager	Andy Ng	9102 2739
	Safety Officer	Keith Chau	9620 7515
Contract 3405 Third Runway Concourse Foundation and Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Project Manager	Francis Choi	9423 3469
	Environmental Officer	Jacky Lai	9028 8975
Contract 3408 Third Runway Concourse and Apron Works (Beijing Urban Construction Group Company Limited and Chevalier (Construction) Company Limited Joint Venture)	Assistant Project Manager	Qian Zhang	5377 7976
	Environmental Officer	Malcolm Leung	7073 7559

Terminal 2 (T2) Expansion:

Party	Position	Name	Telephone
Contract 3508 Terminal 2 Expansion Works (Gammon Engineering & Construction Company Limited)	Project Director	Richard Ellis	6201 5637
	Environmental Officer	Fanny Law	6184 4650

Automated People Mover (APM) and Baggage Handling System (BHS):

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRP Puzhen Bombardier Transportation Systems Limited and CRRP Nanjing Puzhen Co., Ltd. Joint Venture)	Project Manager	Hongdan Wei	158 6180 9450
	Environmental Officer	H Y Yue	9185 8186

Party	Position	Name	Telephone
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Y M Tong	5316 9801
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Richard Ng	9802 9577

Construction Support (Facilities):

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	John Mak	6273 8703
Contract 3723 Eastern Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Ltd. Joint Venture.)	Deputy Project Director	Philip Kong	9337 8700
	Environmental Officer	Eddie Suen	6338 8862
Contract 3728 Minor Site Works (Shun Yuen Construction Company Limited)	Contract Manager	C K Liu	9194 8739
	Environmental Officer	Dan Leung	6856 5899
Contract 3733 Emergency Repair Service (Wing Hing Construction Co., Ltd.)	Project Manager	Michael Kan	9206 0550
	SHE Manager	Mike Leung	6625 2550

Airport Support Infrastructure:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Kingsley Chiang	9424 8437
	Environmental Officer	Eunice Kwok	9243 1331
Contract 3802 APM and BHS Tunnels and Related Works (Gammon Construction Limited)	Project Director	John Adams	6111 6989
	Environmental Officer	Phoebe Ng	9869 1105

Construction Support (Services / Licences):

Party	Position	Name	Telephone
Contract 3901A Concrete Batching Facility (K. Wah Concrete Company Limited)	Project Manager	Benedict Wong	9553 2806
	Environmental Officer	C P Fung	9874 2872
Contract 3901B Concrete Batching Facility (Gammon Construction Limited)	General Manager	Gabriel Chan	2435 3260
	Environmental Officer	Rex Wong	2695 6319
Contract 3913 Asphalt Batching Plant (SPR Joint Venture)	Project Manager	Xie Yi Sheng	6580 6005
	Environmental Officer	Kenneth Chan	9300 2182

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included filling and ground improvement works, together with taxiways, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include road and drainage works, cable ducting, demolition, piling, and excavation works.

The locations of key construction activities are presented in **Figure 1.1**.

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.2**. The EM&A requirements remained unchanged during the reporting period.

Table 1.2: Summary of Status of All Environmental Aspects under the Updated EM&A Manual

Parameters	EM&A Requirements	Status
Air Quality		
Baseline Monitoring	At least 14 consecutive days before commencement of construction work	The baseline air quality monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	At least 3 times every 6 days	On-going
Noise		
Baseline Monitoring	Daily for a period of at least two weeks prior to the commencement of construction works	The baseline noise monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Water Quality		
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides, for at least four weeks prior to the commencement of marine works.	The baseline water quality monitoring result was reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides.	On-going for reclamation works. General impact water quality monitoring for water jetting works was completed on 23 May 2017.

Parameters	EM&A Requirements	Status
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	At least four weeks	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	Three times per week until completion of DCM works.	Due to the completion of all marine-based DCM works within April 2022, regular DCM monitoring was ceased at all monitoring stations starting from 28 April 2022 and would be resumed if there are marine-based DCM works in the coming future.
Sewerage and Sewage Treatment		
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	Methodology to be prepared and submitted to EPD one year before the scheduled commencement of operation of the proposed third runway	The proposed methodology of the annual sewage flow monitoring was approved by EPD. The annual flow monitoring has been started since June 2021.
Details of the routine H ₂ S monitoring system for the sewerage system of 3RS	Details to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	The details of the routine H ₂ S monitoring system will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
Waste Management		
Waste Monitoring	At least weekly	On-going
Land Contamination		
Supplementary Contamination Assessment Plan (CAP)	At least 3 months before commencement of any soil remediation works.	The Supplementary CAP was submitted and approved by EPD under EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	CAR to be submitted for golf course	The CAR for Golf Course was submitted and accepted by EPD.
Contamination Assessment Reports (CAR) for Terminal 2 Emergency Power Supply Systems	CAR to be submitted for Terminal 2 Emergency Power Supply Systems	The CARs for Terminal 2 Emergency Power Supply Systems were submitted and accepted by EPD.
Terrestrial Ecology		
Pre-construction Egretty Survey Plan	Once per month in the breeding season between April and July, prior to the commencement of HDD drilling works.	The Egretty Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Monthly monitoring during the HDD construction works period from August to March.	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology		
Pre-Construction Phase Coral Dive Survey	Prior to marine construction works	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	As per an enhanced monitoring programme based on the Coral Translocation Plan	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)		
Baseline Monitoring	6 months of baseline surveys before the commencement of land formation related construction works. Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: Two days per month at the Sha Chau station and two days per month at the Lung Kwu Chau station; and	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.

Parameters	EM&A Requirements	Status
	Passive Acoustic Monitoring (PAM): For the whole duration of baseline period.	
Impact Monitoring	Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: One day per month at the Sha Chau station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	On-going
Landscape & Visual		
Landscape & Visual Plan	At least 3 months before the commencement of construction works on the formed land of the Project.	The Landscape & Visual Plan was submitted and approved by EPD under EP Condition 2.18
Baseline Monitoring	One-off survey within the Project site boundary prior to commencement of any construction works	The baseline landscape & visual monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Environmental Auditing		
Regular site inspection	Weekly	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	Monitor and check	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	Monitor and check	On-going
SkyPier High Speed Ferries (HSF) implementation measures	Monitor and check	On-going
Construction and Associated Vessels Implementation measures	Monitor and check	On-going
Silt Curtain Deployment Plan implementation measures	Monitor and check	On-going
Spill Response Plan implementation measures	Monitor and check	On-going
Complaint Hotline and Email channel	Construction phase	On-going
Environmental Log Book	Construction phase	On-going

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

The EM&A programme also involved weekly site inspections and related auditing conducted by the ET for checking the implementation of the required environmental mitigation measures recommended in the approved EIA Report. To promote the environmental awareness and enhance the environmental performance of the contractors, regular environmental management meetings were conducted during the reporting period, which are summarised as below:

- Eighteen environmental management meetings for EM&A review with works contracts: 5, 7, 10, 11, 17, 18, 19, 21, 25, 26 and 31 October 2022.

The EM&A programme has been following the recommendations presented in the approved EIA Report and the 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

Air quality monitoring of 1-hour Total Suspended Particulates (TSP) was conducted three times every six days at two representative monitoring stations in the vicinity of air sensitive receivers in Tung Chung and villages in North Lantau in accordance with the 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

2.1 Action and Limit Levels

In accordance with the Manual, baseline air quality monitoring of 1-hour TSP levels at the two air quality monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the air quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 2.2**.

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

2.2 Monitoring Equipment

Portable direct reading dust meter was used to carry out the air quality monitoring. Details of equipment used in the reporting period are given in **Table 2.3**.

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-1 (Serial No. 597337)	11 May 2022	Monthly EM&A Report No. 77, Appendix D

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

The measurement procedures involved in the impact air quality monitoring can be summarised as follows:

- a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2m 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.

2.3.2 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 record of the HVS provided in Appendix D of the Monthly EM&A Report No. 77 and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

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

The air quality monitoring results in the reporting period are summarised in **Table 2.4**. Detailed impact monitoring results are presented in **Appendix C**.

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AR1A	15 - 26	306	500
AR2	22 - 39	298	

The monitoring results were within the corresponding Action and Limit Levels at all monitoring stations in the reporting period.

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

2.5 Conclusion

No dust emission source was observed at the monitoring stations during the monitoring sessions. As the sensitive receivers were far away from the construction activities, with the implementation of dust control measures, there was no adverse impact at the sensitive receivers attributable to the works of the Project.

3 Noise Monitoring

Noise monitoring in the form of 30-minute measurements of L_{eq} , L_{10} , and L_{90} levels was conducted once per week between 0700 and 1900 on normal weekdays at four representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 3.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 3.1: Locations of Impact Noise Monitoring Stations

Monitoring Station	Location	Type of measurement
NM1A	Man Tung Road Park	Free field
NM2 ⁽¹⁾	Tung Chung West Development	To be determined
NM3A ⁽²⁾	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

Notes:

- (1) As described in Section 4.3.3 of the Manual, noise monitoring at NM2 will only commence after occupation of the future Tung Chung West Development.
- (2) According to Section 4.3.3 of the Manual, the noise monitoring at NM3A was temporarily suspended starting from 1 September 2018 and would be resumed with the completion of the Tung Chung East Development.

3.1 Action and Limit Levels

In accordance with the Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the noise monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 3.2**.

Table 3.2: Action and Limit Levels for Noise Monitoring

Monitoring Stations	Time Period	Action Level	Limit Level, $L_{eq}(30mins)$ dB(A)
NM1A, NM2, NM3A, NM4, NM5 and NM6	0700-1900 hours on normal weekdays	When one documented complaint is received from any one of the sensitive receivers	75dB(A) ⁽¹⁾

Note:

- (1) The Limit Level for NM4 is reduced to 70dB(A) for being an educational institution. During school examination period, the Limit Level is further reduced to 65dB(A).

3.2 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 used in the reporting period are given in **Table 3.3**.

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	Rion NL-52 (Serial No. 00998505)	22 Mar 2022	Monthly EM&A Report No. 75, Appendix D
Integrated Sound Level Meter	Rion NL-52 (Serial No. 01287679)	10 Oct 2022	Appendix D
Acoustic Calibrator	Castle GA607 (Serial No. 040162)	22 Mar 2022	Monthly EM&A Report No. 75, Appendix D

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

- a. The sound level meter was set on a tripod at least a height of 1.2m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3dB(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 1dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- e. During the monitoring period, L_{eq} , L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded on a record sheet.
- f. Noise measurement results, when higher than the baseline monitoring levels, 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.

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

- h. The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
- i. 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 listed in **Table 3.3** are valid in the reporting period.

3.4 Summary of Monitoring Results

The noise monitoring schedule involved in the reporting period is provided in **Appendix B**. The monitoring sessions for NM4 & NM6 were rescheduled from 30 September 2022 to 5 October 2022 due to the hoisting of Amber Rainstorm Signal.

The noise monitoring results in the reporting period are summarised in **Table 3.4**. Detailed impact monitoring results are presented in **Appendix C**.

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)
	L _{eq} (30mins)	L _{eq} (30mins)
NM1A ⁽¹⁾	59 - 67	75
NM4 ^{(1) (3)}	61 - 69	70 ⁽²⁾
NM5 ^{(1) (3)}	53 - 61	75
NM6 ^{(1) (3)}	61 - 73	75

Notes:

- (1) +3dB(A) Façade correction included;
- (2) The limit level will be reduced to 65dB(A) during school examination periods at NM4. No school examination took place during this reporting period.
- (3) Some of the noise measurement results were higher than the baseline monitoring levels. In order to reduce the influence of non-Project related noise on the monitoring results, these measurement results were corrected with reference to the baseline monitoring results.

No complaints were received from any sensitive receiver that triggered the Action Level. All monitoring results were also within the corresponding Limit Levels at all monitoring stations in the reporting period.

3.5 Conclusion

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 traffic noise near NM1A, school activities near NM4 and aircraft noise near NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

Water quality monitoring of DO, pH, temperature, salinity, turbidity, and suspended solids (SS) was conducted three days per week, at mid-ebb and mid-flood tides, at a total of 14 water quality monitoring stations, comprising 6 impact (IM) stations, 5 sensitive receiver (SR) stations and 3 control (C) stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impact from the Project before it could become apparent at sensitive receivers (represented by the SR stations). **Table 4.1** describes the details of the monitoring stations. **Figure 4.1** shows the locations of the monitoring stations.

Table 4.1: Monitoring Locations of Impact Water Quality Monitoring

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	<u>General Parameters</u>
C2	Control Station	806945	825682	DO, pH,
C3 ⁽²⁾	Control Station	817803	822109	Temperature, Salinity, Turbidity, SS
IM1 ⁽⁴⁾	Impact Station	806458	818351	
IM2 ⁽⁴⁾	Impact Station	806236	819183	
IM7 ⁽⁴⁾	Impact Station	806835	821349	
IM10 ⁽⁴⁾	Impact Station	809838	822240	
IM11 ⁽⁴⁾	Impact Station	810545	821501	
IM12 ⁽⁴⁾	Impact Station	811519	821162	
SR1A ⁽¹⁾	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS
SR2	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	
SR8 ⁽³⁾	Seawater Intake for cooling at Hong Kong International Airport (East)	811623	820390	

Notes:

- (1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 October 2018. To better reflect the water quality in the immediate vicinity of the intake, the monitoring location of SR1A has been shifted closer to the intake starting from 5 January 2019.
- (2) 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.
- (3) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.
- (4) With the seawall completion and removal of enhanced open sea silt curtains, these monitoring stations were relocated back to their original locations. For IM2, there was minor adjustment of the monitoring location.

4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report. The Action and Limit Levels of general water quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 4.2**. The control and impact stations during ebb tide and flood tide for general water quality monitoring are presented in **Table 4.3**.

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

Parameters		Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring (excluding SR1A & SR8)					
General Water Quality Monitoring	DO in mg/l (Surface, Middle & Bottom)	Surface and Middle		Surface and Middle	
		4.5mg/l		4.1mg/l	
		Bottom		Bottom	
		3.4mg/l		2.7mg/l	
	Suspended Solids (SS) in mg/l	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
	Turbidity in NTU	22.6		36.1	
Action and Limit Levels SR1A					
	SS (mg/l)	33		42	
Action and Limit Levels SR8					
	SS (mg/l)	52		60	

Notes:

- (1) For DO measurement, non-compliance occurs when monitoring result is lower than the limits.
- (2) For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.
- (3) Depth-averaged results are used unless specified otherwise.

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM7, SR3
SR2 ⁽¹⁾	IM7, IM10, IM11, IM12, SR1A, SR3, SR4A, SR8
Ebb Tide	
C1	SR4A
C2	IM1, IM2, IM7, IM10, IM11, IM12, SR1A, SR2, SR3, SR8

Note:

- (1) As per findings of Baseline Water Quality Monitoring Report, the control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

4.2 Monitoring Equipment

Table 4.4 summarises the equipment used in the reporting period for monitoring of specific water quality parameters under the water quality monitoring programme.

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (Serial No. 21G105356) ⁽¹⁾	28 Jul 2022	Monthly EM&A Report No. 79, Appendix D
	YSI ProDSS (Serial No. 16H104234)	16 Sep 2022	Monthly EM&A Report No. 81, Appendix D
	YSI ProDSS (Serial No. 17E100747)	16 Sep 2022	Monthly EM&A Report No. 81, Appendix D

Note:

- (1) The monitoring equipment was not used in the reporting period after the expiry date of the calibration certificate.

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity, and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4°C without being frozen), delivered to the laboratory within 24 hours of collection.

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

All in-situ monitoring instrument was 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 SS (in mg/l).

Calibration certificates of the monitoring equipment used in the reporting period are listed in **Table 4.4**.

4.3.3 Laboratory Measurement / Analysis

Analysis of SS 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 determination. The SS determination works were started within 24 hours after collection of the water samples. The analysis of SS have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

Table 4.6: Laboratory Measurement/ Analysis of SS

Parameters	Instrumentation	Analytical Method	Reporting Limit
SS	Analytical Balance	APHA 2540D	2mg/l

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix B**. Monitoring for both ebb and flood tides on 18 October 2022 were cancelled due to Strong Wind Signal No. 3 in force.

The water quality monitoring results for all parameters (i.e. DO, turbidity and SS) obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix C**.

4.5 Conclusion

During the reporting period, all monitoring results were within their corresponding Action and Limit Levels. Nevertheless, 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 as recommended in the Manual during weekly site inspection and regular environmental management meetings.

5 Waste Management

In accordance with the 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.

5.1 Action and Limit Levels

The Action and Limit Levels of the construction waste are provided in **Table 5.1**.

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

Recommendations made included provision and maintenance of proper chemical waste storage area, as well as handling, segregation, and regular disposal of general refuse. The contractors have taken actions to implement the recommended measures. Waste management audits were carried out by ET according to the requirement of the Waste Management Plan, Updated EM&A Manual and the implementation schedule of the waste management mitigation measures in **Appendix A**.

Based on updated contractors' information, construction waste generated in the reporting period is summarised in **Table 5.2**. ET and IEC have carried out site audits regularly and reviewed the trip ticket system. Dedicated areas for sorting of materials are established on site. Recyclable materials such as steel bar, metal strip, aluminium, paper and plastic are sorted on-site and transported off-site for recycling during this reporting period.

Table 5.2: Construction Waste Statistics

	C&D Material Stockpiled for Reuse or Recycle ⁽¹⁾ (m ³)	C&D Material Reused in the Project (m ³)	C&D Material Reused in other Projects (m ³)	C&D Material Transferred to Public Fill (m ³)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
September 2022 ⁽²⁾	7,051	*82,585	11,226	5,452	240	3,800	1,857
October 2022 ⁽³⁾	1,358	3,122	6,524	3,982	1,100	2,800	2,101

Notes:

- (1) C&D refers to Construction and Demolition.
- (2) Updated figure for the previous month is reported and marked with an asterisk (*). Updated figures for earlier months will be reported in the forthcoming Quarterly and Annual EM&A Reports.
- (3) The data was based on the information provided by contractors up to the submission date of this Monthly EM&A Report, and might be updated in the forthcoming Monthly EM&A Report.

There were no complaints, non-compliance of the WMP, contract-specific WMPs, statutory and contractual requirements that triggered Action and Limit Levels in the reporting period.

5.3 Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual, Waste Management Plan and the proposal of Further Development on Treatment Level / Details and the Reuse Mode for Marine Sediment (hereinafter referred to as “Further Development Proposal”) of the Project. The sampling process, storage conditions of the excavated marine sediment, treatment process, final backfilling location as well as associated records were inspected and checked by ET and verified by IEC to ensure they were in compliance with the requirements as stipulated in the Waste Management Plan and Further Development Proposal.

Only sampling and backfilling works for treated marine sediment was conducted during the reporting period. The details of the marine sediment sampling, treatment and backfilling can be referred to Annual EM&A Report No.6.

6 Chinese White Dolphin Monitoring

In accordance with the Manual, CWD monitoring by small vessel line-transect survey supplemented by land-based theodolite tracking survey and passive acoustic monitoring should be conducted during construction phase.

The small vessel line-transect survey should be conducted at a frequency of two full surveys per month, while land-based theodolite tracking survey should be conducted at a frequency of one day per month per station at Sha Chau (SC) and Lung Kwu Chau (LKC) during the construction phase as stipulated in the Manual.

6.1 Action and Limit Levels

The Action and Limit Levels 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 Action and Limit Levels for CWD monitoring were summarised in **Table 6.1**.

Table 6.1: Derived Values of Action and Limit Levels for Chinese White Dolphin Monitoring

NEL, NWL, AW, WL and SWL as a Whole	
Action Level ⁽³⁾	Running quarterly ⁽¹⁾ STG < 1.86 & ANI < 9.35
Limit Level ⁽³⁾	Two consecutive running quarterly ⁽²⁾ (3-month) STG < 1.86 & ANI < 9.35

Notes: (referring to the baseline monitoring report)

- (1) Action Level – running quarterly encounter rates STG & ANI of this month will be calculated from the reporting period and the two preceding survey months.
- (2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month and the running quarterly encounter rates of this month.
- (3) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria.

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys were conducted along the transects covering Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) areas as proposed in the Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except the addition of AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Approach Area, nevertheless, this transect was established during the EIA of the 3RS Project and refined in the 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 also provided a larger sample size for estimating the density, abundance and patterns of movements in the broader study area of the project.

The planned vessel survey transect lines following the waypoints set for construction phase monitoring as proposed in the Manual 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.

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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
NEL					
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
NWL					
1S	804671	814577	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
AW					
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
WL					
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	8W	800800	812450
2E	801750	806450	8E	802900	812450
3W	799600	807450	9W	801500	813550
3E	801500	807450	9E	803120	813550
4W	799400	808450	10W	801880	814500
4E	801430	808450	10E	803700	814500
5W	799500	809450	11W	802860	815500
5E	801300	809450	12S/11E	803750	815500
6W	799800	810450	12N	803750	818500
6E	801400	810450			
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 Survey

Land-based theodolite tracking survey 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 Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

As mentioned in **Section 6.2.1**, the transects covered NEL, NWL, AW, WL and SWL areas as proposed in the Manual, which 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 going around 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 pairs. Only on-effort data collected under favourable conditions of Beaufort 0-3 and visibility of approximately 1200 m or beyond were used for analysis of the CWD encounter rates.

A 15-20m vessel with a flying bridge observation platform about 4 to 5m 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 were lost from view. At that point, the boat returned (off effort) to the survey line at the closest point after obtaining photo records of the dolphin group and began to survey on effort again.

Focal follows of dolphins would be used for providing supplementary information only 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 would involve the boat following (at an appropriate distance to minimise 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 photograph 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 Project during the baseline monitoring stage.

6.3.3 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey 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 (>1-3km, 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 2-3km 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 period, two complete sets of small vessel line-transect surveys were conducted on the 3, 7, 11, 17, 19, 20, 24 and 27 October 2022 covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

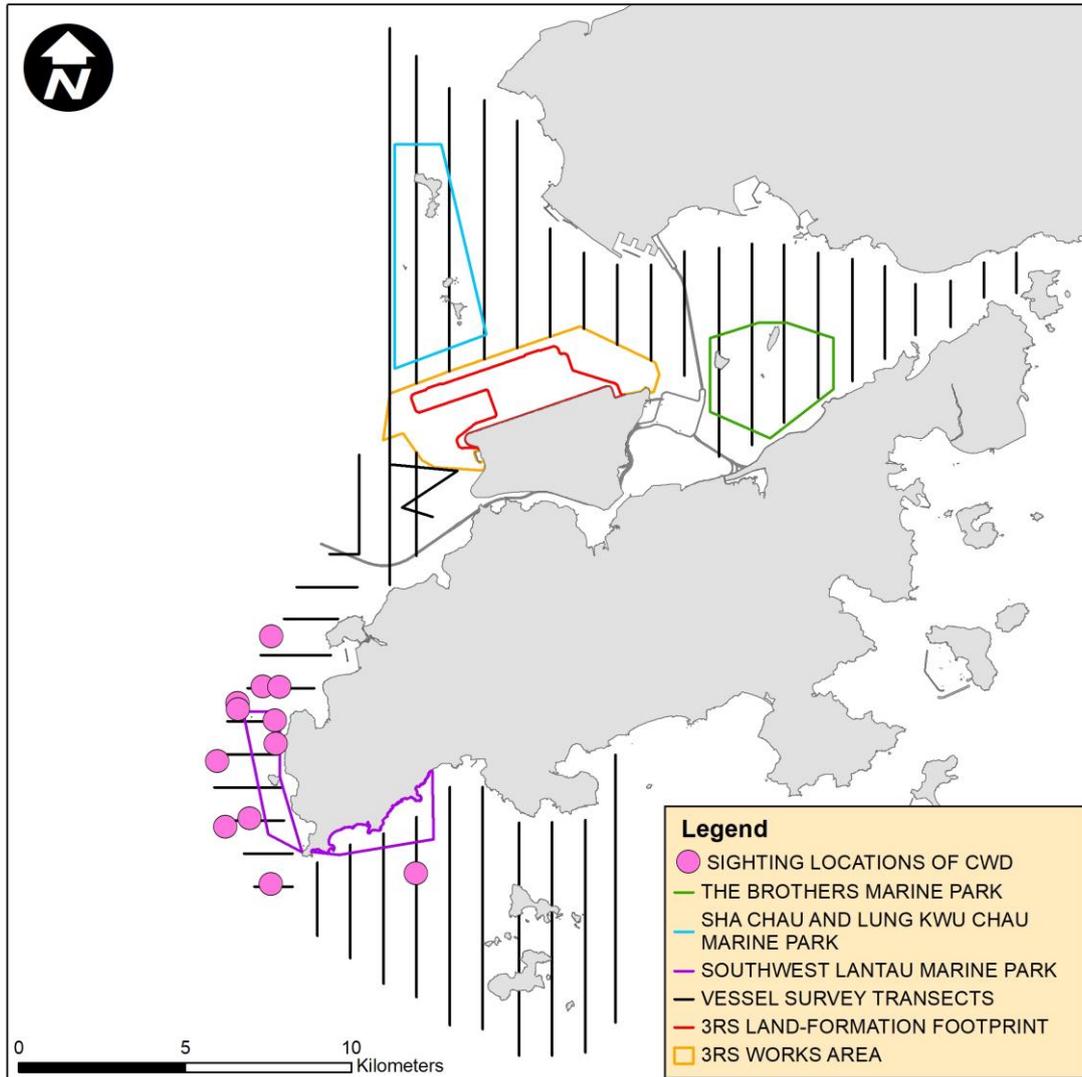
A total of around 451.95 km of survey effort was collected from these surveys and 347.17 km of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In the current reporting period, 12 sightings with 37 dolphins were sighted. All these sightings were on-effort records under favourable weather condition (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 the current reporting period is illustrated in **Figure 6.3**. CWD groups in WL were recorded at waters from Tai O to Fan Lau, with a cluster of CWD groups observed at waters near Yi O. In SWL, the only CWD sighting was recorded at central part of waters in the survey area. There was no CWD sighting recorded in NEL or NWL survey areas during the reporting period.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: (1) Please note that there are 12 pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map. (2) Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

Encounter Rate

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

Encounter Rate by Number of Dolphin Sightings (STG)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In this reporting period, a total of around 347.17 km of survey effort was conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 12 on-effort sightings with 37 dolphins were sighted under such condition. Calculation of the encounter rates for the month are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from August to October 2022), a total of around 1223.66 km of survey effort was conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 38 on-effort sightings and a total number of 135 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 reporting period 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 remain above the Action Level, thus the Action Level is not triggered.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
October 2022	3.46	10.66
Running Quarter from August to October 2022 ⁽¹⁾	3.11	11.03
Action Level	Running quarterly ⁽¹⁾ STG < 1.86 & ANI < 9.35	

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, containing six sets of transect surveys for all monitoring areas. Action Level will be triggered if both STG and ANI fall below the criteria.

Group Size

In the current reporting period, 12 groups of 37 dolphins in total were sighted, and the average group size of CWDs was 3.1 dolphins per group. The number of CWD sightings with medium group size (i.e. 3-9 dolphins) was slightly more than that of CWD sightings with small group size (i.e. 1-2 dolphins). No CWD sighting with large group size (i.e. 10 or more dolphins) was recorded in the current reporting period.

Activities and Association with Fishing Boats

There were four CWD sightings recorded engaging in foraging activities in the current reporting period in SWL and WL survey areas. No association with operating fishing boat was recorded.

Mother-calf Pair

In this reporting period, there were four CWD sightings recorded with mother-and-unspotted juvenile pair in the current reporting period, and these sightings were all spotted in WL survey area.

6.4.2 Photo Identification

In the current reporting period, a total number of 20 different CWD individuals were identified for totally 22 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
SLMM002	3-Oct-22	8	WL	WLMM018	3-Oct-22	6	WL
	20-Oct-22	3	WL	WLMM052	3-Oct-22	4	WL
SLMM007	3-Oct-22	5	WL	WLMM071	20-Oct-22	1	WL
SLMM014	27-Oct-22	3	SWL	WLMM109	3-Oct-22	7	WL
SLMM023	3-Oct-22	7	WL	WLMM114	20-Oct-22	2	WL
SLMM025	3-Oct-22	6	WL	WLMM118	3-Oct-22	6	WL
SLMM037	20-Oct-22	3	WL	WLMM131	3-Oct-22	8	WL
SLMM052	3-Oct-22	6	WL	WLMM152	3-Oct-22	5	WL
SLMM058	3-Oct-22	3	WL			6	WL
WLMM001	20-Oct-22	2	WL	WLMM168	20-Oct-22	1	WL
WLMM007	3-Oct-22	6	WL	WLMM176	3-Oct-22	4	WL

6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 17 October 2022 and at SC on 27 October 2022, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. No CWD group was tracked off LKC or SC stations during the reporting period. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix C**.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau (LKC)	1	6:00	0	0
Sha Chau (SC)	1	6:00	0	0
TOTAL	2	12:00	0	0

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. Both C-POD and F-POD are considered as effective PAM devices in detecting CWD occurrence, and F-POD was the main PAM device deployed where feasible. During this reporting period, the F-POD was retrieved on 20 October 2022 and subsequently re-deployed underwater and positioned at south of Sha Chau Island

inside the SCLKCMP (**Figure 6.4**). Acoustic data would be reviewed to give an indication of CWD occurrence patterns and anthropogenic noise information. Analysis would involve use of proprietary software for objective automated data analyses and experienced analysts to perform visual validation for assessment of dolphin detection. As the period of data collection and analysis takes about four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, no dolphin observation station was required for construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of DEZ monitoring were provided by the ET, with a cumulative total of 704 individuals being trained and the training records kept by the ET. From the contractors' records, no dolphin or other marine mammals were observed within or around the silt curtain during this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling measures 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 7.4** and **Section 7.5** 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 survey and PAM will be provided in future annual 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 two days of land-based theodolite tracking survey effort. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

Site inspections of the construction works to audit the implementation of proper environmental pollution control and mitigation measures for the Project were conducted by ET and IEC on a weekly and bi-weekly basis, respectively. The weekly site inspection schedule of the construction works is provided in **Appendix B**. Besides, physically ad-hoc site inspections were also conducted by ET and IEC if environmental problems were identified, or subsequent to receipt of an environmental complaint, or as part of the investigation work. These site inspections provided a direct means to reinforce the specified environmental protection requirements and pollution control measures in construction sites.

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed. Environmental documents and site records, including waste disposal record, maintenance record of environmental equipment, and relevant environmental permit and licences, were also checked on site. Observations were recorded in the site inspection checklist and passed to the contractor together with the recommended mitigation measures where necessary in order to advise contractors on environmental improvement, awareness and on-site enhancement measures. The observations were made with reference to the following information during the site inspections:

- The EIA and EM&A requirements;
- Relevant environmental protection laws, guidelines, and practice notes;
- The EP conditions and other submissions under the EP;
- Monitoring results of EM&A programme;
- Works progress and programme;
- Proposal of individual works;
- Contract specifications on environmental protection; and
- Previous site inspection results.

Good site practices were observed in site inspections during the reporting period. Advice was given when necessary to ensure the construction workforce were familiar with relevant procedures, and to maintain good environmental performance on site. Regular toolbox talks on environmental issues were organised for the construction workforce by the contractors to ensure understanding and proper implementation of environmental protection and pollution control mitigation measures.

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

7.2 Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix A**) was monitored in accordance with the Manual. All measures undertaken by both the contractor and the landscape contractor during the construction phase and first year of the operation phase shall be audited by a landscape architect, as a member of the ET, on a regular basis to ensure compliance with the intended aims of the measures. Site inspections shall be undertaken at least once every two months during the operation phase.

The implementation status of the environmental protection measures is summarized below in **Table 7.1**. Examples of landscape and visual mitigation measures are shown in **Table 7.2**. The

monitoring programme for detailed design, construction, establishment works and long term management (10 years) stages is presented in **Table 7.3**. Event and Action Plan for Landscape and Visual impacts is stated in **Table 7.4**.

Table 7.1: Landscape and Visual – Construction Phase Audit Summary

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
CM1- The construction area and contractor’s temporary works areas shall be minimised to avoid impacts on adjacent landscape.	The implementation of mitigation measures was checked by ET during weekly site inspection and reported by the Contractors during the monthly Environmental Management Meetings. Implementation of the measures CM5, CM6 and CM7 by Contractors was observed.	All works contracts
CM2 – Reduction of construction period to practical minimum		
CM3 – Phasing of the construction stage to reduce visual impacts during the construction phase.		
CM4 – Construction traffic (land and sea) including construction plants, construction vessels and barges shall be kept to a practical minimum.		
CM5 – Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.		
CM6 – Avoidance of excessive height and bulk of site buildings and structures		
CM7 – Control of night-time lighting by hooding all lights and through minimisation of night working periods		
CM8 – All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor’s works areas	Tree Protection Specifications were provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project. The Contractors’ performance on the implementation of the tree maintenance and protection measures were observed and checked by the ET weekly during construction period.	3302, 3508, 3801

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
<p>CM9 – Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme</p>	<p>Tree Transplanting Specifications were provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project where trees would unavoidably be affected by the construction works.</p> <p>The Contractors were required to submit Method Statements for tree transplanting prior to the transplanting works. Tree inspections were conducted by ET to check the tree transplanting works implemented by the Contractors on site.</p> <p>The Contractors' performance on the implementation of trees maintenance and protection measures on transplanted trees were observed and checked by the ET bi-monthly during the 12-month establishment period after the completion of each batch of transplanting works.</p> <p>Long term management of the transplanted trees was currently monitored by ET annually.</p>	3508, 3801
<p>CM10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical</p>	<p>The Contractor's performance on the implementation of advanced hydroseeding works was observed and checked by the ET during weekly site inspection.</p>	3303

Table 7.2: Examples of Landscape and Visual Mitigation Measures in the Reporting Periods

		
<p>Erection of site hoardings around works area in unobtrusive colours (CM5)</p>	<p>Avoidance of excessive height and bulk of site buildings (CM6)</p>	<p>Control of night-time lighting using light hooding and minimisation of night working period (CM7)</p>
		
<p>General view of tree protection zone for retained tree (CM8)</p>	<p>General view of a transplanted tree (CM9)</p>	<p>General view of advanced hydroseeding around taxiways and runways (CM10)</p>

In accordance with the Updated EM&A Manual, all existing trees shall be protected carefully during construction. Trees unavoidably affected by the works shall be transplanted where practical. In this reporting period, the cumulative total number of retained trees and transplanted trees under the Project remained unchanged (i.e. 36 and 26 respectively) comparing to the previous reporting period. Details of the retained trees, transplanted trees and to-be-transplanted trees under the Project are summarized in **Table 7.5**.

Details of the retained trees are to be discussed in the Quarterly EM&A reports.

Table 7.3: Monitoring Programme for Landscape and Visual

Stage	Monitoring Task	Monitoring Report	Form of Approval	Frequency
Detailed Design	Checking of design works against the recommendations of the landscape and visual impact assessments within the EIA shall be undertaken during detailed design and tender stage, to ensure that they fulfil the intention of the mitigation measures. Any changes to the design, including design changes on site shall also be checked.	Report by AAHK / PM confirming that the design conforms to requirements of EP.	Approved by Client	At the end of the Detailed Design Phase
Construction	Checking of the contractor's operations during the construction period.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Weekly
Establishment Works	Checking of the planting works during the twelve-month Establishment Period after completion of each batch of transplanting works.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Every two months
Long Term Management (10 year)	Monitoring of the long-term management of the planting works in the period up to 10 years after completion of each batch of transplanting works.	Report on Compliance by ET or Maintenance Agency as appropriate	Counter signature of report by Management Agency	Annually

Table 7.4: Event and Action Plan for Landscape and Visual

Event Action Level	Action			
	ET	IEC	AAHK / PM	Contractor
Design Check	Check final design conforms to the requirements of EP and prepare report.	Check report. Recommend remedial design if necessary.	Undertake remedial design if necessary.	
Non-conformity on one occasion	Identify source.	Check report.	Notify Contractor.	Amend working methods to prevent

Event Action Level	Action			
	Inform IEC and AAHK / PM. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed.	Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Check implementation of remedial measures.	Ensure remedial measures are properly implemented.	recurrence of non-conformity. Rectify damage and undertake additional action necessary.
Repeated Non-conformity	Identify source. Inform IEC and AAHK / PM. Increase monitoring frequency. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed. If non-conformity stops, cease additional monitoring.	Check monitoring report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Supervise implementation of remedial measures.	Notify Contractor. Ensure remedial measures area properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.

Table 7.5: Summary of the Number of Retained, Transplanted and To-be-transplanted Trees in the Reporting Period

Existing				
Contract	Retain (nos.)	Transplanted (nos.)		To-be-transplanted (nos.)
		Establishment Period	Maintenance Period	
3302	9	0	0	0
3503	0	0	9	0
3508 ⁽¹⁾	24	0	12	0
3602	0	0	0	0
3801	3	0	5 ⁽²⁾	0
Sub-total	36	0	26	0
Provisional				
Contract	Retain (nos.)	Transplanted (nos.)		To-be-transplanted (nos.)
3508 ⁽¹⁾	50	0		10
Sub-total	50	0		10
Grand Total	86	26		10

Notes:

- (1) As some of the site areas have been handed over to Contract 3508, Contractor of Contract 3508 is currently managing the trees that are located within their site area. Existing trees to be managed by Contract 3508 is subject to change after initial tree surveys for each batch of site areas have been conducted by the Contractor.
- (2) Three transplanted trees (CT1194, CT1794 and CT1795) were subsequently felled after transplantation. Please refer to **Table 7.6** for details.

Summary of the updated transplanted trees and photos are presented in **Table 7.6**.

Table 7.6: Summary of the Transplanted Trees Updated in the Reporting Period

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
CT276	3 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Establishment Period was completed. Next inspection will be conducted in February 2023. Photos of the last inspection in February 2022 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.74.
CT1253	4 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	Southern Landside Petrol Filling Station	
T835	22 Jan 2020	<u>Long Term Management period</u> Feb 2021 – Jan 2030	AAHK	Establishment Period was completed. Next inspection will be conducted in February 2023. Photos of the last inspection in February 2022 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.74.
T836	13 Dec 2019	<u>Long Term Management period</u> Feb 2021 – Jan 2030	AAHK	
T838	22 Jan 2020	<u>Long Term Management period</u> Feb 2021 – Jan 2030	AAHK	
T812	21 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	Establishment Period was completed. Next inspection will be conducted in December 2022. Photos of the last inspection in December 2021 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.72.
T814	20 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T815	15 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T829	18 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T830	14 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T831	19 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T1493	6 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1494	6 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	Establishment Period was completed. Next inspection will be conducted in July 2023. Photos of the last inspection in July 2022 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.79.
T1495	10 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1496	5 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1497	5 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1498	29 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1499	29 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1500	30 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1501	30 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
T1502	5 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1503	6 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1504	24 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
CT1194	4 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Establishment Period was completed. Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted as recommended by tree specialist of the contractor of Southern Landside Petrol Filing Station.
CT1794	3 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	AsiaWorld-Expo	Establishment Period was completed. The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
CT1795	3 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	AsiaWorld-Expo	Establishment Period was completed. The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.

7.3 Land Contamination Assessment

The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20. The CARs for Golf Course and T2 Emergency Power Supply Systems (EPSS) were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. EPD has issued no further comment for aforesaid CARs. No leakage was found after the removal of underground fuel pipelines of T2 EPSS and all required additional photos have been submitted to EPD.

According to the approved supplementary CAP, there are 3 remaining locations where site re-appraisal / additional site investigation are proposed. Based on the latest construction information, there is no development programme for these locations at this stage. As such, the status of site re-appraisal/ additional site investigation shall be further updated upon latest development programme is available.

7.4 Audit of 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 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 implement the mitigation measure of requiring 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.

Due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No ferry movement between HKIA SkyPier and Zhuhai and Macau was recorded in October 2022. 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 summarised in **Table 7.7**.

The daily movement of all SkyPier HSFs, including those not using the diverted route, in this reporting period (i.e., 3 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.

As updated by CLP Power, the construction works of the Hong Kong Offshore LNG Terminal Project may affect the route diversion operation of the SkyPier HSFs from Q1 to Q4 2022. The captains were informed on the issue and ET will continue to closely monitor the implementation of the SkyPier Plan in the period.

Table 7.7: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 31 October 2022
Total number of ferry movements recorded and audited for HSF to/from Zhuhai and Macau	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
A maximum daily cap of 125 movements for all SkyPier HSFs including those not using diverted route	3 daily movement

7.5 Audit of Construction and Associated Vessels

The updated MTRMP-CAV was approved by EPD on 31 May 2022 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:

- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly Construction Traffic Control Centre (CTCC) audit.
- Three-month rolling programmes (one month record and three 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.

7.6 Implementation of Dolphin Exclusion Zone

The DEZ Plan was submitted in accordance with EP Condition 3.1 (v) requirement and Section 10.3 of the Manual, and approved in April 2016 by EPD.

During the reporting period, there was no dolphin observation station required for construction works in accordance with the DEZ Plan .

7.7 Status of Submissions under Environmental Permits

The current status of submissions under the EP up to the reporting period is presented in **Table 7.8**.

Table 7.8: Status of Submissions under Environmental Permit

EP 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 by EPD
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egretty Survey Plan	
2.15	Silt Curtain Deployment Plan	
2.16	Spill Response Plan	
2.17	Detailed Plan on Deep Cement Mixing	
2.18	Landscape & Visual Plan	
2.19	Waste Management Plan	
2.20	Supplementary Contamination Assessment Plan	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.8 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 latest statuses of the environmental licenses and permits in the reporting period are presented in **Appendix E**.

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

7.9.1 Complaints

A complaint regarding dust issue at Tuen Mun Public Cargo Working Area (TMPCWA) was received on 3 October 2022. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. The ET recognized the location, identified a related contractor and requested them to provide information regarding the complaint. According to the information received, the wheel washing facility at Western Quay (WQ) was reported as out of order and manual wheel washing with high pressure water jet was deployed during the alleged period. The contractor confirmed that the wheels and body of the concerned concrete lorry were all manually washed before embarking on RoRo barge. At ET's weekly site inspections and ad-hoc site inspection, wheel washing facility was observed malfunctioning at WQ and manual wheel washing with high pressure water jet for vehicles was deployed. The contractor was reminded to repair the wheel washing facility and no observation related to the wheel washing facility at North Eastern Quay (NEQ) was recorded in the checklist. At the subsequent ad-hoc site inspection, it was noted that the wheel washing facility at WQ was still out of order and manual wheel washing with high pressure water jet was provided to vehicles before they embarked on RoRo barge. Having said that, the contractor was reminded to ensure the cleanliness of the deck of RoRo barge and no observation related to the wheel washing facility at NEQ was recorded.

ET, IEC and AAHK also conducted ad-hoc off-site inspections in regards of the condition at TMPCWA. During the inspections, the wheels of disembarking vehicles were noted washed and the general condition of TMPCWA was observed dusty. ET would continue to monitor the related contractor's performance on wheel washing at WQ and the cleanliness of the decks of RoRo barges, and remind all 3RS contractors to ensure the wheels and body of their vehicles are washed before leaving their respective site boundaries. Hence, the case was considered closed.

7.9.2 Notifications of Summons or Status of Prosecution

Neither notification of summons nor prosecution was received during the reporting period.

7.9.3 Cumulative Statistics

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

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:

Reclamation Works:

Contract 3206 Main Reclamation Works

- Seawall construction; and
- Backfilling works.

Airfield Works:

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Utilities and backfilling works; and
- Stockpiling.

Contract 3303 Third Runway and Associated Works

- Excavation and concreting works;
- Cable laying and ducting works; and
- Pavement work.

Contract 3305 Airfield Ground Lighting System

- Software development.

Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS

- Equipment installation.

Contract 3307 Fire Training Facility

- Architectural, builder's and finishing works;
- Drainage and utilities works;
- Building construction.

Contract 3308 Foreign Object Debris Detection System

- Rectification work for handover sensor system.

Contract 3310 North Runway Modification Works

- Architectural, builder's work and finishing works;
- Excavation works;
- Seawall construction;
- Construction of stormwater drainage;
- Construction of walls and slabs;
- Installation of pipe piles; and
- Backfilling works.

Third Runway Concourse

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Roofing installation and steel frame erection of covered walkway; and
- Alterations and additions works.

Contract 3404 Integrated Airport Control System

- System maintenance.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Bored piling;
- Structure works;
- Excavation; and
- Road formation.

Contract 3408 Third Runway Concourse and Apron Works

- Reinforced concrete works;
- Site setup works;
- Excavation; and
- Building construction.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Viaduct Pier and temporary road construction;
- Pump station and electrical station construction;
- Demolition works; and
- Architectural, builder's work and finishing works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Guidebeam installation.

Contract 3602 Existing APM System Modification Works

- Erection and fixing of power rail; and
- Concrete plinth construction.

Contract 3603 Baggage Handling System (BHS)

- BHS installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Watermain connection works.

Contract 3723 Construction Support Facilities

- Clearance works.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Ventilation ducts construction;
- Rebar fixing and concreting;
- Erection of scaffolding and falseworks; and
- Mass concreting.

Contract 3802 APM and BHS Tunnels and Related Works

- Demolition works;
- Excavation and lateral supports; and
- Tunnel construction.

Construction Support (Services / Licenses):

Contract 3901A Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3901B Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3913 Asphalt Batching Plant

- Operation of asphalt batching plant.

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;
- DEZ monitoring for seawall construction;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works;
- 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 B**.

8.4 Review of the Key Assumptions Adopted in the EIA Report

With reference to Appendix E of the Manual, it is noted that the key assumptions adopted in approved EIA report for the construction phase are still valid and no major changes are involved. The environmental mitigation measures recommended in the approved EIA Report remain applicable and shall be implemented in undertaking construction works for the Project.

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included filling and land-based ground improvement works, together with taxiways, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include road and drainage works, cable ducting, demolition, piling, and excavation works.

All the monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, and CWD were conducted during the reporting period in accordance with the Manual.

Monitoring results of construction dust, construction noise, water quality, construction waste and CWD did not trigger the corresponding Action and Limit Levels during the reporting period.

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. Site inspection findings were recorded in the site inspection checklists and provided to the contractors to follow up.

On the implementation of the SkyPier Plan, due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No HSF movement between HKIA SkyPier and Zhuhai and Macau was recorded during the reporting period. Therefore, no deviation was recorded in the HSF monitoring in the reporting period. The daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route, were in the range of 3 daily movements, which are within the maximum daily cap of 125 daily movements.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone and not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Trainings have been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. Deviations including speeding in the works area, entered no entry zone, and entry from non-designated gates were reviewed by ET. All the concerned captains were reminded by the contractor's CTCC representative to comply with the requirements of the MTRMP-CAV. The ET reminded contractors that all vessels shall avoid entering the no-entry zone, in particular the Brothers Marine Park and the Sha Chau & Lung Kwu Chau Marine Park. Three-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

Figures



80000 E

80000 E

81000 E

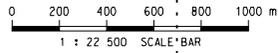
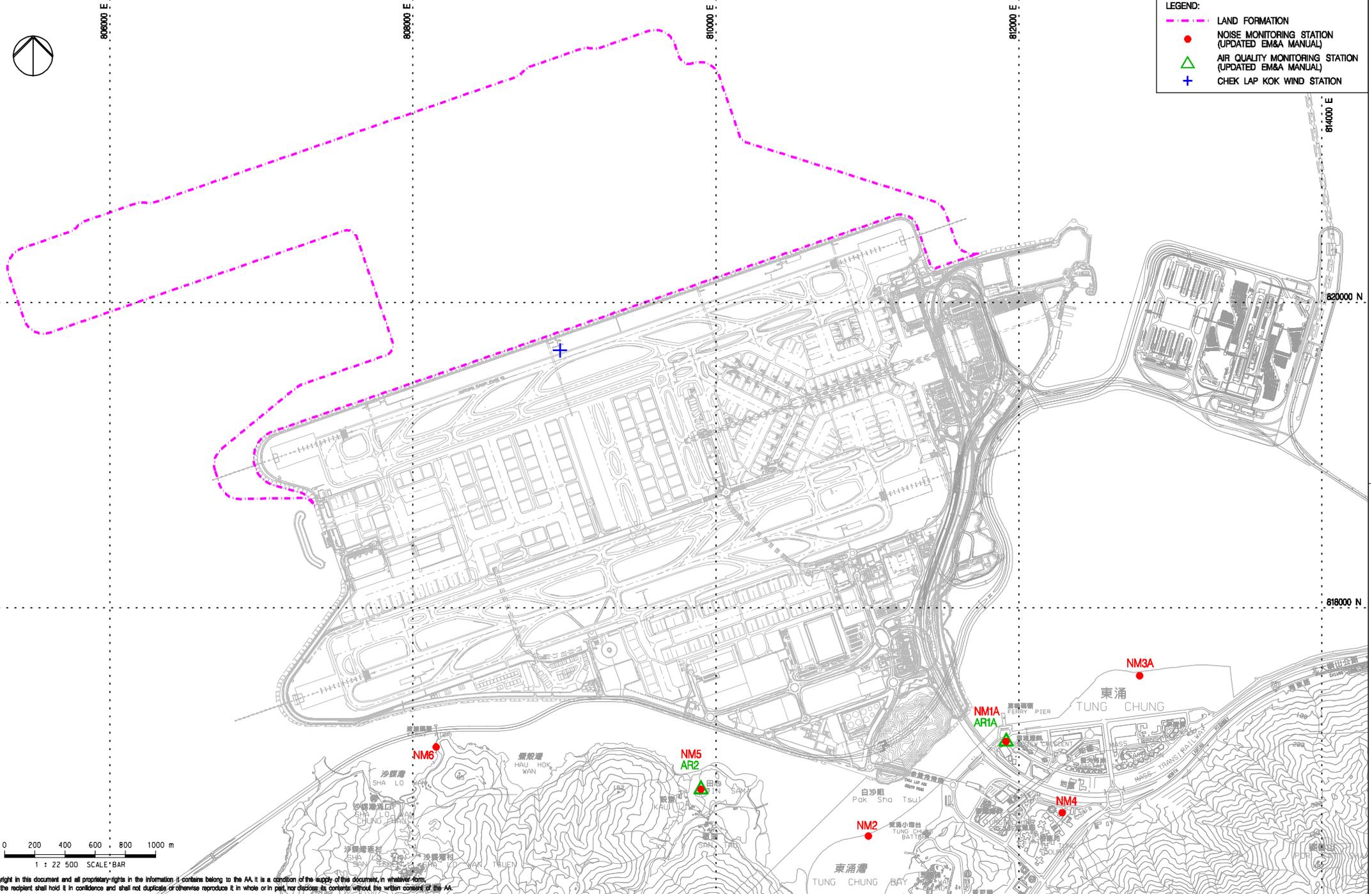
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84000 E

82000 N

81800 N

- LEGEND:
- LAND FORMATION
 - NOISE MONITORING STATION (UPDATED EM&A MANUAL)
 - AIR QUALITY MONITORING STATION (UPDATED EM&A MANUAL)
 - CHEK LAP KOK WIND STATION



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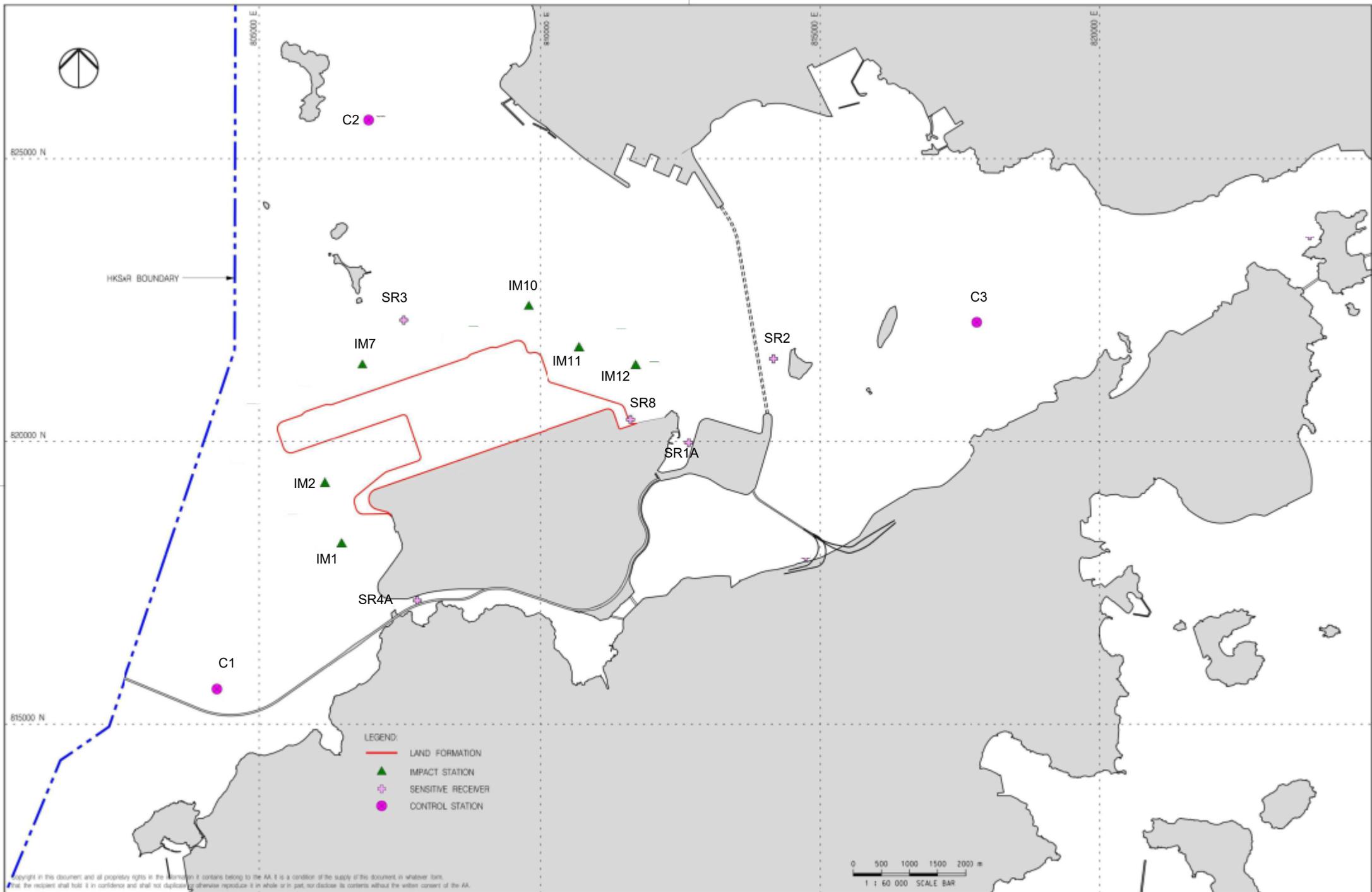
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A	06JAN16	FIRST ISSUE	RO
B	28JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO
D	28OCT18	GENERAL REVISION	SH



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

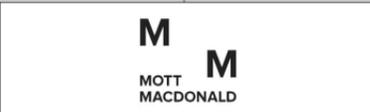
Consultant's Signatures for Approval		Date
Design	TK	29OCT18
Checkers	TK	29OCT18
Approver	EC	29OCT18

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



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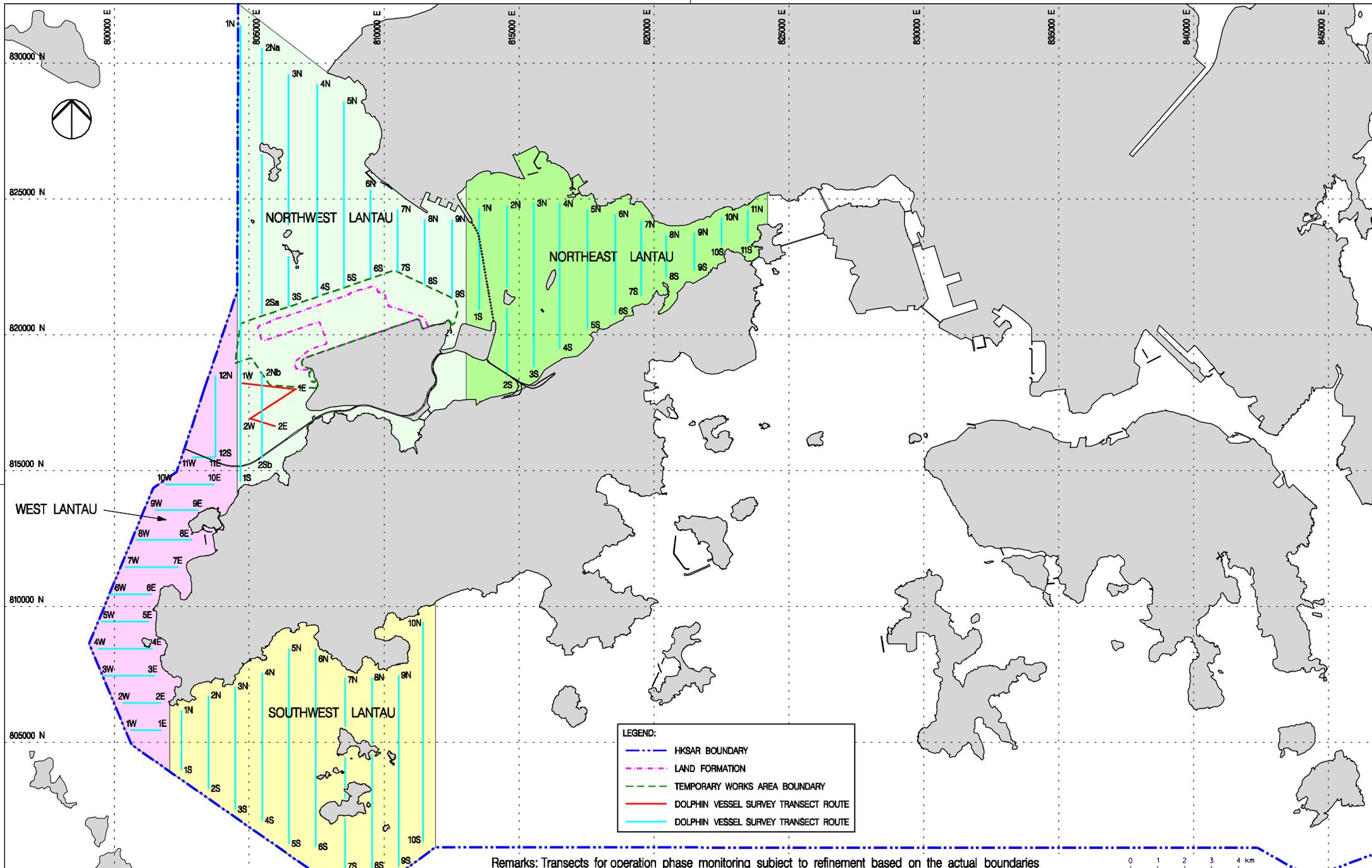
Rev.	Date	Description	Checked
A	21AUG19	FIRST ISSUE	VL



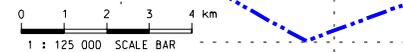
Title
WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	21AUG19
Checkers	DC / TK	21AUG19
Approver	EC	21AUG19

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3
		1 : 60000
Drawing No. FIGURE 4.1		Rev. A



Remarks: Transects for operation phase monitoring subject to refinement based on the actual boundaries for the extension of Hong Kong International Airport Approach Areas (HKIAAA) and 3RS Marine Park



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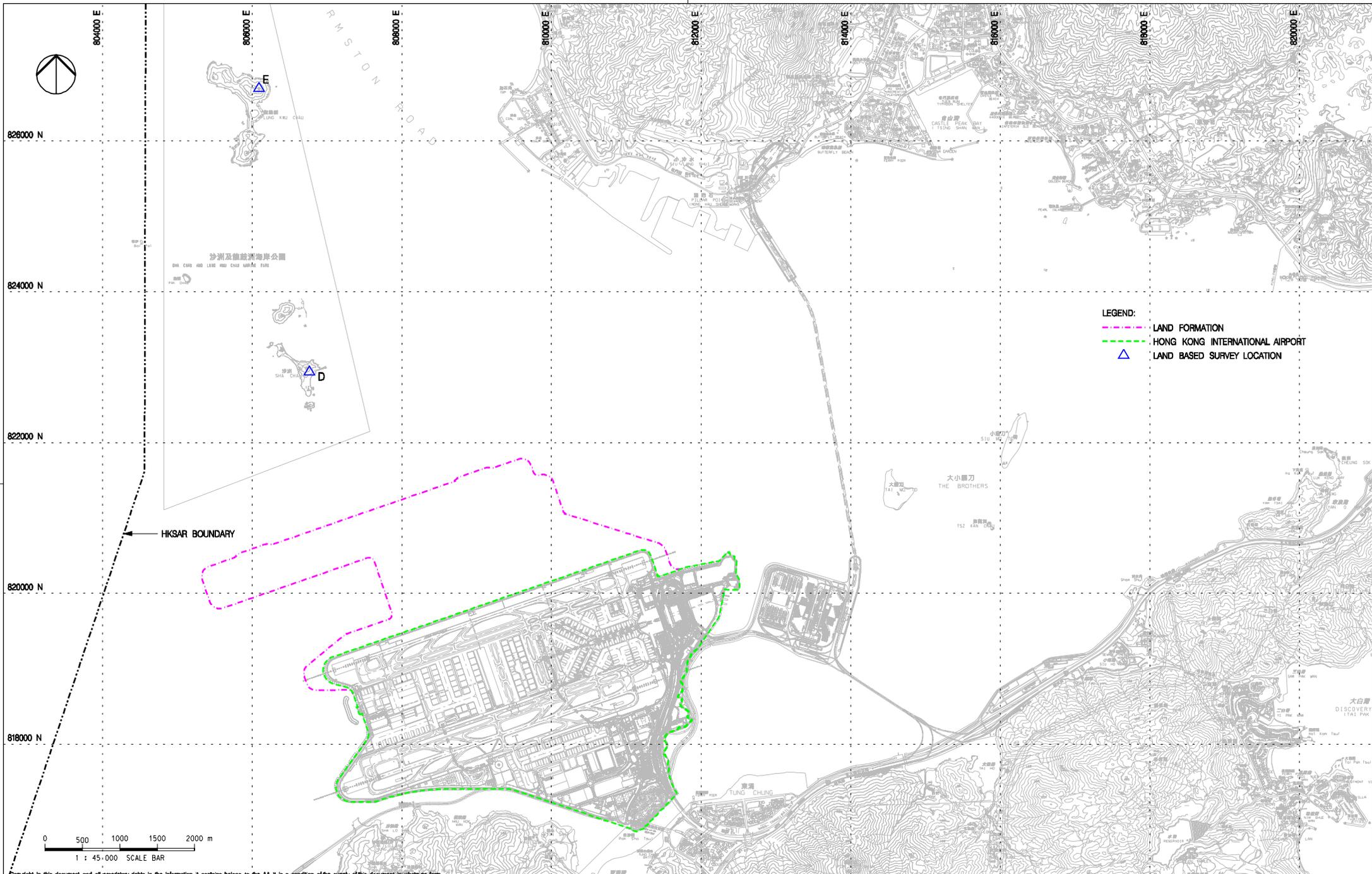
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B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT
E	29OCT18	GENERAL REVISION	SH
F	04APR19	GENERAL REVISION	SH



Title
VESSEL BASED DOLPHIN MONITORING
TRANSECTS IN CONSTRUCTION,
POST-CONSTRUCTION AND OPERATION PHASES

Consultant's Signatures for Approval		Date
Design	JC	04APR19
Checkers	JC / TK	04APR19
Approver	EC	04APR19

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



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

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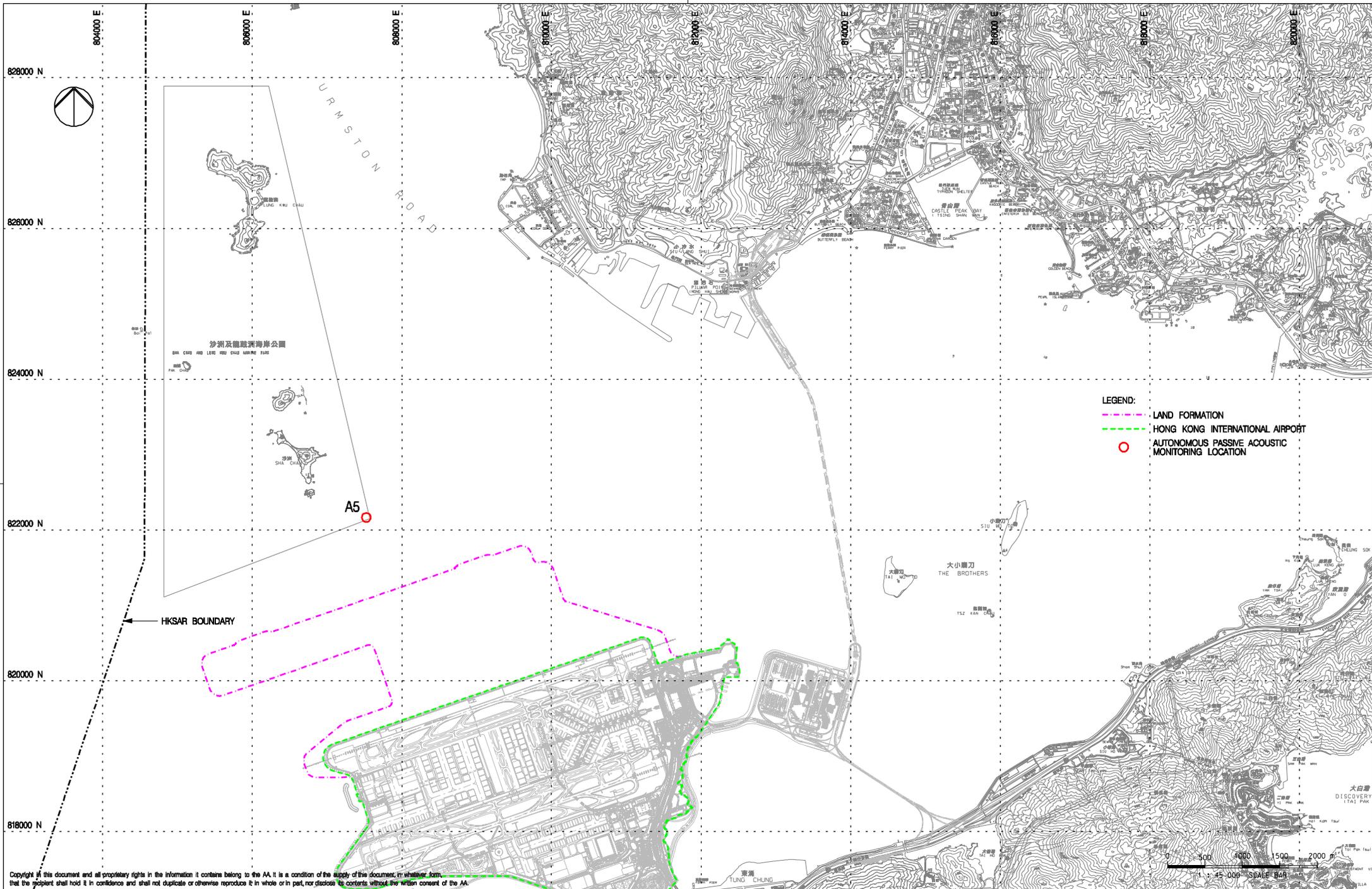
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	06FEB17	GENERAL REVISION	JC
C	29OCT18	GENERAL REVISION	SH



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

Consultant's Signatures for Approval		Date
Design	JC	29OCT18
Checkers	JC / TK	29OCT18
Approver	EC	29OCT18

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



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Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT
B	10OCT17	GENERAL REVISION	PL
C	29OCT18	GENERAL REVISION	SH



Title
LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

Consultant's Signatures for Approval		Date
Design	JC	29OCT18
Checkers	JC / TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	Scale at A3 1 : 45000
FIGURE 6.4	Rev. C

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

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p>Loading, Unloading or Transfer of Dusty Materials</p> <ul style="list-style-type: none"> All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet. 	Within construction site / Duration of the construction phase	
			<p>Debris Handling</p> <ul style="list-style-type: none"> Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. 	Within construction site / Duration of the construction phase	
			<p>Transport of Dusty Materials</p> <ul style="list-style-type: none"> Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. 	Within construction site / Duration of the construction phase	
			<p>Wheel washing</p> <ul style="list-style-type: none"> Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. 	Within construction site / Duration of the construction phase	
			<p>Use of vehicles</p> <ul style="list-style-type: none"> The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site; Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. 	Within construction site / Duration of the construction phase	
			<p>Site hoarding</p> <ul style="list-style-type: none"> Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. 	Within construction site / Duration of the construction phase	
5.2.6.5	2.1	-	<p>Best Practices for Concrete Batching Plant</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include:</p> <p>Cement and other dusty materials</p>	Within Concrete Batching Plant / Duration of the construction phase	

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ The flue gas exit temperature shall not be less than the acid dew point; and ▪ Release of the chimney shall be directed vertically upwards and not be restricted or deflected. 		
			<p>Cold feed side</p> <ul style="list-style-type: none"> ▪ The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed structure such as storage bin and shall not be handled in open area; ▪ Where there is sufficient buffer area surrounding the plant, ground stockpiling may be used. The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side. If 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; ▪ The aggregates with a nominal size greater than 5 mm should preferably be stored in totally enclosed structure. Aggregates stockpile that is above the feeding hopper shall be enclosed at least on top and three sides. If open stockpiling is used, the stockpiles shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; ▪ Belt conveyors shall be enclosed on top and two sides and provided with a metal board at the bottom to eliminate any dust emission due to the wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can be achieve the same performance; ▪ Scrapers shall be provided at the turning points of all belt conveyors inside the chute of the transfer points to remove dust adhered to the belt surface; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals; and ▪ All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	
			<p>Hot feed side</p> <ul style="list-style-type: none"> ▪ The inlet and outlet of the rotary dryer shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter. The particulate and gaseous concentration at the exhaust outlet of the dust collector shall not exceed the required limiting values; ▪ The bucket elevator shall be totally enclosed and the air be extracted and ducted to a dust collection system to meet the required particulates limiting value; ▪ All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings; ▪ Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside. They shall be inspected daily for leakages; ▪ All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value; and 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units). 		
			<p>Material transportation</p> <ul style="list-style-type: none"> The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions; Roadways from the entrance of the plant to the product loading points and/or any other working areas where there are regular movements of vehicles shall be paved or hard surfaced; and Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	
			<p>Control of emissions from bitumen decanting</p> <ul style="list-style-type: none"> The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note; Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in case the upper limit for bitumen temperature is reached; Proper chimney for the discharge of bitumen fumes shall be provided at high level; The emission of bitumen fumes shall not exceed the required emission limit; and The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	
			<p>Liquid fuel</p> <ul style="list-style-type: none"> The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	
			<p>Housekeeping</p> <ul style="list-style-type: none"> A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	
5.2.6.7	2.1	-	<p>Best Practices for Rock Crushing Plants</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:</p> <p>Crushers</p>	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A as there was no rock crushing plant at this stage</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter; ▪ The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping; ▪ Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and ▪ Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure. 		
			<p>Vibratory screens and grizzlies</p> <ul style="list-style-type: none"> ▪ All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and ▪ All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A as there was no rock crushing plant at this stage</p>
			<p>Belt conveyors</p> <ul style="list-style-type: none"> ▪ Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides; ▪ Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and <p>Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals.</p>	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A as there was no rock crushing plant at this stage</p>
			<p>Storage piles and bins</p> <ul style="list-style-type: none"> ▪ Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A as there was no rock crushing plant at this stage</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable; All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or The stockpiles of aggregates 5 mm in size or less shall be enclosed on 3 sides or suitably located to minimize wind-whipping. Save for fluctuations in stock or production, the average stockpile shall stay within the enclosure walls and in no case the height of the stockpile shall exceed twice the height of the enclosure walls; and Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly. 		
			<p>Rock drilling equipment</p> <ul style="list-style-type: none"> Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities. 	Within Concrete Batching Plant / Duration of the construction phase	N/A as there was no rock crushing plant at this stage
Hazard to Human Life – Construction Phase					
Table 6.40	3.2	-	<ul style="list-style-type: none"> Precautionary measures should be established to request barges to move away during typhoons. 	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> An appropriate marine traffic management system should be established to minimize risk of ship collision. 	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> Location of all existing hydrant networks should be clearly identified prior to any construction works. 	Construction Site / Construction Period	I
Noise Impact – Construction Phase					
7.5.6	4.3	-	<p>Good Site Practice</p> <p>Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:</p> <ul style="list-style-type: none"> only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; mobile plant should be sited as far away from NSRs as possible; and material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities. 	Within the Project site / During construction phase / Prior to commencement of operation	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
7.5.6	4.3	-	Adoption of QPME <ul style="list-style-type: none"> QPME should be adopted as far as applicable. 	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	Use of Movable Noise Barriers <ul style="list-style-type: none"> Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs. 	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	Use of Noise Enclosure/ Acoustic Shed <ul style="list-style-type: none"> Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator. 	Within the Project site / During construction phase / Prior to commencement of operation	I
Water Quality Impact – Construction Phase					
8.8.1.2 and 8.8.1.3	5.1	2.26	Marine Construction Activities <u>General Measures to be Applied to All Works Areas</u> <ul style="list-style-type: none"> Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; Use of Lean Material Overboard (LMOB) systems shall be prohibited; Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; All vessels shall be sized such that adequate clearance is maintained between vessels and the seabed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the wastewater meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted. 	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p><u>Specific Measures to be Applied to All Works Areas</u></p> <ul style="list-style-type: none"> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document; ▪ An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities; 	<p>Within construction site / Duration of the construction phase</p>	<p>I – For marine filling</p> <p>C – Completed in Nov 2020 for sand blanket</p> <p>C – Completed in May 2018</p>
			<ul style="list-style-type: none"> ▪ Closed grab dredger shall be used to excavate marine sediment; ▪ Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and <hr/> <ul style="list-style-type: none"> ▪ The Silt Curtain Deployment Plan shall be implemented. 		<p>I</p> <p>(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p> <hr/> <p>I</p>
			<p><u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u></p> <ul style="list-style-type: none"> ▪ Double layer ‘Type III’ silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains; ▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and 	<p>Within construction site / Duration of the construction phase</p>	<p>N/A</p> <p>(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p> <hr/> <p>I – For C7a</p> <p>C – Completed in Dec 2021 for C8</p> <p>*(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> ▪ The silt curtains and silt screens should be regularly checked and maintained. 		<p>I</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p><u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u></p> <ul style="list-style-type: none"> Double layer ‘Type II’ or ‘Type III’ silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides; 	Within construction site / Duration of the construction phase	I *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities; 		N/A (The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and 		I – For C7a C – Completed in Dec 2021 for C8 (The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> The silt curtains and silt screens should be regularly checked and maintained. 		I
			<p><u>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</u></p> <ul style="list-style-type: none"> Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping at Sea Ordinance (DASO) permit conditions; and Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure. 	Within construction site / Duration of the construction phase	N/A – the field joint excavation works for the submarine cable diversion will no longer be conducted anymore
8.8.1.4	5.1	-	<p>Modification of the Existing Seawall</p> <ul style="list-style-type: none"> Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works. 	At the existing northern seawall / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.5	5.1	-	<p>Construction of New Stormwater Outfalls and Modifications to Existing Outfalls</p> <ul style="list-style-type: none"> During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations. 	Within construction site / Duration of the construction phase	I
8.8.1.6 8.8.1.7	5.1	2.27	<p>Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons</p> <p>Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment.</p>	Within construction site / Duration of the construction phase	<p>C – For approach lights</p> <p>N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys</p>
			<p><u>For construction of the eastern approach lights at the CMPs</u></p> <ul style="list-style-type: none"> Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; The excavated materials shall be removed using a closed grab within the steel casings; No discharge of the cement mixed materials into the marine environment will be allowed; and Excavated materials shall be treated and reused on-site. 		C – Completed in Oct 2021
8.8.1.8	5.1	-	<p>Construction of Site Runoff and Drainage</p> <p>The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:</p>	Within construction site / Duration of the construction phase	
			<ul style="list-style-type: none"> Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sandbag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform); 		I
			<ul style="list-style-type: none"> Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction; 		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly; 		
			<ul style="list-style-type: none"> ▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities; 		
			<ul style="list-style-type: none"> ▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and 		
			<ul style="list-style-type: none"> ▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge. 		
			<ul style="list-style-type: none"> ▪ Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the construction materials, soil, silt or debris from washing away into the drainage system; 		
			<ul style="list-style-type: none"> ▪ Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and to prevent stormwater runoff being directed into foul sewers; and 		
			<ul style="list-style-type: none"> ▪ Precautionary measures should be taken at any time of the year when rainstorms are likely. Actions to be taken when a rainstorm is imminent or forecasted are summarized in Appendix A2 of ProPECC Note PN 1/94. This includes actions to be taken during and/or after rainstorms. Particular attention should be paid to the control of silty surface runoff during storm events. 		
8.8.1.9	5.1	-	<p>Sewage Effluent from Construction Workforce</p> <ul style="list-style-type: none"> ▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance. 	Within construction site / During construction phase	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.10 8.8.1.11	5.1		<p>General Construction Activities</p> <ul style="list-style-type: none"> Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event. 	Within construction site / During construction phase	I
8.8.1.12 8.8.1.13	5.1	2.28	<p>Drilling Activities for the Submarine Aviation Fuel Pipelines</p> <p>To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:</p> <ul style="list-style-type: none"> A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; No bulk storage of chemicals shall be permitted; and A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas. 	Within construction site / During construction phase	C – Completed in Jan 2019
			<p>At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:</p> <ul style="list-style-type: none"> During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 	Within construction site / During construction phase	C – Completed in Jan 2019
Waste Management Implication – Construction Phase					
10.5.1.1	7.1	-	<p>Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended:</p> <ul style="list-style-type: none"> The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials; Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works; 	Project Site Area / During design and construction phase	I
					I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work; 		
			<ul style="list-style-type: none"> Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and 		
			<ul style="list-style-type: none"> For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development. 		
10.5.1.1	7.1	-	<p>The following good site practices should be performed during the construction activities include:</p> <ul style="list-style-type: none"> Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; Training of site personnel in proper waste management and chemical waste handling procedures; Provision of sufficient waste disposal points and regular collection for disposal; Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. 	Project Site Area / Construction Phase	
10.5.1.3	7.1	-	<p>The following practices should be performed to achieve waste reduction include:</p> <ul style="list-style-type: none"> Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; 	Project Site Area / Construction Phase	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ Adoption of repetitive design to allow reuse of formworks as far as practicable; ▪ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; ▪ Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force; ▪ Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable; ▪ Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and ▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. 		
10.5.1.5	7.1		Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	Any recyclable materials should be segregated from the non-inert C&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.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	I
10.5.1.16	7.1	-	<p>The following mitigation measures are recommended during excavation and treatment of the sediments:</p> <ul style="list-style-type: none"> ▪ On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions; ▪ The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions; ▪ All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; ▪ Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; ▪ Treated and untreated sediment should be clearly separated and stored separately; and ▪ Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge. 	Project Site Area / Construction Phase	I I I I I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
10.5.1.18	7.1	-	<p>The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal:</p> <ul style="list-style-type: none"> Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material; Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by EPD; and Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation. 	Project Site Area / Construction Phase	N/A – the field joint excavation works for the submarine cable diversion will no longer be conducted anymore
10.5.1.19	7.1	-	<p>Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented:</p> <ul style="list-style-type: none"> Good quality containers compatible with the chemical wastes should be used; Incompatible chemicals should be stored separately; Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.; and The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. 	Project Site Area / Construction Phase	I
10.5.1.20	7.1	-	<p>General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'windblown' light material.</p>	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	<p>The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse.</p>	Project Site Area / Construction Phase	I
Land Contamination – Construction Phase					
11.10.1.2 to 11.10.1.3	8.1	2.32	<p>For areas inaccessible during site reconnaissance survey</p> <ul style="list-style-type: none"> Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas. 	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas. ▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room. ▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively. 		<p>C – Completed in Jan 2018</p> <p>I *(CAR for golf course and Terminal 2 emergency power supply system nos.1, 2, 3, 4 and 5 were submitted to EPD)</p> <p>N/A as no remediation was required.</p>
11.8.1.2	8.1	-	<p>If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any):</p> <ul style="list-style-type: none"> ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements. 	Project Site Area / Construction Phase	N/A as no contaminated soil was found.

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Terrestrial Ecological – Construction Phase					
12.10.1.1	9.2	2.14	Pre-construction Egretty Survey <ul style="list-style-type: none"> Conduct ecological survey for Sha Chau egretty to update the latest boundary of the egretty. 	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	C – Completed in Jan 2019
12.7.2.3 and 12.7.2.6	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egretty <ul style="list-style-type: none"> The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretty. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretty; In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and The containment pit at the daylighting location shall be covered or camouflaged. 	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.7.2.5	9.1	2.30	Preservation of Nesting Vegetation <ul style="list-style-type: none"> The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved. 	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.7.2.4 and 12.7.2.6	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season <ul style="list-style-type: none"> All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons. 	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.10.1.1	9.3	-	Ecological Monitoring <ul style="list-style-type: none"> During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. 	at Sheung Sha Chau Island	C – Completed in Jan 2019
Marine Ecological Impact – Pre-construction Phase					
13.11.4.1	10.2.2	-	<ul style="list-style-type: none"> Pre-construction phase Coral Dive Survey. 	HKIAAA artificial seawall	C – Completed in Jan 2016
Marine Ecological Impact – Construction Phase					
13.11.1.3 to 13.11.1.6	-	-	Minimisation of Land Formation Area <ul style="list-style-type: none"> Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population. 	Land formation footprint / during detailed design phase to completion of construction	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.1.7 to 13.11.1.10	-	2.31	<p>Use of Construction Methods with Minimal Risk/Disturbance</p> <ul style="list-style-type: none"> ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; <hr/> <ul style="list-style-type: none"> ▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment; <hr/> <ul style="list-style-type: none"> ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; <hr/> <ul style="list-style-type: none"> ▪ Avoid bored piling during CWD peak calving season (Mar to Jun); <hr/> <ul style="list-style-type: none"> ▪ Prohibition of underwater percussive piling; and <hr/> <ul style="list-style-type: none"> ▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources. 	During construction phase at marine works area	<p>C – Completed in Jan 2019 for diversion of aviation fuel pipeline</p> <hr/> <p>I</p> <hr/> <p>C – Completed in Oct 2021 for new approach lights</p> <p>N/A for marker beacons as HKIAAAA Marker Beacons would be replaced by buoys</p> <hr/> <p>I</p> <hr/> <p>C – Completed in Jan 2019 for HDD works</p>
13.11.2.1 to 13.11.2.7	-	-	<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; <hr/> <ul style="list-style-type: none"> ▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); <hr/> <ul style="list-style-type: none"> ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and <hr/> <ul style="list-style-type: none"> ▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources. 	All works area during the construction phase	<p>I</p> <hr/> <p>I</p> <hr/> <p>C – Completed in Oct 2021 for new approach lights</p> <hr/> <p>C – Completed in Jan 2019 for HDD works</p>
13.11.1.12	-	-	Strict Enforcement of No-Dumping Policy	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works; Fines for infractions should be implemented; and Unscheduled, on-site audits shall be implemented. 		
13.11.1.13	-	-	<p>Good Construction Site Practices</p> <ul style="list-style-type: none"> Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; Keep the number of working or stationary vessels present on-site to the minimum anytime; and Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 	All works area during the construction phase	I
13.11.1.3 to 13.11.1.6	-	-	<p>Minimisation of Land Formation Area</p> <ul style="list-style-type: none"> Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population. 	Land formation footprint / during detailed design phase to completion of construction	I
13.11.5.4 to 13.11.5.13	10.3.1	-	<p>SkyPier High Speed Ferries' Speed Restrictions and Route Diversions</p> <ul style="list-style-type: none"> SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in Drawing No. MCL/P132/EIA/13-023 of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times. <p>Other mitigation measures</p> <ul style="list-style-type: none"> The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed. 	Area between the footprint and SCLKC Marine Park during construction phase	I
13.11.5.14 to 13.11.5.18	10.3.1	2.31	<p>Dolphin Exclusion Zone</p> <ul style="list-style-type: none"> Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas; 	Marine waters around land formation works area during construction phase	I C – Completed in Sep 2016

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and A DEZ would also be implemented during bored piling work but as a precautionary measure only. 		I C – Completed in Oct 2021 for the bored piling work of New approach lights
13.11.5.19	10.4	2.31	Acoustic Decoupling of Construction Equipment <ul style="list-style-type: none"> Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works. 	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	Spill Response Plan <ul style="list-style-type: none"> An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage. 	Construction phase	I
13.11.5.21 to 13.11.5.23	10.6.1	-	Construction Vessel Speed Limits and Skipper Training <ul style="list-style-type: none"> A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities (as currently indicated by the 1x1km grid squares in Figure 6 of Appendix 13.2 of EIA report). Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing. 	All areas north and west of Lantau Island during construction phase	I
Fisheries Impact – Construction Phase					
14.9.1.2 to 14.9.1.5	-	-	Minimisation of Land Formation Area <ul style="list-style-type: none"> Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources. 	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	Use of Construction Methods with Minimal Risk/Disturbance <ul style="list-style-type: none"> Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; 	During construction phase at marine works area	C – Completed in Jan 2019 for diversion of aviation fuel pipeline

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment; Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 		<p>I</p> <hr/> <p>C – Completed in Oct 2021 for new approach lights N/A for marker beacons as HKIAAAA Marker Beacons would be replaced by buoys</p> <hr/> <p>C – Completed in Jan 2019 for HDD works</p>
14.9.1.11	-		<p>Strict Enforcement of No-Dumping Policy</p> <ul style="list-style-type: none"> A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works; Fines for infractions should be implemented; and Unscheduled, on-site audits shall be implemented. 	All works area during the construction phase	I
14.9.1.12	-		<p>Good Construction Site Practices</p> <ul style="list-style-type: none"> Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; Keep the number of working or stationary vessels present on-site to the minimum anytime; and Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 	All works area during the construction phase	I
14.9.1.13 to 14.9.1.18	-		<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); 	All works area during the construction phase	<p>I</p> <hr/> <p>I</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 		C – Completed in Oct 2021 for new approach lights N/A for marker beacons as HKIAAAA Marker Beacons would be replaced by buoys
			<ul style="list-style-type: none"> Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 		C – Completed on Jan 2019 for HDD work
Landscape and Visual Impact – Construction Phase					
Table 15.6	12.3	-	CM1 - The construction area and contractor’s temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM2 - Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM3 - Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM4 - Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM5 - Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases.	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	CM6 - Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM7 - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases.	I
Table 15.6	12.3	-	CM8 - All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor’s works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM9 - Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM10 - Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works; Upon handover and completion of works.	I
Cultural Heritage Impact – Construction Phase					
Not applicable to the construction stage of this project.					
Health Impact – Aircraft Emissions					
Not applicable to the construction stage of this project.					

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Timing of completion of measures	Mitigation Measures Implemented?^
Health Impact – Aircraft Noise						
Not applicable to the construction stage of this project.						

Notes:

- “ - ” For items denoted as “ - ” provided under the columns of EM&A Ref. or EP Condition, environmental protection measures should be referred to the relevant paragraph(s) / table(s) in the approved EIA Report.
- “ I ” Implemented and on-going where applicable.
- “ N/A ” Not applicable to the construction works implemented during the reporting month.
- “ ^ ” Checked by ET through site inspection and record provided by the Contractor.

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Oct-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 WQ General mid-ebb: 16:40 mid-flood: 11:13
2	3 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	4 WQ General mid-ebb: 07:23 mid-flood: 20:21	5 Site Inspection NM4, NM6 ^[1]	6 Site Inspection WQ General mid-ebb: 10:12 mid-flood: 17:42	7 Site Inspection CWD Survey (Vessel) NM4, NM6	8 AR1A, AR2 WQ General mid-ebb: 11:54 mid-flood: 18:41
9	10 Site Inspection	11 Site Inspection CWD Survey (Vessel) WQ General mid-ebb: 13:48 mid-flood: 07:48	12 Site Inspection	13 Site Inspection NM4, NM6 WQ General mid-ebb: 14:54 mid-flood: 09:19	14 Site Inspection AR1A, AR2 NM1A, NM5	15 WQ General mid-ebb: 16:00 mid-flood: 11:05
16	17 Site Inspection CWD Survey (Vessel, Land-based)	18 Site Inspection WQ General ^[2] mid-ebb: 06:20 mid-flood: 19:11	19 Site Inspection CWD Survey (Vessel)	20 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 09:14 mid-flood: 17:10	21 Site Inspection NM4, NM6	22 WQ General mid-ebb: 11:00 mid-flood: 17:42
23	24 Site Inspection CWD Survey (Vessel)	25 Site Inspection WQ General mid-ebb: 12:52 mid-flood: 06:51	26 Site Inspection AR1A, AR2 NM1A, NM5	27 Site Inspection CWD Survey (Vessel, Land-based) WQ General mid-ebb: 14:13 mid-flood: 08:26	28 Site Inspection NM4, NM6	29 WQ General mid-ebb: 15:44 mid-flood: 10:20
30	31 Site Inspection	Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality [1] Noise monitoring sessions for NM4 & NM6 were rescheduled from 30 September 2022 to 5 October 2022 due to the hoisting of Amber Rainstorm Signal. [2] WQ Monitoring for both ebb and flood tides on 18 October 2022 was cancelled due to Strong Wind Signal No.3 in force.				

Tentative Monitoring Schedule of Next Reporting Period

Nov-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Site Inspection AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 05:45 mid-flood: 18:26	2 Site Inspection NM4, NM6	3 Site Inspection WQ General mid-ebb: 08:40 mid-flood: 16:25	4 Site Inspection	5 WQ General mid-ebb: 10:42 mid-flood: 17:28
6	7 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	8 Site Inspection WQ General mid-ebb: 12:48 mid-flood: 07:02	9 Site Inspection CWD Survey (Vessel)	10 Site Inspection CWD Survey (Vessel) WQ General mid-ebb: 14:00 mid-flood: 08:36	11 Site Inspection CWD Survey (Vessel) NM4, NM6	12 AR1A, AR2 WQ General mid-ebb: 15:03 mid-flood: 10:07
13	14 Site Inspection CWD Survey (Vessel)	15 Site Inspection CWD Survey (Land-based) WQ General mid-ebb: 04:42 mid-flood: 17:02	16 Site Inspection	17 Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General mid-ebb: 06:28 mid-flood: 19:31	18 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	19 WQ General mid-ebb: 09:11 mid-flood: 16:18
20	21 Site Inspection CWD Survey (Vessel)	22 Site Inspection CWD Survey (Land-based) WQ General mid-ebb: 11:44 mid-flood: 17:29	23 Site Inspection	24 Site Inspection AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 13:16 mid-flood: 07:42	25 Site Inspection NM4, NM6	26 WQ General mid-ebb: 14:47 mid-flood: 09:30
27	28 Site Inspection	29 Site Inspection WQ General mid-ebb: 04:35 mid-flood: 17:04	30 Site Inspection AR1A, AR2 NM1A, NM5			
Notes: Contract Number - Site Inspection CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan						

Appendix C. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

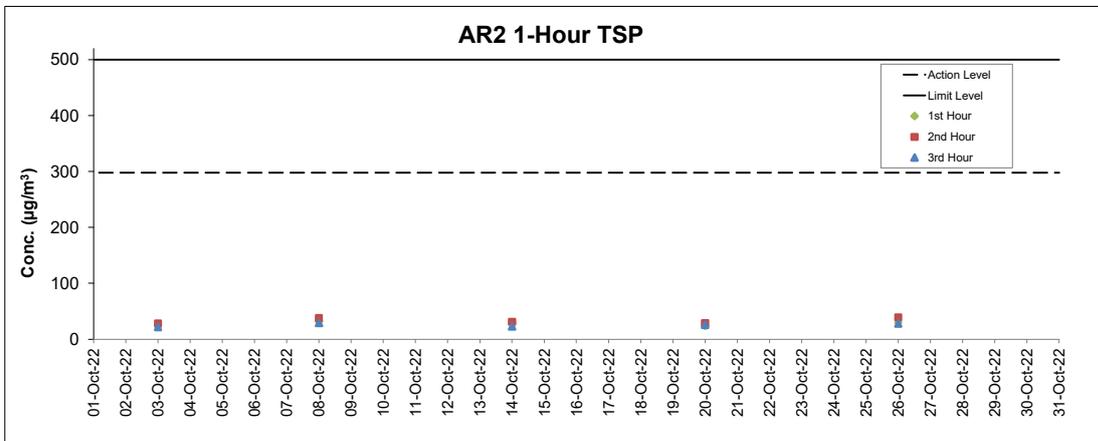
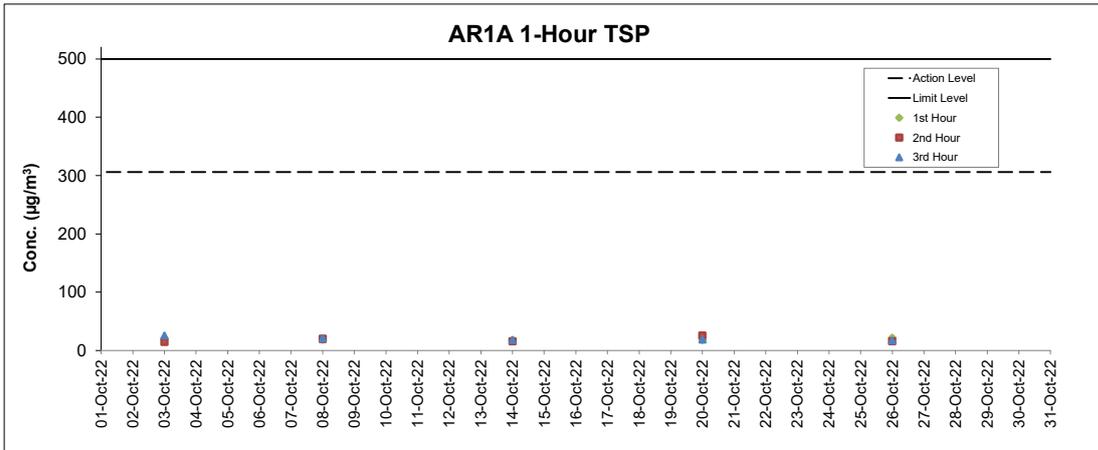
Station: AR1A- Man Tung Road Park

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
3-Oct-22	12:52	Sunny	3.9	173	21	306	500
3-Oct-22	13:52	Sunny	2.8	Variable	15	306	500
3-Oct-22	14:52	Sunny	3.3	108	26	306	500
8-Oct-22	12:33	Sunny	3.1	55	19	306	500
8-Oct-22	13:33	Sunny	3.3	80	20	306	500
8-Oct-22	14:33	Sunny	3.9	100	21	306	500
14-Oct-22	12:38	Sunny	2.8	Variable	18	306	500
14-Oct-22	13:38	Sunny	3.1	326	16	306	500
14-Oct-22	14:38	Sunny	5.3	268	18	306	500
20-Oct-22	12:47	Sunny	6.1	105	18	306	500
20-Oct-22	13:47	Sunny	5.8	116	26	306	500
20-Oct-22	14:47	Sunny	4.7	108	19	306	500
26-Oct-22	13:03	Sunny	4.2	92	22	306	500
26-Oct-22	14:03	Sunny	3.3	137	16	306	500
26-Oct-22	15:03	Sunny	5.3	263	17	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
3-Oct-22	8:41	Sunny	3.3	50	26	298	500
3-Oct-22	9:41	Sunny	3.3	52	28	298	500
3-Oct-22	10:41	Sunny	3.3	61	22	298	500
8-Oct-22	8:41	Sunny	4.7	60	32	298	500
8-Oct-22	9:41	Sunny	3.9	34	38	298	500
8-Oct-22	10:41	Sunny	3.3	30	29	298	500
14-Oct-22	8:46	Sunny	5.3	56	29	298	500
14-Oct-22	9:46	Sunny	4.2	40	31	298	500
14-Oct-22	10:46	Sunny	2.8	48	23	298	500
20-Oct-22	8:51	Sunny	7.5	75	24	298	500
20-Oct-22	9:51	Sunny	6.7	75	29	298	500
20-Oct-22	10:51	Sunny	5.6	84	26	298	500
26-Oct-22	8:46	Sunny	6.4	84	30	298	500
26-Oct-22	9:46	Sunny	4.9	82	39	298	500
26-Oct-22	10:46	Sunny	4.2	53	28	298	500



Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A) ^
3-Oct-22	Sunny	12:24	56.9	52.5	59
3-Oct-22	Sunny	12:29	57.7	52.9	
3-Oct-22	Sunny	12:34	57.0	53.1	
3-Oct-22	Sunny	12:39	56.8	53.1	
3-Oct-22	Sunny	12:44	57.1	53.1	
3-Oct-22	Sunny	12:49	56.7	53.2	67
14-Oct-22	Sunny	13:49	65.0	50.2	
14-Oct-22	Sunny	13:56	67.8	49.2	
14-Oct-22	Sunny	14:01	68.0	52.3	
14-Oct-22	Sunny	14:07	68.1	51.2	
14-Oct-22	Sunny	14:20	68.2	50.9	
14-Oct-22	Sunny	14:25	55.5	48.0	66
20-Oct-22	Sunny	12:29	63.8	55.7	
20-Oct-22	Sunny	12:34	63.2	57.0	
20-Oct-22	Sunny	12:39	63.9	58.6	
20-Oct-22	Sunny	12:44	64.7	52.9	
20-Oct-22	Sunny	12:49	68.4	61.1	
20-Oct-22	Sunny	12:54	67.5	62.1	64
26-Oct-22	Sunny	12:11	62.3	54.4	
26-Oct-22	Sunny	12:16	63.3	55.4	
26-Oct-22	Sunny	12:21	63.2	56.1	
26-Oct-22	Sunny	12:26	63.6	57.5	
26-Oct-22	Sunny	12:31	62.9	55.5	
26-Oct-22	Sunny	12:36	62.8	56.4	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A) ^
5-Oct-22	Sunny	12:16	64.8	60.8	69*
5-Oct-22	Sunny	12:21	65.1	60.6	
5-Oct-22	Sunny	12:26	65.5	61.4	
5-Oct-22	Sunny	12:31	64.7	61.9	
5-Oct-22	Sunny	12:36	63.0	60.6	
5-Oct-22	Sunny	12:41	63.6	60.4	
7-Oct-22	Sunny	12:31	57.0	54.4	61
7-Oct-22	Sunny	12:36	58.8	55.0	
7-Oct-22	Sunny	12:41	57.6	53.4	
7-Oct-22	Sunny	12:46	56.0	53.3	
7-Oct-22	Sunny	12:51	55.2	53.6	
7-Oct-22	Sunny	12:56	55.0	53.8	
13-Oct-22	Sunny	8:06	60.1	53.3	63
13-Oct-22	Sunny	8:11	61.7	55.3	
13-Oct-22	Sunny	8:16	61.8	54.6	
13-Oct-22	Sunny	8:22	61.3	54.4	
13-Oct-22	Sunny	8:27	62.4	55.2	
13-Oct-22	Sunny	8:32	60.6	52.4	
21-Oct-22	Sunny	9:30	60.3	57.0	64*
21-Oct-22	Sunny	9:35	60.4	57.2	
21-Oct-22	Sunny	9:40	61.4	57.4	
21-Oct-22	Sunny	9:45	62.0	58.1	
21-Oct-22	Sunny	9:50	62.6	58.5	
21-Oct-22	Sunny	9:55	59.7	57.3	
28-Oct-22	Sunny	11:15	61.8	57.8	66
28-Oct-22	Sunny	11:20	63.1	58.3	
28-Oct-22	Sunny	11:25	63.4	58.8	
28-Oct-22	Sunny	11:30	62.4	57.7	
28-Oct-22	Sunny	11:35	67.7	57.5	
28-Oct-22	Sunny	11:40	63.2	58.4	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

(*) The measurement result was corrected with reference to the baseline monitoring levels.

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A) ^
3-Oct-22	Sunny	9:47	52.0	48.8	54
3-Oct-22	Sunny	9:52	51.2	48.9	
3-Oct-22	Sunny	9:57	51.6	49.2	
3-Oct-22	Sunny	10:02	51.0	48.8	
3-Oct-22	Sunny	10:07	51.2	49.1	
3-Oct-22	Sunny	10:12	51.5	48.9	
14-Oct-22	Sunny	9:02	54.9	52.5	53*
14-Oct-22	Sunny	9:07	54.9	52.6	
14-Oct-22	Sunny	9:12	58.0	52.9	
14-Oct-22	Sunny	9:17	59.9	53.1	
14-Oct-22	Sunny	9:22	59.5	52.9	
14-Oct-22	Sunny	9:27	59.4	53.4	
20-Oct-22	Sunny	8:45	64.5	53.5	61*
20-Oct-22	Sunny	8:50	56.2	52.6	
20-Oct-22	Sunny	8:55	62.3	52.5	
20-Oct-22	Sunny	9:00	62.8	52.9	
20-Oct-22	Sunny	9:05	63.6	52.6	
20-Oct-22	Sunny	9:10	61.8	54.2	
26-Oct-22	Sunny	8:15	53.0	52.2	57*
26-Oct-22	Sunny	8:20	53.2	52.0	
26-Oct-22	Sunny	8:25	52.8	51.9	
26-Oct-22	Sunny	8:30	53.6	52.2	
26-Oct-22	Sunny	8:35	52.9	52.1	
26-Oct-22	Sunny	8:40	53.1	52.1	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

(*) The measurement result was corrected with reference to the baseline monitoring levels.

Noise Measurement Results

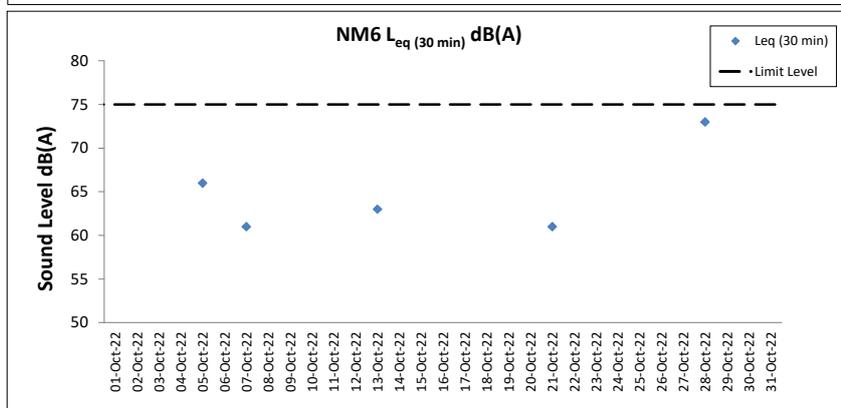
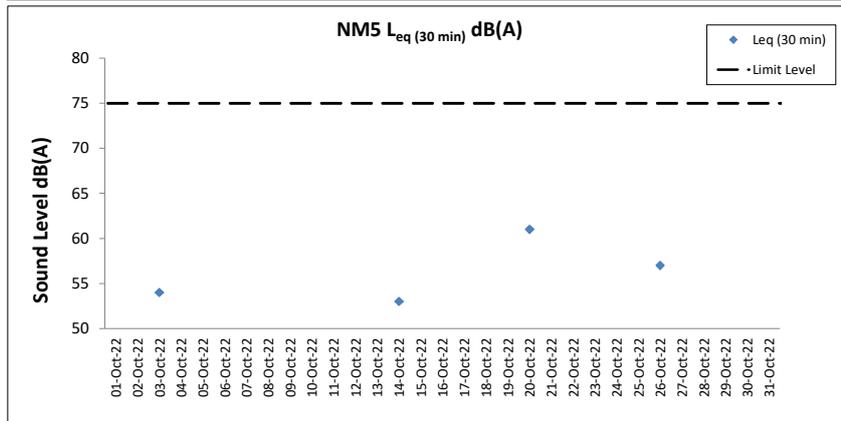
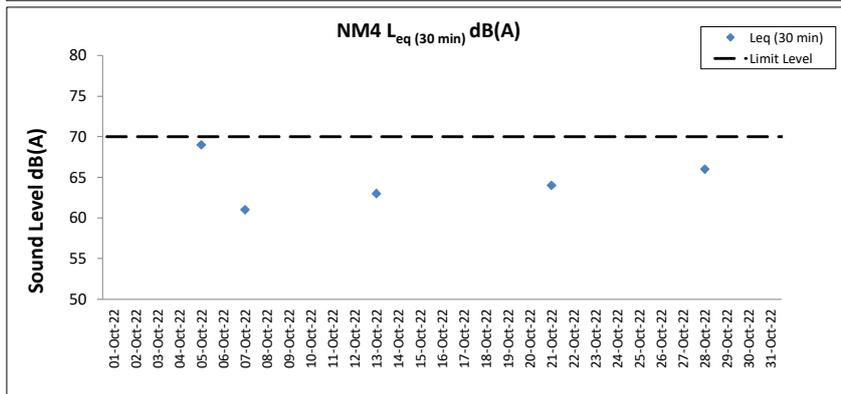
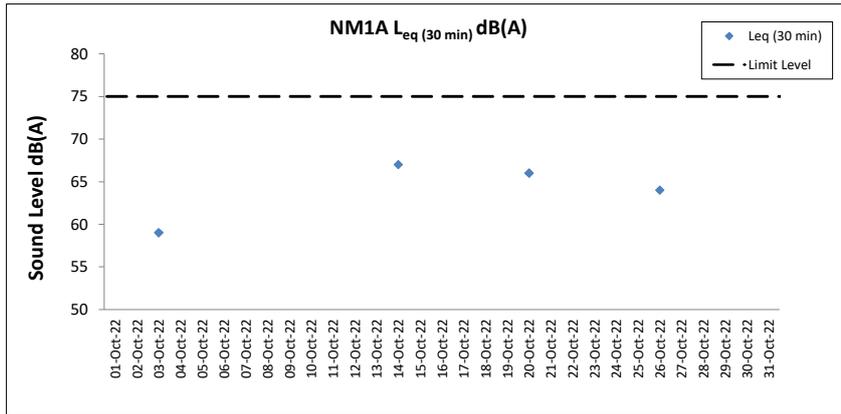
Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A) ^
5-Oct-22	Sunny	15:19	67.0	52.8	66
5-Oct-22	Sunny	15:24	65.6	53.6	
5-Oct-22	Sunny	15:29	67.0	53.9	
5-Oct-22	Sunny	15:34	63.6	52.3	
5-Oct-22	Sunny	15:39	63.4	52.0	
5-Oct-22	Sunny	15:44	53.7	52.0	
7-Oct-22	Sunny	14:51	65.7	50.9	61
7-Oct-22	Sunny	14:56	59.9	54.3	
7-Oct-22	Sunny	15:01	59.2	53.6	
7-Oct-22	Sunny	15:06	57.8	53.4	
7-Oct-22	Sunny	15:11	55.0	51.4	
7-Oct-22	Sunny	15:16	53.3	52.0	
13-Oct-22	Sunny	10:07	61.3	49.0	63
13-Oct-22	Sunny	10:12	57.0	52.3	
13-Oct-22	Sunny	10:17	57.1	51.3	
13-Oct-22	Sunny	10:22	58.5	53.0	
13-Oct-22	Sunny	10:29	56.6	52.9	
13-Oct-22	Sunny	10:35	56.2	52.5	
21-Oct-22	Sunny	11:26	56.4	52.3	61
21-Oct-22	Sunny	11:31	56.8	51.7	
21-Oct-22	Sunny	11:36	61.6	53.0	
21-Oct-22	Sunny	11:42	61.3	53.7	
21-Oct-22	Sunny	11:47	62.0	53.2	
21-Oct-22	Sunny	11:52	60.7	54.1	
28-Oct-22	Sunny	9:42	72.4	55.7	73*
28-Oct-22	Sunny	9:47	71.7	61.5	
28-Oct-22	Sunny	9:52	74.4	59.2	
28-Oct-22	Sunny	9:57	77.2	56.8	
28-Oct-22	Sunny	10:02	68.1	55.1	
28-Oct-22	Sunny	10:07	77.2	57.1	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

(*) The measurement result was corrected with reference to the baseline monitoring levels.



Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Water Quality Monitoring Results

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

Water Quality Monitoring Results on 01 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Rough	16:47	8.2	Surface	1.0	0.2	206	<u>27.6</u>	27.6	8.2	8.2	<u>28.9</u>	28.9	<u>85.7</u>	85.7	5.8	5.7	8.6	11.4	9	9	815603	804229
						1.0	0.1	210	27.6		8.2		<u>28.9</u>		85.6		5.7		8.5		10			
					Middle	4.1	0.2	195	<u>27.4</u>	8.2	8.2	<u>29.0</u>	29.0	<u>84.7</u>	84.6	5.7	11.5	10						
						4.1	0.1	188	27.4	8.2	8.2	<u>29.0</u>	29.0	<u>84.5</u>	84.6	5.7	11.6	9						
					Bottom	7.2	0.2	197	<u>27.3</u>	8.2	8.2	<u>29.1</u>	29.1	<u>84.0</u>	84.1	5.7	14.1	9						
						7.2	0.2	197	27.3	8.2	8.2	<u>29.1</u>	29.1	<u>84.1</u>	84.1	5.7	14.1	9						
C2	Fine	Rough	14:58	9.2	Surface	1.0	0.1	354	<u>28.0</u>	28.0	8.1	8.1	<u>26.4</u>	26.4	<u>80.2</u>	80.2	5.4	5.4	4.9	6.9	9	11	825671	806959
						1.0	0.1	349	28.0		8.1		<u>26.4</u>		80.2		5.4		4.9		10			
					Middle	4.6	0.1	346	<u>27.7</u>	8.1	8.1	<u>26.6</u>	26.6	<u>78.4</u>	78.4	5.3	5.5	10						
						4.6	0.1	340	27.7	8.1	8.1	<u>26.6</u>	26.6	<u>78.4</u>	78.4	5.3	5.6	10						
					Bottom	8.2	0.1	348	<u>27.3</u>	8.2	8.2	<u>28.5</u>	28.6	<u>81.2</u>	81.2	5.5	10.1	12						
						8.2	0.1	351	27.3	8.2	8.2	<u>28.6</u>	28.6	<u>81.2</u>	81.2	5.5	10.2	12						
C3	Misty	Moderate	16:04	9.0	Surface	1.0	0.1	83	<u>28.0</u>	28.0	8.1	8.1	<u>32.3</u>	32.3	<u>81.2</u>	81.3	5.3	5.4	5.0	5.6	10	9	822090	817810
						1.0	0.1	86	27.9		8.1		<u>32.3</u>		81.3		5.3		5.0		11			
					Middle	4.5	0.1	88	<u>27.9</u>	8.1	8.1	<u>32.4</u>	32.4	<u>81.9</u>	82.1	5.4	5.6	9						
						4.5	0.1	85	27.9	8.1	8.1	<u>32.4</u>	32.4	<u>82.2</u>	82.1	5.4	5.5	9						
					Bottom	8.0	0.2	89	<u>27.9</u>	8.2	8.2	<u>32.4</u>	32.4	<u>85.1</u>	86.0	5.6	6.3	8						
						8.0	0.1	94	27.9	8.2	8.2	<u>32.4</u>	32.4	<u>86.8</u>	86.0	5.7	6.3	8						
IM1	Fine	Rough	16:14	7.6	Surface	1.0	0.1	195	<u>27.6</u>	27.6	8.2	8.2	<u>29.0</u>	29.0	<u>86.8</u>	86.8	5.8	5.8	8.7	7.9	10	10	818335	806467
						1.0	0.2	189	27.6		8.2		<u>29.0</u>		86.8		5.8		8.6		10			
					Middle	3.8	0.0	205	<u>27.6</u>	8.2	8.2	<u>28.9</u>	28.9	<u>86.3</u>	86.4	5.8	8.8	11						
						3.8	0.0	199	27.6	8.2	8.2	<u>28.9</u>	28.9	<u>86.4</u>	86.4	5.8	8.8	10						
					Bottom	6.6	0.1	208	<u>27.2</u>	8.2	8.2	<u>29.1</u>	29.1	<u>82.5</u>	82.4	5.6	6.4	11						
						6.6	0.1	208	27.2	8.2	8.2	<u>29.1</u>	29.1	<u>82.3</u>	82.4	5.6	6.4	10						
IM2	Fine	Rough	16:02	7.8	Surface	1.0	0.0	164	<u>27.9</u>	27.9	8.2	8.2	<u>28.6</u>	28.6	<u>86.3</u>	86.3	5.8	5.7	7.6	7.7	11	11	819199	806216
						1.0	0.0	159	27.9		8.2		<u>28.6</u>		86.3		5.8		7.6		11			
					Middle	3.9	0.0	161	<u>27.4</u>	8.2	8.2	<u>28.9</u>	28.8	<u>83.2</u>	83.4	5.6	10.4	11						
						3.9	0.0	167	27.5	8.2	8.2	<u>28.8</u>	28.8	<u>83.6</u>	83.4	5.6	10.4	10						
					Bottom	6.8	0.0	159	<u>27.1</u>	8.2	8.2	<u>29.3</u>	29.3	<u>83.1</u>	83.2	5.6	5.0	10						
						6.8	0.0	165	27.1	8.2	8.2	<u>29.3</u>	29.3	<u>83.2</u>	83.2	5.6	5.0	10						
IM7	Fine	Rough	15:32	8.4	Surface	1.0	0.1	74	<u>27.9</u>	27.9	8.1	8.1	<u>28.4</u>	28.4	<u>86.7</u>	86.8	5.8	5.8	6.6	6.5	11	11	821331	806843
						1.0	0.1	69	27.9		8.2		<u>28.4</u>		86.8		5.8		6.6		10			
					Middle	4.2	0.1	86	<u>27.9</u>	8.2	8.2	<u>28.4</u>	28.4	<u>86.6</u>	86.7	5.8	7.5	11						
						4.2	0.1	89	27.9	8.2	8.2	<u>28.4</u>	28.4	<u>86.7</u>	86.7	5.8	7.5	11						
					Bottom	7.4	0.1	101	<u>27.2</u>	8.2	8.2	<u>28.9</u>	28.9	<u>83.4</u>	83.7	5.6	5.3	12						
						7.4	0.1	108	27.2	8.2	8.2	<u>28.9</u>	28.9	<u>84.0</u>	83.7	5.7	5.4	13						

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
 Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring Results on 01 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
IM10	Misty	Moderate	14:57	8.8	Surface	1.0	0.1	352	28.1	28.1	8.3	8.3	30.2	30.2	88.4	88.5	5.8	5.8	5.9	6.4	6.4	11	10	822243	809828	
						1.0	0.1	352	28.1		8.3	8.3	30.3	30.2	88.5	88.5	5.8	5.8				5.1				10
					Middle	4.4	0.1	4	28.3	28.4	8.3	8.3	30.3	30.3	88.9	89.0	5.9	5.9	5.9	6.4	6.4	6.8				10
						4.4	0.1	356	28.4		8.3	8.3	30.3	30.3	89.1	89.0	5.9	5.9				6.9				10
					Bottom	7.8	0.1	341	28.6	28.7	8.3	8.3	30.1	30.1	89.8	90.0	5.9	5.9	5.9	6.4	6.4	7.3				9
						7.8	0.0	346	28.8		8.3	8.3	30.1	30.1	90.2	90.0	5.9	5.9				7.3				9
IM11	Misty	Moderate	15:04	8.0	Surface	1.0	0.0	313	28.1	28.1	8.1	8.1	30.7	30.7	88.6	88.7	5.8	5.8	5.9	6.7	6.7	5.2	9	821510	810560	
						1.0	0.0	317	28.1		8.1	8.1	30.7	30.7	88.8	88.7	5.9	5.9				5.2				9
					Middle	4.0	0.0	326	27.8	27.8	8.1	8.1	30.8	30.9	89.9	90.1	6.0	6.0	6.0	6.7	6.7	6.8				10
						4.0	0.0	324	27.7		8.1	8.1	30.9	30.9	90.3	90.1	6.0	6.0				6.8				9
					Bottom	7.0	0.0	297	27.6	27.6	8.2	8.2	31.0	31.0	91.3	92.0	6.1	6.1	6.1	6.7	6.7	8.0				9
						7.0	0.0	291	27.5		8.2	8.2	31.0	31.0	92.6	92.0	6.2	6.2				7.9				10
IM12	Misty	Moderate	15:11	8.4	Surface	1.0	0.0	59	27.9	27.9	8.1	8.1	30.9	30.9	85.0	85.0	5.6	5.6	5.8	8.3	8.3	7.7	11	821161	811536	
						1.0	0.0	65	27.9		8.1	8.1	30.9	30.9	85.0	85.0	5.6	5.6				7.8				12
					Middle	4.2	0.1	82	27.9	27.9	8.1	8.1	30.9	30.9	88.6	88.9	5.9	5.9	5.9	8.3	8.3	8.2				11
						4.2	0.1	83	27.9		8.1	8.1	30.9	30.9	89.1	88.9	5.9	5.9				8.1				10
					Bottom	7.4	0.0	73	27.9	27.9	8.1	8.1	31.0	30.9	91.8	92.3	6.1	6.1	6.1	8.3	8.3	9.0				10
						7.4	0.0	78	27.9		8.1	8.1	30.9	30.9	92.7	92.3	6.1	6.1				9.1				9
SR1A	Misty	Moderate	15:30	5.0	Surface	1.0	0.0	18	28.1	28.1	8.1	8.1	30.6	30.6	82.9	83.0	5.5	5.5	5.5	3.2	3.2	2.7	10	819976	812655	
						1.0	0.1	19	28.1		8.1	8.1	30.6	30.6	83.0	83.0	5.5	5.5				2.7				10
					Middle	2.5	0.0	13	-	-	-	-	-	-	-	-	-	-	-	3.2	3.2	-				-
						2.5	0.0	10	-		-	-	-	-	-	-	-	-				-				-
					Bottom	4.0	-	20	28.0	28.0	8.1	8.1	30.7	30.7	83.4	83.5	5.5	5.5	5.5	3.2	3.2	3.7				9
						4.0	0.1	14	28.0		8.1	8.1	30.7	30.7	83.6	83.5	5.5	5.5				3.6				9
SR2	Misty	Moderate	15:43	5.2	Surface	1.0	0.1	38	28.0	28.0	8.1	8.1	31.2	31.2	90.6	90.9	6.0	6.0	6.0	7.6	7.6	7.2	9	821445	814189	
						1.0	0.1	34	28.0		8.1	8.1	31.2	31.2	91.2	90.9	6.0	6.0				7.1				9
					Middle	-	0.1	61	-	-	-	-	-	-	-	-	-	-	-	7.6	7.6	-				-
						-	0.0	64	-		-	-	-	-	-	-	-	-				-				-
					Bottom	4.2	0.0	24	27.9	27.9	8.1	8.1	31.3	31.2	94.2	94.9	6.2	6.2	6.3	7.6	7.6	8.0				9
						4.2	0.1	27	27.9		8.1	8.1	31.1	31.2	95.5	94.9	6.3	6.3				8.1				10
SR3	Fine	Rough	15:24	8.1	Surface	1.0	0.0	56	27.7	27.7	8.1	8.1	28.2	28.2	83.2	83.2	5.6	5.6	5.6	9.5	9.5	7.3	10	822133	807591	
						1.0	0.0	53	27.7		8.1	8.1	28.2	28.2	83.2	83.2	5.6	5.6				7.3				11
					Middle	4.1	0.0	64	27.5	27.5	8.2	8.2	28.5	28.5	82.7	82.8	5.6	5.6	5.6	9.5	9.5	8.9				10
						4.1	-	58	27.5		8.2	8.2	28.5	28.5	82.8	82.8	5.6	5.6				9.0				9
					Bottom	7.1	0.1	79	27.4	27.4	8.2	8.2	28.7	28.7	82.7	82.7	5.6	5.6	5.6	9.5	9.5	12.2				10
						7.1	0.1	78	27.4		8.2	8.2	28.7	28.7	82.7	82.7	5.6	5.6				12.2				9
SR4A	Fine	Rough	17:22	10.1	Surface	1.0	0.0	314	27.8	27.8	8.1	8.1	28.9	28.9	79.2	79.1	5.3	5.3	5.2	6.1	6.1	5.9	11	817171	807787	
						1.0	0.0	315	27.8		8.1	8.1	28.9	28.9	79.0	79.1	5.3	5.3				5.9				12
					Middle	5.1	0.0	311	27.5	27.5	8.1	8.1	29.5	29.5	74.6	74.7	5.0	5.0	5.1	6.1	6.1	5.7				10
						5.1	0.1	316	27.5		8.1	8.1	29.5	29.5	74.7	74.7	5.0	5.0				5.7				10
					Bottom	9.1	0.0	290	27.5	27.5	8.1	8.1	29.6	29.6	76.2	76.3	5.1	5.1	5.1	6.1	6.1	6.8				10
						9.1	0.0	289	27.5		8.1	8.1	29.6	29.6	76.3	76.3	5.1	5.1				6.7				10
SR8	Misty	Moderate	15:15	5.6	Surface	1.0	-	-	27.9	27.9	8.1	8.1	30.8	30.8	90.9	90.9	6.0	6.0	6.0	8.9	8.9	8.5	12	820381	811618	
						1.0	-	-	27.9		8.1	8.1	30.8	30.8	90.9	90.9	6.0	6.0				8.4				10
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.9	8.9	-				-
						-	-	-	-		-	-	-	-	-	-	-	-				-				-
					Bottom	4.6	-	-	27.8	27.8	8.1	8.1	30.8	30.7	93.3	94.5	6.2	6.2	6.3	8.9	8.9	9.4				14
						4.6	-	-	27.8		8.1	8.1	30.7	30.7	95.6	94.5	6.3	6.3				9.4				13

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

Water Quality Monitoring Results on 01 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA					
C1	Sunny	Rough	10:33	7.4	Surface	1.0	0.4	38	27.8	27.8	8.2	8.2	28.7	28.7	85.6	85.6	5.7	5.7	7.7	6.6	8	10	815599	804229	
						1.0	0.3	43	27.8		8.2	8.2	28.7	28.7	85.6	85.6	5.7		7.7						
					Middle	3.7	0.3	25	27.2	27.2	8.2	8.2	29.1	29.1	83.0	83.0	5.6	5.6	6.7	5.6	9				
						3.7	0.3	18	27.2		8.2	8.2	29.1	29.1	83.0	83.0	5.6		6.7						
					Bottom	6.4	0.3	38	27.1	27.1	8.2	8.2	29.2	29.2	82.9	83.0	5.6	5.6	5.4	5.6	10				
						6.4	0.3	39	27.1		8.2	8.2	29.2	29.2	83.0	83.0	5.6		5.4						
C2	Sunny	Rough	12:11	8.1	Surface	1.0	0.3	339	27.5	27.5	8.2	8.2	28.7	28.7	82.7	82.7	5.6	5.6	8.8	10.0	10	11	825669	806968	
						1.0	0.3	336	27.5		8.2	8.2	28.7	28.7	82.7	82.7	5.6		8.9						
					Middle	4.1	0.3	347	27.3	27.3	8.2	8.2	28.8	28.8	81.7	81.7	5.5	5.5	9.4		5.5				10
						4.1	0.3	354	27.3		8.2	8.2	28.8	28.8	81.7	81.7	5.5		9.5						
					Bottom	7.1	0.3	344	27.3	27.3	8.2	8.2	28.9	28.9	81.4	81.4	5.5	5.5	11.6		5.5				12
						7.1	0.3	337	27.3		8.2	8.2	28.9	28.9	81.4	81.4	5.5		11.7						
C3	Misty	Moderate	10:11	9.8	Surface	1.0	0.4	255	28.0	28.0	8.0	8.0	31.1	31.1	82.6	82.6	5.4	5.4	7.1	8.2	12	11	822114	817812	
						1.0	0.3	254	28.0		8.0	8.0	31.1	31.1	82.6	82.6	5.4		7.2						
					Middle	4.9	0.4	272	28.0	28.0	8.0	8.0	31.1	31.1	82.6	82.6	5.4	5.4	8.5		5.4				12
						4.9	0.5	276	28.0		8.0	8.0	31.1	31.1	82.6	82.6	5.4		8.5						
					Bottom	8.8	0.4	257	28.0	28.0	8.0	8.0	31.1	31.1	82.7	82.7	5.5	5.5	9.0		5.5				9
						8.8	0.4	253	28.0		8.0	8.0	31.1	31.1	82.7	82.7	5.5		9.1						
IM1	Sunny	Moderate	11:05	6.1	Surface	1.0	0.2	18	27.8	27.8	8.1	8.1	28.4	28.4	85.4	85.4	5.7	5.7	4.6	7.0	9	10	818342	806478	
						1.0	0.1	18	27.8		8.1	8.1	28.4	28.4	85.4	85.4	5.7		4.6						
					Middle	3.1	0.2	24	27.5	27.6	8.1	8.1	28.5	28.5	83.9	84.0	5.7	5.7	7.9		5.7				9
						3.1	0.2	25	27.6		8.2	8.1	28.5	28.5	84.1	84.0	5.7		7.9						
					Bottom	5.1	0.2	14	27.2	27.2	8.2	8.2	29.0	29.0	82.0	82.1	5.5	5.5	8.7		5.5				12
						5.1	0.2	14	27.2		8.2	8.2	29.0	29.0	82.1	82.1	5.5		8.6						
IM2	Sunny	Moderate	11:18	6.6	Surface	1.0	0.2	5	27.7	27.7	8.1	8.1	28.5	28.5	84.7	84.7	5.7	5.6	7.6	7.0	11	10	819197	806247	
						1.0	0.2	10	27.7		8.1	8.1	28.5	28.5	84.7	84.7	5.7		7.6						
					Middle	3.3	0.2	346	27.7	27.7	8.1	8.1	28.5	28.5	81.1	81.2	5.5	5.5	8.0		5.5				9
						3.3	0.2	341	27.7		8.2	8.1	28.5	28.5	81.2	81.2	5.5		8.0						
					Bottom	5.6	0.2	358	27.2	27.2	8.2	8.2	29.0	29.0	79.3	79.3	5.3	5.3	5.3		5.3				9
						5.6	0.2	356	27.2		8.2	8.2	29.0	29.0	79.3	79.3	5.3		5.4						
IM7	Sunny	Rough	11:37	7.5	Surface	1.0	0.2	338	27.8	27.8	8.1	8.1	28.1	28.1	84.5	84.5	5.7	5.6	6.4	4.9	10	9	821327	806835	
						1.0	0.2	334	27.8		8.1	8.1	28.1	28.1	84.4	84.4	5.7		6.5						
					Middle	3.8	0.3	356	27.3	27.3	8.2	8.2	28.7	28.7	81.2	81.3	5.5	5.5	3.8		5.5				9
						3.8	0.3	351	27.3		8.2	8.2	28.7	28.7	81.3	81.3	5.5		3.8						
					Bottom	6.5	0.2	320	27.1	27.1	8.2	8.2	29.3	29.3	81.5	81.5	5.5	5.5	4.6		5.5				9
						6.5	0.2	325	27.1		8.2	8.2	29.3	29.3	81.4	81.4	5.5		4.6						

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring Results on 01 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
IM10	Misty	Moderate	11:14	8.2	Surface	1.0	0.4	290	<u>28.2</u>	8.1	8.1	30.4	30.4	89.1	89.2	5.9	6.0	4.5	6.9	10	10	822249	809831			
						1.0	0.3	292	28.2	8.1	8.1	30.4	30.4	89.3	89.2	5.9	6.0	4.5	6.9	11						
					Middle	4.1	0.3	274	28.2	8.1	8.1	30.4	30.4	90.3	90.5	6.0	6.0	7.5	6.9	10						
						4.1	0.3	279	28.2	8.1	8.1	30.4	30.4	90.7	90.5	6.0	6.0	7.5	6.9	9						
					Bottom	7.2	0.3	291	28.2	8.1	8.1	30.3	30.3	93.1	93.9	6.1	6.2	8.8	6.2	9						
						7.2	0.3	287	28.2	8.1	8.1	30.3	30.3	94.6	93.9	6.2	6.2	8.7	6.2	8						
IM11	Misty	Moderate	11:08	8.4	Surface	1.0	0.5	267	27.9	8.1	8.1	30.6	30.6	86.4	86.6	5.7	5.8	6.6	7.5	10	12	821511	810538			
						1.0	0.5	272	27.8	8.1	8.1	30.7	30.6	86.7	86.6	5.7	5.8	6.5	7.5	10						
					Middle	4.2	0.5	287	27.7	8.1	8.1	30.8	30.8	87.4	87.6	5.8	5.8	7.4	7.5	11						
						4.2	0.5	292	27.6	8.1	8.1	30.8	30.8	87.8	87.6	5.8	5.8	7.5	7.5	11						
					Bottom	7.4	0.5	276	27.5	8.1	8.1	30.9	30.9	90.0	90.5	6.0	6.0	8.4	6.0	13						
						7.4	0.5	282	27.4	8.1	8.1	30.9	30.9	90.9	90.5	6.0	6.0	8.5	6.0	14						
IM12	Misty	Moderate	11:04	8.6	Surface	1.0	0.5	295	27.8	8.1	8.1	30.9	30.9	85.4	85.5	5.7	5.7	7.0	8.3	12	12	821165	811497			
						1.0	0.5	289	27.7	8.1	8.1	30.9	30.9	85.5	85.5	5.7	5.7	7.0	8.3	12						
					Middle	4.3	0.5	285	27.6	8.1	8.1	31.0	31.0	86.1	86.3	5.7	5.7	8.6	6.1	12						
						4.3	0.5	279	27.6	8.1	8.1	31.0	31.0	86.4	86.3	5.7	5.7	8.6	6.1	12						
					Bottom	7.6	0.4	277	27.4	8.1	8.1	31.1	31.1	91.5	91.9	6.1	6.1	9.5	6.1	11						
						7.6	0.4	280	27.4	8.1	8.1	31.1	31.1	92.2	91.9	6.1	6.1	9.5	6.1	11						
SR1A	Misty	Moderate	10:43	5.2	Surface	1.0	0.0	196	27.6	8.1	8.1	30.9	30.9	90.0	90.1	6.0	6.0	3.1	6.0	14	13	819982	812655			
						1.0	0.0	195	27.5	8.1	8.1	30.9	30.9	90.2	90.1	6.0	6.0	3.2	6.0	14						
					Middle	2.6	0.0	186	-	-	-	-	-	-	-	-	-	-	-	-				-	3.9	-
						2.6	0.0	178	-	-	-	-	-	-	-	-	-	-	-	-				-	3.9	-
					Bottom	4.2	-	170	27.3	8.1	8.1	30.7	30.6	95.5	98.4	6.4	6.6	4.7	6.6	11						
						4.2	0.0	168	27.2	8.1	8.1	30.5	30.6	101.3	98.4	6.8	6.6	4.7	6.6	12						
SR2	Misty	Moderate	10:31	4.2	Surface	1.0	0.2	219	27.9	8.0	8.0	31.1	31.1	82.8	82.8	5.5	5.5	7.2	7.8	10	10	821477	814181			
						1.0	0.2	215	27.9	8.0	8.0	31.1	31.1	82.8	82.8	5.5	5.5	7.2	7.8	11						
					Middle	-	0.1	206	-	-	-	-	-	-	-	-	-	-	-	-				-	7.8	-
						-	0.1	199	-	-	-	-	-	-	-	-	-	-	-	-				-	7.8	-
					Bottom	3.2	0.2	237	27.9	8.0	8.0	31.1	31.1	82.9	82.9	5.5	5.5	8.5	5.5	9						
						3.2	0.2	233	27.9	8.0	8.0	31.1	31.1	82.9	82.9	5.5	5.5	8.5	5.5	10						
SR3	Sunny	Rough	11:45	7.8	Surface	1.0	0.3	355	27.8	8.1	8.1	28.2	28.2	84.4	84.4	5.7	5.6	6.2	8.3	14	12	822126	807565			
						1.0	0.3	353	27.8	8.1	8.1	28.2	28.2	84.4	84.4	5.7	5.6	6.2	8.3	13						
					Middle	3.9	0.2	335	27.3	8.2	8.2	28.8	28.8	80.8	80.8	5.5	5.5	6.4	5.6	12						
						3.9	0.2	333	27.3	8.2	8.2	28.9	28.8	80.8	80.8	5.5	5.5	6.4	5.6	10						
					Bottom	6.8	0.3	330	27.1	8.2	8.2	29.2	29.2	81.7	81.8	5.5	5.5	12.3	5.5	10						
						6.8	0.3	337	27.2	8.2	8.2	29.2	29.2	81.8	81.8	5.5	5.5	12.3	5.5	10						
SR4A	Sunny	Moderate	09:50	8.6	Surface	1.0	0.0	223	27.2	8.1	8.1	28.5	28.5	80.6	80.7	5.5	5.5	7.6	9.4	10	11	817186	807800			
						1.0	0.0	219	27.2	8.1	8.1	28.5	28.5	80.7	80.7	5.5	5.5	7.5	9.4	10						
					Middle	4.3	0.0	241	27.0	8.1	8.1	28.5	28.5	79.9	80.0	5.4	5.4	9.3	5.4	10						
						4.3	0.1	240	27.0	8.1	8.1	28.5	28.5	80.0	80.0	5.4	5.4	9.4	5.4	10						
					Bottom	7.6	0.1	240	27.0	8.1	8.1	28.6	28.6	79.8	79.8	5.4	5.4	11.3	5.4	12						
						7.6	0.1	241	27.0	8.1	8.1	28.6	28.6	79.8	79.8	5.4	5.4	11.3	5.4	11						
SR8	Misty	Moderate	10:59	4.0	Surface	1.0	-	-	27.9	8.1	8.1	30.6	30.6	87.1	87.2	5.8	5.8	7.3	7.7	11	11	820401	811639			
						1.0	-	-	27.9	8.1	8.1	30.6	30.6	87.2	87.2	5.8	5.8	7.4	7.7	11						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	7.7	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	7.7	-
					Bottom	3.0	-	-	27.8	8.1	8.1	30.7	30.8	87.5	87.7	5.8	5.8	8.1	5.8	11						
						3.0	-	-	27.8	8.1	8.1	30.8	30.8	87.8	87.7	5.8	5.8	8.1	5.8	11						

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
 Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	07:40	8.4	Surface	1.0	0.4	205	<u>27.8</u>	27.8	8.2	8.2	<u>28.3</u>	28.3	<u>83.5</u>	83.5	5.6	5.6	9.2	11.2	4	4	815605	804267
						1.0	0.4	200	27.8		8.2		<u>28.3</u>		83.4		5.6				9.4			
					Middle	4.2	0.5	217	<u>27.5</u>	27.5	8.2	8.2	<u>29.7</u>	29.7	<u>82.6</u>	82.7	5.5	5.5	11.1	4				
						4.2	0.5	210	27.5		8.2		<u>29.7</u>		82.7		5.5		11.2	5				
					Bottom	7.4	0.5	192	<u>27.5</u>	27.5	8.2	8.2	<u>29.8</u>	29.8	<u>83.6</u>	83.8	5.6	5.6	13.0	3				
						7.4	0.5	196	27.5		8.2		<u>29.8</u>		83.9		5.6		13.5	4				
C2	Cloudy	Moderate	08:56	11.4	Surface	1.0	0.8	183	<u>28.5</u>	28.6	8.3	8.3	<u>23.0</u>	23.0	<u>84.5</u>	84.7	5.8	5.5	7.0	10.5	4	5	825683	806934
						1.0	0.8	184	28.6		8.3		<u>22.9</u>		84.9		5.8				6.8			
					Middle	5.7	0.7	169	<u>28.1</u>	28.1	8.3	8.3	<u>27.6</u>	27.6	<u>76.7</u>	76.8	5.1	5.2	10.2	4				
						5.7	0.6	161	28.1		8.3		<u>27.6</u>		76.8		5.2		10.3	5				
					Bottom	10.4	0.7	165	<u>28.1</u>	28.1	8.3	8.3	<u>27.7</u>	27.7	<u>77.3</u>	77.4	5.2	5.2	14.3	6				
						10.4	0.7	167	28.1		8.3		<u>27.7</u>		77.4		5.2		14.3	5				
C3	Fine	Moderate	07:50	9.0	Surface	1.0	0.3	88	<u>28.3</u>	28.3	8.1	8.1	<u>31.0</u>	31.0	<u>81.7</u>	81.8	5.4	5.4	7.7	8.3	4	5	822096	817793
						1.0	0.3	95	28.3		8.1		<u>31.1</u>		81.9		5.4				7.6			
					Middle	4.5	0.3	79	<u>28.3</u>	28.3	8.1	8.1	<u>31.2</u>	31.2	<u>82.5</u>	82.8	5.4	5.4	8.2	5				
						4.5	0.3	84	28.3		8.1		<u>31.2</u>		83.0		5.4		8.1	4				
					Bottom	8.0	0.4	66	<u>28.3</u>	28.3	8.1	8.1	<u>31.3</u>	31.3	<u>85.1</u>	85.5	5.6	5.6	9.0	5				
						8.0	0.3	68	28.3		8.1		<u>31.2</u>		85.9		5.6		9.1	6				
IM1	Cloudy	Moderate	07:59	6.2	Surface	1.0	0.3	208	<u>27.9</u>	27.9	8.2	8.2	<u>29.3</u>	29.3	<u>86.4</u>	86.4	5.8	5.6	2.4	5.5	6	6	818342	806440
						1.0	0.4	209	27.8		8.2		<u>29.3</u>		86.3		5.8				2.6			
					Middle	3.1	0.4	179	<u>27.5</u>	27.5	8.2	8.2	<u>29.8</u>	29.8	<u>80.2</u>	80.3	5.4	5.4	3.6	6				
						3.1	0.4	182	27.5		8.2		<u>29.8</u>		80.3		5.4		3.6	5				
					Bottom	5.2	0.4	214	<u>27.5</u>	27.5	8.3	8.3	<u>30.3</u>	30.3	<u>82.8</u>	82.9	5.5	5.5	10.7	4				
						5.2	0.4	219	27.5		8.3		<u>30.3</u>		83.0		5.5		10.2	5				
IM2	Cloudy	Moderate	08:04	6.8	Surface	1.0	0.4	189	<u>28.0</u>	28.0	8.2	8.2	<u>29.2</u>	29.3	<u>84.7</u>	84.5	5.6	5.5	2.3	6.4	4	4	819171	806223
						1.0	0.4	189	28.0		8.2		<u>29.3</u>		84.3		5.6				2.3			
					Middle	3.4	0.4	182	<u>27.6</u>	27.6	8.2	8.2	<u>29.7</u>	29.7	<u>81.2</u>	81.2	5.4	5.4	3.0	4				
						3.4	0.4	179	27.6		8.2		<u>29.7</u>		81.1		5.4		3.0	4				
					Bottom	5.8	0.4	212	<u>27.5</u>	27.5	8.2	8.2	<u>30.3</u>	30.3	<u>80.0</u>	80.1	5.3	5.4	13.7	3				
						5.8	0.4	209	27.5		8.2		<u>30.3</u>		80.2		5.4		13.9	3				
IM7	Cloudy	Moderate	08:27	7.7	Surface	1.0	0.3	213	<u>28.4</u>	28.4	8.2	8.2	<u>25.5</u>	25.5	<u>83.6</u>	83.6	5.6	5.6	4.1	8.5	6	5	821350	806824
						1.0	0.4	205	28.4		8.2		<u>25.6</u>		83.5		5.6				4.5			
					Middle	3.9	0.3	200	<u>28.2</u>	28.2	8.2	8.2	<u>26.9</u>	26.9	<u>82.6</u>	82.6	5.6	5.6	8.9	4				
						3.9	0.3	197	28.2		8.2		<u>26.9</u>		82.6		5.6		9.3	5				
					Bottom	6.7	0.3	200	<u>28.1</u>	28.1	8.2	8.2	<u>27.2</u>	27.2	<u>82.7</u>	82.8	5.6	5.6	12.1	4				
						6.7	0.4	197	28.1		8.2		<u>27.2</u>		82.8		5.6		12.2	4				

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA								
IM10	Fine	Moderate	08:56	8.2	Surface	1.0	0.4	128	28.9	28.9	8.1	8.1	27.0	27.1	92.7	92.8	6.2	6.2	1.3	6.2	4	5	822230	809819				
						1.0	0.4	129	28.9	28.9	8.1	8.1	27.1	27.1	92.8	92.8	6.2	6.2	1.4	6.2	4							
					Middle	4.1	0.5	112	28.9	28.9	8.1	8.1	27.4	27.4	93.7	94.0	6.2	6.2	2.5	6.2	4							
						4.1	0.4	116	28.9	28.9	8.1	8.1	27.4	27.4	94.3	94.0	6.3	6.3	2.5	6.3	5							
					Bottom	7.2	0.5	109	28.9	28.9	8.1	8.1	27.4	27.4	95.3	96.3	6.3	6.4	3.8	6.4	6							
						7.2	0.4	110	28.9	28.9	8.1	8.1	27.4	27.4	97.2	96.3	6.4	6.4	3.8	6.4	5							
IM11	Fine	Moderate	08:49	8.0	Surface	1.0	0.4	103	28.9	28.9	8.0	8.0	26.4	26.4	90.3	90.3	6.0	6.0	2.7	6.0	2	4	821506	810564				
						1.0	0.4	107	28.9	28.9	8.1	8.1	26.4	26.4	90.2	90.3	6.0	6.0	2.7	6.0	3							
					Middle	4.0	0.4	92	28.7	28.7	8.1	8.1	28.9	29.0	90.6	90.8	6.0	6.0	4.0	6.0	4							
						4.0	0.4	96	28.7	28.7	8.1	8.1	29.0	29.0	91.0	90.8	6.0	6.0	4.0	6.0	4							
					Bottom	7.0	0.5	108	28.7	28.7	8.1	8.1	29.1	29.1	92.9	93.5	6.1	6.2	5.1	6.2	5							
						7.0	0.4	107	28.7	28.7	8.1	8.1	29.0	29.1	94.0	93.5	6.2	6.2	5.1	6.2	5							
IM12	Fine	Moderate	08:43	7.6	Surface	1.0	0.5	98	28.8	28.8	8.1	8.1	28.6	28.7	92.2	92.3	6.1	6.1	1.0	6.1	3	4	821152	811531				
						1.0	0.5	101	28.8	28.8	8.1	8.1	28.7	28.7	92.3	92.3	6.1	6.1	1.0	6.1	3							
					Middle	3.8	0.5	116	28.6	28.6	8.1	8.1	29.2	29.3	93.1	93.3	6.1	6.1	1.7	6.1	4							
						3.8	0.5	119	28.6	28.6	8.1	8.1	29.3	29.3	93.4	93.3	6.2	6.2	1.6	6.2	4							
					Bottom	6.6	0.5	125	28.6	28.6	8.1	8.1	29.4	29.4	94.5	94.9	6.2	6.3	3.0	6.3	4							
						6.6	0.5	130	28.6	28.6	8.1	8.1	29.4	29.4	95.2	94.9	6.3	6.3	2.9	6.3	5							
SR1A	Fine	Moderate	08:22	5.2	Surface	1.0	0.0	62	28.6	28.6	8.1	8.1	29.6	29.6	90.0	90.1	5.9	5.9	7.3	5.9	5	4	819981	812662				
						1.0	0.1	65	28.6	28.6	8.1	8.1	29.6	29.6	90.1	90.1	5.9	5.9	7.3	5.9	5							
					Middle	2.6	0.0	59	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	7.7	-
						2.6	0.1	63	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	7.7	-
					Bottom	4.2	0.1	58	28.6	28.6	8.1	8.1	29.7	29.7	91.4	92.8	6.0	6.1	8.1	6.1	8.1				6.1	4		
						4.2	0.1	58	28.5	28.5	8.1	8.1	29.7	29.7	94.2	92.8	6.2	6.2	8.2	6.2	8.2				6.2	3		
SR2	Fine	Moderate	08:11	5.8	Surface	1.0	0.5	35	28.4	28.4	8.3	8.3	30.0	30.0	90.2	90.4	5.9	6.0	3.4	6.0	4	4	821484	814151				
						1.0	0.5	30	28.4	28.4	8.3	8.3	30.1	30.0	90.5	90.4	6.0	6.0	3.5	6.0	4							
					Middle	-	0.5	55	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	4.2	-
						-	0.5	60	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	4.2	-
					Bottom	4.8	0.5	26	28.4	28.4	8.3	8.3	30.2	30.2	93.1	93.9	6.1	6.2	5.0	6.2	4.9				6.2	3		
						4.8	0.5	30	28.4	28.4	8.3	8.3	30.2	30.2	94.7	93.9	6.2	6.2	4.9	6.2	4.9				6.2	3		
SR3	Cloudy	Moderate	08:35	8.5	Surface	1.0	0.6	177	28.4	28.4	8.2	8.2	25.3	25.4	83.1	83.0	5.6	5.6	2.7	5.6	4	3	822161	807582				
						1.0	0.5	175	28.4	28.4	8.2	8.2	25.4	25.4	82.9	83.0	5.6	5.6	2.6	5.6	4							
					Middle	4.3	0.6	151	28.1	28.1	8.2	8.2	27.3	27.3	79.6	79.7	5.4	5.4	4.8	5.4	3							
						4.3	0.6	156	28.1	28.1	8.2	8.2	27.3	27.3	79.7	79.7	5.4	5.4	4.9	5.4	3							
					Bottom	7.5	0.6	185	28.0	28.0	8.2	8.2	27.6	27.7	80.7	80.9	5.4	5.4	5.7	5.4	2							
						7.5	0.6	182	28.0	28.0	8.2	8.2	27.7	27.7	81.0	80.9	5.4	5.4	5.8	5.4	3							
SR4A	Cloudy	Moderate	07:23	8.4	Surface	1.0	0.0	35	27.8	27.8	8.1	8.1	28.7	28.7	80.7	80.8	5.4	5.4	6.4	5.4	4	4	817174	807794				
						1.0	0.1	30	27.8	27.8	8.1	8.1	28.7	28.7	80.8	80.8	5.4	5.4	6.3	5.4	3							
					Middle	4.2	0.0	48	27.6	27.6	8.1	8.1	29.2	29.2	79.0	79.0	5.3	5.3	8.8	5.3	4							
						4.2	0.0	54	27.6	27.6	8.1	8.1	29.2	29.2	79.0	79.0	5.3	5.3	9.0	5.3	4							
					Bottom	7.4	0.0	52	27.6	27.6	8.1	8.1	29.3	29.3	79.4	79.5	5.3	5.3	10.7	5.3	5							
						7.4	0.0	55	27.6	27.6	8.1	8.1	29.4	29.3	79.5	79.5	5.3	5.3	11.0	5.3	4							
SR8	Fine	Moderate	08:38	4.2	Surface	1.0	-	-	29.0	29.0	8.1	8.1	29.2	29.2	95.8	95.8	6.3	6.3	5.4	6.3	4	4	820371	811626				
						1.0	-	-	28.9	28.9	8.1	8.1	29.2	29.2	95.8	95.8	6.3	6.3	5.3	6.3	4							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	5.7	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	5.7	-
					Bottom	3.2	-	-	28.8	28.8	8.2	8.2	29.3	29.2	97.0	97.8	6.4	6.5	6.0	6.5	6.0				6.5	4		
						3.2	-	-	28.8	28.8	8.1	8.1	29.2	29.2	98.5	97.8	6.5	6.5	6.1	6.5	6.1				6.5	3		

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Rainy	Moderate	19:30	8.2	Surface	1.0	0.1	49	28.0	28.0	8.2	8.2	27.7	27.8	84.4	84.2	5.7	5.5	11.4	11.8	6	5	815635	804239
						1.0	0.1	55	28.0	8.2	8.2	27.8	27.8	84.0	84.0	5.6	5.5	11.5	11.8	5	5			
					Middle	4.1	0.1	49	27.6	27.6	8.2	8.2	29.4	29.4	81.3	81.3	5.4	5.4	11.0	11.8	5	5		
						4.1	0.1	45	27.6	27.6	8.2	8.2	29.4	29.4	81.3	81.3	5.4	5.4	11.8	11.8	6	5		
					Bottom	7.2	0.1	23	27.6	27.6	8.2	8.2	29.7	29.7	81.4	81.5	5.4	5.5	12.8	12.4	5	5		
						7.2	0.1	27	27.6	27.6	8.2	8.2	29.7	29.7	81.6	81.5	5.5	5.5	12.4	12.4	5	5		
C2	Rainy	Moderate	18:38	11.5	Surface	1.0	0.2	335	28.4	28.4	8.2	8.2	23.8	23.8	80.2	80.2	5.5	5.3	4.5	9.8	5	5	825691	806963
						1.0	0.2	342	28.4	28.4	8.2	8.2	23.8	23.8	80.1	80.2	5.5	5.5	4.5	9.8	4	5		
					Middle	5.8	0.2	355	28.1	28.1	8.2	8.2	27.5	27.6	75.0	74.9	5.0	5.0	12.7	12.0	4	5		
						5.8	0.1	358	28.1	28.1	8.2	8.2	27.6	27.6	74.7	74.4	5.0	4.9	12.9	12.0	5	5		
					Bottom	10.5	0.1	314	28.1	28.1	8.2	8.2	27.6	27.5	73.4	73.4	4.9	4.9	12.0	12.4	5	5		
						10.5	0.2	317	28.1	28.1	8.2	8.2	27.5	27.5	73.3	73.4	4.9	4.9	12.4	12.4	6	5		
C3	Fine	Moderate	19:55	9.6	Surface	1.0	0.0	88	28.7	28.7	8.1	8.1	30.3	30.4	84.7	84.5	5.5	5.5	4.1	5.1	5	5	822128	817780
						1.0	0.1	94	28.7	28.7	8.1	8.1	30.4	30.4	84.3	84.5	5.5	5.5	4.2	5.1	5	5		
					Middle	4.8	0.1	89	28.7	28.8	8.1	8.1	30.6	30.7	84.0	84.2	5.5	5.5	5.2	5.1	4	5		
						4.8	0.1	94	28.8	28.8	8.1	8.1	30.7	30.7	84.3	84.3	5.5	5.5	5.1	5.1	5	5		
					Bottom	8.6	0.1	84	28.8	28.8	8.1	8.1	30.7	30.7	86.3	87.0	5.6	5.7	6.0	6.1	4	5		
						8.6	0.1	80	28.8	28.8	8.1	8.1	30.7	30.7	87.6	87.0	5.7	5.7	6.1	6.1	4	5		
IM1	Rainy	Moderate	19:17	6.3	Surface	1.0	0.1	21	27.8	27.8	8.2	8.2	29.5	29.5	80.5	80.5	5.4	5.4	11.2	11.8	6	5	818362	806480
						1.0	0.1	25	27.8	27.8	8.2	8.2	29.5	29.5	80.5	80.5	5.4	5.4	11.8	11.8	5	5		
					Middle	3.2	0.1	12	27.6	27.6	8.2	8.2	29.8	29.8	80.5	80.5	5.4	5.4	11.1	11.3	4	5		
						3.2	0.1	15	27.6	27.6	8.2	8.2	29.9	29.8	80.5	80.5	5.4	5.4	11.3	11.3	4	5		
					Bottom	5.3	0.1	43	27.6	27.6	8.2	8.2	30.2	30.2	81.7	82.0	5.4	5.5	12.8	12.6	4	5		
						5.3	0.1	37	27.6	27.6	8.2	8.2	30.2	30.2	82.2	82.0	5.5	5.5	12.6	12.6	4	5		
IM2	Rainy	Moderate	19:12	6.6	Surface	1.0	0.1	13	28.4	28.4	8.3	8.3	28.9	28.9	89.1	89.1	5.9	5.7	4.7	5.3	5	5	819177	806249
						1.0	0.1	10	28.4	28.4	8.3	8.3	28.9	28.9	89.1	89.1	5.9	5.7	4.8	5.3	6	5		
					Middle	3.3	0.1	24	27.6	27.6	8.3	8.3	30.0	30.1	81.3	81.3	5.4	5.4	3.8	3.7	4	5		
						3.3	0.1	21	27.6	27.6	8.3	8.3	30.1	30.1	81.2	81.3	5.4	5.4	3.7	3.7	4	5		
					Bottom	5.6	0.1	352	27.5	27.5	8.3	8.3	30.3	30.3	81.9	82.2	5.5	5.5	7.7	7.0	4	5		
						5.6	0.1	348	27.5	27.5	8.3	8.3	30.3	30.3	82.4	82.2	5.5	5.5	7.0	7.0	4	5		
IM7	Rainy	Moderate	18:55	7.5	Surface	1.0	0.1	47	28.3	28.3	8.1	8.1	26.1	26.1	83.4	83.5	5.6	5.7	4.6	7.9	5	5	821349	806816
						1.0	0.1	50	28.3	28.3	8.1	8.1	26.1	26.1	83.5	83.5	5.6	5.7	4.9	7.9	5	5		
					Middle	3.8	0.1	55	28.3	28.3	8.1	8.1	26.4	26.4	84.4	84.5	5.7	5.7	7.8	8.3	4	5		
						3.8	0.2	53	28.3	28.3	8.1	8.1	26.4	26.4	84.6	84.5	5.7	5.7	8.3	8.3	4	5		
					Bottom	6.5	0.2	43	28.3	28.3	8.1	8.1	26.4	26.4	87.1	87.3	5.9	5.9	10.8	11.1	4	5		
						6.5	0.1	37	28.3	28.3	8.1	8.1	26.4	26.4	87.5	87.3	5.9	5.9	11.1	11.1	4	5		

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is **bolded and underlined**

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA		
IM10	Fine	Moderate	18:41	8.4	Surface	1.0	0.1	307	29.0	29.0	8.0	8.0	26.9	26.9	91.1	91.2	6.0	6.1	1.4	2.6	6	5	822247	809823				
						1.0	0.2	313	29.0		8.0	8.0	27.0	26.9	91.3	91.2	6.0	6.1	1.4		5							
					Middle	4.2	0.1	297	29.0	29.0	8.0	8.0	27.2	27.2	91.8	91.9	6.1	6.1	2.6	2.6	5				2.6	5		
						4.2	0.2	293	29.0		8.0	8.0	27.2	27.1	91.9	91.9	6.1	6.1	2.6		5							
					Bottom	7.4	0.2	293	29.0	29.0	8.0	8.0	27.2	27.1	92.4	92.5	6.1	6.1	3.6	6.1	5				3.6	5		
						7.4	0.1	289	29.0		8.0	8.0	27.0	27.1	92.6	92.5	6.1	6.1	3.7		4							
IM11	Fine	Moderate	19:00	8.0	Surface	1.0	0.1	278	29.0	29.0	8.2	8.2	24.9	24.9	92.0	91.9	6.2	6.2	1.0	2.0	5	5	821510	810540				
						1.0	0.2	274	29.0		8.2	8.2	25.0	24.9	91.8	91.9	6.2	6.2	1.1		4							
					Middle	4.0	0.2	278	28.9	28.9	8.2	8.2	28.2	28.3	92.2	92.4	6.1	6.1	2.3	6.2	5				2.3	5		
						4.0	0.2	280	28.8		8.2	8.2	28.4	28.3	92.6	92.4	6.1	6.1	2.3		4							
					Bottom	7.0	0.1	269	28.8	28.9	8.2	8.2	28.7	28.3	94.5	95.2	6.2	6.3	2.8	6.3	5				2.8	5		
						7.0	0.1	264	29.0		8.2	8.2	27.9	28.3	95.8	95.2	6.3	6.3	2.8		6							
IM12	Fine	Moderate	19:05	7.4	Surface	1.0	0.2	286	28.8	28.8	8.1	8.1	28.6	28.7	89.4	89.4	5.9	5.9	6.2	5.9	4	5	821156	811503				
						1.0	0.2	287	28.8		8.1	8.1	28.7	28.7	89.4	89.4	5.9	5.9	6.3		4							
					Middle	3.7	0.2	271	28.9	28.9	8.2	8.2	29.1	29.1	89.4	89.4	5.9	5.9	7.1	6.2	5				7.1	5		
						3.7	0.3	271	28.9		8.2	8.2	29.2	29.1	89.4	89.4	5.9	5.9	7.2		4							
					Bottom	6.4	0.2	268	29.4	29.5	8.2	8.2	29.0	29.0	90.9	91.1	5.9	5.9	8.0	5.9	5				8.0	5		
						6.4	0.2	262	29.5		8.2	8.2	28.9	29.0	91.3	91.1	5.9	5.9	8.1		5							
SR1A	Fine	Moderate	19:24	5.2	Surface	1.0	0.1	261	28.8	28.8	8.1	8.1	29.6	29.6	87.2	87.2	5.7	5.7	2.2	5.7	4	5	819977	812662				
						1.0	0.0	260	28.8		8.1	8.1	29.6	29.6	87.2	87.2	5.7	5.7	2.2		4							
					Middle	2.6	0.0	254	-	-	-	-	-	-	-	-	-	-	-	5.7	-				2.7	-	-	5
						2.6	-	250	-		-	-	-	-	-	-	-	-	-		7.1					4		
					Bottom	4.2	0.0	249	28.9	28.9	8.1	8.1	29.6	29.5	87.1	88.8	5.7	5.8	3.2	5.8	5				87.1	6	3.2	5
						4.2	0.0	242	28.9		8.1	8.1	29.5	29.5	90.5	88.8	5.9	5.9	3.1		5							
SR2	Fine	Moderate	19:35	5.8	Surface	1.0	0.1	207	28.3	28.3	8.1	8.1	30.1	30.2	91.1	91.1	6.0	6.0	4.7	6.0	4	4	821448	814150				
						1.0	0.0	200	28.2		8.1	8.1	30.3	30.2	91.0	91.1	6.0	6.0	4.7		4							
					Middle	-	0.1	183	-	-	-	-	-	-	-	-	-	-	-	6.0	-				5.1	-	-	4
						-	0.0	184	-		-	-	-	-	-	-	-	-	-		5.4					4		
					Bottom	4.8	0.1	200	28.0	28.0	8.1	8.1	31.0	31.0	93.7	95.0	6.2	6.3	5.4	6.3	5				31.0	5.4	5.5	5
						4.8	0.1	202	28.0		8.1	8.1	31.0	31.0	96.2	95.0	6.4	6.4	5.5		5							
SR3	Rainy	Moderate	18:50	8.1	Surface	1.0	0.1	10	28.4	28.5	8.1	8.1	25.1	25.1	84.3	84.4	5.7	5.6	2.6	5.6	4	4	822143	807571				
						1.0	0.2	12	28.5		8.1	8.1	25.0	25.1	84.4	84.4	5.7	5.6	2.6		4							
					Middle	4.1	0.2	9	28.1	28.1	8.1	8.1	27.2	27.2	80.2	80.3	5.4	5.4	4.9	6.2	4				80.2	5.4	5.3	4
						4.1	0.2	2	28.1		8.1	8.1	27.2	27.2	80.4	80.3	5.4	5.4	5.3		4							
					Bottom	7.1	0.2	16	28.1	28.1	8.1	8.1	27.3	27.3	81.9	82.0	5.5	5.5	7.8	5.5	4				81.9	5.5	8.9	4
						7.1	0.2	15	28.1		8.1	8.1	27.3	27.3	82.0	82.0	5.5	5.5	8.9		4							
SR4A	Rainy	Moderate	19:46	8.8	Surface	1.0	0.0	81	28.2	28.2	8.5	8.5	28.9	28.9	81.8	81.9	5.4	5.5	10.7	5.5	4	5	817181	807802				
						1.0	0.1	74	28.2		8.5	8.5	28.9	28.9	81.9	81.9	5.4	5.5	10.5		4							
					Middle	4.4	0.0	84	28.2	28.2	8.5	8.5	28.9	28.9	82.1	82.2	5.5	5.5	8.7	6.2	5				8.7	8.6	4	
						4.4	0.0	86	28.2		8.5	8.5	28.9	28.9	82.2	82.2	5.5	5.5	8.6		4							
					Bottom	7.8	0.0	63	28.2	28.2	8.5	8.5	28.9	28.9	83.8	84.1	5.6	5.6	10.7	5.6	6				83.8	10.7	10.8	5
						7.8	0.0	65	28.2		8.5	8.5	28.9	28.9	84.3	84.1	5.6	5.6	10.8		5							
SR8	Fine	Moderate	19:10	5.0	Surface	1.0	-	-	29.4	29.4	8.1	8.1	28.8	28.7	94.3	94.4	6.2	6.2	7.1	6.2	4	4	820404	811617				
						1.0	-	-	29.3		8.2	8.1	28.7	28.7	94.5	94.4	6.2	6.2	7.2		4							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-				7.6	-	-	4
						-	-	-	-		-	-	-	-	-	-	-	-	-		-					8.0		
					Bottom	4.0	-	-	29.0	29.1	8.1	8.1	27.5	27.2	96.3	96.9	6.4	6.4	8.0	6.4	4				96.3	8.0	8.1	4
						4.0	-	-	29.1		8.1	8.1	27.0	27.2	97.5	96.9	6.4	6.4	8.1		4							

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	10:08	8.7	Surface	1.0	0.5	215	28.1	28.1	8.2	8.2	29.0	29.0	87.1	87.1	5.8	5.8	3.2	9.8	4	4	815602	804238
						1.0	0.5	209	28.1		8.2		29.0		87.1		5.8		3.3		5			
					Middle	4.4	0.5	218	28.0	28.0	8.2	8.2	30.1	30.1	86.7	86.8	5.7	5.8	12.6	3				
						4.4	0.5	225	28.0		8.2		30.1		86.8		5.7		12.3		4			
					Bottom	7.7	0.5	188	28.0	28.0	8.2	8.2	30.0	30.0	87.9	88.0	5.8	5.8	13.3	3				
						7.7	0.5	180	28.0		8.2		30.0		88.0		5.8		13.9		4			
C2	Cloudy	Moderate	11:22	10.9	Surface	1.0	0.6	179	28.4	28.4	8.1	8.1	26.2	26.2	82.8	82.7	5.6	5.6	5.3	10.3	3	4	825669	806938
						1.0	0.7	176	28.4		8.1		26.3		82.5		5.6		6.0		4			
					Middle	5.5	0.6	171	28.2	28.2	8.1	8.1	26.5	26.5	81.1	81.0	5.5	5.5	12.6	3				
						5.5	0.5	176	28.2		8.1		26.5		80.9		5.5		12.5		4			
					Bottom	9.9	0.6	167	28.2	28.2	8.0	8.0	28.1	28.1	72.9	73.1	4.9	4.9	12.7	4				
						9.9	0.7	173	28.2		8.0		28.1		73.2		4.9		12.7		5			
C3	Fine	Moderate	09:39	9.6	Surface	1.0	0.4	64	28.4	28.4	7.9	7.9	32.2	32.3	77.1	77.1	5.0	5.0	2.7	3.6	4	4	822116	817794
						1.0	0.3	61	28.3		7.9		32.3		77.0		5.0		2.8		5			
					Middle	4.8	0.3	74	28.3	28.3	7.9	7.9	32.7	32.7	77.5	77.6	5.0	5.0	3.9	4				
						4.8	0.2	72	28.3		7.9		32.7		77.7		5.0		3.9		4			
					Bottom	8.6	0.4	60	28.3	28.3	7.8	7.8	32.7	32.7	79.0	79.2	5.1	5.2	4.2	3				
						8.6	0.3	56	28.3		7.8		32.7		79.4		5.2		4.2		4			
IM1	Cloudy	Moderate	10:27	6.5	Surface	1.0	0.3	181	28.1	28.1	8.2	8.2	29.3	29.3	85.0	85.0	5.7	5.6	4.6	6.0	4	4	818331	806437
						1.0	0.3	184	28.1		8.2		29.3		84.9		5.6		4.7		5			
					Middle	3.3	0.3	192	28.0	28.0	8.2	8.2	29.5	29.5	84.3	84.3	5.6	5.6	5.8	4				
						3.3	0.4	188	28.0		8.2		29.6		84.2		5.6		5.4		4			
					Bottom	5.5	0.4	173	28.0	28.0	8.2	8.2	29.6	29.6	84.8	84.9	5.6	5.6	7.6	4				
						5.5	0.4	175	28.0		8.2		29.6		84.9		5.6		7.7		4			
IM2	Cloudy	Moderate	10:32	6.7	Surface	1.0	0.4	200	28.1	28.1	8.1	8.1	29.2	29.2	84.6	84.6	5.6	5.6	4.0	5.5	2	3	819176	806238
						1.0	0.4	198	28.1		8.1		29.2		84.6		5.6		4.1		3			
					Middle	3.4	0.4	207	28.0	28.0	8.1	8.1	29.3	29.3	84.1	84.0	5.6	5.6	5.5	4				
						3.4	0.4	206	28.0		8.1		29.4		83.9		5.6		5.7		4			
					Bottom	5.7	0.4	222	28.0	28.0	8.1	8.1	29.4	29.4	84.4	84.5	5.6	5.6	7.0	4				
						5.7	0.4	218	28.0		8.1		29.4		84.5		5.6		7.1		4			
IM7	Cloudy	Moderate	10:54	8.5	Surface	1.0	0.3	210	28.2	28.2	8.1	8.1	26.7	26.7	87.2	87.2	5.9	5.7	2.2	5.8	6	5	821328	806828
						1.0	0.3	212	28.2		8.1		26.7		87.1		5.9		2.2		6			
					Middle	4.3	0.3	226	28.0	28.0	8.2	8.2	26.9	27.0	82.1	81.8	5.5	5.5	4.2	4				
						4.3	0.3	227	28.0		8.2		27.0		81.4		5.5		6.2		4			
					Bottom	7.5	0.3	188	27.9	27.9	8.2	8.2	29.0	29.0	81.6	81.7	5.4	5.5	9.8	4				
						7.5	0.3	192	27.9		8.2		29.0		81.7		5.5		9.9		4			

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA	
IM10	Fine	Moderate	10:55	8.6	Surface	1.0	0.5	117	28.5	28.5	8.0	8.0	30.6	30.6	84.1	84.1	5.5	5.5	5.0	6.4	5	4	822256	809845			
						1.0	0.5	114	28.5		8.0		30.7		84.0		5.5		5.1		4						
					Middle	4.3	0.4	133	28.4	28.4	8.0	8.0	30.8	30.8	84.0	84.2	5.5	5.5	6.2	5.7	6.2	5.7			4	5	
						4.3	0.4	131	28.4		8.0		30.8		84.3		5.5		6.2		4						
					Bottom	7.6	0.5	108	28.4	28.4	8.0	8.0	30.8	30.7	85.5	85.8	5.6	5.7	7.9	5.7	7.9	5.7			4	4	
						7.6	0.5	107	28.4		8.0		30.7		86.1		5.7		7.9		4						
IM11	Fine	Moderate	10:47	8.0	Surface	1.0	0.4	103	28.5	28.5	8.0	8.0	30.2	30.2	85.5	85.5	5.6	5.6	4.8	5.4	4	4	821497	810552			
						1.0	0.4	110	28.5		8.0		30.3		85.4		5.6		4.7		4						
					Middle	4.0	0.5	109	28.5	28.5	8.0	8.0	30.4	30.4	85.4	85.5	5.6	5.6	5.4	5.8	5.4	5.8			4	4	
						4.0	0.5	115	28.4		8.0		30.4		85.6		5.6		5.5		4						
					Bottom	7.0	0.5	78	28.3	28.3	8.0	8.0	30.5	30.5	86.9	87.2	5.7	5.8	6.1	5.8	6.1	5.8			4	4	
						7.0	0.5	73	28.3		8.0		30.5		87.5		5.8		6.2		4						
IM12	Fine	Moderate	10:40	7.6	Surface	1.0	0.5	106	28.5	28.5	8.0	8.0	30.4	30.4	83.7	83.6	5.5	5.5	5.1	6.5	4	5	821185	811505			
						1.0	0.5	104	28.5		8.0		30.4		83.5		5.5		5.1		5						
					Middle	3.8	0.5	116	28.4	28.4	8.0	8.0	30.6	30.7	83.7	83.9	5.5	5.5	6.7	5.7	6.7	5.7			4	6	
						3.8	0.5	121	28.3		8.0		30.7		84.0		5.5		6.7		4						
					Bottom	6.6	0.6	105	28.3	28.3	8.0	7.9	30.7	30.7	86.1	86.7	5.7	5.7	7.8	5.7	7.8	5.7			6	5	
						6.6	0.6	98	28.2		7.9		30.7		87.2		5.7		7.9		5						
SR1A	Fine	Moderate	10:17	5.0	Surface	1.0	0.0	72	28.3	28.3	7.9	7.9	30.9	30.9	84.6	84.9	5.6	5.6	4.4	5.6	4	4	819973	812656			
						1.0	0.1	72	28.3		7.9		30.9		85.1		5.6		4.4		4						
					Middle	2.5	0.0	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	4
						2.5	0.0	60	-		-		-		-		-		-		-						
					Bottom	4.0	0.0	85	28.1	28.1	7.9	7.9	31.0	31.0	87.6	87.9	5.8	5.8	5.3	5.8	5.3	5.8			3	3	
						4.0	0.0	90	28.0		7.9		31.0		88.1		5.8		5.3		3						
SR2	Fine	Moderate	10:03	4.8	Surface	1.0	0.5	45	28.3	28.3	7.9	7.9	31.0	31.0	82.0	81.9	5.4	5.4	4.1	5.4	5	4	821459	814167			
						1.0	0.4	48	28.3		7.9		31.1		81.7		5.4		4.2		4						
					Middle	-	0.6	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	5
						-	0.6	50	-		-		-		-		-		-		-						
					Bottom	3.8	0.5	47	28.1	28.1	7.9	7.8	31.5	31.4	83.4	84.5	5.5	5.6	6.0	5.6	6.0	5.6			4	5	
						3.8	0.5	46	28.0		7.8		31.3		85.5		5.6		6.0		5						
SR3	Cloudy	Moderate	11:01	8.7	Surface	1.0	0.5	175	28.3	28.3	8.1	8.1	26.9	26.9	87.7	87.7	5.9	5.9	2.5	5.8	5	5	822151	807576			
						1.0	0.5	176	28.3		8.1		26.9		87.6		5.9		2.6		5						
					Middle	4.4	0.6	164	28.1	28.1	8.1	8.1	27.2	27.2	85.1	84.9	5.7	5.7	3.5	5.4	3.7	5.4			5	4	
						4.4	0.6	167	28.1		8.1		27.3		84.7		5.7		3.7		4						
					Bottom	7.7	0.6	150	27.9	27.9	8.1	8.1	28.3	28.3	80.4	80.2	5.4	5.4	12.8	5.4	12.1	5.4			3	3	
						7.7	0.6	151	27.9		8.1		28.3		79.9		5.4		12.1		3						
SR4A	Cloudy	Moderate	09:52	9.0	Surface	1.0	0.0	84	28.0	28.0	8.2	8.2	29.3	29.3	83.9	83.9	5.6	5.6	7.8	5.6	3	3	817176	807788			
						1.0	0.0	79	28.0		8.2		29.3		83.8		5.6		7.8		3						
					Middle	4.5	0.1	84	28.0	28.0	8.2	8.2	29.3	29.3	83.5	83.5	5.6	5.6	7.8	5.5	7.8	5.5			4	4	
						4.5	0.1	82	28.0		8.2		29.3		83.5		5.6		7.8		4						
					Bottom	8.0	0.1	68	28.0	28.0	8.2	8.2	29.3	29.3	82.8	82.8	5.5	5.5	9.6	5.5	9.6	5.5			4	5	
						8.0	0.1	73	28.0		8.2		29.3		82.8		5.5		9.7		5						
SR8	Fine	Moderate	10:35	4.2	Surface	1.0	-	-	28.7	28.7	8.0	8.0	30.7	29.5	83.7	83.6	5.5	5.7	6.1	5.6	4	5	820394	811638			
						1.0	-	-	28.6		8.0		30.7		83.5		5.7		6.1		5						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	4
						-	-	-	-		-		-		-		-		-		-						
					Bottom	3.2	-	-	28.4	28.4	7.9	7.9	30.8	30.8	85.1	85.7	5.6	5.7	7.9	5.7	7.9	5.7			4	3	
						3.2	-	-	28.4		7.9		30.8		86.3		5.7		7.8		3						

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
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Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 06 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Rainy	Moderate	16:56	8.4	Surface	1.0	0.2	30	28.3	28.3	8.2	8.2	27.8	27.8	84.7	84.7	5.7	5.6	12.1	12.1	5	4	815608	804233
						1.0	0.2	23	28.3		8.2		27.9	84.6	84.7	5.6	13.0		4					
					Middle	4.2	0.3	12	28.1	28.1	8.2	8.2	29.4	29.4	83.9	83.9	5.6	5.6	10.3	10.3	4			
						4.2	0.2	9	28.1		8.2		29.4	83.9	83.9	5.6	10.5		4					
					Bottom	7.4	0.3	7	28.1	28.1	8.2	8.2	29.6	29.6	84.7	84.8	5.6	5.6	13.2	13.7	4			
						7.4	0.3	12	28.1		8.2		29.6	84.9	84.8	5.6	13.7		3					
C2	Rainy	Moderate	16:02	9.3	Surface	1.0	0.2	202	28.4	28.4	8.1	8.1	23.9	24.0	86.5	85.8	5.9	5.8	5.4	8.1	3	3	825659	806952
						1.0	0.2	206	28.4		8.1		24.1	85.1	85.8	5.8	5.1		3					
					Middle	4.7	0.2	168	28.2	28.2	8.1	8.1	27.4	27.4	76.0	76.0	5.1	5.1	9.6	9.7	3			
						4.7	0.2	165	28.2		8.1		27.4	76.0	76.0	5.1	9.7		3					
					Bottom	8.3	0.1	208	28.2	28.2	8.1	8.1	27.6	27.6	77.2	77.3	5.2	5.2	10.0	9.1	3			
						8.3	0.1	203	28.2		8.1		27.6	77.4	77.3	5.2	9.1		4					
C3	Fine	Moderate	17:16	8.8	Surface	1.0	0.4	272	28.6	28.6	8.0	8.0	31.1	31.1	80.5	80.6	5.3	5.3	2.1	3.3	3	3	822097	817797
						1.0	0.4	272	28.6		8.0		31.1	80.6	80.6	5.3	2.2		3					
					Middle	4.4	0.4	281	28.5	28.5	8.0	8.0	31.2	31.2	80.7	80.8	5.3	5.3	3.4	3.5	3			
						4.4	0.4	275	28.5		8.0		31.2	80.8	80.8	5.3	3.5		3					
					Bottom	7.8	0.4	259	28.5	28.6	8.0	8.0	31.2	31.2	81.4	81.6	5.3	5.3	4.4	4.3	4			
						7.8	0.4	257	28.6		8.0		31.1	81.8	81.6	5.3	4.3		4					
IM1	Rainy	Moderate	16:43	6.7	Surface	1.0	0.1	15	28.4	28.4	8.2	8.2	29.1	29.1	84.5	84.5	5.6	5.6	11.9	11.3	2	3	818353	806464
						1.0	0.1	18	28.3		8.2		29.1	84.5	84.5	5.6	11.8		3					
					Middle	3.4	0.2	30	28.2	28.2	8.2	8.2	29.8	29.8	84.1	84.2	5.6	5.6	11.5	11.5	3			
						3.4	0.1	28	28.1		8.2		29.8	84.3	84.2	5.6	11.5		3					
					Bottom	5.7	0.2	15	28.1	28.1	8.2	8.2	29.8	29.8	85.2	85.3	5.6	5.7	10.1	10.9	4			
						5.7	0.1	14	28.1		8.2		29.8	85.3	85.3	5.7	10.9		3					
IM2	Rainy	Moderate	16:37	6.7	Surface	1.0	0.1	354	28.2	28.2	8.2	8.2	29.3	29.3	84.2	84.2	5.6	5.6	9.4	10.1	3	3	819197	806259
						1.0	0.1	347	28.2		8.2		29.4	84.2	84.2	5.6	9.5		4					
					Middle	3.4	0.1	342	28.2	28.2	8.2	8.2	29.6	29.6	84.5	84.6	5.6	5.6	10.6	10.6	4			
						3.4	0.1	342	28.2		8.2		29.6	84.6	84.6	5.6	10.6		2					
					Bottom	5.7	0.1	348	28.2	28.2	8.2	8.2	29.8	29.8	84.6	84.7	5.6	5.6	10.0	10.3	3			
						5.7	0.1	349	28.2		8.2		29.8	84.7	84.7	5.6	10.3		2					
IM7	Rainy	Moderate	16:19	8.1	Surface	1.0	0.1	287	28.4	28.4	8.1	8.1	26.6	26.6	82.4	82.4	5.5	5.6	5.9	7.4	5	4	821356	806811
						1.0	0.1	292	28.4		8.1		26.6	82.4	82.4	5.5	6.1		4					
					Middle	4.1	0.1	267	28.4	28.4	8.1	8.1	26.8	26.8	83.1	83.3	5.6	5.6	7.5	7.8	4			
						4.1	0.1	262	28.4		8.1		26.8	83.5	83.3	5.6	7.8		3					
					Bottom	7.1	0.1	259	28.4	28.4	8.1	8.1	26.8	26.8	85.6	85.8	5.7	5.8	8.5	8.6	4			
						7.1	0.1	251	28.4		8.1		26.8	85.9	85.8	5.8	8.6		3					

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Water Quality Monitoring

Water Quality Monitoring Results on 06 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA		
IM10	Fine	Moderate	16:03	7.4	Surface	1.0	0.1	258	28.8	28.8	8.0	8.0	29.4	29.5	83.1	83.2	5.5	5.5	1.7	2.8	3	3	822227	809817				
						1.0	0.2	260	28.8		8.0		29.5		83.3		5.5		1.7		2							
					Middle	3.7	0.2	255	28.8	8.0	29.6	29.6	84.2	84.3	5.5	5.5	2.9	3										
						3.7	0.2	257	28.8	8.0	29.6	29.6	84.4	84.3	5.5	5.5	3.0	4										
					Bottom	6.4	0.1	280	28.8	7.9	7.9	29.7	29.6	85.9	86.3	5.6	5.7	3.8	3									
						6.4	0.1	286	28.8	7.9	7.9	29.6	29.6	86.6	86.3	5.7	5.7	3.8	4									
IM11	Fine	Moderate	16:19	8.0	Surface	1.0	0.3	285	29.0	29.0	8.0	8.0	29.3	29.3	87.6	87.7	5.7	5.7	2.5	3.4	3	3	821515	810551				
						1.0	0.3	279	29.0		8.0		29.4		29.3		87.7		5.7		2.5				3			
					Middle	4.0	0.3	283	29.0	8.0	29.6	29.6	88.1	88.3	5.8	5.8	3.5	3										
						4.0	0.2	282	28.9	8.0	29.7	29.6	88.4	88.3	5.8	5.8	3.5	3										
					Bottom	7.0	0.3	261	28.9	8.0	29.8	29.7	89.4	89.8	5.8	5.9	4.2	3										
						7.0	0.3	260	28.9	7.9	7.9	29.7	29.7	90.2	89.8	5.9	5.9	4.2	3									
IM12	Fine	Moderate	16:24	8.2	Surface	1.0	0.4	282	29.0	29.0	8.0	8.0	29.7	29.8	88.0	88.0	5.7	5.7	1.8	2.7	2	3	821185	811503				
						1.0	0.4	281	29.0		8.0		29.8		29.8		88.0		5.8		1.7				2			
					Middle	4.1	0.3	288	29.0	8.0	29.9	29.9	88.1	88.2	5.7	5.7	2.3	2										
						4.1	0.4	285	29.0	8.0	29.9	29.9	88.2	88.2	5.7	5.7	2.4	2										
					Bottom	7.2	0.3	274	29.4	8.0	29.6	29.5	88.8	89.1	5.8	5.8	4.0	4										
						7.2	0.3	268	29.6	8.0	29.5	29.5	89.3	89.1	5.8	5.8	4.0	3										
SR1A	Fine	Moderate	16:44	5.8	Surface	1.0	0.0	184	29.0	29.0	8.1	8.1	30.3	30.3	86.4	86.5	5.6	5.6	6.1	6.8	3	3	819973	812654				
						1.0	0.0	181	29.0		8.1		30.3		30.3		86.5		86.5		5.6				5.6	6.2	3	
					Middle	2.9	0.0	183	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
						2.9	0.0	178	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
					Bottom	4.8	0.0	195	29.0	8.1	8.1	30.3	30.3	86.8	86.9	5.7	5.7	7.4	4									
						4.8	0.0	197	29.0	8.1	8.1	30.3	30.3	87.0	86.9	5.7	5.7	7.5	3									
SR2	Fine	Moderate	16:55	5.6	Surface	1.0	0.1	219	28.9	28.9	8.0	8.0	30.1	30.1	89.1	89.0	5.8	5.8	3.0	3.8	3	3	821465	814151				
						1.0	0.0	218	28.9		8.0		30.0		30.1		88.8		89.0		5.8				5.8	3.1	3	
					Middle	-	0.1	219	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
						-	0.1	217	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
					Bottom	4.6	0.1	241	29.1	8.0	7.9	29.9	29.8	89.1	89.7	5.8	5.9	4.4	4									
						4.6	0.0	243	29.2	7.9	7.9	29.8	29.8	90.3	89.7	5.9	5.9	4.5	3									
SR3	Rainy	Moderate	16:14	8.5	Surface	1.0	0.1	205	28.4	28.4	8.1	8.1	26.4	26.5	84.2	82.5	5.7	5.5	2.5	6.5	5	3	822136	807562				
						1.0	0.1	204	28.4		8.1		26.5		26.5		80.7		82.5		5.4				5.5	2.4	4	
					Middle	4.3	0.1	219	28.3	8.1	8.1	26.8	26.8	81.3	81.4	5.5	5.5	7.4	3									
						4.3	0.1	214	28.3	8.1	8.1	26.8	26.8	81.5	81.4	5.5	5.5	7.2	3									
					Bottom	7.5	0.0	197	28.3	8.1	8.1	26.9	27.0	82.4	82.6	5.5	5.6	9.9	2									
						7.5	0.1	191	28.2	8.1	8.1	27.0	27.0	82.7	82.6	5.6	5.6	9.5	3									
SR4A	Rainy	Moderate	17:11	8.5	Surface	1.0	0.0	233	28.7	28.7	8.1	8.1	28.2	28.2	86.1	86.1	5.7	5.7	13.0	13.2	2	4	817200	807789				
						1.0	0.0	229	28.7		8.1		28.2		28.2		86.1		86.1		5.7				5.7	13.6	3	
					Middle	4.3	0.0	228	28.7	8.1	8.1	28.3	28.3	86.8	86.9	5.7	5.7	13.1	4									
						4.3	0.1	220	28.7	8.1	8.1	28.3	28.3	87.0	86.9	5.8	5.8	13.1	3									
					Bottom	7.5	0.0	198	28.6	8.1	8.1	28.4	28.4	88.2	88.3	5.8	5.9	13.4	5									
						7.5	0.0	201	28.6	8.1	8.1	28.4	28.4	88.4	88.3	5.9	5.9	13.2	4									
SR8	Fine	Moderate	16:28	5.0	Surface	1.0	-	-	29.5	29.5	8.0	8.0	29.6	29.6	91.7	91.7	5.9	5.9	3.0	3.5	3	3	820403	811612				
						1.0	-	-	29.5		8.0		29.6		29.6		91.6		91.7		5.9				5.9	3.0	3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	
					Bottom	4.0	-	-	29.8	29.9	7.9	7.9	29.2	29.2	92.2	92.5	6.0	6.0	4.1	6.0	4.1				6.0	3	6.0	4
						4.0	-	-	29.9		7.9		29.2		29.2		92.8		92.5		6.0					6.0		4.1

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	11:59	8.4	Surface	1.0	0.5	215	28.1	8.3	8.3	30.0	30.1	93.7	93.7	6.2	6.2	6.2	13.0	12.2	8	7	815613	804236
						1.0	0.6	214	28.1	8.3	8.3	30.1	30.1	93.7	93.7	6.2	6.2			12.7	8			
					Middle	4.2	0.5	204	27.9	8.3	8.3	30.9	30.9	93.5	93.5	6.2	6.2	13.4	6					
						4.2	0.5	200	27.9	8.3	8.3	30.9	30.9	93.4	93.4	6.2	6.2	13.3	6					
					Bottom	7.4	0.5	228	27.9	8.3	8.3	30.9	30.9	93.0	93.0	6.2	6.2	13.2	6					
						7.4	0.5	230	27.8	8.3	8.3	30.9	30.9	92.9	93.0	6.2	6.2	13.2	7					
C2	Cloudy	Moderate	13:29	10.7	Surface	1.0	0.5	176	28.5	8.1	8.1	26.7	26.7	84.7	84.8	5.7	5.7	5.7	10.7	8.6	4	5	825704	806937
						1.0	0.5	170	28.5	8.1	8.1	26.7	26.7	84.8	84.8	5.7	5.7			9.2	4			
					Middle	5.4	0.5	145	28.4	8.1	8.1	27.0	27.0	85.0	85.0	5.7	5.7	10.8	4					
						5.4	0.5	140	28.4	8.1	8.1	27.0	27.0	84.9	85.0	5.7	5.7	10.2	5					
					Bottom	9.7	0.4	150	28.4	8.1	8.1	27.0	27.0	83.3	83.3	5.6	5.6	12.6	5					
						9.7	0.4	145	28.4	8.1	8.1	27.0	27.0	83.3	83.3	5.6	5.6	12.6	6					
C3	Fine	Moderate	11:44	9.6	Surface	1.0	0.3	79	28.5	7.9	7.9	32.4	32.4	79.1	79.1	5.1	5.1	5.2	3.7	2.4	5	5	822126	817818
						1.0	0.3	73	28.4	7.9	7.9	32.5	32.4	79.0	79.1	5.1	5.1			2.5	4			
					Middle	4.8	0.3	64	28.4	7.9	7.9	32.8	32.8	79.5	79.6	5.2	5.2	3.8	5					
						4.8	0.3	60	28.4	7.9	7.9	32.8	32.8	79.7	79.6	5.2	5.2	3.9	4					
					Bottom	8.6	0.4	94	28.4	7.9	7.9	32.7	32.7	81.4	81.5	5.3	5.3	4.7	7					
						8.6	0.4	96	28.3	7.9	7.9	32.7	32.7	81.6	81.5	5.3	5.3	4.7	6					
IM1	Cloudy	Moderate	12:19	6.2	Surface	1.0	0.4	203	28.1	8.3	8.3	29.6	29.6	91.3	91.3	6.1	6.1	6.1	12.1	8.6	10	9	818359	806441
						1.0	0.4	200	28.1	8.3	8.3	29.6	29.6	91.3	91.3	6.1	6.1			9.0	10			
					Middle	3.1	0.4	192	28.0	8.3	8.3	30.1	30.1	91.2	91.2	6.0	6.0	14.0	10					
						3.1	0.3	198	28.0	8.3	8.3	30.1	30.1	91.2	91.2	6.0	6.0	13.6	8					
					Bottom	5.2	0.4	201	28.0	8.2	8.2	30.4	30.4	91.0	91.0	6.0	6.0	13.9	8					
						5.2	0.4	202	28.0	8.2	8.2	30.4	30.4	91.0	91.0	6.0	6.0	13.5	8					
IM2	Cloudy	Moderate	12:27	7.0	Surface	1.0	0.5	209	28.2	8.2	8.2	29.9	29.8	91.0	91.0	6.0	6.0	6.0	9.2	6.9	8	8	819163	806240
						1.0	0.4	215	28.2	8.2	8.2	29.8	29.8	91.0	91.0	6.0	6.0			6.9	9			
					Middle	3.5	0.5	210	28.1	8.2	8.2	30.1	30.1	90.7	90.7	6.0	6.0	8.1	7					
						3.5	0.4	208	28.1	8.2	8.2	30.1	30.1	90.7	90.7	6.0	6.0	8.2	8					
					Bottom	6.0	0.5	218	28.0	8.2	8.2	30.4	30.4	90.5	90.7	6.0	6.0	12.9	7					
						6.0	0.5	214	28.0	8.2	8.2	30.4	30.4	90.8	90.7	6.0	6.0	12.3	8					
IM7	Cloudy	Moderate	12:53	7.5	Surface	1.0	0.4	188	28.3	8.1	8.1	28.3	28.3	88.0	88.0	5.9	5.9	5.9	5.7	4.2	6	6	821364	806829
						1.0	0.4	180	28.3	8.1	8.1	28.3	28.3	88.0	88.0	5.9	5.9			4.3	7			
					Middle	3.8	0.3	183	28.2	8.2	8.2	28.5	28.6	89.2	89.3	5.9	5.9	4.4	6					
						3.8	0.3	180	28.2	8.2	8.2	28.6	28.6	89.3	89.3	5.9	5.9	4.3	6					
					Bottom	6.5	0.3	208	28.0	8.2	8.2	29.8	29.8	90.8	90.8	6.0	6.0	8.9	6					
						6.5	0.3	210	28.0	8.2	8.2	29.8	29.8	91.0	90.9	6.0	6.0	8.2	6					

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA	
IM10	Fine	Moderate	13:11	9.2	Surface	1.0	0.4	131	28.7	28.7	8.1	8.1	31.0	31.0	89.6	89.7	5.8	5.9	7.7	8.4	8	9	822248	809829			
						1.0	0.5	126	28.7	8.1	8.1	31.0	31.0	89.7	89.7	5.8	5.9	7.6	8.4	7							
					Middle	4.6	0.5	122	28.7	28.8	8.1	8.1	31.0	31.0	90.0	90.1	5.9	5.9	8.0	8.4	9						
						4.6	0.5	117	28.8	28.8	8.1	8.1	31.0	31.0	90.2	90.1	5.9	5.9	8.0	8.4	9						
					Bottom	8.2	0.5	131	28.9	28.9	8.0	8.0	30.9	30.9	90.7	90.9	5.9	5.9	9.4	8.4	10						
						8.2	0.5	131	28.9	28.9	8.0	8.0	30.9	30.9	91.1	90.9	5.9	5.9	9.5	8.4	10						
IM11	Fine	Moderate	13:07	8.2	Surface	1.0	0.5	98	28.8	28.8	8.1	8.1	30.8	30.8	89.7	89.7	5.8	5.9	7.5	8.2	6	7	821484	810561			
						1.0	0.5	91	28.8	28.8	8.1	8.1	30.8	30.8	89.6	89.7	5.8	5.9	7.5	8.2	6						
					Middle	4.1	0.5	118	28.7	28.7	8.1	8.1	30.9	30.9	89.8	89.9	5.9	5.9	8.1	8.2	6						
						4.1	0.5	123	28.7	28.7	8.1	8.1	30.9	30.9	89.9	89.9	5.9	5.9	8.1	8.2	6						
					Bottom	7.2	0.5	92	28.7	28.7	8.0	8.0	30.9	30.9	90.6	90.9	5.9	5.9	9.1	8.2	7						
						7.2	0.5	96	28.7	28.7	8.0	8.0	30.9	30.9	91.2	90.9	5.9	5.9	9.0	8.2	8						
IM12	Fine	Moderate	12:46	7.6	Surface	1.0	0.6	96	28.7	28.7	8.0	8.0	30.7	30.7	88.4	88.4	5.8	5.8	6.8	7.4	10	12	821168	811521			
						1.0	0.6	98	28.6	28.7	8.0	8.0	30.7	30.7	88.4	88.4	5.8	5.8	6.7	7.4	10						
					Middle	3.8	0.5	87	28.6	28.6	8.0	8.0	30.8	30.7	88.7	88.8	5.8	5.8	7.4	7.4	13						
						3.8	0.5	83	28.6	28.6	8.0	8.0	30.7	30.7	88.9	88.8	5.8	5.8	7.5	7.4	12						
					Bottom	6.6	0.5	108	28.7	28.7	8.0	8.0	30.7	30.7	90.3	90.7	5.9	5.9	8.0	7.4	13						
						6.6	0.6	103	28.7	28.7	8.0	8.0	30.7	30.7	91.0	90.7	5.9	5.9	8.0	7.4	14						
SR1A	Fine	Moderate	12:24	4.4	Surface	1.0	0.0	57	28.8	28.8	8.0	8.0	30.9	30.9	87.8	88.0	5.7	5.7	4.0	4.0	6	6	819981	812663			
						1.0	0.0	60	28.7	28.8	8.0	8.0	30.9	30.9	88.1	88.0	5.7	5.7	4.0	4.0	8						
					Middle	2.2	0.1	80	-	-	-	-	-	-	-	-	-	-	-	-	-				-	4.0	-
						2.2	0.1	74	-	-	-	-	-	-	-	-	-	-	-	-	-				-	4.0	-
					Bottom	3.4	0.0	61	28.7	28.7	7.9	7.9	30.9	30.9	89.6	90.3	5.8	5.9	4.1	4.0	4						
						3.4	0.1	67	28.7	28.7	7.9	7.9	30.9	30.9	91.0	90.3	5.9	5.9	4.1	4.0	5						
SR2	Fine	Moderate	12:12	5.0	Surface	1.0	0.5	34	28.6	28.6	8.0	8.0	30.6	30.7	88.1	88.1	5.8	5.8	5.3	5.7	5	5	821455	814169			
						1.0	0.5	34	28.6	28.6	8.0	8.0	30.7	30.7	88.1	88.1	5.8	5.8	5.4	5.7	4						
					Middle	-	0.5	21	-	-	-	-	-	-	-	-	-	-	-	-	-				-	5.7	-
						-	0.5	27	-	-	-	-	-	-	-	-	-	-	-	-	-				-	5.7	-
					Bottom	4.0	0.5	29	28.5	28.5	7.9	7.9	30.8	30.5	89.4	90.8	5.9	6.0	6.0	6.0	6.1				6.0	5	
						4.0	0.4	32	28.4	28.5	7.9	7.9	30.3	30.5	92.1	90.8	6.1	6.0	6.1	6.0	6.1				6.0	6	
SR3	Cloudy	Moderate	13:03	8.6	Surface	1.0	0.4	177	28.6	28.6	8.1	8.1	28.0	28.0	86.7	86.7	5.8	5.9	3.8	7.9	6	7	822155	807573			
						1.0	0.4	170	28.6	28.6	8.1	8.1	28.0	28.0	86.7	86.7	5.8	5.8	3.8	7.9	5						
					Middle	4.3	0.5	176	28.2	28.2	8.2	8.2	28.8	28.8	88.2	88.3	5.9	5.9	9.1	7.9	6						
						4.3	0.5	178	28.2	28.2	8.2	8.2	28.8	28.8	88.3	88.3	5.9	5.9	9.6	7.9	7						
					Bottom	7.6	0.4	173	28.2	28.2	8.2	8.2	28.9	28.9	90.5	90.6	6.0	6.0	10.7	7.9	8						
						7.6	0.5	178	28.2	28.2	8.2	8.2	28.9	28.9	90.6	90.6	6.0	6.0	10.7	7.9	8						
SR4A	Cloudy	Moderate	11:42	9.2	Surface	1.0	0.0	68	28.1	28.1	8.2	8.2	30.1	30.1	91.7	91.7	6.1	6.1	8.6	10.5	11	11	817210	807810			
						1.0	0.0	63	28.1	28.1	8.2	8.2	30.1	30.1	91.6	91.7	6.1	6.1	8.8	10.5	12						
					Middle	4.6	0.0	93	28.0	28.0	8.2	8.2	30.4	30.4	90.7	90.7	6.0	6.0	11.6	10.5	11						
						4.6	0.0	99	28.0	28.0	8.2	8.2	30.4	30.4	90.7	90.7	6.0	6.0	11.6	10.5	11						
					Bottom	8.2	0.0	95	28.0	28.0	8.2	8.2	30.4	30.4	91.0	91.1	6.0	6.0	11.4	10.5	10						
						8.2	0.0	98	28.0	28.0	8.2	8.2	30.4	30.4	91.1	91.1	6.0	6.0	11.1	10.5	9						
SR8	Fine	Moderate	12:42	4.2	Surface	1.0	-	-	28.9	28.9	8.0	8.0	30.7	30.7	89.1	89.1	5.8	5.8	5.2	5.9	5	6	820391	811606			
						1.0	-	-	28.8	28.9	8.0	8.0	30.7	30.7	89.0	89.1	5.8	5.8	5.2	5.9	6						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	5.9	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	5.9	-
					Bottom	3.2	-	-	28.7	28.7	8.0	8.0	30.8	30.6	90.4	90.9	5.9	6.0	6.5	5.9	6.0				6.5	7	
						3.2	-	-	28.7	28.7	8.0	8.0	30.4	30.6	91.4	90.9	6.0	6.0	6.5	5.9	6.0				6.5	6	

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Water Quality Monitoring

Water Quality Monitoring Results on 08 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA							
C1	Cloudy	Moderate	18:10	8.5	Surface	1.0	0.3	21	28.2	28.2	8.2	8.2	29.2	29.2	90.4	90.5	6.0	6.0	6.0	15.7	13.9	20	19	815638	804269				
						1.0	0.3	23	28.2		8.2		29.2		90.5		6.0					15.9				21			
					Middle	4.3	0.4	15	28.2	28.2	8.2	8.2	29.4	29.4	91.2	91.3	6.0	6.1	6.1	13.7	13.9	13.7				13.9	20		
						4.3	0.3	19	28.2		8.2		29.4		91.3		6.1										13.7	19	
					Bottom	7.5	0.3	17	28.1	28.1	8.2	8.2	29.6	29.6	92.0	92.1	6.1	6.1	6.1	12.6	13.9	12.6				13.9	12.6	13.9	16
						7.5	0.4	16	28.1		8.2		29.6		92.1		6.1												12.1
C2	Cloudy	Moderate	17:02	10.4	Surface	1.0	0.1	167	28.5	28.5	8.1	8.1	26.7	26.7	84.4	84.4	5.6	5.7	5.7	4.4	8.7	9	8	825689	806953				
						1.0	0.0	162	28.5		8.1		26.7		84.4		5.7					4.4				8			
					Middle	5.2	0.2	185	28.4	28.4	8.1	8.1	27.1	27.1	85.1	85.1	5.7	5.7	5.7	10.3	8.7	10.3				8.7	10.3	8	
						5.2	0.2	188	28.4		8.1		27.1		85.1		5.7												10.3
					Bottom	9.4	0.1	158	28.4	28.4	8.1	8.1	27.1	27.1	84.8	84.8	5.7	5.7	5.7	11.6	8.7	11.6				8.7	11.6	8	
						9.4	0.2	163	28.4		8.1		27.1		84.8		5.7												11.1
C3	Fine	Moderate	17:58	8.6	Surface	1.0	0.4	271	28.5	28.5	8.0	8.0	31.4	31.0	87.6	87.1	5.7	5.5	5.5	7.5	8.3	9	7	822126	817797				
						1.0	0.4	276	28.5		8.0		30.6		86.5		6.0					7.6				8			
					Middle	4.3	0.5	247	28.5	28.5	8.0	8.0	32.1	32.1	79.1	78.9	5.1	5.1	5.1	8.2	8.3	8.2				8.3	8.2	7	
						4.3	0.5	245	28.5		8.0		32.1		78.7		5.1												8.2
					Bottom	7.6	0.4	272	28.5	28.5	8.0	8.0	32.1	32.1	77.6	79.1	5.0	5.1	5.1	9.1	8.3	9.1				8.3	9.1	6	
						7.6	0.5	274	28.5		8.0		32.1		80.5		5.2												9.0
IM1	Cloudy	Moderate	17:54	6.0	Surface	1.0	0.2	18	28.3	28.3	8.2	8.2	29.8	29.8	92.4	92.3	6.1	6.1	6.1	6.0	7.5	6	7	818334	806471				
						1.0	0.2	19	28.3		8.2		29.8		92.2		6.1					6.2				6			
					Middle	3.0	0.1	10	28.2	28.2	8.2	8.2	29.9	30.0	91.3	91.3	6.0	6.0	6.0	6.8	7.5	6.8				7.5	6.8	7	
						3.0	0.1	17	28.1		8.2		30.0		91.3		6.0												6.9
					Bottom	5.0	0.2	4	28.0	28.0	8.3	8.3	30.8	30.8	91.3	91.3	6.0	6.0	6.0	9.9	7.5	9.9				7.5	9.9	7	
						5.0	0.2	359	28.0		8.3		30.8		91.3		6.0												9.4
IM2	Cloudy	Moderate	17:47	7.0	Surface	1.0	0.1	326	28.2	28.2	8.2	8.2	29.8	29.8	93.9	93.9	6.2	6.2	6.2	5.3	9.2	6	8	819200	806239				
						1.0	0.1	323	28.2		8.2		29.8		93.9		6.2					5.3				7			
					Middle	3.5	0.0	320	28.1	28.1	8.2	8.2	30.3	30.3	92.3	92.3	6.1	6.1	6.1	8.9	9.2	8.9				9.2	8		
						3.5	0.1	316	28.1		8.2		30.3		92.2		6.1											9.2	8
					Bottom	6.0	0.1	290	28.0	28.0	8.3	8.3	30.7	30.7	91.9	92.0	6.1	6.1	6.1	13.6	9.2	13.6				9.2	13.6	8	
						6.0	0.1	296	28.0		8.3		30.7		92.0		6.1												13.2
IM7	Cloudy	Moderate	17:28	8.0	Surface	1.0	0.2	279	28.3	28.3	8.1	8.1	27.9	27.9	86.4	86.5	5.8	5.9	5.9	8.0	9.5	10	10	821356	806822				
						1.0	0.2	280	28.3		8.1		27.9		86.5		5.8					8.2				11			
					Middle	4.0	0.2	273	28.3	28.3	8.2	8.2	28.1	28.1	88.6	88.6	5.9	5.9	5.9	9.8	9.5	9.8				9.5	9.8	10	
						4.0	0.2	266	28.3		8.2		28.1		88.6		5.9												9.8
					Bottom	7.0	0.2	262	28.1	28.1	8.2	8.2	28.3	28.3	90.2	90.4	6.0	6.1	6.1	10.5	9.5	10.5				9.5	10.5	10	
						7.0	0.1	266	28.0		8.2		28.3		90.5		6.1												10.6

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
IM10	Fine	Moderate	17:07	7.4	Surface	1.0	0.2	236	28.6	28.6	8.1	8.1	31.0	31.0	89.3	89.3	5.8	5.8	5.7	7	8	822238	809860			
						1.0	0.2	235	28.6	8.1	8.1	31.0	31.0	89.3	89.3	5.8	5.8	5.8	6							
					Middle	3.7	0.2	263	28.6	28.6	8.1	8.1	31.0	31.0	89.4	89.4	5.8	5.8	6.7	6.7				6.7	9	
						3.7	0.2	259	28.6	28.6	8.1	8.1	31.0	31.0	89.4	89.4	5.8	5.8	6.8	6.8				6.8	8	
					Bottom	6.4	0.2	252	28.6	28.6	8.1	8.1	31.0	31.0	89.4	89.4	5.8	5.8	7.6	7.6				7.6	10	
						6.4	0.1	251	28.6	28.6	8.1	8.1	31.0	31.0	89.4	89.4	5.8	5.8	7.6	7.6				7.6	9	
IM11	Fine	Moderate	17:11	7.2	Surface	1.0	0.3	273	28.7	28.7	8.1	8.1	31.0	31.0	90.2	90.2	5.9	5.9	7.8	8	9	821480	810560			
						1.0	0.4	270	28.7	28.7	8.1	8.1	31.0	31.0	90.2	90.2	5.9	5.9	7.7	7.7				7.7	8	
					Middle	3.6	0.4	257	28.7	28.8	8.1	8.0	31.0	31.0	90.5	90.7	5.9	5.9	8.8	8.8				8.8	8	
						3.6	0.4	251	28.8	28.8	8.0	8.0	31.0	31.0	90.8	90.7	5.9	5.9	8.7	8.7				8.7	9	
					Bottom	6.2	0.3	287	28.9	28.9	8.0	8.0	31.0	30.9	91.9	92.2	6.0	6.0	9.0	9.0				9.0	10	
						6.2	0.3	281	28.9	28.9	8.0	8.0	30.9	30.9	92.5	92.2	6.0	6.0	9.0	9.0				9.0	9	
IM12	Fine	Moderate	17:13	8.6	Surface	1.0	0.3	269	28.7	28.7	8.1	8.1	31.0	31.0	88.4	88.5	5.8	5.8	6.1	10	11	821141	811506			
						1.0	0.4	270	28.7	28.7	8.1	8.1	31.0	31.0	88.5	88.5	5.8	5.8	6.2	6.2				6.2	10	
					Middle	4.3	0.3	276	28.7	28.7	8.1	8.1	31.0	31.1	88.7	88.8	5.8	5.8	7.1	7.1				7.1	11	
						4.3	0.4	274	28.6	28.7	8.1	8.1	31.1	31.1	88.8	88.8	5.8	5.8	7.1	7.1				7.1	12	
					Bottom	7.6	0.3	282	28.7	28.7	8.0	8.0	31.0	31.0	89.6	89.9	5.8	5.8	8.0	8.0				8.0	12	
						7.6	0.3	274	28.7	28.7	8.0	8.0	31.0	31.0	90.2	89.9	5.9	5.9	8.1	8.1				8.1	12	
SR1A	Fine	Moderate	17:31	5.6	Surface	1.0	0.1	203	28.8	28.8	8.0	8.0	30.8	30.8	84.9	85.0	5.5	5.5	5.9	4	5	819977	812656			
						1.0	0.1	209	28.8	28.8	8.0	8.0	30.8	30.8	85.0	85.0	5.5	5.5	5.9	5.9				5.9	5	
					Middle	2.8	0.0	186	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						2.8	0.1	182	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	4.6	0.0	173	28.7	28.7	8.0	8.0	30.8	30.8	85.3	85.5	5.6	5.6	6.0	6.0				6.0	5	
						4.6	0.1	166	28.7	28.7	8.0	8.0	30.8	30.8	85.6	85.5	5.6	5.6	6.0	6.0				6.0	6	
SR2	Fine	Moderate	17:42	5.0	Surface	1.0	0.2	220	28.6	28.6	8.0	8.0	31.1	31.1	89.2	89.3	5.8	5.8	8.3	6	7	821446	814145			
						1.0	0.2	216	28.6	28.6	8.0	8.0	31.1	31.1	89.4	89.3	5.8	5.8	8.3	8.3				8.3	5	
					Middle	-	0.2	214	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						-	0.2	208	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	4.0	0.1	235	28.6	28.6	8.0	8.0	31.3	31.3	91.4	91.8	6.0	6.0	9.0	9.0				9.0	9	
						4.0	0.2	235	28.6	28.6	8.0	8.0	31.3	31.3	92.1	91.8	6.0	6.0	9.0	9.0				9.0	9	
SR3	Cloudy	Moderate	17:21	8.3	Surface	1.0	0.1	251	28.2	28.2	8.2	8.2	27.7	27.7	84.7	84.7	5.7	5.7	12.0	10	8	822148	807587			
						1.0	0.1	251	28.2	28.2	8.2	8.2	27.8	27.8	84.6	84.7	5.7	5.7	12.2	12.2				12.2	9	
					Middle	4.2	0.1	283	28.2	28.2	8.2	8.2	28.1	28.1	84.7	84.7	5.7	5.7	14.2	14.2				14.2	8	
						4.2	0.1	283	28.2	28.2	8.2	8.2	28.1	28.1	84.7	84.7	5.7	5.7	14.4	14.4				14.4	7	
					Bottom	7.3	0.1	244	28.1	28.1	8.2	8.2	28.3	28.2	85.3	85.3	5.7	5.7	15.8	15.8				15.8	6	
						7.3	0.1	244	28.1	28.1	8.2	8.2	28.2	28.2	85.3	85.3	5.7	5.7	15.9	15.9				15.9	6	
SR4A	Cloudy	Moderate	18:29	8.4	Surface	1.0	0.0	219	28.3	28.3	8.2	8.2	29.0	29.0	87.4	87.5	5.8	5.8	11.0	25	23	817186	807793			
						1.0	0.0	219	28.3	28.3	8.2	8.2	29.0	29.0	87.5	87.5	5.8	5.8	10.3	10.3				10.3	24	
					Middle	4.2	0.1	215	28.3	28.3	8.2	8.2	29.0	29.0	88.1	88.2	5.8	5.8	11.3	11.3				11.3	22	
						4.2	0.1	217	28.3	28.3	8.2	8.2	29.0	29.0	88.3	88.2	5.9	5.9	11.4	11.4				11.4	23	
					Bottom	7.4	0.0	212	28.3	28.3	8.2	8.2	29.0	29.0	90.0	90.1	6.0	6.0	15.1	15.1				15.1	21	
						7.4	0.0	209	28.3	28.3	8.2	8.2	29.0	29.0	90.2	90.1	6.0	6.0	15.7	15.7				15.7	22	
SR8	Fine	Moderate	17:16	5.4	Surface	1.0	-	-	28.8	28.8	8.0	8.0	30.7	30.7	89.4	89.6	5.8	5.8	3.2	10	10	820391	811616			
						1.0	-	-	28.8	28.8	8.0	8.0	30.7	30.7	89.7	89.6	5.8	5.8	3.2	3.2				3.2	8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	4.4	-	-	28.9	28.9	8.0	8.0	30.6	29.7	90.7	91.4	5.9	5.9	5.0	5.0				5.0	10	
						4.4	-	-	28.9	28.9	8.0	8.0	28.8	28.8	92.1	92.1	6.0	6.0	4.9	4.9				4.9	11	

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
C1	Rainy	Moderate	13:06	8.2	Surface	1.0	0.2	216	<u>26.7</u>	26.7	8.2	8.2	31.9	31.9	95.3	95.3	6.4	6.4	5.8	7.5	4	5	815625	804247		
						1.0	0.2	219	26.7		8.2		31.9		95.3		6.4		5.8		6					
					Middle	4.1	0.3	220	<u>26.6</u>	26.6	8.2	8.2	31.9	31.9	93.6	93.6	6.3	6.3	6.6	6.3	6.6	6.3			5	5
						4.1	0.2	226	26.6		8.2		31.9		93.6		6.3		6.6		5					
					Bottom	7.2	0.2	220	<u>26.5</u>	26.5	8.2	8.2	31.8	31.8	93.6	93.7	6.3	6.3	10.4	6.3	10.4	6.3			5	5
						7.2	0.2	223	26.5		8.2		31.8		93.8		6.3		10.1		5					
C2	Rainy	Moderate	12:05	11.1	Surface	1.0	0.0	17	<u>26.7</u>	26.7	8.1	8.1	29.6	29.6	89.5	89.6	6.1	6.2	4.1	7.5	7	8	825688	806960		
						1.0	0.0	17	26.7		8.1		29.6		89.6		6.1		4.2		7					
					Middle	5.6	0.0	17	<u>26.4</u>	26.4	8.1	8.1	30.1	30.1	91.5	91.6	6.2	6.2	7.8	6.2	8.2	6.2			8	8
						5.6	0.0	10	26.4		8.1		30.2		91.6		6.2		8.2		8					
					Bottom	10.1	0.1	10	<u>26.2</u>	26.2	8.1	8.1	30.5	30.5	91.1	91.1	6.2	6.2	10.7	6.2	10.7	6.2			7	8
						10.1	0.1	8	26.2		8.1		30.4		91.0		6.2		10.2		9					
C3	Fine	Moderate	13:08	8.6	Surface	1.0	0.3	67	<u>27.6</u>	27.6	8.2	8.2	33.6	33.6	90.7	90.9	5.9	6.0	1.1	2.4	11	12	822121	817782		
						1.0	0.3	71	27.6		8.2		33.6		91.0		5.9		1.2		13					
					Middle	4.3	0.3	93	<u>27.6</u>	27.6	8.2	8.2	33.7	33.7	92.3	92.6	6.0	6.2	3.0	6.2	3.0	6.2			11	12
						4.3	0.4	99	27.6		8.2		33.7		92.8		6.1		3.1		12					
					Bottom	7.6	0.3	94	<u>27.6</u>	27.6	8.2	8.2	33.7	33.7	94.1	94.6	6.2	6.2	3.1	6.2	3.1	6.2			12	11
						7.6	0.3	97	27.6		8.2		33.6		95.1		6.2		3.1		11					
IM1	Rainy	Moderate	12:54	6.8	Surface	1.0	0.2	190	<u>26.4</u>	26.4	8.2	8.2	30.9	30.9	93.4	93.4	6.3	6.3	6.6	8.8	5	7	818356	806463		
						1.0	0.1	194	26.4		8.2		30.9		93.3		6.3		6.8		6					
					Middle	3.4	0.1	180	<u>26.3</u>	26.3	8.2	8.2	31.2	31.2	92.2	92.2	6.2	6.2	8.4	6.2	8.5	6.2			9	7
						3.4	0.1	179	26.3		8.2		31.2		92.2		6.2		8.5		9					
					Bottom	5.8	0.1	208	<u>26.4</u>	26.4	8.2	8.2	31.5	31.4	90.2	90.1	6.1	6.1	11.4	6.1	11.4	6.1			7	8
						5.8	0.1	212	26.4		8.2		31.4		89.9		6.1		11.4		8					
IM2	Rainy	Moderate	12:49	7.5	Surface	1.0	0.1	144	<u>26.3</u>	26.3	8.2	8.2	30.9	31.0	92.9	92.9	6.3	6.3	5.4	6.7	6	6	819195	806249		
						1.0	0.1	136	26.3		8.2		31.0		92.8		6.3		5.6		7					
					Middle	3.8	0.1	153	<u>26.3</u>	26.3	8.2	8.2	31.3	31.3	92.7	92.8	6.3	6.3	7.2	6.3	7.2	6.3			6	6
						3.8	0.1	158	26.3		8.2		31.3		92.8		6.3		7.2		5					
					Bottom	6.5	0.0	131	<u>26.4</u>	26.4	8.2	8.2	31.4	31.4	93.6	93.7	6.3	6.3	6.9	6.3	6.9	6.3			6	6
						6.5	0.0	127	26.4		8.2		31.4		93.7		6.3		7.7		6					
IM7	Rainy	Moderate	12:28	8.1	Surface	1.0	0.2	91	<u>26.4</u>	26.4	8.2	8.2	30.4	30.4	89.3	89.3	6.1	6.1	6.1	10.0	8	7	821331	806814		
						1.0	0.1	89	26.4		8.2		30.5		89.2		6.1		6.2		7					
					Middle	4.1	0.1	85	<u>26.3</u>	26.3	8.2	8.2	30.6	30.6	88.8	88.8	6.0	6.0	9.1	6.0	9.2	6.0			6	7
						4.1	0.1	90	26.3		8.2		30.6		88.8		6.0		9.2		7					
					Bottom	7.1	0.2	81	<u>26.3</u>	26.3	8.2	8.2	30.7	30.7	89.3	89.4	6.1	6.1	14.6	6.1	14.6	6.1			7	7
						7.1	0.2	81	26.3		8.2		30.7		89.4		6.1		14.9		7					

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA		
IM10	Fine	Moderate	12:07	7.2	Surface	1.0	0.2	73	26.8	26.8	8.2	8.2	32.5	32.5	93.4	93.5	6.2	6.3	5.6	6.3	12	12	822261	809835				
						1.0	0.2	78	26.8	8.2	8.2	32.6	32.5	93.6	93.5	6.2	6.3	5.6	6.3	11	12							
					Middle	3.6	0.1	83	26.8	26.8	8.2	8.2	32.7	32.7	94.4	94.5	6.3	6.4	6.1	6.4	10	12						
						3.6	0.1	84	26.8	26.8	8.2	8.2	32.7	32.7	94.5	94.5	6.3	6.4	6.1	6.4	12	12						
					Bottom	6.2	0.1	85	26.8	26.8	8.3	8.3	32.7	32.7	95.3	95.5	6.3	6.4	7.1	6.4	12	12						
						6.2	0.1	82	26.8	26.8	8.3	8.3	32.7	32.7	95.6	95.5	6.4	6.4	7.2	6.4	12	12						
IM11	Fine	Moderate	12:17	7.2	Surface	1.0	0.2	75	27.2	27.2	8.2	8.2	32.1	32.1	92.7	92.8	6.2	6.2	2.4	6.2	11	12	821512	810550				
						1.0	0.2	68	27.2	27.2	8.2	8.2	32.1	32.1	92.8	92.8	6.2	6.2	2.5	6.2	12	12						
					Middle	3.6	0.2	91	27.2	27.2	8.2	8.2	32.2	32.2	93.2	93.4	6.2	6.2	3.8	6.2	12	12						
						3.6	0.2	85	27.2	27.2	8.2	8.2	32.2	32.2	93.6	93.4	6.2	6.2	3.8	6.2	12	12						
					Bottom	6.2	0.2	104	27.2	27.2	8.2	8.2	32.2	32.2	94.5	95.4	6.3	6.4	4.7	6.4	11	12						
						6.2	0.2	106	27.2	27.2	8.2	8.2	32.2	32.2	96.3	95.4	6.4	6.4	4.7	6.4	11	12						
IM12	Fine	Moderate	12:21	7.8	Surface	1.0	0.2	93	27.3	27.3	8.1	8.1	32.5	32.5	89.4	89.5	5.9	5.9	5.4	5.9	11	11	821157	811535				
						1.0	0.2	95	27.3	27.3	8.1	8.1	32.5	32.5	89.5	89.5	5.9	5.9	5.4	5.9	11	11						
					Middle	3.9	0.2	78	27.3	27.3	8.1	8.1	32.5	32.5	89.8	90.0	5.9	6.0	5.8	6.0	11	10						
						3.9	0.2	73	27.3	27.3	8.1	8.1	32.5	32.5	90.1	90.0	6.0	6.1	5.8	6.1	10	11						
					Bottom	6.8	0.2	92	27.3	27.3	8.1	8.1	32.5	32.5	91.5	92.1	6.0	6.1	6.2	6.1	10	11						
						6.8	0.2	91	27.3	27.3	8.2	8.1	32.5	32.5	92.7	92.1	6.1	6.1	6.2	6.1	11	11						
SR1A	Fine	Moderate	12:40	5.8	Surface	1.0	0.1	25	26.9	26.9	8.1	8.1	31.8	31.8	87.0	87.2	5.8	5.8	6.1	5.8	10	11	819978	812653				
						1.0	0.0	31	26.9	26.9	8.1	8.1	31.8	31.8	87.4	87.2	5.8	5.8	6.1	5.8	11	11						
					Middle	2.9	0.0	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	10	10
						2.9	0.1	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	10	10
					Bottom	4.8	0.0	52	26.9	26.9	8.1	8.1	31.9	31.9	87.7	87.8	5.9	5.9	7.2	5.9	7.2	5.9			10	10		
						4.8	0.0	46	26.8	26.8	8.1	8.1	31.9	31.9	87.9	87.8	5.9	5.9	7.2	5.9	7.2	5.9			10	10		
SR2	Fine	Moderate	12:51	5.0	Surface	1.0	0.2	44	27.3	27.3	8.1	8.1	32.3	32.3	94.2	96.1	6.2	6.4	3.4	6.4	11	12	821470	814161				
						1.0	0.2	38	27.3	27.3	8.1	8.1	32.4	32.3	98.0	96.1	6.5	6.4	3.5	6.4	12	12						
					Middle	-	0.2	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	11	11
						-	0.3	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	11	11
					Bottom	4.0	0.3	36	27.1	27.2	8.1	8.1	32.5	32.5	100.1	100.9	6.6	6.7	4.2	6.7	4.3	6.7			10	10		
						4.0	0.3	33	27.2	27.2	8.1	8.1	32.4	32.5	101.7	100.9	6.7	6.7	4.3	6.7	4.3	6.7			10	10		
SR3	Rainy	Moderate	12:22	9.2	Surface	1.0	0.1	83	26.6	26.6	8.1	8.1	29.7	29.7	88.8	88.8	6.0	6.1	5.1	6.1	6	7	822135	807573				
						1.0	0.2	88	26.6	26.6	8.1	8.1	29.7	29.7	88.8	88.8	6.0	6.1	5.1	6.1	7	7						
					Middle	4.6	0.1	69	26.5	26.5	8.2	8.2	29.9	29.9	89.5	89.6	6.1	6.1	7.6	6.1	7.9	6.1			8	7		
						4.6	0.1	65	26.5	26.5	8.2	8.2	30.0	29.9	89.7	89.6	6.1	6.1	7.9	6.1	7.9	6.1			8	7		
					Bottom	8.2	0.1	82	26.4	26.4	8.2	8.2	30.4	30.4	90.9	91.0	6.2	6.2	11.5	6.2	11.7	6.2			7	7		
						8.2	0.1	84	26.4	26.4	8.2	8.2	30.4	30.4	91.0	91.0	6.2	6.2	11.7	6.2	11.7	6.2			7	7		
SR4A	Rainy	Moderate	13:24	8.7	Surface	1.0	0.0	70	26.4	26.4	8.2	8.2	31.1	31.1	92.9	92.9	6.3	6.3	6.6	6.3	9	8	817198	807798				
						1.0	0.0	71	26.4	26.4	8.2	8.2	31.1	31.1	92.9	92.9	6.3	6.3	6.6	6.3	8	8						
					Middle	4.4	-	84	26.3	26.3	8.2	8.2	31.2	31.2	92.2	92.2	6.2	6.2	8.6	6.2	8.8	6.2			8	8		
						4.4	0.0	87	26.3	26.3	8.2	8.2	31.2	31.2	92.2	92.2	6.2	6.2	8.8	6.2	8.8	6.2			8	8		
					Bottom	7.7	0.0	85	26.3	26.3	8.2	8.2	31.2	31.2	92.5	92.6	6.3	6.3	9.8	6.3	9.8	6.3			8	8		
						7.7	0.0	86	26.3	26.3	8.2	8.2	31.2	31.2	92.6	92.6	6.3	6.3	9.8	6.3	9.8	6.3			8	8		
SR8	Fine	Moderate	12:26	5.0	Surface	1.0	-	-	27.3	27.3	8.1	8.1	32.3	32.3	94.4	94.9	6.3	6.3	7.7	6.3	10	12	820403	811641				
						1.0	-	-	27.2	27.2	8.1	8.1	32.3	32.3	95.3	94.9	6.3	6.3	7.8	6.3	12	12						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	11	11
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	11	11
					Bottom	4.0	-	-	27.1	27.2	8.1	8.1	32.3	32.3	97.0	97.5	6.4	6.5	8.0	6.4	8.0	6.4			11	10		
						4.0	-	-	27.2	27.2	8.1	8.1	32.2	32.2	98.0	97.5	6.5	6.5	8.1	6.5	8.1	6.5			10	10		

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

Water Quality Monitoring Results on 11 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
C1	Cloudy	Moderate	08:02	8.2	Surface	1.0	0.4	25	26.5	26.5	8.2	8.2	31.8	31.8	91.3	91.3	6.1	6.1	6.1	6.1	9.7	9.7	15	14	815619	804270
						1.0	0.4	30	26.5	26.5	8.2	8.2	31.8	31.8	91.2	91.2	6.1	6.1	6.1	6.1	9.8	9.8	14			
					Middle	4.1	0.5	16	26.5	26.5	8.2	8.2	31.8	31.8	91.1	91.2	6.1	6.1	6.1	6.1	11.4	11.4	13			
						4.1	0.5	16	26.5	26.5	8.2	8.2	31.8	31.8	91.2	91.2	6.1	6.1	6.1	6.1	11.0	11.0	14			
					Bottom	7.2	0.5	57	26.5	26.5	8.2	8.2	31.8	31.8	91.9	92.0	6.2	6.2	6.2	6.2	9.2	9.2	12			
						7.2	0.5	55	26.5	26.5	8.2	8.2	31.8	31.8	92.0	92.0	6.2	6.2	6.2	6.2	9.5	9.5	14			
C2	Cloudy	Moderate	09:06	11.3	Surface	1.0	0.4	2	26.5	26.5	8.1	8.1	29.8	29.8	88.5	88.6	6.0	6.0	6.0	6.0	6.4	6.4	13	11	825663	806966
						1.0	0.4	1	26.5	26.5	8.1	8.1	29.8	29.8	88.6	88.6	6.0	6.0	6.0	6.0	6.7	6.7	14			
					Middle	5.7	0.5	351	26.3	26.3	8.1	8.1	30.2	30.2	88.9	89.0	6.1	6.1	6.1	6.1	9.7	9.7	8			
						5.7	0.5	344	26.3	26.3	8.1	8.1	30.2	30.2	89.0	89.0	6.1	6.1	6.1	6.1	9.6	9.6	9			
					Bottom	10.3	0.5	342	26.3	26.3	8.1	8.1	30.3	30.2	89.8	89.8	6.1	6.1	6.1	6.1	9.6	9.6	10			
						10.3	0.5	341	26.3	26.3	8.1	8.1	30.2	30.2	90.1	90.0	6.1	6.1	6.1	6.1	8.9	8.9	9			
C3	Fine	Moderate	08:30	9.4	Surface	1.0	0.5	252	27.3	27.3	8.0	8.0	32.7	32.7	85.4	85.4	5.6	5.6	5.6	5.6	6.5	6.5	12	12	822129	817806
						1.0	0.5	253	27.3	27.3	8.0	8.0	32.7	32.7	85.4	85.4	5.6	5.6	5.6	5.6	6.6	6.6	11			
					Middle	4.7	0.5	273	27.3	27.3	8.0	8.0	32.7	32.7	85.5	85.5	5.6	5.6	5.6	5.6	7.6	7.6	13			
						4.7	0.5	276	27.3	27.3	8.0	8.0	32.7	32.7	85.5	85.5	5.7	5.7	5.7	5.7	7.6	7.6	12			
					Bottom	8.4	0.5	274	27.3	27.3	8.0	8.0	32.7	32.7	85.6	85.7	5.7	5.7	5.7	5.7	8.0	8.0	13			
						8.4	0.5	267	27.3	27.3	8.0	8.0	32.7	32.7	85.8	85.7	5.7	5.7	5.7	5.7	8.1	8.1	12			
IM1	Cloudy	Moderate	08:17	7.0	Surface	1.0	0.3	24	26.3	26.3	8.2	8.2	31.0	31.0	90.9	90.9	6.2	6.2	6.2	6.2	12.7	12.7	15	14	818358	806456
						1.0	0.3	30	26.2	26.2	8.2	8.2	31.0	31.0	90.9	90.9	6.2	6.2	6.2	6.2	12.7	12.7	15			
					Middle	3.5	0.3	18	26.2	26.2	8.2	8.2	31.1	31.1	91.0	91.0	6.2	6.2	6.2	6.2	13.2	13.2	15			
						3.5	0.3	18	26.2	26.2	8.2	8.2	31.1	31.1	91.0	91.0	6.2	6.2	6.2	6.2	13.3	13.3	14			
					Bottom	6.0	0.3	40	26.2	26.2	8.2	8.2	31.1	31.1	90.9	90.9	6.2	6.2	6.2	6.2	13.9	13.9	13			
						6.0	0.3	35	26.2	26.2	8.2	8.2	31.1	31.1	90.9	90.9	6.2	6.2	6.2	6.2	13.7	13.7	13			
IM2	Cloudy	Moderate	08:22	7.3	Surface	1.0	0.4	21	26.2	26.2	8.2	8.2	30.9	30.9	90.0	90.0	6.1	6.1	6.1	6.1	12.0	12.0	13	14	819165	806232
						1.0	0.3	13	26.2	26.2	8.2	8.2	30.9	30.9	90.0	90.0	6.1	6.1	6.1	6.1	12.1	12.1	12			
					Middle	3.7	0.3	1	26.2	26.2	8.2	8.2	30.9	30.9	89.9	89.9	6.1	6.1	6.1	6.1	12.1	12.1	13			
						3.7	0.3	8	26.2	26.2	8.2	8.2	30.9	30.9	89.9	89.9	6.1	6.1	6.1	6.1	12.1	12.1	12			
					Bottom	6.3	0.3	37	26.2	26.2	8.2	8.2	30.9	30.9	91.4	91.5	6.2	6.2	6.2	6.2	10.6	10.6	15			
						6.3	0.3	40	26.2	26.2	8.2	8.2	30.9	30.9	91.5	91.5	6.2	6.2	6.2	6.2	10.3	10.3	16			
IM7	Cloudy	Moderate	08:42	8.5	Surface	1.0	0.3	358	26.3	26.3	8.1	8.1	30.4	30.4	88.6	88.6	6.0	6.0	6.0	6.0	9.7	9.7	15	14	821338	806811
						1.0	0.3	354	26.3	26.3	8.1	8.1	30.4	30.4	88.6	88.6	6.0	6.0	6.0	6.0	9.8	9.8	16			
					Middle	4.3	0.3	4	26.3	26.3	8.1	8.1	30.4	30.4	88.8	88.8	6.0	6.0	6.0	6.0	14.2	14.2	13			
						4.3	0.3	359	26.3	26.3	8.1	8.1	30.4	30.4	88.8	88.8	6.0	6.0	6.0	6.0	14.6	14.6	13			
					Bottom	7.5	0.3	356	26.3	26.3	8.1	8.1	30.4	30.4	90.0	90.1	6.1	6.1	6.1	6.1	13.6	13.6	13			
						7.5	0.3	352	26.3	26.3	8.1	8.1	30.4	30.4	90.2	90.2	6.1	6.1	6.1	6.1	13.5	13.5	14			

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Water Quality Monitoring

Water Quality Monitoring Results on 11 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Fine	Moderate	09:29	9.2	Surface	1.0	0.4	305	<u>27.2</u>	27.2	8.1	8.1	<u>32.6</u>	32.6	<u>92.4</u>	92.6	6.1	6.2	7.3	8.2	12	12	822245	809831
						1.0	0.3	311	<u>27.2</u>		8.1		<u>32.6</u>		<u>92.7</u>		6.1		7.3		11			
					Middle	4.6	0.4	284	<u>27.2</u>	8.1	8.1	<u>32.6</u>	32.6	<u>93.7</u>	93.9	6.2	8.2	12						
						4.6	0.4	277	<u>27.2</u>	8.1	<u>32.6</u>	<u>94.1</u>		6.2		8.1	11							
					Bottom	8.2	0.3	289	<u>27.2</u>	27.2	8.1	8.1	<u>32.6</u>	32.6	<u>102.4</u>	103.4	6.8	9.0	13					
						8.2	0.3	281	<u>27.2</u>		8.1		<u>32.5</u>		<u>104.4</u>		6.9	9.1	11					
IM11	Fine	Moderate	09:24	8.2	Surface	1.0	0.4	277	<u>27.2</u>	27.2	8.1	8.1	<u>32.5</u>	32.5	<u>91.2</u>	91.4	6.0	6.1	7.0	7.6	13	12	821506	810527
						1.0	0.4	283	<u>27.2</u>		8.1		<u>32.5</u>		<u>91.6</u>		6.1		6.9		12			
					Middle	4.1	0.4	264	<u>27.2</u>	27.2	8.1	8.1	<u>32.5</u>	32.5	<u>92.7</u>	93.0	6.1	7.5	11					
						4.1	0.4	259	<u>27.2</u>		8.1		<u>32.5</u>		<u>93.2</u>		6.2	7.6	12					
					Bottom	7.2	0.4	260	<u>27.2</u>	27.2	8.1	8.1	<u>32.5</u>	32.5	<u>100.1</u>	101.1	6.6	8.4	11					
						7.2	0.4	258	<u>27.2</u>		8.1		<u>32.5</u>		<u>102.0</u>		6.8	8.5	12					
IM12	Fine	Moderate	09:18	7.6	Surface	1.0	0.5	287	<u>27.2</u>	27.2	8.1	8.1	<u>32.5</u>	32.5	<u>92.1</u>	92.3	6.1	6.2	7.6	8.2	10	11	821139	811513
						1.0	0.5	281	<u>27.2</u>		8.1		<u>32.5</u>		<u>92.5</u>		6.1		7.5		12			
					Middle	3.8	0.4	287	<u>27.2</u>	27.2	8.1	8.1	<u>32.5</u>	32.5	<u>93.4</u>	93.8	6.2	8.0	11					
						3.8	0.4	292	<u>27.2</u>		8.1		<u>32.5</u>		<u>94.1</u>		6.2	8.1	10					
					Bottom	6.6	0.4	273	<u>27.1</u>	27.2	8.1	8.1	<u>32.4</u>	32.4	<u>101.5</u>	102.7	6.7	9.1	12					
						6.6	0.5	267	<u>27.2</u>		8.1		<u>32.4</u>		<u>103.8</u>		6.9	9.2	13					
SR1A	Fine	Moderate	08:57	4.0	Surface	1.0	0.0	211	<u>26.6</u>	26.6	8.0	8.0	31.9	31.9	<u>93.1</u>	94.3	6.2	6.3	6.6	6.9	10	11	819978	812663
						1.0	0.1	211	<u>26.6</u>		8.0		31.9		<u>95.4</u>		6.4		6.7		11			
					Middle	2.0	0.1	211	-	-	-	-	-	-	-	-	-	-	-					
						2.0	0.0	205	-		-		-		-		-	-	-					
					Bottom	3.0	0.0	229	<u>26.5</u>	26.6	8.1	8.1	<u>31.2</u>	31.5	<u>101.5</u>	101.7	6.8	7.1	11					
						3.0	-	233	<u>26.6</u>		8.1		<u>31.8</u>		<u>101.8</u>		6.8	7.1	12					
SR2	Fine	Moderate	08:45	4.4	Surface	1.0	0.1	248	<u>27.3</u>	27.3	8.0	8.0	<u>32.7</u>	32.7	<u>85.3</u>	85.3	5.6	5.6	7.5	8.0	12	13	821456	814173
						1.0	0.1	249	<u>27.3</u>		8.0		<u>32.7</u>		<u>85.3</u>		5.6		7.6		13			
					Middle	-	0.1	257	-	-	-	-	-	-	-	-	-	-	-					
						-	0.1	253	-		-		-		-		-	-						
					Bottom	3.4	0.1	267	<u>27.3</u>	27.3	8.0	8.0	<u>32.7</u>	32.7	<u>85.3</u>	85.3	5.6	8.4	12					
						3.4	0.2	263	<u>27.3</u>		8.0		<u>32.7</u>		<u>85.3</u>		5.6	8.5	13					
SR3	Cloudy	Moderate	08:49	9.2	Surface	1.0	0.4	331	<u>26.5</u>	26.5	8.1	8.1	<u>29.6</u>	29.6	<u>89.0</u>	89.1	6.1	6.1	7.9	11.4	12	12	822146	807583
						1.0	0.4	328	<u>26.5</u>		8.1		<u>29.6</u>		<u>89.1</u>		6.1		8.5		12			
					Middle	4.6	0.5	325	<u>26.3</u>	26.3	8.1	8.1	<u>30.2</u>	30.2	<u>89.7</u>	89.7	6.1	12.1	12					
						4.6	0.4	327	<u>26.3</u>		8.1		<u>30.2</u>		<u>89.7</u>		6.1	12.8	10					
					Bottom	8.2	0.4	336	<u>26.2</u>	26.2	8.2	8.2	<u>30.5</u>	30.5	<u>90.4</u>	90.5	6.2	13.4	10					
						8.2	0.5	331	<u>26.2</u>		8.2		<u>30.5</u>		<u>90.5</u>		6.2	13.5	13					
SR4A	Cloudy	Moderate	07:43	8.8	Surface	1.0	0.0	178	<u>26.1</u>	26.1	8.1	8.1	<u>30.7</u>	30.7	<u>90.6</u>	90.6	6.2	6.2	11.6	12.5	14	13	817175	807795
						1.0	0.0	170	<u>26.1</u>		8.1		<u>30.7</u>		<u>90.6</u>		6.2		12.0		12			
					Middle	4.4	0.0	201	<u>26.1</u>	26.1	8.1	8.1	<u>30.7</u>	30.7	<u>90.5</u>	90.5	6.2	14.5	13					
						4.4	0.1	194	<u>26.1</u>		8.1		<u>30.7</u>		<u>90.5</u>		6.2	14.7	12					
					Bottom	7.8	0.0	171	<u>26.1</u>	26.1	8.0	8.0	<u>30.7</u>	30.6	<u>90.5</u>	90.5	6.2	11.6	13					
						7.8	0.0	174	<u>26.1</u>		8.0		<u>30.6</u>		<u>90.5</u>		6.2	10.7	13					
SR8	Fine	Moderate	09:14	5.6	Surface	1.0	-	-	<u>27.2</u>	27.2	8.1	8.1	<u>32.1</u>	32.2	<u>96.3</u>	96.5	6.4	6.4	7.1	7.6	12	8	820376	811615
						1.0	-	-	<u>27.1</u>		8.1		<u>32.2</u>		<u>96.7</u>		6.4		7.1		0			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
						-	-	-	-		-		-		-		-	-						
					Bottom	4.6	-	-	<u>27.0</u>	27.0	8.1	8.1	<u>32.3</u>	32.2	<u>99.1</u>	99.8	6.6	8.0	11					
						4.6	-	-	<u>27.0</u>		8.1		<u>32.2</u>		<u>100.5</u>		6.7	8.0	10					

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
 Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

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

Water Quality Monitoring

Water Quality Monitoring Results on 13 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Rainy	Moderate	14:20	8.0	Surface	1.0	0.2	222	26.8	8.3	8.3	34.4	34.4	92.7	92.5	6.1	6.1	6.3	6.1	4	4	815631	804248	
						1.0	0.2	228	26.7	8.3	8.3	34.5	34.4	92.3	92.5	6.1	6.1	6.9	6.1	5	5			
					Middle	4.0	0.1	189	26.7	8.3	8.3	34.6	34.6	91.8	91.9	6.1	6.1	9.5	6.1	4	4			
						4.0	0.1	195	26.7	8.3	8.3	34.6	34.6	91.9	91.9	6.1	6.1	9.8	6.1	4	4			
					Bottom	7.0	0.2	187	26.7	8.3	8.3	34.6	34.6	92.3	92.4	6.1	6.1	9.8	6.1	5	5			
						7.0	0.1	187	26.7	8.3	8.3	34.6	34.6	92.5	92.4	6.1	6.1	9.7	6.1	5	5			
C2	Rainy	Moderate	13:10	11.0	Surface	1.0	0.1	350	26.5	8.3	8.3	32.7	32.7	92.4	92.5	6.2	6.2	3.6	6.2	4	4	825690	806952	
						1.0	0.1	343	26.5	8.3	8.3	32.7	32.7	92.5	92.5	6.2	6.2	3.7	6.2	5	5			
					Middle	5.5	0.0	350	26.5	8.3	8.3	33.3	33.4	92.5	92.4	6.2	6.2	7.4	6.2	5	5			
						5.5	0.0	345	26.5	8.3	8.3	33.4	33.4	92.3	92.4	6.2	6.2	8.4	6.2	5	5			
					Bottom	10.0	0.1	348	26.4	8.3	8.3	33.9	33.9	92.1	92.2	6.1	6.1	13.5	6.1	5	5			
						10.0	0.1	350	26.4	8.3	8.3	33.9	33.9	92.2	92.2	6.1	6.1	13.6	6.1	6	6			
C3	Fine	Moderate	14:13	8.2	Surface	1.0	0.2	89	27.0	8.2	8.2	31.5	31.5	87.5	87.6	5.9	5.9	1.0	6.0	6	6	822122	817788	
						1.0	0.2	90	26.9	8.2	8.2	31.5	31.5	87.7	87.6	5.9	5.9	1.1	6.0	7	7			
					Middle	4.1	0.2	75	26.9	8.2	8.2	31.5	31.5	89.2	89.4	6.0	6.0	1.8	6.0	5	5			
						4.1	0.2	75	26.9	8.2	8.2	31.5	31.5	89.6	89.4	6.0	6.0	1.7	6.0	6	6			
					Bottom	7.2	0.2	63	26.9	8.2	8.2	31.5	31.5	91.2	91.7	6.1	6.1	2.7	6.2	5	5			
						7.2	0.3	60	26.9	8.2	8.2	31.5	31.5	92.2	91.7	6.2	6.2	2.7	6.2	5	5			
IM1	Rainy	Moderate	14:02	7.3	Surface	1.0	0.1	168	26.5	8.3	8.3	34.1	34.1	92.2	92.2	6.1	6.1	8.1	6.1	5	5	818356	806447	
						1.0	0.1	160	26.5	8.3	8.3	34.1	34.1	92.1	92.2	6.1	6.1	8.1	6.1	5	5			
					Middle	3.7	0.1	185	26.4	8.3	8.3	34.2	34.2	92.2	92.3	6.1	6.1	8.2	6.1	4	4			
						3.7	0.1	190	26.4	8.3	8.3	34.2	34.2	92.4	92.3	6.1	6.1	7.8	6.1	5	5			
					Bottom	6.3	0.0	185	26.4	8.3	8.3	34.2	34.2	92.8	92.9	6.2	6.2	7.3	6.2	5	5			
						6.3	0.0	186	26.4	8.3	8.3	34.2	34.2	92.9	92.9	6.2	6.2	7.4	6.2	4	4			
IM2	Rainy	Moderate	13:57	7.6	Surface	1.0	0.1	119	26.6	8.4	8.4	34.0	34.0	96.9	96.8	6.4	6.4	4.8	6.4	4	4	819193	806230	
						1.0	0.1	116	26.6	8.4	8.4	34.0	34.0	96.7	96.8	6.4	6.4	4.8	6.4	5	5			
					Middle	3.8	0.0	112	26.4	8.3	8.3	34.1	34.1	94.5	94.5	6.3	6.3	6.1	6.3	5	5			
						3.8	0.0	112	26.4	8.3	8.3	34.1	34.1	94.4	94.4	6.3	6.3	6.2	6.3	5	5			
					Bottom	6.6	0.1	108	26.4	8.3	8.3	34.1	34.1	94.4	94.5	6.3	6.3	6.1	6.3	5	5			
						6.6	0.1	102	26.4	8.3	8.3	34.1	34.1	94.6	94.5	6.3	6.3	6.1	6.3	5	5			
IM7	Rainy	Moderate	13:37	7.9	Surface	1.0	0.1	90	26.6	8.3	8.3	33.0	33.0	93.1	93.0	6.2	6.2	2.6	6.2	4	4	821325	806845	
						1.0	0.1	82	26.6	8.3	8.3	33.1	33.0	92.8	93.0	6.2	6.2	2.6	6.2	5	5			
					Middle	4.0	0.1	97	26.4	8.3	8.3	33.7	33.7	91.5	91.5	6.1	6.1	3.6	6.1	5	5			
						4.0	0.1	104	26.4	8.3	8.3	33.8	33.8	91.5	91.5	6.1	6.1	3.6	6.1	4	4			
					Bottom	6.9	0.2	62	26.4	8.2	8.2	33.8	33.8	93.7	93.9	6.2	6.2	10.1	6.2	4	4			
						6.9	0.2	67	26.4	8.2	8.2	33.8	33.8	94.0	93.9	6.3	6.3	10.6	6.3	4	4			

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Water Quality Monitoring

Water Quality Monitoring Results on 13 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)					
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA							
IM10	Fine	Moderate	13:11	7.0	Surface	1.0	0.1	24	26.4	26.4	8.2	8.2	31.0	31.0	86.4	86.4	5.8	5.8	5.9	5.9	3.2	3.2	5	822249	809853				
						1.0	0.2	19	26.4	8.2	8.2	31.0	31.0	86.3	86.4	5.8	5.8	5.9	5.9	4.3	4.3	6							
					Middle	3.5	0.1	34	26.4	26.4	8.2	8.2	31.0	31.0	86.4	86.5	5.9	5.9	5.9	5.9	6.1	6.1	4.3			4.3	6		
						3.5	0.1	26	26.4	26.4	8.2	8.2	31.0	31.0	86.5	86.5	5.9	5.9	5.9	5.9	6.1	6.1	4.3			4.3	6		
					Bottom	6.0	0.1	22	26.4	26.4	8.2	8.2	31.0	31.0	86.7	86.7	5.9	5.9	5.9	5.9	6.1	6.1	4.3			4.3	8		
						6.0	0.1	23	26.4	26.4	8.2	8.2	31.0	31.0	86.7	86.7	5.9	5.9	5.9	5.9	6.1	6.1	4.3			4.3	7		
IM11	Fine	Moderate	13:16	8.8	Surface	1.0	0.0	27	26.5	26.5	8.2	8.2	31.1	31.1	86.6	86.7	5.8	5.8	5.9	5.9	3.0	3.0	6	821505	810546				
						1.0	0.1	34	26.5	26.5	8.2	8.2	31.1	31.1	86.7	86.7	5.9	5.9	5.9	5.9	6.1	6.1	3.1			3.1	7		
					Middle	4.4	0.1	57	26.5	26.5	8.3	8.3	31.1	31.1	87.3	87.4	5.9	5.9	5.9	5.9	6.1	6.1	4.4			4.4	6		
						4.4	0.0	52	26.5	26.5	8.3	8.3	31.1	31.1	87.4	87.4	5.9	5.9	5.9	5.9	6.1	6.1	4.5			4.5	6		
					Bottom	7.8	0.0	65	26.5	26.5	8.3	8.3	31.1	31.1	87.7	88.0	5.9	5.9	5.9	5.9	6.1	6.1	5.7			5.7	6		
						7.8	0.0	67	26.5	26.5	8.3	8.3	31.1	31.1	88.2	88.0	6.0	6.0	6.0	6.0	6.1	6.1	5.7			5.7	5		
IM12	Fine	Moderate	13:25	7.8	Surface	1.0	0.1	73	26.6	26.6	8.2	8.2	31.1	31.1	90.1	90.2	6.1	6.1	6.1	6.1	4.4	4.4	5	821142	811530				
						1.0	0.1	66	26.5	26.6	8.2	8.2	31.1	31.1	90.3	90.2	6.1	6.1	6.1	6.1	6.1	6.1	4.5			4.5	6		
					Middle	3.9	0.1	65	26.5	26.5	8.2	8.2	31.1	31.1	91.0	91.2	6.1	6.1	6.1	6.1	6.1	6.1	4.7			4.7	6		
						3.9	0.1	62	26.5	26.5	8.2	8.2	31.1	31.1	91.3	91.2	6.2	6.2	6.2	6.2	6.1	6.1	4.8			4.8	5		
					Bottom	6.8	0.1	107	26.5	26.5	8.2	8.2	31.0	31.0	93.3	93.7	6.3	6.3	6.3	6.3	6.1	6.1	5.2			5.2	5		
						6.8	0.1	107	26.5	26.5	8.2	8.2	31.0	31.0	94.1	93.7	6.4	6.4	6.4	6.4	6.1	6.1	5.1			5.1	4		
SR1A	Fine	Moderate	13:46	4.6	Surface	1.0	0.0	32	26.3	26.3	8.2	8.2	30.6	30.6	90.1	90.1	6.1	6.1	6.1	6.1	2.6	2.6	4	819976	812653				
						1.0	0.0	26	26.3	26.3	8.2	8.2	30.6	30.6	90.1	90.1	6.1	6.1	6.1	6.1	6.1	6.1	2.5			2.5	5		
					Middle	2.3	0.0	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3.1	5
						2.3	0.1	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	
					Bottom	3.6	0.0	33	26.2	26.2	8.2	8.2	30.6	30.6	91.0	91.0	6.2	6.2	6.2	6.2	6.1	6.1	3.6			3.6	6		
						3.6	0.1	26	26.2	26.2	8.2	8.2	30.6	30.6	91.0	91.0	6.2	6.2	6.2	6.2	6.1	6.1	3.6			3.6	5		
SR2	Fine	Moderate	13:56	5.8	Surface	1.0	0.2	65	26.6	26.6	8.2	8.2	30.9	30.9	92.9	93.1	6.3	6.3	6.3	6.3	2.8	2.8	5	821486	814172				
						1.0	0.2	65	26.6	26.6	8.2	8.2	30.9	30.9	93.2	93.1	6.3	6.3	6.3	6.3	6.3	6.3	2.8			2.8	5		
					Middle	-	0.2	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3.3	6
						-	0.2	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	
					Bottom	4.8	0.2	67	26.6	26.6	8.2	8.2	31.0	31.0	96.2	96.2	6.5	6.5	6.5	6.5	6.3	6.3	3.9			3.9	6		
						4.8	0.2	71	26.6	26.6	8.2	8.2	31.0	31.0	96.2	96.2	6.5	6.5	6.5	6.5	6.3	6.3	3.9			3.9	6		
SR3	Rainy	Moderate	13:31	9.2	Surface	1.0	0.1	55	26.6	26.6	8.4	8.4	32.8	32.8	93.2	93.2	6.2	6.2	6.2	6.2	4.7	4.7	6	822160	807573				
						1.0	0.1	53	26.6	26.6	8.4	8.4	32.8	32.8	93.2	93.2	6.2	6.2	6.2	6.2	6.2	6.2	4.8			4.8	5		
					Middle	4.6	0.0	30	26.5	26.5	8.4	8.4	33.1	33.2	93.3	93.3	6.2	6.2	6.2	6.2	6.2	6.2	5.6			5.6	4		
						4.6	0.1	22	26.5	26.5	8.4	8.4	33.2	33.2	93.3	93.3	6.2	6.2	6.2	6.2	6.2	6.2	5.6			5.6	4		
					Bottom	8.2	0.1	28	26.4	26.4	8.4	8.4	33.8	33.8	93.4	93.4	6.2	6.2	6.2	6.2	6.2	6.2	12.0			12.0	4		
						8.2	0.1	24	26.4	26.4	8.4	8.4	33.8	33.8	93.5	93.5	6.2	6.2	6.2	6.2	6.2	6.2	12.3			12.3	3		
SR4A	Rainy	Moderate	14:39	9.0	Surface	1.0	0.0	61	26.5	26.5	8.2	8.2	34.1	34.1	93.8	93.8	6.2	6.2	6.2	6.2	6.8	6.8	5	817208	807821				
						1.0	0.0	54	26.5	26.5	8.2	8.2	34.2	34.2	93.7	93.7	6.2	6.2	6.2	6.2	6.2	6.2	7.1			7.1	4		
					Middle	4.5	0.0	57	26.5	26.5	8.2	8.2	34.2	34.2	93.4	93.5	6.2	6.2	6.2	6.2	6.2	6.2	8.7			8.7	5		
						4.5	0.0	52	26.5	26.5	8.2	8.2	34.2	34.2	93.5	93.5	6.2	6.2	6.2	6.2	6.2	6.2	8.9			8.9	6		
					Bottom	8.0	0.0	54	26.4	26.4	8.3	8.3	34.2	34.2	94.4	94.5	6.3	6.3	6.3	6.3	6.3	6.3	9.5			9.5	6		
						8.0	0.1	52	26.4	26.4	8.3	8.3	34.2	34.2	94.6	94.6	6.3	6.3	6.3	6.3	6.3	6.3	9.5			9.5	7		
SR8	Fine	Moderate	13:29	5.6	Surface	1.0	-	-	26.7	26.7	8.2	8.2	30.9	30.9	90.8	90.8	6.1	6.1	6.1	6.1	3.1	3.1	4	820397	811626				
						1.0	-	-	26.7	26.7	8.2	8.2	30.9	30.9	90.8	90.8	6.1	6.1	6.1	6.1	6.1	6.1	3.1			3.1	5		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3.8	5
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	
					Bottom	4.6	-	-	26.6	26.6	8.2	8.2	30.9	30.9	91.6	93.5	6.2	6.2	6.2	6.2	6.3	6.3	4.6			4.6	5		
						4.6	-	-	26.6	26.6	8.2	8.2	30.9	30.9	95.3	95.3	6.4	6.4	6.4	6.4	6.3	6.3	4.5			4.5	6		

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 13 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA	
C1	Cloudy	Moderate	09:07	8.2	Surface	1.0	0.4	36	26.5	26.5	8.1	8.1	34.5	34.5	92.1	92.1	6.1	6.1	6.1	11.2	10.3	6	6	815621	804224		
						1.0	0.4	40	26.5	8.1	8.1	34.5	34.5	92.1	92.1	6.1	6.1	11.3				4					
					Middle	4.1	0.4	33	26.5	26.5	8.1	8.1	34.5	34.5	92.2	92.3	6.1	6.1	6.2	9.3	6.2	10.0				6	5
						4.1	0.4	33	26.5	8.1	8.1	34.5	34.5	92.3	92.8	6.1	6.2	9.3									6
					Bottom	7.2	0.4	40	26.5	26.5	8.1	8.1	34.5	34.5	92.8	93.0	6.2	6.2	6.0	10.3	6.0	10.3				6	6
						7.2	0.5	46	26.5	8.1	8.1	34.5	34.5	93.1	93.0	6.2	6.2	10.3									6
C2	Cloudy	Moderate	10:11	12.1	Surface	1.0	0.4	354	26.5	26.5	8.1	8.1	32.0	32.0	91.1	91.1	6.1	6.1	6.1	3.8	5.9	4	4	825678	806967		
						1.0	0.4	353	26.5	8.1	8.1	32.0	32.0	91.1	91.1	6.1	6.1	4.0								4	
					Middle	6.1	0.4	351	26.4	26.4	8.1	8.1	32.1	32.1	90.6	90.6	6.1	6.1	6.0	3.5	6.0	10.6				5	4
						6.1	0.4	355	26.4	8.1	8.1	32.1	32.1	90.5	90.6	6.1	6.1	3.5									5
					Bottom	11.1	0.4	334	26.4	26.4	8.1	8.1	32.2	32.2	89.6	89.6	6.0	6.0	6.0	10.3	6.0	10.3				5	5
						11.1	0.4	337	26.4	8.1	8.1	32.2	32.2	89.6	89.6	6.0	6.0	10.3									5
C3	Fine	Moderate	08:59	9.2	Surface	1.0	0.5	254	26.1	26.1	7.9	7.9	30.4	30.4	87.4	87.6	6.0	6.0	6.0	5.2	6.2	5	5	822093	817810		
						1.0	0.5	247	26.1	26.1	7.9	7.9	30.4	30.4	87.7	87.6	6.0	6.0								5.2	5
					Middle	4.6	0.5	261	26.1	26.1	7.9	7.9	30.4	30.4	88.5	88.5	6.0	6.0	6.2	6.3	6.2	7.0				6	5
						4.6	0.5	268	26.1	26.1	7.9	7.9	30.4	30.4	88.5	88.5	6.0	6.0									6.4
					Bottom	8.2	0.5	244	26.1	26.1	7.9	7.9	30.4	30.4	90.3	90.6	6.2	6.2	6.2	6.9	6.2	6.9				6	7
						8.2	0.4	248	26.1	26.1	7.9	7.9	30.4	30.4	90.8	90.6	6.2	6.2									6.9
IM1	Cloudy	Moderate	09:23	6.9	Surface	1.0	0.2	31	26.3	26.3	8.1	8.1	34.1	34.1	92.5	92.5	6.2	6.2	6.2	9.6	10.8	5	5	818363	806475		
						1.0	0.2	36	26.3	26.3	8.1	8.1	34.1	34.1	92.5	92.5	6.2	6.2								9.6	5
					Middle	3.5	0.3	26	26.3	26.3	8.1	8.1	34.2	34.2	92.0	92.0	6.1	6.1	6.2	11.2	6.2	11.6				4	5
						3.5	0.3	23	26.3	26.3	8.1	8.1	34.2	34.2	92.0	92.0	6.1	6.1									11.3
					Bottom	5.9	0.2	354	26.3	26.3	8.1	8.1	34.3	34.3	92.8	92.9	6.2	6.2	6.0	11.6	6.0	11.6				4	5
						5.9	0.3	358	26.3	26.3	8.1	8.1	34.3	34.3	92.9	92.9	6.2	6.2									11.6
IM2	Cloudy	Moderate	09:29	8.1	Surface	1.0	0.2	6	26.3	26.3	8.2	8.2	33.8	33.8	92.2	92.2	6.2	6.2	6.2	8.1	10.7	5	5	819172	806248		
						1.0	0.3	0	26.3	26.3	8.2	8.2	33.8	33.8	92.2	92.2	6.2	6.2								8.2	5
					Middle	4.1	0.3	358	26.2	26.2	8.1	8.1	34.0	34.0	91.9	91.9	6.1	6.1	6.1	10.1	6.1	13.3				5	4
						4.1	0.3	357	26.2	26.2	8.1	8.1	34.0	34.0	91.9	91.9	6.1	6.1									10.8
					Bottom	7.1	0.3	16	26.2	26.2	8.1	8.1	33.9	33.9	91.6	91.6	6.1	6.1	6.0	13.5	6.0	13.5				5	5
						7.1	0.3	9	26.2	26.2	8.1	8.1	33.9	33.9	91.6	91.6	6.1	6.1									13.5
IM7	Cloudy	Moderate	09:46	8.5	Surface	1.0	0.3	345	26.4	26.4	8.1	8.1	32.7	32.7	89.1	89.1	6.0	6.0	6.0	3.5	5.5	5	5	821347	806816		
						1.0	0.3	349	26.4	26.4	8.1	8.1	32.8	32.8	89.0	89.1	6.0	6.0								3.5	6
					Middle	4.3	0.2	8	26.3	26.3	8.1	8.1	33.1	33.1	89.0	89.1	6.0	6.0	6.0	4.4	6.0	4.6				5	6
						4.3	0.2	4	26.3	26.3	8.1	8.1	33.2	33.1	89.1	89.1	6.0	6.0									4.6
					Bottom	7.5	0.3	345	26.2	26.2	8.2	8.2	34.0	34.0	89.9	89.9	6.0	6.0	6.0	8.4	6.0	8.4				4	5
						7.5	0.2	339	26.2	26.2	8.2	8.2	34.0	34.0	89.9	89.9	6.0	6.0									8.8

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 13 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA		
IM10	Fine	Moderate	09:42	9.0	Surface	1.0	0.4	305	26.0	26.0	8.2	8.2	30.8	30.8	90.8	90.9	6.2	6.2	6.8	7.3	5	6	822234	809837				
						1.0	0.3	302	26.0		8.2		30.8		91.0		6.2		6.7		5							
					Middle	4.5	0.4	307	26.0	8.2	8.2	30.7	30.7	91.6	91.7	6.2	6.2	7.2	6									
						4.5	0.4	313	26.0	8.2	8.2	30.7	30.7	91.8	91.7	6.3	6.3	7.2	5									
					Bottom	8.0	0.4	301	26.0	8.2	8.2	30.7	30.7	93.3	93.7	6.4	6.4	8.1	6									
						8.0	0.5	294	26.0	8.2	8.2	30.7	30.7	94.1	93.7	6.4	6.4	8.0	7									
IM11	Fine	Moderate	09:37	9.2	Surface	1.0	0.5	275	26.1	26.1	8.2	8.2	30.7	30.7	90.2	90.3	6.1	6.2	7.5	8.4	5	5	821505	810558				
						1.0	0.5	270	26.1		8.2		30.7		90.3		6.2		7.6		4							
					Middle	4.6	0.5	293	26.1	8.2	8.2	30.7	30.7	90.8	90.9	6.2	6.2	8.6	5									
						4.6	0.4	294	26.1	8.2	8.2	30.7	30.7	90.9	90.9	6.2	6.2	8.6	5									
					Bottom	8.2	0.4	278	26.1	8.2	8.2	30.7	30.7	96.0	96.4	6.5	6.6	9.1	6									
						8.2	0.4	284	26.1	8.2	8.2	30.7	30.7	96.7	96.4	6.6	6.6	9.1	5									
IM12	Fine	Moderate	09:32	8.0	Surface	1.0	0.5	272	26.1	26.1	8.2	8.2	30.7	30.7	89.5	89.6	6.1	6.1	6.6	7.3	5	6	821176	811537				
						1.0	0.5	274	26.1		8.2		30.7		89.7		6.1		6.5		4							
					Middle	4.0	0.5	280	26.1	8.2	8.2	30.7	30.7	90.1	90.3	6.1	6.1	7.3	6									
						4.0	0.5	285	26.1	8.2	8.2	30.7	30.7	90.5	90.3	6.2	6.2	7.2	5									
					Bottom	7.0	0.5	285	26.1	8.2	8.2	30.7	30.7	91.9	93.9	6.3	6.4	8.0	7									
						7.0	0.5	280	26.1	8.2	8.2	30.7	30.7	95.9	93.9	6.5	6.4	8.1	6									
SR1A	Fine	Moderate	09:11	5.2	Surface	1.0	0.1	183	26.1	26.1	8.1	8.1	30.5	30.5	89.2	89.4	6.1	6.1	6.2	6.6	6	6	819983	812662				
						1.0	0.1	187	26.1		8.1		30.5		89.5		6.1		6.2		6							
					Middle	2.6	0.0	181	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
						2.6	-	186	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
					Bottom	4.2	0.1	207	26.1	8.1	8.1	30.5	30.5	92.0	92.6	6.3	6.4	7.1	5									
						4.2	0.1	211	26.1	8.1	8.1	30.5	30.5	93.2	92.6	6.4	6.4	7.0	5									
SR2	Fine	Moderate	09:00	5.2	Surface	1.0	0.2	250	26.1	26.1	7.9	7.9	30.5	30.5	86.5	86.6	5.9	5.9	6.1	6.6	6	6	821471	814180				
						1.0	0.1	256	26.1		7.9		30.5		86.6		5.9		6.0		7							
					Middle	-	0.1	260	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
						-	0.1	265	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
					Bottom	4.2	0.2	244	26.1	7.9	7.9	30.5	30.5	86.9	87.0	5.9	5.9	7.2	5									
						4.2	0.1	244	26.1	7.9	7.9	30.5	30.5	87.0	87.0	5.9	5.9	7.2	6									
SR3	Cloudy	Moderate	09:53	9.2	Surface	1.0	0.3	348	26.5	26.5	8.1	8.1	32.5	32.6	89.6	89.6	6.0	6.0	4.1	5.2	5	5	822164	807583				
						1.0	0.4	345	26.5		8.1		32.6		89.6		6.0		4.2		4							
					Middle	4.6	0.4	323	26.4	8.1	8.1	33.1	33.1	89.7	89.8	6.0	6.0	5.4	4									
						4.6	0.4	323	26.4	8.1	8.1	33.2	33.1	89.8	89.8	6.0	6.0	5.5	5									
					Bottom	8.2	0.4	358	26.4	8.1	8.1	33.2	33.2	90.7	90.8	6.1	6.1	5.8	5									
						8.2	0.4	0	26.4	8.1	8.1	33.3	33.2	90.9	90.8	6.1	6.1	5.9	4									
SR4A	Cloudy	Moderate	08:46	8.8	Surface	1.0	0.0	199	26.2	26.2	8.1	8.1	33.6	33.6	90.7	90.7	6.1	6.1	4.8	6.6	5	6	817198	807802				
						1.0	0.0	196	26.2		8.1		33.6		90.7		6.1		4.9		5							
					Middle	4.4	0.0	215	26.2	8.1	8.1	33.8	33.9	90.4	90.4	6.0	6.0	5.9	6									
						4.4	0.1	219	26.2	8.1	8.1	33.9	33.9	90.4	90.4	6.0	6.0	6.1	6									
					Bottom	7.8	0.1	182	26.2	8.1	8.1	34.1	34.1	90.6	90.7	6.1	6.1	9.1	6									
						7.8	0.1	185	26.2	8.1	8.1	34.1	34.1	90.7	90.7	6.1	6.1	9.1	6									
SR8	Fine	Moderate	09:28	4.8	Surface	1.0	-	-	26.0	26.0	8.2	8.2	30.7	30.7	94.7	94.9	6.5	6.5	5.7	6.2	6	6	820398	811622				
						1.0	-	-	26.0		8.2		30.7		95.0		6.5		5.7		5							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	
					Bottom	3.8	-	-	26.0	8.2	8.2	30.7	30.7	96.8	97.4	6.6	6.7	6.8	6									
						3.8	-	-	26.0	8.2	8.2	30.7	30.7	98.0	97.4	6.7	6.7	6.8	7									

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
C1	Rainy	Moderate	15:38	7.4	Surface	1.0	0.1	203	26.4	26.4	8.3	8.3	31.1	31.1	97.2	97.2	6.6	6.5	2.9	6.8	6	5	815636	804250		
						1.0	0.1	200	26.4		8.3		31.1		97.2		6.6		2.9		5					
					Middle	3.7	0.0	201	26.4	26.4	8.2	8.2	31.4	31.4	95.0	94.9	6.4	6.1	6.1	6.1	6.4	6.1			4	5
						3.7	0.0	195	26.4		8.2		31.5		94.7		6.4		6.3		5					
					Bottom	6.4	0.1	210	26.4	26.4	8.2	8.2	31.9	31.9	90.5	90.5	6.1	6.1	6.1	6.1	6.1	6.1			11.3	4
						6.4	0.1	207	26.4		8.2		31.9		90.5		6.1		11.3		4					
C2	Rainy	Moderate	14:19	11.8	Surface	1.0	0.1	346	26.2	26.2	8.2	8.2	29.5	29.5	90.7	90.7	6.2	6.1	3.8	5.4	5	6	825701	806931		
						1.0	0.1	352	26.2		8.2		29.5		90.6		6.2		3.8		6					
					Middle	5.9	0.1	333	26.1	26.1	8.1	8.1	29.6	29.6	87.6	87.6	6.0	6.0	6.0	6.0	5.8	6.1			6	7
						5.9	0.1	327	26.1		8.1		29.6		87.5		6.0		6.1		7					
					Bottom	10.8	0.1	2	26.2	26.2	8.1	8.1	29.7	29.7	88.4	88.6	6.1	6.1	6.1	6.1	6.1	6.1			6.7	6
						10.8	0.2	6	26.2		8.1		29.7		88.8		6.1		6.5		7					
C3	Sunny	Rough	15:47	12.6	Surface	1.0	0.0	68	27.4	27.4	8.2	8.2	34.1	34.1	85.9	85.9	5.6	5.6	1.4	2.0	6	5	822119	817817		
						1.0	0.1	66	27.4		8.2		34.1		85.9		5.6		1.5		5					
					Middle	6.3	0.0	88	27.3	27.3	8.2	8.2	34.1	34.1	84.5	84.6	5.5	5.5	5.5	5.5	5.5	5.5			1.8	5
						6.3	-	90	27.3		8.2		34.1		84.6		5.5		1.8		5					
					Bottom	11.6	0.0	101	27.2	27.2	8.2	8.2	34.1	34.1	83.9	84.0	5.5	5.5	5.5	5.5	5.5	5.5			2.9	4
						11.6	0.0	100	27.2		8.2		34.1		84.1		84.0		5.5		2.9				5	
IM1	Rainy	Moderate	15:20	6.8	Surface	1.0	0.1	102	26.3	26.3	8.2	8.2	30.5	30.5	96.5	96.5	6.6	6.6	4.2	6.3	6	6	818361	806454		
						1.0	0.1	100	26.3		8.2		30.5		96.5		6.6		4.2		6					
					Middle	3.4	0.0	102	26.3	26.3	8.2	8.2	30.8	30.8	95.1	95.1	6.5	6.5	6.5	6.5	6.5	6.5			4.3	7
						3.4	0.0	102	26.3		8.2		30.8		95.1		6.5		4.3		7					
					Bottom	5.8	0.1	127	26.3	26.3	8.2	8.2	31.3	31.3	93.6	93.6	6.3	6.3	6.3	6.3	6.3	6.3			10.4	8
						5.8	0.0	133	26.3		8.2		31.3		93.6		6.3		10.4		7					
IM2	Rainy	Moderate	15:12	7.0	Surface	1.0	0.0	69	26.3	26.3	8.2	8.2	30.7	30.7	93.4	93.3	6.3	6.3	5.8	8.7	7	6	819171	806251		
						1.0	0.0	76	26.3		8.2		30.7		93.2		6.3		5.9		6					
					Middle	3.5	-	66	26.1	26.1	8.2	8.2	31.0	31.0	90.6	90.6	6.2	6.2	6.2	6.2	6.2	6.2			8.4	8
						3.5	-	69	26.1		8.2		31.0		90.6		6.2		8.4		6					
					Bottom	6.0	0.0	64	26.0	26.0	8.3	8.3	31.2	31.2	91.9	91.9	6.2	6.2	6.2	6.2	6.2	6.2			11.9	10
						6.0	0.0	61	26.0		8.3		31.2		91.9		91.9		6.3		11.6				11	
IM7	Rainy	Moderate	14:46	7.8	Surface	1.0	0.1	58	26.4	26.4	8.2	8.2	29.6	29.6	93.2	93.2	6.4	6.4	2.1	3.1	3	4	821362	806815		
						1.0	0.0	64	26.4		8.2		29.6		93.2		6.4		2.1		4					
					Middle	3.9	0.1	55	26.3	26.3	8.2	8.2	30.0	30.0	92.6	92.6	6.3	6.3	6.3	6.3	6.3	6.3			2.5	4
						3.9	0.0	56	26.3		8.2		30.0		92.5		6.3		2.5		4					
					Bottom	6.8	0.1	49	26.2	26.2	8.2	8.2	31.0	31.0	91.7	91.7	6.2	6.2	6.2	6.2	6.2	6.2			4.7	5
						6.8	0.1	43	26.2		8.2		31.0		91.7		6.2		4.8		4					

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA		
IM10	Sunny	Rough	14:18	9.1	Surface	1.0	0.1	331	26.9	26.9	8.2	8.2	33.2	33.2	95.0	95.0	6.3	6.3	1.7	6.3	6	7	822250	809850				
						1.0	0.1	326	26.9	8.2	8.2	33.2	33.2	95.0	95.0	6.3	6.3	1.7	6.3	6								
					Middle	4.6	0.1	331	26.9	26.9	8.2	8.2	33.2	33.2	94.5	94.5	6.3	6.3	2.1	6.3	6				7			
						4.6	0.1	323	26.9	26.9	8.2	8.2	33.2	33.2	94.5	94.5	6.3	6.3	2.1	6.3	7				7			
					Bottom	8.1	0.1	336	26.7	26.7	8.2	8.2	33.2	33.2	91.9	91.9	6.1	6.1	3.0	6.1	6.1				7	7		
						8.1	0.1	337	26.7	26.7	8.2	8.2	33.2	33.2	91.9	91.9	6.1	6.1	3.2	6.1	6.1				7	7		
IM11	Sunny	Rough	14:34	8.9	Surface	1.0	0.1	310	26.9	26.9	8.2	8.2	33.3	33.3	93.7	93.7	6.2	6.2	6.1	6.2	5	6	821482	810531				
						1.0	0.1	311	26.9	26.9	8.2	8.2	33.3	33.3	93.7	93.7	6.2	6.2	6.1	6.2	5							
					Middle	4.5	0.1	312	26.9	26.9	8.2	8.2	33.3	33.3	93.6	93.6	6.2	6.2	2.0	6.2	6.2				6	6		
						4.5	0.1	313	26.9	26.9	8.2	8.2	33.3	33.3	93.5	93.5	6.2	6.2	2.0	6.2	6.2				6	6		
					Bottom	7.9	0.1	298	26.8	26.8	8.2	8.2	33.3	33.3	94.5	94.5	6.3	6.3	2.2	6.3	6.3				6	6		
						7.9	0.1	298	26.8	26.8	8.2	8.2	33.3	33.3	94.5	94.5	6.3	6.3	2.2	6.3	6.3				6	6		
IM12	Sunny	Rough	14:39	8.2	Surface	1.0	0.1	352	26.9	26.9	8.2	8.2	33.4	33.4	92.9	92.9	6.2	6.2	2.1	6.2	7	6	821141	811530				
						1.0	0.1	348	26.9	26.9	8.2	8.2	33.4	33.4	92.9	92.9	6.2	6.2	2.1	6.2	8							
					Middle	4.1	0.1	353	26.9	26.9	8.2	8.2	33.4	33.4	92.6	92.7	6.1	6.1	1.9	6.1	6.1				5	5		
						4.1	0.0	346	26.9	26.9	8.2	8.2	33.4	33.4	92.7	92.7	6.1	6.1	2.0	6.1	6.1				5	5		
					Bottom	7.2	0.0	5	26.9	26.9	8.2	8.2	33.4	33.4	92.4	92.5	6.1	6.1	2.0	6.1	6.1				4	4		
						7.2	0.0	0	26.9	26.9	8.2	8.2	33.4	33.4	92.5	92.5	6.1	6.1	2.1	6.1	6.1				4	4		
SR1A	Sunny	Moderate	15:05	5.2	Surface	1.0	0.0	13	26.9	27.0	8.2	8.2	33.3	33.3	96.6	96.7	6.4	6.4	1.4	6.4	4	5	819970	812665				
						1.0	0.0	7	27.0	27.0	8.2	8.2	33.3	33.3	96.8	96.8	6.4	6.4	1.5	6.4	6							
					Middle	2.6	0.0	15	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
						2.6	0.0	10	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
					Bottom	4.2	0.0	23	26.9	26.9	8.2	8.2	33.3	33.3	95.5	95.6	6.3	6.3	2.0	6.3	6.3				4	4		
						4.2	0.0	28	26.9	26.9	8.2	8.2	33.3	33.3	95.6	95.6	6.3	6.3	2.1	6.3	6.3				5	5		
SR2	Sunny	Rough	15:16	5.8	Surface	1.0	0.0	39	27.0	27.0	8.2	8.2	33.4	33.4	95.1	95.1	6.3	6.3	3.4	6.3	4	5	821486	814173				
						1.0	0.1	32	27.0	27.0	8.2	8.2	33.4	33.4	95.1	95.1	6.3	6.3	3.4	6.3	5							
					Middle	-	0.0	28	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
						-	0.1	25	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
					Bottom	4.8	0.1	70	26.9	26.9	8.2	8.2	33.4	33.4	92.7	92.7	6.1	6.1	6.8	6.1	6.1				6	6		
						4.8	0.0	62	26.9	26.9	8.2	8.2	33.4	33.4	92.7	92.7	6.1	6.1	6.8	6.1	6.1				6	6		
SR3	Rainy	Moderate	14:38	9.2	Surface	1.0	0.0	42	26.2	26.2	8.2	8.2	29.8	29.8	89.7	89.7	6.1	6.1	3.7	6.1	4	6	822132	807575				
						1.0	0.1	43	26.2	26.2	8.2	8.2	29.9	29.9	89.7	89.7	6.1	6.1	3.8	6.1	4							
					Middle	4.6	0.0	39	26.1	26.1	8.2	8.2	30.3	30.3	89.6	89.6	6.1	6.1	4.6	6.1	6.1				5	5		
						4.6	0.1	46	26.1	26.1	8.2	8.2	30.3	30.3	89.6	89.6	6.1	6.1	4.6	6.1	6.1				6	6		
					Bottom	8.2	0.0	18	26.1	26.1	8.2	8.2	30.9	30.9	92.6	92.7	6.3	6.3	10.7	6.3	6.3				8	8		
						8.2	0.1	22	26.1	26.1	8.2	8.2	30.9	30.9	92.7	92.7	6.3	6.3	10.6	6.3	6.3				6	6		
SR4A	Rainy	Moderate	15:59	9.0	Surface	1.0	0.0	68	26.4	26.4	8.2	8.2	30.8	30.8	98.6	98.6	6.7	6.7	4.4	6.7	7	7	817197	807826				
						1.0	0.0	63	26.4	26.4	8.2	8.2	30.8	30.8	98.6	98.6	6.7	6.7	4.4	6.7	7							
					Middle	4.5	0.0	68	26.4	26.4	8.2	8.2	30.9	30.9	97.5	97.5	6.6	6.6	4.7	6.6	6.6				7	7		
						4.5	0.0	67	26.4	26.4	8.2	8.2	30.9	30.9	97.4	97.4	6.6	6.6	4.7	6.6	6.6				8	8		
					Bottom	8.0	0.0	54	26.4	26.4	8.2	8.2	31.0	31.0	96.3	96.3	6.5	6.5	5.1	6.5	6.5				7	7		
						8.0	0.0	50	26.4	26.4	8.2	8.2	31.0	31.0	96.3	96.3	6.5	6.5	5.4	6.5	6.5				8	8		
SR8	Sunny	Moderate	14:43	5.1	Surface	1.0	-	-	27.0	27.0	8.2	8.2	33.2	33.2	96.4	96.4	6.4	6.4	2.0	6.4	4	4	820368	811621				
						1.0	-	-	27.0	27.0	8.2	8.2	33.2	33.2	96.3	96.3	6.4	6.4	2.0	6.4	4							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
					Bottom	4.1	-	-	26.9	26.9	8.2	8.2	33.3	33.3	94.4	94.5	6.3	6.3	1.8	6.3	6.3				4	4		
						4.1	-	-	26.9	26.9	8.2	8.2	33.3	33.3	94.5	94.5	6.3	6.3	1.8	6.3	6.3				4	4		

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA					
C1	Cloudy	Rough	10:29	8.4	Surface	1.0	0.3	23	26.2	26.2	8.2	8.2	30.6	30.6	94.0	93.9	6.4	6.4	4.2	6.3	4	6	815603	804241							
						1.0	0.3	18	26.2	8.2	8.2	30.6	30.6	93.8	93.8	6.4	6.4	4.3	6.3	4	6										
					Middle	4.2	0.3	28	26.2	8.2	8.2	31.3	31.3	91.6	91.6	6.2	6.2	10.8	6.4	6	6.4	6			6	815603	804241				
						4.2	0.4	25	26.2	8.2	8.2	31.3	31.3	91.6	91.6	6.2	6.2	10.9	6.4	7	6.4	7			6						
					Bottom	7.4	0.3	21	26.2	8.2	8.2	31.4	31.4	94.7	94.7	6.4	6.4	13.5	6.4	6	6.4	7			6.4			7	6	815603	804241
						7.4	0.3	15	26.2	8.2	8.2	31.4	31.4	94.7	94.7	6.4	6.4	13.5	6.4	6	6.4	6			6.4			6	6		
C2	Cloudy	Rough	11:59	11.5	Surface	1.0	0.3	345	26.2	26.2	8.1	8.1	29.5	29.5	91.2	91.2	6.2	6.2	3.6	6.2	6	6	825684	806963							
						1.0	0.3	341	26.2	8.1	8.1	29.5	29.5	91.1	91.1	6.2	6.2	3.6	6.2	5	6.2	5			6						
					Middle	5.8	0.2	0	26.1	8.1	8.1	29.5	29.5	88.7	88.7	6.1	6.1	5.1	6.1	6	6.1	6			6.1	6	825684	806963			
						5.8	0.2	4	26.1	8.1	8.1	29.5	29.5	88.6	88.6	6.1	6.1	5.2	6.1	6	6.1	6			6.1	6					
					Bottom	10.5	0.3	357	26.2	8.1	8.1	29.6	29.6	88.4	88.4	6.1	6.1	6.5	6.1	6	6.1	7			6.1	7			6	825684	806963
						10.5	0.2	355	26.2	8.1	8.1	29.6	29.6	88.4	88.4	6.1	6.1	6.7	6.1	8	6.1	8			6.1	8			6		
C3	Sunny	Moderate	10:32	11.9	Surface	1.0	0.4	256	27.2	27.2	8.3	8.3	33.7	33.7	89.4	89.4	5.9	5.9	1.8	5.8	6	5	822113	817823							
						1.0	0.4	249	27.2	8.3	8.3	33.7	33.7	89.4	89.4	5.9	5.9	1.8	5.8	5	5.8	5			5						
					Middle	6.0	0.4	259	27.0	8.2	8.2	33.8	33.8	86.6	86.6	5.7	5.7	1.1	5.7	5	5.7	5			5.7	4	822113	817823			
						6.0	0.4	264	27.0	8.2	8.2	33.8	33.8	86.6	86.6	5.7	5.7	1.1	5.7	4	5.7	4			5.7	4					
					Bottom	10.9	0.5	248	27.1	8.3	8.3	33.9	33.9	84.8	84.8	5.6	5.6	2.3	5.6	4	5.6	4			5.6	3			5	822113	817823
						10.9	0.5	249	27.1	8.3	8.3	33.9	33.9	84.8	84.8	5.6	5.6	2.4	5.6	3	5.6	3			5.6	3			5		
IM1	Cloudy	Moderate	10:49	6.4	Surface	1.0	0.2	9	26.2	26.2	8.2	8.2	30.9	30.9	94.0	94.0	6.4	6.4	6.3	6.4	6	6	818358	806437							
						1.0	0.2	15	26.2	8.2	8.2	30.9	30.9	93.9	93.9	6.4	6.4	6.3	6.4	7	6.4	7			6						
					Middle	3.2	0.2	24	26.1	8.2	8.2	31.1	31.1	93.8	93.8	6.4	6.4	7.4	6.4	6	6.4	8			6.4	8	818358	806437			
						3.2	0.2	27	26.1	8.2	8.2	31.1	31.1	93.8	93.8	6.4	6.4	7.4	6.4	7	6.4	7			6.4	7					
					Bottom	5.4	0.1	0	26.1	8.2	8.2	31.3	31.3	94.5	94.5	6.4	6.4	8.6	6.4	6	6.4	11			6.4	6			6	818358	806437
						5.4	0.1	359	26.1	8.2	8.2	31.3	31.3	94.7	94.7	6.4	6.4	8.9	6.4	6	6.4	10			6.4	10			6		
IM2	Cloudy	Moderate	10:58	7.5	Surface	1.0	0.2	5	26.2	26.2	8.2	8.2	30.8	30.8	94.4	94.4	6.4	6.4	4.2	6.4	4	6	819169	806229							
						1.0	0.1	2	26.2	8.2	8.2	30.8	30.8	94.3	94.3	6.4	6.4	4.2	6.4	4	6.4	4			6						
					Middle	3.8	0.1	348	26.0	8.2	8.2	31.1	31.1	94.1	94.1	6.4	6.4	8.1	6.4	6	6.4	5			6.4	5	819169	806229			
						3.8	0.1	348	26.0	8.2	8.2	31.1	31.1	94.1	94.1	6.4	6.4	8.1	6.4	6	6.4	6			6.4	6					
					Bottom	6.5	0.2	3	26.0	8.2	8.2	31.1	31.1	95.3	95.3	6.5	6.5	11.0	6.5	6	6.5	6			6.5	6			819169	806229	
						6.5	0.2	2	26.0	8.2	8.2	31.1	31.1	95.5	95.5	6.5	6.5	11.1	6.5	7	6.5	7			6.5	7					
IM7	Cloudy	Moderate	11:30	8.6	Surface	1.0	0.1	339	26.3	26.3	8.2	8.2	29.5	29.5	90.8	90.7	6.2	6.2	2.3	6.2	4	5	821352	806828							
						1.0	0.1	336	26.3	8.2	8.2	29.6	29.6	90.6	90.6	6.2	6.2	2.4	6.2	4	6.2	4			5						
					Middle	4.3	0.1	340	26.1	8.2	8.2	29.8	29.8	89.5	89.5	6.1	6.1	3.2	6.1	4	6.1	4			6.1	4	821352	806828			
						4.3	0.1	336	26.1	8.2	8.2	29.8	29.8	89.6	89.6	6.1	6.1	3.3	6.1	5	6.1	5			6.1	5					
					Bottom	7.6	0.1	337	26.1	8.2	8.2	30.9	30.9	92.5	92.5	6.3	6.3	5.7	6.3	6	6.3	6			6.3	6			821352	806828	
						7.6	0.1	339	26.1	8.2	8.2	30.9	30.9	92.7	92.7	6.3	6.3	5.7	6.3	5	6.3	5			6.3	5					

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA							
IM10	Sunny	Moderate	11:57	8.9	Surface	1.0	0.3	313	26.9	26.9	8.2	8.2	33.3	33.3	94.4	94.4	6.3	6.3	6.3	2.9	4	4	822236	809836			
						1.0	0.2	318	26.9	8.2	8.2	33.3	33.3	94.3	94.4	6.3	6.3										
					Middle	4.5	0.2	284	26.7	26.7	8.2	8.2	33.3	33.3	93.3	93.3	6.2	6.2	6.2	6.2	6.2	6.2			4	4	
						4.5	0.2	288	26.7	26.7	8.2	8.2	33.3	33.3	93.3	93.3	6.2	6.2									
					Bottom	7.9	0.3	292	26.7	26.7	8.2	8.2	33.3	33.3	92.9	92.9	6.2	6.2	6.2	6.2	6.2	6.2			4	4	
						7.9	0.3	288	26.7	26.7	8.2	8.2	33.3	33.3	92.9	92.9	6.2	6.2									
IM11	Sunny	Moderate	11:42	8.3	Surface	1.0	0.2	289	26.8	26.8	8.2	8.2	33.4	33.4	94.1	94.1	6.3	6.3	6.3	3.5	6	5	821508	810567			
						1.0	0.2	290	26.8	26.8	8.2	8.2	33.4	33.4	94.1	94.1	6.3	6.3									
					Middle	4.2	0.3	294	26.7	26.7	8.2	8.2	33.4	33.4	94.1	94.1	6.2	6.2	6.2	6.2	6.2	6.2			4	4	
						4.2	0.3	290	26.7	26.7	8.2	8.2	33.4	33.4	94.1	94.1	6.2	6.2									
					Bottom	7.3	0.3	260	26.7	26.7	8.2	8.2	33.4	33.4	85.2	85.2	5.6	5.6	5.6	5.6	5.6	5.6			4	4	
						7.3	0.3	262	26.7	26.7	8.2	8.2	33.4	33.4	85.2	85.2	5.6	5.6									
IM12	Sunny	Moderate	11:35	7.8	Surface	1.0	0.3	274	26.9	26.9	8.2	8.2	33.3	33.3	91.8	91.8	6.1	6.1	6.1	5.1	8	7	821141	811512			
						1.0	0.3	277	26.9	26.9	8.2	8.2	33.3	33.3	91.8	91.8	6.1	6.1									
					Middle	3.9	0.4	293	26.7	26.7	8.2	8.2	33.3	33.3	91.1	91.1	6.1	6.1	6.1	6.1	6.1	6.1			6	6	
						3.9	0.3	287	26.7	26.7	8.2	8.2	33.3	33.3	91.1	91.1	6.1	6.1									
					Bottom	6.8	0.3	295	26.6	26.6	8.2	8.2	33.3	33.3	91.1	91.2	6.1	6.1	6.1	6.1	6.1	6.1			6	6	
						6.8	0.3	293	26.6	26.6	8.2	8.2	33.3	33.3	91.2	91.2	6.1	6.1									
SR1A	Sunny	Calm	11:04	4.1	Surface	1.0	0.0	180	26.9	26.9	8.2	8.2	33.2	33.2	97.7	97.7	6.5	6.5	6.5	3.1	4	5	819976	812666			
						1.0	0.0	173	26.9	26.9	8.2	8.2	33.2	33.2	97.6	97.7	6.5	6.5									
					Middle	2.1	0.1	169	-	-	-	-	-	-	-	-	-	-	-	-	-	6.5			6.5	3.6	4
						2.1	0.1	165	-	-	-	-	-	-	-	-	-	-									
					Bottom	3.1	-	168	26.9	26.9	8.2	8.2	33.3	33.3	98.3	98.3	6.5	6.5	6.5	6.5	6.5	6.5			4	4	
						3.1	0.0	173	26.9	26.9	8.2	8.2	33.3	33.3	98.3	98.3	6.5	6.5									
SR2	Sunny	Moderate	10:51	4.7	Surface	1.0	0.1	276	26.8	26.8	8.2	8.2	33.3	33.3	97.3	97.3	6.4	6.4	6.4	3.4	4	4	821444	814188			
						1.0	0.1	280	26.8	26.8	8.2	8.2	33.4	33.3	97.3	97.3	6.4	6.4									
					Middle	-	0.1	283	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4			6.4	4.1	4
						-	0.1	282	-	-	-	-	-	-	-	-	-	-									
					Bottom	3.7	0.0	245	26.8	26.8	8.2	8.2	33.3	33.3	91.3	91.3	6.1	6.1	6.1	6.1	6.1	6.1			4	4	
						3.7	0.0	238	26.8	26.8	8.2	8.2	33.3	33.3	91.3	91.3	6.1	6.1									
SR3	Cloudy	Rough	11:38	8.9	Surface	1.0	0.2	354	26.3	26.3	8.1	8.1	29.4	29.4	92.1	92.1	6.3	6.3	6.2	3.2	4	4	822149	807562			
						1.0	0.2	357	26.3	26.3	8.1	8.1	29.5	29.4	92.0	92.1	6.3	6.3									
					Middle	4.5	0.2	357	26.1	26.1	8.2	8.2	29.8	29.8	89.7	89.8	6.1	6.1	6.1	6.1	6.1	6.1			4	4	
						4.5	0.3	353	26.1	26.1	8.2	8.2	29.8	29.8	89.8	89.8	6.2	6.2									
					Bottom	7.9	0.2	339	26.1	26.1	8.2	8.2	30.2	30.2	92.1	92.2	6.3	6.3	6.3	6.3	6.3	6.3			4	4	
						7.9	0.2	336	26.1	26.1	8.2	8.2	30.2	30.2	92.2	92.2	6.3	6.3									
SR4A	Cloudy	Moderate	10:07	9.0	Surface	1.0	0.0	237	26.3	26.3	8.5	8.5	31.0	31.0	94.8	94.8	6.4	6.4	6.4	7.6	7	6	817201	807788			
						1.0	0.1	233	26.3	26.3	8.5	8.5	31.0	31.0	94.8	94.8	6.4	6.4									
					Middle	4.5	0.0	245	26.2	26.2	8.5	8.5	31.1	31.1	92.4	92.3	6.3	6.3	6.3	6.3	6.3	6.3			7	6	
						4.5	0.1	240	26.2	26.2	8.5	8.5	31.1	31.1	92.2	92.3	6.3	6.3									
					Bottom	8.0	0.0	221	26.2	26.2	8.5	8.5	31.1	31.1	91.6	91.6	6.2	6.2	6.2	6.2	6.2	6.2			6	5	
						8.0	0.0	227	26.2	26.2	8.5	8.5	31.1	31.1	91.6	91.6	6.2	6.2									
SR8	Sunny	Calm	11:26	4.8	Surface	1.0	-	-	26.8	26.8	8.2	8.2	33.0	33.0	95.2	95.2	6.3	6.3	6.3	2.1	6	7	820371	811631			
						1.0	-	-	26.8	26.8	8.2	8.2	33.0	33.0	95.2	95.2	6.3	6.3									
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.3			6.3	2.3	5
						-	-	-	-	-	-	-	-	-	-	-	-	-									
					Bottom	3.8	-	-	26.8	26.8	8.2	8.2	33.0	33.0	94.8	94.8	6.3	6.3	6.3	6.3	6.3	6.3			6	5	
						3.8	-	-	26.8	26.8	8.2	8.2	33.1	33.0	94.7	94.7	6.3	6.3									

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	08:44	8.6	Surface	1.0	0.3	215	24.4	24.4	8.2	8.2	32.4	32.4	92.6	92.6	6.4	6.4	8.1	9.2	4	4	815623	804246
						1.0	0.3	213	24.4	24.4	8.2	8.2	32.4	32.4	92.5	92.4	6.4	6.4	8.3	9.1	5	4		
					Middle	4.3	0.3	221	24.4	24.4	8.2	8.2	32.4	32.4	92.4	92.4	6.4	6.4	9.1	9.1	4	4		
						4.3	0.3	214	24.4	24.4	8.2	8.2	32.4	32.4	92.4	92.4	6.4	6.4	9.1	9.1	4	4		
					Bottom	7.6	0.4	211	24.4	24.4	8.2	8.2	32.4	32.4	92.0	92.1	6.4	6.4	10.2	10.2	2	3		
						7.6	0.4	210	24.4	24.4	8.2	8.2	32.4	32.4	92.2	92.2	6.4	6.4	10.2	10.2	3	3		
C2	Cloudy	Moderate	10:24	11.4	Surface	1.0	0.5	164	24.7	24.7	8.2	8.2	32.0	32.0	91.7	91.7	6.4	6.4	2.4	3.4	4	4	825659	806939
						1.0	0.5	168	24.7	24.7	8.2	8.2	32.0	32.0	91.7	91.7	6.4	6.4	2.5	3.4	4	4		
					Middle	5.7	0.5	182	24.2	24.2	8.2	8.2	32.1	32.1	92.7	92.8	6.5	6.5	3.6	3.6	3	3		
						5.7	0.5	181	24.2	24.2	8.2	8.2	32.1	32.1	92.8	92.8	6.5	6.5	3.7	3.7	4	4		
					Bottom	10.4	0.4	191	24.1	24.1	8.2	8.2	32.1	32.1	93.3	93.4	6.5	6.5	4.1	4.1	2	2		
						10.4	0.5	183	24.1	24.1	8.2	8.2	32.1	32.1	93.4	93.4	6.5	6.5	4.1	4.1	2	2		
C3	Fine	Moderate	07:59	9.0	Surface	1.0	0.1	48	25.4	25.4	8.0	8.0	34.9	34.9	92.5	92.5	6.2	6.2	1.1	1.2	2	3	822105	817819
						1.0	0.1	43	25.4	25.4	8.0	8.0	34.9	34.9	92.5	92.5	6.2	6.2	1.0	1.2	3	3		
					Middle	4.5	0.1	52	25.4	25.4	8.0	8.0	35.0	34.9	92.9	93.0	6.2	6.2	1.2	1.2	3	3		
						4.5	0.1	51	25.4	25.4	8.0	8.0	34.9	34.9	93.0	93.0	6.3	6.3	1.1	1.1	3	3		
					Bottom	8.0	0.1	52	25.4	25.4	8.0	8.0	34.9	34.9	93.7	93.9	6.3	6.3	1.5	1.5	3	3		
						8.0	0.1	48	25.4	25.4	8.0	8.0	34.9	34.9	94.0	94.0	6.3	6.3	1.5	1.5	4	4		
IM1	Cloudy	Moderate	09:00	6.7	Surface	1.0	0.3	192	23.7	23.7	8.2	8.2	32.1	32.1	95.1	95.1	6.7	6.7	3.5	5.8	3	3	818363	806458
						1.0	0.3	189	23.7	23.7	8.2	8.2	32.1	32.1	95.1	95.1	6.7	6.7	3.5	5.8	2	2		
					Middle	3.4	0.3	174	23.8	23.8	8.2	8.2	32.1	32.1	94.0	94.0	6.6	6.6	6.1	6.1	3	3		
						3.4	0.3	170	23.8	23.8	8.2	8.2	32.1	32.1	93.9	93.9	6.6	6.6	6.3	6.3	3	3		
					Bottom	5.7	0.3	170	24.0	24.0	8.2	8.2	32.2	32.2	93.7	93.7	6.6	6.6	7.5	7.5	4	4		
						5.7	0.3	170	24.0	24.0	8.2	8.2	32.2	32.2	93.7	93.7	6.6	6.6	8.1	8.1	4	4		
IM2	Cloudy	Moderate	09:05	7.4	Surface	1.0	0.3	206	23.8	23.8	8.2	8.2	32.1	32.1	91.9	91.9	6.5	6.5	4.7	6.6	2	2	819161	806225
						1.0	0.3	202	23.8	23.8	8.2	8.2	32.1	32.1	91.9	91.9	6.5	6.5	5.0	6.6	2	2		
					Middle	3.7	0.3	190	23.8	23.8	8.2	8.2	32.1	32.1	91.5	91.5	6.4	6.4	6.9	6.9	2	3		
						3.7	0.2	191	23.8	23.8	8.2	8.2	32.1	32.1	91.5	91.5	6.4	6.4	7.0	7.0	2	3		
					Bottom	6.4	0.3	208	23.8	23.8	8.2	8.2	32.1	32.1	91.5	91.5	6.4	6.4	7.9	7.9	3	3		
						6.4	0.3	211	23.8	23.8	8.2	8.2	32.1	32.1	91.5	91.5	6.4	6.4	7.9	7.9	4	4		
IM7	Cloudy	Moderate	09:31	7.8	Surface	1.0	0.2	203	23.8	23.8	8.2	8.2	32.0	32.0	94.8	94.8	6.7	6.7	2.7	3.9	2	3	821372	806838
						1.0	0.2	208	23.8	23.8	8.2	8.2	32.0	32.0	94.7	94.7	6.7	6.7	2.7	3.9	2	3		
					Middle	3.9	0.2	205	23.8	23.8	8.2	8.2	32.0	32.0	94.5	94.5	6.7	6.7	2.5	2.5	2	3		
						3.9	0.2	198	23.8	23.8	8.2	8.2	32.0	32.0	94.5	94.5	6.7	6.7	2.4	2.4	3	3		
					Bottom	6.8	0.3	216	23.8	23.8	8.2	8.2	31.9	31.9	91.2	91.2	6.4	6.4	6.5	6.5	3	3		
						6.8	0.3	214	23.8	23.8	8.2	8.2	31.9	31.9	91.2	91.2	6.4	6.4	6.7	6.7	3	3		

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Note: The monitoring session on 18 October 2022 was cancelled due to Strong Wind Signal No. 3 in force.

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			
IM10	Fine	Moderate	09:22	8.6	Surface	1.0	0.2	137	24.4	24.4	8.2	8.2	34.4	34.4	97.0	97.0	6.7	6.7	2.1	3	822239	809824			
						1.0	0.2	134	24.4	8.2	8.2	34.4	34.4	97.0	97.0	6.7	6.7	2.2	2						
					Middle	4.3	0.2	138	24.2	24.2	8.2	8.2	34.5	34.5	97.6	97.8	6.7	6.7	3.8	2					
						4.3	0.2	133	24.2	24.2	8.2	8.2	34.5	34.5	97.9	97.8	6.7	6.7	3.7	2					
					Bottom	7.6	0.2	154	24.2	24.2	8.2	8.2	34.5	34.5	98.6	98.8	6.8	6.8	4.4	4					
						7.6	0.2	147	24.2	24.2	8.2	8.2	34.5	34.5	99.0	98.8	6.8	6.8	4.3	5					
IM11	Fine	Moderate	09:12	8.8	Surface	1.0	0.2	113	24.2	24.2	8.2	8.2	34.4	34.5	95.8	95.9	6.6	6.6	3.0	6	821510	810546			
						1.0	0.2	110	24.1	24.2	8.2	8.2	34.5	34.5	95.9	95.9	6.6	6.6	3.1	5					
					Middle	4.4	0.2	120	23.9	23.9	8.2	8.2	34.7	34.7	96.1	96.3	6.7	6.7	4.7	3					
						4.4	0.2	121	23.8	23.9	8.2	8.2	34.7	34.7	96.5	96.3	6.7	6.7	4.6	4					
					Bottom	7.8	0.2	112	23.6	23.6	8.2	8.2	34.9	34.9	101.0	101.2	7.0	7.1	5.1	3					
						7.8	0.2	105	23.5	23.6	8.2	8.2	34.9	34.9	101.4	101.2	7.1	7.1	5.0	3					
IM12	Fine	Moderate	09:01	7.8	Surface	1.0	0.2	123	24.3	24.3	8.2	8.2	34.4	34.4	97.2	97.3	6.7	6.7	1.6	3	821181	811520			
						1.0	0.2	116	24.3	24.3	8.2	8.2	34.4	34.4	97.4	97.3	6.7	6.7	1.5	4					
					Middle	3.9	0.3	104	24.3	24.3	8.2	8.2	34.4	34.4	98.4	98.6	6.8	6.8	2.6	2					
						3.9	0.3	98	24.3	24.3	8.2	8.2	34.4	34.4	98.7	98.6	6.8	6.8	2.6	3					
					Bottom	6.8	0.2	113	24.3	24.3	8.2	8.2	34.4	34.3	100.0	100.3	6.9	6.9	2.3	2					
						6.8	0.2	107	24.3	24.3	8.2	8.2	34.3	34.3	100.6	100.3	6.9	6.9	2.4	3					
SR1A	Fine	Moderate	08:32	4.8	Surface	1.0	0.0	104	25.2	25.2	8.2	8.2	34.6	34.6	97.8	98.0	6.6	6.6	1.6	3	819971	812666			
						1.0	0.0	101	25.2	25.2	8.2	8.2	34.6	34.6	98.2	98.0	6.7	6.7	1.6	2					
					Middle	2.4	0.0	126	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
						2.4	0.0	131	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
					Bottom	3.8	0.0	97	25.1	25.1	8.2	8.2	34.2	34.4	99.3	100.0	6.7	6.8	2.1	4					
						3.8	0.0	94	25.1	25.1	8.2	8.2	34.5	34.4	100.6	100.0	6.8	6.8	2.1	3					
SR2	Fine	Moderate	08:18	5.8	Surface	1.0	0.4	25	25.4	25.4	8.1	8.1	34.9	34.9	92.3	92.4	6.2	6.2	3.0	<2	821471	814183			
						1.0	0.4	27	25.4	25.4	8.1	8.1	34.9	34.9	92.4	92.4	6.2	6.2	3.1	<2					
					Middle	-	0.3	29	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
						-	0.4	22	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
					Bottom	4.8	0.4	28	25.4	25.4	8.1	8.1	34.9	34.9	92.4	92.4	6.2	6.2	4.1	4					
						4.8	0.4	31	25.4	25.4	8.1	8.1	34.9	34.9	92.4	92.4	6.2	6.2	4.2	3					
SR3	Cloudy	Moderate	09:39	9.2	Surface	1.0	0.4	154	24.4	24.4	8.2	8.2	32.0	32.0	94.2	94.2	6.6	6.6	2.3	3	822152	807578			
						1.0	0.4	159	24.3	24.4	8.2	8.2	32.0	32.0	94.2	94.2	6.6	6.6	2.4	3					
					Middle	4.6	0.5	173	24.0	24.0	8.2	8.2	32.0	32.0	93.9	94.0	6.6	6.6	3.7	4					
						4.6	0.5	175	24.0	24.0	8.2	8.2	32.0	32.0	94.0	94.0	6.6	6.6	3.9	3					
					Bottom	8.2	0.4	172	23.8	23.8	8.2	8.2	32.1	32.1	94.5	94.7	6.7	6.7	5.6	6					
						8.2	0.4	177	23.8	23.8	8.2	8.2	32.1	32.1	94.8	94.7	6.7	6.7	5.6	4					
SR4A	Cloudy	Moderate	08:27	8.6	Surface	1.0	0.0	54	23.9	23.9	8.2	8.2	31.8	31.8	92.2	92.2	6.5	6.5	6.1	2	817178	807788			
						1.0	0.0	57	23.9	23.9	8.2	8.2	31.8	31.8	92.2	92.2	6.5	6.5	6.1	3					
					Middle	4.3	0.0	56	23.9	23.9	8.2	8.2	31.8	31.8	92.3	92.3	6.5	6.5	6.5	2					
						4.3	0.0	60	23.9	23.9	8.2	8.2	31.8	31.8	92.3	92.3	6.5	6.5	6.5	3					
					Bottom	7.6	0.0	63	23.9	23.9	8.2	8.2	31.8	31.8	92.7	92.8	6.5	6.5	6.6	4					
						7.6	0.0	59	23.9	23.9	8.2	8.2	31.8	31.8	92.9	92.8	6.5	6.5	6.6	5					
SR8	Fine	Moderate	08:44	4.8	Surface	1.0	-	-	25.2	25.2	8.2	8.2	34.5	34.5	95.9	96.0	6.5	6.5	2.5	4	820409	811611			
						1.0	-	-	25.2	25.2	8.2	8.2	34.5	34.5	96.0	96.0	6.5	6.5	2.5	3					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
					Bottom	3.8	-	-	25.2	25.2	8.2	8.2	34.5	34.5	96.9	97.2	6.6	6.6	3.2	2					
						3.8	-	-	25.2	25.2	8.2	8.2	34.5	34.5	97.4	97.2	6.6	6.6	3.2	3					

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
 Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined
 Note: The monitoring session on 18 October 2022 was cancelled due to Strong Wind Signal No. 3 in force.

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Moderate	16:47	8.0	Surface	1.0	0.3	42	24.1	24.1	8.2	8.2	32.3	32.3	93.4	93.4	6.5	6.5	8.1	8.8	5	4	815609	804251		
						1.0	0.3	41	24.1		8.2		32.3		93.4		6.5		8.4		4					
					Middle	4.0	0.2	14	24.1	24.1	8.2	8.2	32.3	32.3	93.6	93.7	6.5	6.5	10.4	6.6	6.6	6.6			3	3
						4.0	0.2	13	24.1		8.2		32.3		93.7		6.5		11.1		4					
					Bottom	7.0	0.2	56	24.1	24.1	8.2	8.2	32.3	32.3	94.5	94.7	6.6	6.6	7.7	6.6	6.6	6.6			2	2
						7.0	0.2	49	24.1		8.2		32.3		94.9		6.6		7.0		3					
C2	Fine	Moderate	15:41	11.4	Surface	1.0	0.0	333	24.7	24.7	8.2	8.2	32.0	32.0	91.9	92.0	6.4	6.4	2.6	4.9	3	3	825703	806934		
						1.0	0.1	333	24.7		8.2		32.0		92.0		6.4		2.7		2					
					Middle	5.7	0.1	323	24.3	24.3	8.2	8.2	32.1	32.1	91.7	91.8	6.4	6.4	3.6	6.4	6.4	6.4			3	3
						5.7	0.1	323	24.3		8.2		32.1		91.8		6.4		3.5		2					
					Bottom	10.4	0.0	319	24.2	24.2	8.2	8.2	32.1	32.1	91.7	91.6	6.4	6.4	9.8	6.4	6.4	6.4			2	2
						10.4	0.1	317	24.2		8.2		32.1		91.4		6.4		7.3		3					
C3	Fine	Moderate	17:09	8.2	Surface	1.0	0.3	264	25.5	25.5	8.3	8.3	34.7	34.7	97.0	97.1	6.5	6.5	1.5	1.7	4	3	822127	817788		
						1.0	0.3	258	25.5		8.3		34.7		97.1		6.5		1.6		3					
					Middle	4.1	0.3	240	25.5	25.5	8.3	8.3	34.7	34.7	97.7	97.9	6.6	6.6	1.7	6.6	6.6	6.6			3	3
						4.1	0.2	246	25.4		8.3		34.7		98.0		6.6		1.7		4					
					Bottom	7.2	0.3	257	25.4	25.4	8.3	8.3	34.7	34.7	99.5	99.8	6.7	6.7	1.9	6.7	6.7	6.7			3	3
						7.2	0.3	252	25.4		8.3		34.7		100.1		6.7		1.9		3					
IM1	Fine	Moderate	16:19	6.2	Surface	1.0	0.1	31	24.0	24.0	8.2	8.2	32.1	32.1	93.9	93.9	6.6	6.6	4.0	6.4	2	3	818330	806445		
						1.0	0.2	34	24.0		8.2		32.1		93.9		6.6		4.1		2					
					Middle	3.1	0.2	20	23.9	23.9	8.2	8.2	32.1	32.1	94.0	94.1	6.6	6.6	5.7	6.6	6.6	6.6			3	3
						3.1	0.1	21	23.9		8.2		32.1		94.1		6.6		5.9		4					
					Bottom	5.2	0.2	21	23.9	23.9	8.2	8.2	32.1	32.1	95.8	96.0	6.7	6.7	9.5	6.7	6.7	6.7			4	4
						5.2	0.2	25	23.9		8.2		32.1		96.1		6.7		9.4		3					
IM2	Fine	Moderate	16:12	6.8	Surface	1.0	0.2	16	24.0	24.0	8.2	8.2	32.1	32.1	92.8	92.8	6.5	6.5	8.0	9.8	2	3	819177	806230		
						1.0	0.2	10	23.9		8.2		32.1		92.7		6.5		8.4		3					
					Middle	3.4	0.1	19	23.9	23.9	8.2	8.2	32.1	32.1	92.8	92.9	6.5	6.5	9.7	6.5	6.5	6.5			3	3
						3.4	0.1	25	23.9		8.2		32.1		92.9		6.5		9.5		2					
					Bottom	5.8	0.2	28	23.9	23.9	8.2	8.2	32.1	32.1	94.2	94.4	6.6	6.6	11.2	6.6	6.6	6.6			2	2
						5.8	0.2	27	23.9		8.2		32.1		94.6		6.6		11.9		3					
IM7	Fine	Moderate	15:55	7.6	Surface	1.0	0.1	325	24.2	24.2	8.2	8.2	31.9	31.9	95.0	95.0	6.6	6.6	2.2	4.2	3	3	821344	806814		
						1.0	0.0	329	24.1		8.2		31.9		94.9		6.6		2.5		3					
					Middle	3.8	0.0	313	23.9	23.9	8.2	8.2	32.0	32.0	93.9	93.9	6.6	6.6	4.3	6.6	6.6	6.6			3	3
						3.8	0.1	318	23.9		8.2		32.0		93.9		6.6		4.4		3					
					Bottom	6.6	0.1	336	23.8	23.8	8.2	8.2	32.0	32.0	93.9	94.0	6.6	6.6	5.9	6.6	6.6	6.6			4	4
						6.6	0.1	335	23.8		8.2		32.0		94.0		6.6		6.1		3					

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Note: The monitoring session on 18 October 2022 was cancelled due to Strong Wind Signal No. 3 in force.

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA								
IM10	Fine	Moderate	15:31	8.2	Surface	1.0	0.2	271	24.4	24.4	8.2	8.2	34.4	34.4	96.0	96.1	6.6	6.6	1.7	2.6	4	4	822244	809837				
						1.0	0.3	267	24.4	8.2	8.2	34.4	34.4	96.1	96.1	6.6	6.6	1.6	2.6	3	4							
					Middle	4.1	0.2	259	24.3	24.3	8.2	8.2	34.5	34.5	96.2	96.3	6.6	6.6	3.0	2.6	3	4						
						4.1	0.2	259	24.3	24.3	8.2	8.2	34.5	34.5	96.3	96.3	6.6	6.6	2.9	2.6	4	4						
					Bottom	7.2	0.2	296	24.4	24.4	8.2	8.2	34.4	34.4	96.7	96.7	6.6	6.6	3.2	6.6	4	4						
						7.2	0.3	294	24.4	24.4	8.2	8.2	34.4	34.4	96.7	96.7	6.6	6.6	3.3	6.6	5	4						
IM11	Fine	Moderate	16:12	8.6	Surface	1.0	0.3	282	24.3	24.3	8.2	8.2	34.4	34.4	95.8	95.9	6.6	6.6	2.0	2.8	4	4	821484	810530				
						1.0	0.3	278	24.3	24.3	8.3	8.2	34.4	34.4	96.0	96.0	6.6	6.6	1.9	2.8	4	4						
					Middle	4.3	0.3	295	24.3	24.3	8.3	8.3	34.4	34.4	96.2	96.2	6.6	6.6	2.9	2.8	4	4						
						4.3	0.2	293	24.3	24.3	8.3	8.3	34.4	34.4	96.2	96.2	6.6	6.6	2.9	2.8	4	4						
					Bottom	7.6	0.3	274	24.3	24.3	8.3	8.3	34.4	34.4	97.0	97.2	6.7	6.7	3.7	6.7	3	4						
						7.6	0.3	270	24.3	24.3	8.3	8.3	34.4	34.4	97.3	97.2	6.7	6.7	3.7	6.7	2	4						
IM12	Fine	Moderate	16:18	7.6	Surface	1.0	0.3	271	24.3	24.3	8.2	8.2	34.5	34.5	99.0	99.1	6.8	6.8	2.6	3.5	3	4	821139	811536				
						1.0	0.3	266	24.3	24.3	8.2	8.2	34.5	34.5	99.2	99.1	6.8	6.8	2.6	3.5	3	4						
					Middle	3.8	0.3	271	24.2	24.2	8.2	8.2	34.5	34.5	99.7	99.8	6.9	6.9	3.7	6.9	4	4						
						3.8	0.3	267	24.2	24.2	8.2	8.2	34.5	34.5	99.9	99.8	6.9	6.9	3.7	6.9	3	4						
					Bottom	6.6	0.3	284	24.2	24.2	8.2	8.2	34.5	34.5	100.8	101.1	6.9	6.9	4.0	7.0	4	4						
						6.6	0.3	282	24.2	24.2	8.2	8.2	34.5	34.5	101.4	101.1	7.0	7.0	4.1	7.0	4	4						
SR1A	Fine	Moderate	16:31	4.8	Surface	1.0	0.0	214	25.3	25.3	8.2	8.2	34.6	34.6	97.6	97.8	6.6	6.6	1.5	1.7	4	3	819976	812664				
						1.0	-	210	25.3	25.3	8.2	8.2	34.6	34.6	97.9	97.8	6.6	6.6	1.5	1.7	3	3						
					Middle	2.4	0.0	187	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.7	-	3	3
						2.4	0.1	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.7	-	3	3
					Bottom	3.8	0.0	217	25.3	25.3	8.2	8.2	34.5	34.5	99.0	99.3	6.7	6.7	1.8	6.7	3	3						
						3.8	0.1	213	25.3	25.3	8.2	8.2	34.6	34.5	99.5	99.3	6.7	6.7	1.9	6.7	3	3						
SR2	Fine	Moderate	16:49	5.4	Surface	1.0	0.1	216	24.9	24.9	8.2	8.2	34.5	34.5	99.7	99.9	6.8	6.8	1.5	1.8	3	4	821451	814186				
						1.0	0.1	209	24.8	24.9	8.2	8.2	34.5	34.5	100.0	99.9	6.8	6.8	1.6	1.8	3	4						
					Middle	-	0.1	231	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.8	-	4	4
						-	0.1	234	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.8	-	4	4
					Bottom	4.4	0.1	210	24.8	24.8	8.2	8.2	34.4	34.4	101.0	101.3	6.9	6.9	2.0	6.9	4	4						
						4.4	0.2	205	24.8	24.8	8.2	8.2	34.4	34.4	101.5	101.3	6.9	6.9	2.0	6.9	4	4						
SR3	Fine	Moderate	15:48	9.5	Surface	1.0	0.1	331	24.4	24.4	8.2	8.2	32.1	32.0	93.9	93.9	6.5	6.5	2.6	5.2	3	3	822156	807562				
						1.0	0.1	327	24.3	24.4	8.2	8.2	32.0	32.0	93.8	93.8	6.5	6.5	2.8	5.2	2	3						
					Middle	4.8	0.0	331	23.9	23.9	8.2	8.2	32.1	32.1	93.1	93.1	6.5	6.5	5.8	5.2	2	3						
						4.8	0.0	325	23.9	23.9	8.2	8.2	32.1	32.1	93.1	93.1	6.5	6.5	5.9	5.2	3	3						
					Bottom	8.5	0.1	332	23.9	23.9	8.2	8.2	32.0	32.0	93.8	94.0	6.6	6.6	6.8	6.6	3	3						
						8.5	0.1	328	23.9	23.9	8.2	8.2	32.0	32.0	94.1	94.0	6.6	6.6	7.2	6.6	3	3						
SR4A	Fine	Moderate	17:05	9.2	Surface	1.0	0.0	206	23.8	23.8	8.2	8.2	32.0	32.0	94.0	94.0	6.6	6.6	5.3	7.9	3	3	817179	807793				
						1.0	0.1	211	23.8	23.8	8.2	8.2	32.0	32.0	94.0	94.0	6.6	6.6	5.3	7.9	2	3						
					Middle	4.6	0.0	207	23.7	23.7	8.2	8.2	32.1	32.1	92.9	92.9	6.6	6.6	7.7	6.6	3	3						
						4.6	0.1	202	23.7	23.7	8.2	8.2	32.1	32.1	92.9	92.9	6.5	6.5	7.9	6.6	2	3						
					Bottom	8.2	0.0	224	23.7	23.7	8.3	8.3	32.1	32.1	93.0	93.1	6.6	6.6	10.6	6.6	3	3						
						8.2	0.1	226	23.7	23.7	8.3	8.3	32.1	32.1	93.2	93.1	6.6	6.6	10.7	6.6	3	3						
SR8	Fine	Moderate	16:22	4.8	Surface	1.0	-	-	25.4	25.4	8.2	8.2	34.4	34.4	97.0	97.1	6.6	6.6	1.4	1.5	3	4	820376	811633				
						1.0	-	-	25.4	25.4	8.2	8.2	34.4	34.4	97.1	97.1	6.6	6.6	1.5	1.5	4	4						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.5	-	4	4
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.5	-	4	4
					Bottom	3.8	-	-	25.4	25.4	8.2	8.2	34.4	34.4	97.4	97.6	6.6	6.6	1.6	6.6	4	4						
						3.8	-	-	25.4	25.4	8.2	8.2	34.4	34.4	97.8	97.6	6.6	6.6	1.6	6.6	4	4						

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

Note: The monitoring session on 18 October 2022 was cancelled due to Strong Wind Signal No. 3 in force.

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Moderate	09:44	8.6	Surface	1.0	0.2	202	24.4	24.4	8.2	8.2	32.4	32.4	92.6	92.6	6.4	6.4	6.4	9.2	8.1	8	815612	804238		
						1.0	0.2	207	24.4	8.2	8.2	32.4	32.4	92.5	92.5	6.4	6.4									
					Middle	4.3	0.2	214	24.4	24.4	8.2	8.2	32.4	32.4	92.4	92.4	6.4	6.4	6.4	6.4	6.4	6.4			9.1	12
						4.3	0.3	218	24.4	24.4	8.2	8.2	32.4	32.4	92.4	92.4	6.4	6.4	6.4	6.4	6.4	6.4			9.1	13
					Bottom	7.6	0.3	185	24.4	24.4	8.2	8.2	32.4	32.4	92.0	92.1	6.4	6.4	6.4	6.4	6.4	6.4			10.2	12
						7.6	0.3	183	24.4	24.4	8.2	8.2	32.4	32.4	92.2	92.2	6.4	6.4	6.4	6.4	6.4	6.4			10.2	14
C2	Fine	Moderate	11:24	11.4	Surface	1.0	0.5	169	24.7	24.7	8.2	8.2	32.0	32.0	91.7	91.7	6.4	6.4	6.5	3.4	2.4	4	825690	806932		
						1.0	0.5	163	24.7	24.7	8.2	8.2	32.0	32.0	91.7	91.7	6.4	6.4								
					Middle	5.7	0.6	161	24.2	24.2	8.2	8.2	32.1	32.1	92.7	92.8	6.5	6.5	6.5	6.5	6.5	6.5			3.6	2
						5.7	0.6	154	24.2	24.2	8.2	8.2	32.1	32.1	92.8	92.8	6.5	6.5	6.5	6.5	6.5	6.5			3.7	3
					Bottom	10.4	0.5	151	24.1	24.1	8.2	8.2	32.1	32.1	93.3	93.4	6.5	6.5	6.5	6.5	6.5	6.5			4.1	2
						10.4	0.5	144	24.1	24.1	8.2	8.2	32.1	32.1	93.4	93.4	6.5	6.5	6.5	6.5	6.5	6.5			4.1	3
C3	Fine	Moderate	09:22	11.3	Surface	1.0	0.2	67	25.4	25.4	8.2	8.2	34.7	34.7	93.1	93.0	6.3	6.3	6.2	1.6	0.5	4	822106	817798		
						1.0	0.2	67	25.4	25.4	8.2	8.2	34.7	34.7	92.9	92.9	6.3	6.3								
					Middle	5.7	0.2	80	25.3	25.3	8.1	8.1	34.8	34.8	90.0	90.0	6.1	6.1	6.1	6.1	6.1	6.1			1.7	3
						5.7	0.2	73	25.3	25.3	8.1	8.1	34.8	34.8	90.0	90.0	6.1	6.1	6.1	6.1	6.1	6.1			1.7	4
					Bottom	10.3	0.2	70	25.3	25.3	8.1	8.1	34.9	34.9	90.2	90.3	6.1	6.1	6.1	6.1	6.1	6.1			2.7	5
						10.3	0.1	75	25.3	25.3	8.2	8.1	34.9	34.9	90.4	90.3	6.1	6.1	6.1	6.1	6.1	6.1			2.6	3
IM1	Fine	Moderate	10:00	6.7	Surface	1.0	0.1	174	23.7	23.7	8.2	8.2	32.1	32.1	95.1	95.1	6.7	6.7	6.7	5.8	3.5	4	818328	806450		
						1.0	0.1	170	23.7	23.7	8.2	8.2	32.1	32.1	95.1	95.1	6.7	6.7								
					Middle	3.4	0.2	194	23.8	23.8	8.2	8.2	32.1	32.1	94.0	94.0	6.6	6.6	6.6	6.6	6.6	6.6			6.1	4
						3.4	0.1	188	23.8	23.8	8.2	8.2	32.1	32.1	93.9	93.9	6.6	6.6	6.6	6.6	6.6	6.6			6.3	4
					Bottom	5.7	0.1	193	24.0	24.0	8.2	8.2	32.2	32.2	93.7	93.7	6.6	6.6	6.6	6.6	6.6	6.6			7.5	4
						5.7	0.1	187	24.0	24.0	8.2	8.2	32.2	32.2	93.7	93.7	6.6	6.6	6.6	6.6	6.6	6.6			8.1	4
IM2	Fine	Moderate	10:05	7.4	Surface	1.0	0.2	191	23.8	23.8	8.2	8.2	32.1	32.1	91.9	91.9	6.5	6.5	6.5	6.6	4.7	6	819204	806249		
						1.0	0.1	187	23.8	23.8	8.2	8.2	32.1	32.1	91.9	91.9	6.5	6.5								
					Middle	3.7	0.2	165	23.8	23.8	8.2	8.2	32.1	32.1	91.5	91.5	6.4	6.4	6.4	6.4	6.4	6.4			6.9	6
						3.7	0.2	165	23.8	23.8	8.2	8.2	32.1	32.1	91.5	91.5	6.4	6.4	6.4	6.4	6.4	6.4			7.0	7
					Bottom	6.4	0.2	187	23.8	23.8	8.2	8.2	32.1	32.1	91.5	91.5	6.4	6.4	6.4	6.4	6.4	6.4			7.9	5
						6.4	0.2	183	23.8	23.8	8.2	8.2	32.1	32.1	91.5	91.5	6.4	6.4	6.4	6.4	6.4	6.4			7.9	7
IM7	Fine	Moderate	10:31	7.8	Surface	1.0	0.2	182	23.8	23.8	8.2	8.2	32.0	32.0	94.8	94.8	6.7	6.7	6.7	3.9	2.7	5	821338	806845		
						1.0	0.2	179	23.8	23.8	8.2	8.2	32.0	32.0	94.7	94.7	6.7	6.7								
					Middle	3.9	0.1	168	23.8	23.8	8.2	8.2	32.0	32.0	94.5	94.5	6.7	6.7	6.7	6.7	6.7	6.7			2.5	5
						3.9	0.1	173	23.8	23.8	8.2	8.2	32.0	32.0	94.5	94.5	6.7	6.7	6.7	6.7	6.7	6.7			2.4	5
					Bottom	6.8	0.2	189	23.8	23.8	8.2	8.2	31.9	31.9	91.2	91.2	6.4	6.4	6.4	6.4	6.4	6.4			6.5	3
						6.8	0.3	190	23.8	23.8	8.2	8.2	31.9	31.9	91.2	91.2	6.4	6.4	6.4	6.4	6.4	6.4			6.7	3

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA							
IM10	Fine	Moderate	10:51	8.2	Surface	1.0	0.4	110	25.2	25.2	8.2	8.2	33.7	33.7	99.8	99.8	6.8	6.8	6.7	6.7	0.5	6	822223	809852			
						1.0	0.4	107	25.2	8.2	8.2	33.7	33.7	99.8	99.8	6.8	6.8	6.7	6.7	0.5	4						
					Middle	4.1	0.4	112	25.1	25.1	8.2	8.2	34.0	34.0	97.2	97.2	6.6	6.6	6.6	6.6	2.0	5			4		
						4.1	0.4	115	25.1	25.1	8.2	8.2	34.0	34.0	97.1	97.1	6.6	6.6	6.6	6.6	2.3	3					
					Bottom	7.2	0.4	118	25.0	25.0	8.2	8.2	34.1	34.1	97.7	97.8	6.7	6.7	6.7	6.7	3.4	3					
						7.2	0.4	117	25.0	25.0	8.2	8.2	34.1	34.1	97.8	97.8	6.7	6.7	6.7	6.7	3.5	3					
IM11	Fine	Moderate	10:43	7.7	Surface	1.0	0.5	109	25.1	25.1	8.2	8.2	33.9	33.9	97.9	97.9	6.7	6.7	6.6	6.6	1.1	4	821521	810526			
						1.0	0.5	113	25.1	25.1	8.2	8.2	33.9	33.9	97.8	97.9	6.7	6.7	6.6	6.6	1.3	3					
					Middle	3.9	0.4	103	25.1	25.1	8.1	8.1	34.1	34.1	96.3	96.3	6.6	6.6	6.5	6.5	2.2	3			4		
						3.9	0.4	102	25.1	25.1	8.1	8.1	34.1	34.1	96.2	96.3	6.5	6.5	6.5	6.5	2.3	3					
					Bottom	6.7	0.5	120	25.0	25.0	8.1	8.1	34.3	34.2	96.6	96.7	6.6	6.6	6.6	6.6	3.1	3					
						6.7	0.5	112	25.0	25.0	8.1	8.1	34.2	34.2	96.8	96.7	6.6	6.6	6.6	6.6	3.3	5					
IM12	Fine	Moderate	10:35	8.6	Surface	1.0	0.5	109	25.0	25.0	8.2	8.2	34.4	34.4	95.4	95.4	6.5	6.5	6.5	6.5	2.5	4	821165	811509			
						1.0	0.5	105	25.0	25.0	8.2	8.2	34.4	34.4	95.3	95.3	6.5	6.5	6.5	6.5	2.7	5					
					Middle	4.3	0.4	98	25.0	25.0	8.2	8.2	34.4	34.4	95.3	95.3	6.5	6.5	6.5	6.5	3.5	6			5		
						4.3	0.4	90	25.0	25.0	8.2	8.2	34.4	34.4	95.3	95.3	6.5	6.5	6.5	6.5	6.4	7					
					Bottom	7.6	0.5	91	25.0	25.0	8.2	8.2	34.4	34.4	95.5	95.5	6.5	6.5	6.5	6.5	4.0	5					
						7.6	0.4	93	25.0	25.0	8.2	8.2	34.4	34.4	95.5	95.5	6.5	6.5	6.5	6.5	3.8	4					
SR1A	Fine	Moderate	10:03	5.3	Surface	1.0	0.0	91	25.2	25.2	8.1	8.1	34.4	34.4	94.4	94.4	6.4	6.4	6.4	6.4	1.5	4	819975	812666			
						1.0	0.0	97	25.2	25.2	8.1	8.1	34.4	34.4	94.4	94.4	6.4	6.4	6.4	6.4	1.6	6					
					Middle	2.7	0.0	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	5
						2.7	-	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-
					Bottom	4.3	0.0	104	25.1	25.1	8.1	8.1	34.5	34.5	94.4	94.5	6.4	6.4	6.4	6.4	3.6	6					
						4.3	0.0	104	25.1	25.1	8.1	8.1	34.5	34.5	94.5	94.5	6.4	6.4	6.4	6.4	3.6	5					
SR2	Fine	Moderate	09:47	4.3	Surface	1.0	0.3	62	25.1	25.1	8.2	8.2	34.5	34.5	94.8	94.8	6.4	6.4	6.4	6.4	1.9	3	821472	814171			
						1.0	0.3	60	25.1	25.1	8.2	8.2	34.5	34.5	94.8	94.8	6.4	6.4	6.4	6.4	2.0	3					
					Middle	-	0.3	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	4
						-	0.3	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-
					Bottom	3.3	0.4	57	25.0	25.0	8.2	8.2	34.5	34.5	95.0	95.0	6.4	6.4	6.5	6.5	2.0	5					
						3.3	0.4	58	25.0	25.0	8.2	8.2	34.5	34.5	95.0	95.0	6.5	6.5	6.5	6.5	2.0	5					
SR3	Fine	Moderate	10:39	9.2	Surface	1.0	0.4	145	24.4	24.4	8.2	8.2	32.0	32.0	94.2	94.2	6.6	6.6	6.6	6.6	2.3	3	822147	807577			
						1.0	0.4	146	24.3	24.4	8.2	8.2	32.0	32.0	94.2	94.2	6.6	6.6	6.6	6.6	2.4	4					
					Middle	4.6	0.4	174	24.0	24.0	8.2	8.2	32.0	32.0	93.9	94.0	6.6	6.6	6.6	6.6	3.7	3					
						4.6	0.4	171	24.0	24.0	8.2	8.2	32.0	32.0	94.0	94.0	6.6	6.6	6.6	6.6	3.9	4					
					Bottom	8.2	0.3	178	23.8	23.8	8.2	8.2	32.1	32.1	94.5	94.7	6.7	6.7	6.7	6.7	5.6	2					
						8.2	0.4	176	23.8	23.8	8.2	8.2	32.1	32.1	94.8	94.7	6.7	6.7	6.7	6.7	5.6	3					
SR4A	Fine	Moderate	09:27	8.6	Surface	1.0	0.0	99	23.9	23.9	8.2	8.2	31.8	31.8	92.2	92.2	6.5	6.5	6.5	6.5	6.1	14	817200	807795			
						1.0	0.0	96	23.9	23.9	8.2	8.2	31.8	31.8	92.2	92.2	6.5	6.5	6.5	6.5	6.1	13					
					Middle	4.3	-	96	23.9	23.9	8.2	8.2	31.8	31.8	92.3	92.3	6.5	6.5	6.5	6.5	6.5	6.5			6.5	11	
						4.3	0.0	89	23.9	23.9	8.2	8.2	31.8	31.8	92.3	92.3	6.5	6.5	6.5	6.5	6.5	6.5			11		
					Bottom	7.6	0.0	92	23.9	23.9	8.2	8.2	31.8	31.8	92.7	92.8	6.5	6.5	6.5	6.5	6.6	6.6			6.6	12	
						7.6	0.1	99	23.9	23.9	8.2	8.2	31.8	31.8	92.9	92.9	6.5	6.5	6.5	6.5	6.6	6.6			6.6	11	
SR8	Fine	Moderate	10:29	5.0	Surface	1.0	-	-	25.7	25.7	8.2	8.2	34.3	34.3	96.3	96.2	6.5	6.5	6.5	6.5	2.1	5	820402	811599			
						1.0	-	-	25.7	25.7	8.2	8.2	34.3	34.3	96.1	96.1	6.5	6.5	6.5	6.5	2.1	4					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	5
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-
					Bottom	4.0	-	-	25.1	25.2	8.7	8.7	34.3	34.3	93.9	93.9	6.4	6.4	6.4	6.4	6.5	6.5			6.5	6.5	6
						4.0	-	-	25.2	25.2	8.7	8.7	34.3	34.3	93.9	93.9	6.4	6.4	6.4	6.4	6.3	6.3			6.3	6.3	5

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Moderate	17:07	8.0	Surface	1.0	0.2	41	24.1	24.1	8.2	8.2	32.3	32.3	93.4	93.4	6.5	6.5	8.1	8.8	6	6	815611	804258		
						1.0	0.2	44	24.1		8.2		32.3		93.4		6.5									
					Middle	4.0	0.2	23	24.1	24.1	8.2	8.2	32.3	32.3	93.6	93.7	6.5	6.5	8.4	6.6	6.6	6.6	6	6	815611	804258
						4.0	0.2	20	24.1		8.2		32.3		93.7		6.5									
					Bottom	7.0	0.3	33	24.1	24.1	8.2	8.2	32.3	32.3	94.5	94.7	6.6	6.6	11.1	6.6	6.6	6.6	6	6	815611	804258
						7.0	0.3	36	24.1		8.2		32.3		94.9		6.6									
C2	Fine	Moderate	16:01	11.4	Surface	1.0	0.0	246	24.7	24.7	8.2	8.2	32.0	32.0	91.9	92.0	6.4	6.4	2.6	4.9	5	5	825666	806941		
						1.0	0.0	251	24.7		8.2		32.0		92.0		6.4									
					Middle	5.7	0.1	236	24.3	24.3	8.2	8.2	32.1	32.1	91.7	91.8	6.4	6.4	3.6	6.4	6.4	6.4	5	5	825666	806941
						5.7	0.1	232	24.3		8.2		32.1		91.8		6.4									
					Bottom	10.4	0.0	267	24.2	24.2	8.2	8.2	32.1	32.1	91.7	91.6	6.4	6.4	3.5	6.4	6.4	6.4	4	4	825666	806941
						10.4	0.0	268	24.2		8.2		32.1		91.4		6.4									
C3	Fine	Moderate	17:19	11.2	Surface	1.0	0.4	277	25.4	25.4	8.3	8.3	34.0	34.0	92.7	92.7	6.3	6.3	3.0	4.6	3	3	822131	817786		
						1.0	0.3	280	25.4		8.3		34.0		92.6		6.3									
					Middle	5.6	0.4	246	25.0	25.0	8.3	8.3	34.6	34.6	91.1	91.2	6.2	6.2	4.5	6.3	6.3	6.3	2	2	822131	817786
						5.6	0.4	241	25.0		8.3		34.6		91.3		6.2									
					Bottom	10.2	0.4	284	25.0	25.0	8.3	8.3	34.8	34.8	92.9	93.0	6.3	6.3	5.9	6.3	6.3	6.3	3	3	822131	817786
						10.2	0.5	281	25.0		8.3		34.9		93.1		6.3									
IM1	Fine	Moderate	16:39	6.2	Surface	1.0	0.1	14	24.0	24.0	8.2	8.2	32.1	32.1	93.9	93.9	6.6	6.6	4.0	6.4	13	13	818373	806438		
						1.0	0.1	8	24.0		8.2		32.1		93.9		6.6									
					Middle	3.1	0.1	8	23.9	23.9	8.2	8.2	32.1	32.1	94.0	94.1	6.6	6.6	4.1	6.6	6.6	6.6	13	13	818373	806438
						3.1	0.1	3	23.9		8.2		32.1		94.1		6.6									
					Bottom	5.2	0.1	18	23.9	23.9	8.2	8.2	32.1	32.1	95.8	96.0	6.7	6.7	5.9	6.7	6.7	6.7	14	12	818373	806438
						5.2	0.1	18	23.9		8.2		32.1		96.1		6.7									
IM2	Fine	Moderate	16:32	6.8	Surface	1.0	0.1	264	24.0	24.0	8.2	8.2	32.1	32.1	92.8	92.8	6.5	6.5	8.0	9.8	8	8	819180	806215		
						1.0	0.1	266	23.9		8.2		32.1		92.7		6.5									
					Middle	3.4	0.1	282	23.9	23.9	8.2	8.2	32.1	32.1	92.8	92.9	6.5	6.5	8.4	6.5	6.5	6.5	9	9	819180	806215
						3.4	0.2	275	23.9		8.2		32.1		92.9		6.5									
					Bottom	5.8	0.1	245	23.9	23.9	8.2	8.2	32.1	32.1	94.2	94.4	6.6	6.6	9.5	6.6	6.6	6.6	8	8	819180	806215
						5.8	0.0	250	23.9		8.2		32.1		94.6		6.6									
IM7	Fine	Moderate	16:15	7.6	Surface	1.0	0.1	259	24.2	24.2	8.2	8.2	31.9	31.9	95.0	95.0	6.6	6.6	2.2	4.2	4	4	821367	806831		
						1.0	0.1	262	24.1		8.2		31.9		94.9		6.6									
					Middle	3.8	0.1	246	23.9	23.9	8.2	8.2	32.0	32.0	93.9	93.9	6.6	6.6	2.5	6.6	6.6	6.6	5	5	821367	806831
						3.8	0.2	241	23.9		8.2		32.0		93.9		6.6									
					Bottom	6.6	0.2	278	23.8	23.8	8.2	8.2	32.0	32.0	93.9	94.0	6.6	6.6	4.4	6.6	6.6	6.6	4	4	821367	806831
						6.6	0.2	279	23.8		8.2		32.0		94.0		6.6									

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is **bolded and underlined**

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

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA						
IM10	Fine	Moderate	15:57	8.9	Surface	1.0	0.2	253	25.7	25.7	8.3	8.3	33.4	33.4	101.2	101.2	6.8	6.8	6.7	3.0	4.4	<2	3	822260	809849			
						1.0	0.2	251	25.7	8.3	8.3	33.4	33.4	101.2	101.2	6.8	6.8	6.7	4.2	4.4	<2	3						
					Middle	4.5	0.2	257	25.4	25.4	8.3	8.3	33.8	33.8	97.6	97.6	6.6	6.6	6.7	4.2	4.4	2	3			3		
						4.5	0.1	262	25.4	25.4	8.3	8.3	33.8	33.8	97.6	97.6	6.6	6.6	6.7	5.2	4.4	3	3					
					Bottom	7.9	0.2	255	25.4	25.4	8.3	8.3	33.9	33.9	98.0	98.1	6.6	6.6	6.7	5.1	4.4	4	3			4		
						7.9	0.1	258	25.4	25.4	8.3	8.3	33.9	33.9	98.1	98.1	6.7	6.7	6.7	5.0	4.4	4	3			4		
IM11	Fine	Moderate	16:12	8.0	Surface	1.0	0.3	277	25.6	25.6	8.2	8.2	33.4	33.4	99.8	99.7	6.8	6.8	6.7	6.1	4.5	5	3	821523	810553			
						1.0	0.3	273	25.6	25.6	8.2	8.2	33.4	33.4	99.6	99.7	6.7	6.7	6.7	4.4	4.5	3	4					
					Middle	4.0	0.3	255	25.4	25.4	8.2	8.2	33.8	33.8	97.7	97.7	6.6	6.6	6.6	4.5	4.5	3	4			4		
						4.0	0.2	261	25.4	25.4	8.3	8.3	33.8	33.8	97.6	97.6	6.6	6.6	6.6	4.5	4.5	3	4			4		
					Bottom	7.0	0.3	261	25.4	25.4	8.3	8.3	33.9	33.9	97.3	97.4	6.6	6.6	6.6	4.5	4.5	3	4			3		
						7.0	0.3	267	25.4	25.4	8.3	8.3	33.9	33.9	97.4	97.4	6.6	6.6	6.6	3.0	4.5	3	4			3		
IM12	Fine	Moderate	16:24	8.5	Surface	1.0	0.3	276	26.4	26.4	8.2	8.2	31.9	32.0	105.9	105.9	7.1	7.1	6.9	4.6	6.1	3	2	821144	811536			
						1.0	0.3	279	26.3	26.4	8.2	8.2	32.0	32.0	105.9	105.9	7.1	7.1	6.9	9.0	6.1	2	3					
					Middle	4.3	0.3	281	25.7	25.7	8.2	8.2	32.8	32.8	98.5	98.6	6.7	6.7	6.7	8.8	6.1	4	3			3		
						4.3	0.4	285	25.7	25.7	8.2	8.2	32.8	32.8	98.6	98.6	6.7	6.7	6.7	4.0	6.1	3	3			3		
					Bottom	7.5	0.3	260	25.6	25.7	8.2	8.2	32.9	32.9	99.0	99.1	6.7	6.7	6.7	4.1	6.1	3	3			3		
						7.5	0.3	264	25.7	25.7	8.2	8.2	32.9	32.9	99.2	99.2	6.7	6.7	6.7	6.1	6.1	2	3			2		
SR1A	Fine	Moderate	17:03	5.2	Surface	1.0	0.1	194	25.9	25.9	8.2	8.2	32.6	32.6	103.6	103.7	7.0	7.0	7.0	3.8	4.7	3	3	819982	812656			
						1.0	0.1	200	25.9	25.9	8.2	8.2	32.6	32.6	103.7	103.7	7.0	7.0	7.0	4.7	4.7	3	3					
					Middle	2.6	0.0	177	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7			-	-	3
						2.6	0.0	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7			-	-	3
					Bottom	4.2	0.0	180	25.7	25.7	8.2	8.2	33.1	33.1	104.9	105.0	7.1	7.1	7.1	4.8	7.1	7.1	2			7.1	2	3
						4.2	0.0	175	25.7	25.7	8.2	8.2	33.1	33.1	105.1	105.1	7.1	7.1	7.1	5.6	7.1	7.1	<2			7.1	<2	3
SR2	Fine	Moderate	17:03	4.6	Surface	1.0	0.2	226	25.9	25.9	8.2	8.2	32.6	32.6	103.6	103.7	7.0	7.0	7.0	3.8	4.7	<2	<2	821439	814152			
						1.0	0.2	220	25.9	25.9	8.2	8.2	32.6	32.6	103.7	103.7	7.0	7.0	7.0	4.7	4.7	<2	<2					
					Middle	-	0.2	243	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7			-	-	2
						-	0.2	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7			-	-	2
					Bottom	3.6	0.2	216	25.7	25.7	8.2	8.2	33.1	33.1	104.9	105.0	7.1	7.1	7.1	4.8	7.1	7.1	2			7.1	2	2
						3.6	0.1	210	25.7	25.7	8.2	8.2	33.1	33.1	105.1	105.1	7.1	7.1	7.1	5.6	7.1	7.1	<2			7.1	<2	2
SR3	Fine	Moderate	16:08	9.5	Surface	1.0	0.1	258	24.4	24.4	8.2	8.2	32.1	32.0	93.9	93.9	6.5	6.5	6.5	2.6	5.2	3	2	822169	807589			
						1.0	0.1	259	24.3	24.4	8.2	8.2	32.0	32.0	93.8	93.8	6.5	6.5	6.5	2.8	5.2	2	5.2			2		
					Middle	4.8	0.1	275	23.9	23.9	8.2	8.2	32.1	32.1	93.1	93.1	6.5	6.5	6.5	5.8	5.2	4	5.2			4	4	
						4.8	0.1	272	23.9	23.9	8.2	8.2	32.1	32.1	93.1	93.1	6.5	6.5	6.5	5.9	5.2	4	5.2			4	4	
					Bottom	8.5	0.1	271	23.9	23.9	8.2	8.2	32.0	32.0	93.8	94.0	6.6	6.6	6.6	6.8	6.6	6.6	3			6.6	3	4
						8.5	0.2	273	23.9	23.9	8.2	8.2	32.0	32.0	94.1	94.1	6.6	6.6	6.6	7.2	6.6	6.6	5			6.6	5	4
SR4A	Fine	Moderate	17:25	9.2	Surface	1.0	0.0	181	23.8	23.8	8.2	8.2	32.0	32.0	94.0	94.0	6.6	6.6	6.6	5.3	7.9	13	13	817187	807827			
						1.0	0.0	181	23.8	23.8	8.2	8.2	32.0	32.0	94.0	94.0	6.6	6.6	6.6	5.3	7.9	13	13					
					Middle	4.6	0.0	183	23.7	23.7	8.2	8.2	32.1	32.1	92.9	92.9	6.6	6.6	6.6	7.7	7.9	15	7.9			15		
						4.6	0.0	186	23.7	23.7	8.2	8.2	32.1	32.1	92.9	92.9	6.5	6.5	6.5	7.9	7.9	14	7.9			14		
					Bottom	8.2	0.0	168	23.7	23.7	8.3	8.3	32.1	32.1	93.0	93.1	6.6	6.6	6.6	10.6	6.6	6.6	16			6.6	16	
						8.2	0.0	170	23.7	23.7	8.3	8.3	32.1	32.1	93.2	93.2	6.6	6.6	6.6	10.7	6.6	6.6	18			6.6	18	
SR8	Fine	Moderate	16:29	4.8	Surface	1.0	-	-	26.8	26.8	8.2	8.2	32.7	32.7	104.8	104.8	7.0	7.0	7.0	8.9	6.6	4	4	820393	811603			
						1.0	-	-	26.8	26.8	8.2	8.2	32.7	32.7	104.8	104.8	7.0	7.0	7.0	6.5	6.6	4	4					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6			-	-	3
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6			-	-	3
					Bottom	3.8	-	-	25.7	25.7	8.2	8.2	33.0	33.0	102.0	102.2	6.9	6.9	6.9	6.3	6.9	6.9	<2			6.9	<2	3
						3.8	-	-	25.7	25.7	8.2	8.2	33.0	33.0	102.3	102.3	6.9	6.9	6.9	4.6	6.9	6.9	<2			6.9	<2	3

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value
C1	Fine	Moderate	12:08	8.0	Surface	8.0	0.4	204	25.0	25.0	8.2	8.2	35.2	35.2	96.1	96.1	6.5	6.5	7.1	9.9	8	815605	804225		
						8.0	0.4	211	25.0	25.0	8.2	8.2	35.2	35.2	96.1	96.1	6.5								
					Middle	8.0	0.3	199	25.0	25.0	8.2	8.2	35.2	35.2	95.2	95.2	6.4							6.4	7.7
						8.0	0.3	206	25.0	25.0	8.2	8.2	35.2	35.2	95.1	95.2	6.4							6.4	7.7
					Bottom	8.0	0.3	218	24.9	24.9	8.2	8.2	35.2	35.2	96.6	96.7	6.5							6.6	14.9
						8.0	0.3	223	24.9	24.9	8.2	8.2	35.2	35.2	96.8	96.7	6.6							6.6	14.7
C2	Fine	Moderate	11:10	11.2	Surface	11.2	0.1	168	25.1	25.1	8.2	8.2	33.6	33.6	98.3	98.3	6.7	6.7	6.7	6.4	6	825693	806955		
						11.2	0.1	175	25.1	25.1	8.2	8.2	33.6	33.6	98.3	98.3	6.7								
					Middle	11.2	0.1	186	25.0	25.0	8.2	8.2	33.7	33.7	97.7	97.7	6.7							6.7	3.3
						11.2	0.1	191	25.0	25.0	8.2	8.2	33.7	33.7	97.6	97.6	6.7							6.7	3.3
					Bottom	11.2	0.2	149	24.9	25.0	8.2	8.2	33.9	33.9	97.1	97.2	6.6							6.6	13.7
						11.2	0.2	141	25.0	25.0	8.2	8.2	33.9	33.9	97.2	97.2	6.6							6.6	13.1
C3	Fine	Moderate	12:16	8.2	Surface	8.2	0.4	66	25.0	25.0	8.2	8.2	32.2	32.2	91.6	91.9	6.3	6.5	2.4	4	822100	817786			
						8.2	0.3	72	25.0	25.0	8.2	8.2	32.2	32.2	92.1	91.9	6.3								
					Middle	8.2	0.3	94	25.0	25.0	8.2	8.2	32.2	32.2	95.8	96.1	6.6						6.5	2.4	
						8.2	0.3	89	25.0	25.0	8.2	8.2	32.2	32.2	96.4	96.1	6.6						6.5	2.5	
					Bottom	8.2	0.3	78	25.0	25.0	8.2	8.2	32.2	32.2	98.0	98.7	6.8						6.8	3.3	
						8.2	0.3	84	25.0	25.0	8.3	8.2	32.2	32.2	99.4	98.7	6.8						6.8	3.2	
IM1	Fine	Moderate	11:56	7.4	Surface	7.4	0.2	188	25.0	25.0	8.2	8.2	34.7	34.7	97.1	97.0	6.6	6.6	11.2	6	818333	806460			
						7.4	0.1	191	25.0	25.0	8.2	8.2	34.7	34.7	96.9	97.0	6.6								
					Middle	7.4	0.2	200	25.0	25.0	8.2	8.2	34.9	34.9	95.7	95.7	6.5						6.6	11.5	
						7.4	0.2	194	25.0	25.0	8.2	8.2	34.9	34.9	95.7	95.7	6.5						6.6	11.9	
					Bottom	7.4	0.2	204	25.0	25.0	8.2	8.2	35.0	35.0	96.9	97.0	6.6						6.6	15.5	
						7.4	0.1	204	25.0	25.0	8.2	8.2	35.0	35.0	97.0	97.0	6.6						6.6	15.6	
IM2	Fine	Moderate	11:51	8.2	Surface	8.2	0.1	182	25.0	25.0	8.3	8.3	34.7	34.7	97.5	97.5	6.6	6.6	8.4	8	819197	806220			
						8.2	0.2	184	25.0	25.0	8.3	8.3	34.7	34.7	97.4	97.5	6.6								
					Middle	8.2	0.1	163	24.9	24.9	8.3	8.3	34.8	34.8	96.2	96.3	6.5						6.6	12.1	
						8.2	0.1	163	24.9	24.9	8.3	8.3	34.8	34.8	96.3	96.3	6.5						6.6	11.6	
					Bottom	8.2	0.1	188	24.9	24.9	8.2	8.2	34.7	34.7	97.0	97.1	6.6						6.6	8.7	
						8.2	0.2	187	24.9	24.9	8.2	8.2	34.7	34.7	97.2	97.1	6.6						6.6	9.0	
IM7	Fine	Moderate	11:32	7.8	Surface	7.8	0.2	106	25.0	25.0	8.2	8.2	33.8	33.9	99.1	99.0	6.8	6.7	4.7	6	821372	806848			
						7.8	0.2	103	25.0	25.0	8.2	8.2	33.9	33.9	98.9	99.0	6.7								
					Middle	7.8	0.2	114	24.9	24.9	8.2	8.2	34.0	34.1	97.1	97.0	6.6						6.7	3.6	
						7.8	0.2	109	24.9	24.9	8.2	8.2	34.1	34.1	96.9	97.0	6.6						6.7	3.9	
					Bottom	7.8	0.2	108	24.9	24.9	8.2	8.2	34.4	34.4	95.4	95.5	6.5						6.5	8.1	
						7.8	0.2	111	24.9	24.9	8.2	8.2	34.4	34.4	95.5	95.5	6.5						6.5	8.3	

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Water Quality Monitoring

Water Quality Monitoring Results on 25 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA		
IM10	Fine	Moderate	11:11	7.8	Surface	7.8	0.2	75	24.6	24.6	8.3	8.3	31.3	31.3	100.6	100.6	7.0	7.0	1.6	1.6	5	5	822247	809834				
						7.8	0.2	70	24.6	24.6	8.3	8.3	31.3	31.3	100.5	100.6	7.0	7.0	1.6	1.6	7	7						
					Middle	7.8	0.2	92	24.6	24.6	8.3	8.3	31.3	31.3	100.6	100.7	7.0	7.0	2.4	2.4	5	5			6	6		
						7.8	0.3	88	24.6	24.6	8.3	8.3	31.3	31.3	100.8	100.8	7.0	7.0	2.5	2.5	7	7						
					Bottom	7.8	0.3	81	24.6	24.6	8.3	8.3	31.3	31.3	101.3	101.4	7.1	7.1	2.4	2.4	5	5			4	4		
						7.8	0.3	77	24.6	24.6	8.4	8.3	31.4	31.3	101.5	101.4	7.1	7.1	2.4	2.4	4	4						
IM11	Fine	Moderate	11:18	8.6	Surface	8.6	0.3	82	24.7	24.7	8.3	8.3	31.7	31.7	100.0	100.1	6.9	7.0	1.1	1.1	5	5	821481	810554				
						8.6	0.3	75	24.7	24.7	8.3	8.3	31.7	31.7	100.1	100.1	7.0	7.0	1.1	1.1	6	6						
					Middle	8.6	0.2	83	24.7	24.7	8.3	8.3	31.7	31.7	100.5	100.6	7.0	7.0	1.6	1.6	5	5			5	5		
						8.6	0.3	90	24.7	24.7	8.3	8.3	31.7	31.7	100.7	100.6	7.0	7.0	1.5	1.5	5	5						
					Bottom	8.6	0.3	82	24.6	24.6	8.3	8.3	31.7	31.7	101.2	101.5	7.0	7.1	2.8	2.8	4	4			4	4		
						8.6	0.3	83	24.6	24.6	8.3	8.3	31.7	31.7	101.8	101.5	7.1	7.1	2.8	2.8	4	4						
IM12	Fine	Moderate	11:23	7.8	Surface	7.8	0.3	91	24.7	24.7	8.2	8.2	31.7	31.7	100.2	100.3	7.0	7.0	1.1	1.1	6	6	821150	811535				
						7.8	0.4	90	24.7	24.7	8.2	8.2	31.7	31.7	100.4	100.3	7.0	7.0	1.1	1.1	4	4						
					Middle	7.8	0.3	106	24.7	24.7	8.2	8.2	31.7	31.7	100.8	100.9	7.0	7.0	2.1	2.1	6	6			6	6		
						7.8	0.4	107	24.7	24.7	8.2	8.2	31.7	31.7	101.0	100.9	7.0	7.0	2.1	2.1	6	6						
					Bottom	7.8	0.3	88	24.7	24.7	8.2	8.2	31.6	31.6	101.8	102.1	7.1	7.1	2.3	2.3	5	5			7	7		
						7.8	0.4	85	24.7	24.7	8.2	8.2	31.6	31.6	102.4	102.1	7.1	7.1	2.3	2.3	7	7						
SR1A	Fine	Moderate	11:45	4.8	Surface	4.8	0.1	26	24.6	24.6	8.2	8.2	31.6	31.6	96.7	96.8	6.7	6.7	2.5	2.5	4	4	819981	812655				
						4.8	0.1	25	24.6	24.6	8.2	8.2	31.6	31.6	96.9	96.8	6.7	6.7	2.6	2.6	4	4						
					Middle	4.8	0.0	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	4	4
						4.8	0.0	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		
					Bottom	4.8	0.0	37	24.6	24.6	8.2	8.2	31.6	31.6	97.1	97.3	6.8	6.8	3.1	3.1	4	4			5	5		
						4.8	0.0	35	24.6	24.6	8.2	8.2	31.6	31.6	97.5	97.3	6.8	6.8	3.1	3.1	5	5						
SR2	Fine	Moderate	11:58	5.0	Surface	5.0	0.3	67	24.8	24.8	8.2	8.2	31.6	31.6	101.1	101.3	7.0	7.0	1.6	1.6	6	6	821455	814160				
						5.0	0.3	74	24.8	24.8	8.2	8.2	31.6	31.6	101.5	101.3	7.0	7.0	1.6	1.6	6	6						
					Middle	-	0.3	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	6	6
						-	0.3	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		
					Bottom	5.0	0.3	71	24.7	24.7	8.2	8.2	31.7	31.6	102.4	102.7	7.1	7.2	2.9	2.9	5	5			6	6		
						5.0	0.3	76	24.7	24.7	8.2	8.2	31.6	31.6	102.9	102.7	7.2	7.2	2.8	2.8	6	6						
SR3	Fine	Moderate	11:26	9.4	Surface	9.4	0.2	143	25.1	25.1	8.2	8.2	33.6	33.6	99.6	99.6	6.8	6.8	2.4	2.4	6	6	822161	807563				
						9.4	0.2	144	25.1	25.1	8.2	8.2	33.6	33.6	99.5	99.6	6.8	6.8	2.4	2.4	6	6						
					Middle	9.4	0.2	139	25.0	25.0	8.2	8.2	33.9	33.9	97.4	97.4	6.6	6.6	6.4	6.4	5	5			6	6		
						9.4	0.2	137	25.0	25.0	8.2	8.2	33.9	33.9	97.3	97.3	6.6	6.6	6.7	6.7	6	6						
					Bottom	9.4	0.1	133	25.0	25.0	8.3	8.3	34.2	34.2	97.8	97.9	6.7	6.7	12.4	12.4	5	5			6	6		
						9.4	0.1	129	25.0	25.0	8.3	8.3	34.2	34.2	97.9	97.9	6.7	6.7	12.7	12.7	6	6						
SR4A	Fine	Moderate	12:26	9.2	Surface	9.2	0.0	83	25.0	25.0	8.3	8.3	34.8	34.8	96.6	96.6	6.6	6.6	5.5	5.5	9	9	817181	807812				
						9.2	0.1	80	25.0	25.0	8.3	8.3	34.8	34.8	96.6	96.6	6.6	6.6	5.6	5.6	9	9						
					Middle	9.2	0.1	95	25.0	25.0	8.3	8.3	34.8	34.8	95.9	95.9	6.5	6.5	7.2	7.2	10	10			9	9		
						9.2	0.1	93	25.0	25.0	8.3	8.3	34.8	34.8	95.9	95.9	6.5	6.5	7.4	7.4	8	8						
					Bottom	9.2	0.0	99	25.0	25.0	8.3	8.3	34.8	34.8	97.3	97.4	6.6	6.6	8.3	8.3	10	10			8	8		
						9.2	0.0	102	25.0	25.0	8.3	8.3	34.8	34.8	97.4	97.4	6.6	6.6	8.3	8.3	8	8						
SR8	Fine	Moderate	11:28	4.6	Surface	4.6	-	-	24.7	24.7	8.2	8.2	31.5	31.5	101.4	101.6	7.1	7.1	2.4	2.4	5	5	820374	811630				
						4.6	-	-	24.6	24.6	8.2	8.2	31.5	31.5	101.8	101.6	7.1	7.1	2.3	2.3	5	5						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	5	5
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		
					Bottom	4.6	-	-	24.6	24.6	8.2	8.2	31.5	31.4	102.3	102.7	7.1	7.2	3.8	3.8	6	6			4	4		
						4.6	-	-	24.6	24.6	8.2	8.2	31.4	31.4	103.0	102.7	7.2	7.2	3.9	3.9	4	4						

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)										
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA												
C1	Fine	Moderate	06:45	8.0	Surface	8.0	0.4	28	25.0	25.0	8.2	8.2	35.2	35.2	93.8	93.8	6.4	6.4	10.9	12.2	11	12	815630	804256										
						8.0	0.4	21	25.0	8.2	8.2	35.2	35.2	93.8	6.4	10.8	11																	
					Middle	8.0	0.4	19	24.9	24.9	8.2	8.2	35.2	35.2	93.9	94.0	6.4		11.1		12													
						8.0	0.4	19	24.9	24.9	8.2	8.2	35.2	35.2	94.0	6.4	11.3		12															
					Bottom	8.0	0.4	43	24.9	24.9	8.2	8.2	35.2	35.2	95.0	95.1	6.4		14.9		12													
						8.0	0.4	39	24.9	24.9	8.2	8.2	35.2	35.2	95.2	95.1	6.5		14.3		12													
					C2	Fine	Moderate	07:51	10.6	Surface	10.6	0.5	4	25.1	25.1	8.2	8.2		33.6		33.6				98.2	98.2	6.7	6.7	2.9	7.5	6	6	825679	806934
											10.6	0.5	7	25.1	25.1	8.2	8.2		33.6		33.6				98.2	6.7	3.0		6					
Middle	10.6	0.4	6	25.0						25.0	8.2	8.2	33.8	33.8	97.2	97.2	6.6	4.2	7															
	10.6	0.5	2	25.0						25.0	8.2	8.2	33.8	33.8	97.1	97.0	6.6	4.3	6															
Bottom	10.6	0.4	2	24.9						24.9	8.2	8.2	33.9	33.9	96.9	97.0	6.6	15.2	5															
	10.6	0.5	357	24.9						24.9	8.2	8.2	33.9	33.9	97.0	97.0	6.6	15.7	5															
C3	Fine	Moderate	07:22	8.8						Surface	8.8	0.5	267	25.0	25.0	8.0	8.0	31.9	31.9	84.7	84.7	5.8	5.9	1.0	2.6	6	5		822104		817802			
											8.8	0.4	270	25.0	25.0	8.0	8.0	31.9	31.9	84.7	5.8	1.0		5										
					Middle	8.8	0.4	270	25.0	25.0	8.0	8.0	31.9	31.8	85.0	85.1	5.9	2.9	6															
						8.8	0.4	277	25.0	25.0	8.0	8.0	31.8	31.8	85.1	85.1	5.9	3.0	4															
					Bottom	8.8	0.4	276	25.0	25.0	8.0	8.0	31.8	31.8	86.0	86.3	5.9	4.0	6															
						8.8	0.5	282	25.0	25.0	8.0	8.0	31.8	31.8	86.5	86.3	6.0	3.8	5															
					IM1	Fine	Moderate	07:00	6.8	Surface	6.8	0.3	8	25.0	25.0	8.2	8.2	34.6	34.6	95.5	95.5	6.5		6.5		7.6		9.3		11		9	818354	806478
											6.8	0.3	14	25.0	25.0	8.2	8.2	34.6	34.6	95.4	95.3	6.5				7.6				9				
Middle	6.8	0.2	33	25.0						25.0	8.2	8.2	34.6	34.6	95.3	95.3	6.5	8.2	8															
	6.8	0.3	26	25.0						25.0	8.2	8.2	34.6	34.6	95.3	95.3	6.5	8.3	9															
Bottom	6.8	0.2	9	24.9						24.9	8.2	8.2	34.7	34.7	96.0	96.1	6.5	11.9	8															
	6.8	0.2	3	24.9						24.9	8.2	8.2	34.7	34.7	96.1	96.1	6.5	12.3	8															
IM2	Fine	Moderate	07:05	7.7						Surface	7.7	0.3	8	24.9	24.9	8.2	8.2	34.6	34.6	96.6	96.6	6.6	6.6		5.2	5.2	14		11	819161	806238			
											7.7	0.3	15	24.9	24.9	8.2	8.2	34.6	34.6	96.6	96.6	6.6			5.2		12							
					Middle	7.7	0.2	16	24.9	24.9	8.2	8.2	34.7	34.7	96.9	96.9	6.6	5.1	12															
						7.7	0.3	10	24.9	24.9	8.2	8.2	34.7	34.7	96.9	96.9	6.6	5.1	13															
					Bottom	7.7	0.3	31	24.8	24.8	8.2	8.2	34.7	34.7	97.7	97.8	6.7	5.5	8															
						7.7	0.3	37	24.8	24.8	8.2	8.2	34.7	34.7	97.9	97.8	6.7	5.5	9															
					IM7	Fine	Moderate	07:28	8.2	Surface	8.2	0.3	6	25.0	25.0	8.3	8.3	33.7	33.7	98.4	98.3	6.7		6.6	2.2		4.4	8				7	821343	806825
											8.2	0.3	10	25.0	25.0	8.3	8.3	33.8	33.8	98.2	98.3	6.7			2.2			10						
Middle	8.2	0.3	347	24.9						24.9	8.3	8.3	34.3	34.3	96.0	96.0	6.5	4.6	6															
	8.2	0.2	350	24.9						24.9	8.3	8.3	34.3	34.3	95.9	96.0	6.5	4.7	6															
Bottom	8.2	0.2	13	24.9						24.9	8.3	8.3	34.4	34.4	96.1	96.2	6.6	6.3	6															
	8.2	0.2	8	24.9						24.9	8.3	8.3	34.4	34.4	96.3	96.2	6.6	6.2	8															

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
IM10	Fine	Moderate	08:25	8.0	Surface	8.0	0.4	295	24.6	24.6	8.2	8.2	31.6	31.6	99.2	99.3	6.9	7.0	1.0	1.8	5	5	822235	809829		
						8.0	0.4	292	24.6	24.6	8.2	8.2	31.6	31.6	99.4	99.3	6.9	7.0	1.0	1.8	6					
					Middle	8.0	0.4	307	24.6	24.6	8.2	8.2	31.6	31.6	100.1	100.3	7.0	7.0	1.9	1.8	5					
						8.0	0.4	301	24.6	24.6	8.2	8.2	31.6	31.6	100.5	100.3	7.0	7.0	1.9	1.8	4					
					Bottom	8.0	0.4	313	24.6	24.6	8.3	8.3	31.6	31.6	101.6	102.1	7.1	7.2	2.3	7.2	2.3				5	
						8.0	0.4	305	24.6	24.6	8.3	8.3	31.6	31.6	102.6	102.1	7.2	7.2	2.4	7.2	2.4				7	
IM11	Fine	Moderate	08:19	8.4	Surface	8.4	0.5	293	24.7	24.7	8.3	8.3	31.6	31.6	97.5	97.6	6.8	6.8	2.1	3.1	5	821510	810557			
						8.4	0.5	297	24.7	24.7	8.3	8.3	31.5	31.6	97.7	97.6	6.8	6.8	2.1							
					Middle	8.4	0.4	266	24.7	24.7	8.3	8.3	31.5	31.5	98.2	98.4	6.8	6.8	3.2					7		
						8.4	0.5	272	24.7	24.7	8.3	8.3	31.5	31.5	98.5	98.4	6.8	6.8	3.1					5		
					Bottom	8.4	0.4	288	24.7	24.7	8.3	8.3	31.5	31.4	99.5	99.8	6.9	7.0	4.0					7.0	4.0	5
						8.4	0.4	293	24.7	24.7	8.3	8.3	31.4	31.4	100.1	99.8	7.0	7.0	4.0					7.0	4.0	4
IM12	Fine	Moderate	08:13	7.8	Surface	7.8	0.4	287	24.6	24.6	8.2	8.2	31.6	31.6	97.9	98.0	6.8	6.9	1.3	2.2	5	821184	811528			
						7.8	0.5	289	24.6	24.6	8.2	8.2	31.6	31.6	98.0	98.0	6.8	6.8	1.3							
					Middle	7.8	0.5	279	24.6	24.6	8.2	8.2	31.6	31.6	98.6	98.8	6.9	6.9	2.3					6.9	2.3	5
						7.8	0.5	283	24.6	24.6	8.2	8.2	31.6	31.6	99.0	98.8	6.9	6.9	2.4					6.9	2.4	5
					Bottom	7.8	0.4	281	24.6	24.6	8.2	8.2	31.5	31.5	100.0	100.5	7.0	7.0	3.0					7.0	3.0	5
						7.8	0.4	282	24.6	24.6	8.2	8.2	31.5	31.5	100.9	100.5	7.0	7.0	3.1					7.0	3.1	6
SR1A	Fine	Moderate	07:52	4.4	Surface	4.4	0.0	210	24.4	24.4	8.2	8.2	31.6	31.6	99.6	100.0	7.0	7.0	5.8	5.9	5	819970	812665			
						4.4	0.1	215	24.4	24.4	8.2	8.2	31.6	31.6	100.3	100.0	7.0	7.0	5.7							
					Middle	4.4	0.0	222	-	-	-	-	-	-	-	-	-	-	-					-	-	-
						4.4	0.1	218	-	-	-	-	-	-	-	-	-	-	-					-	-	-
					Bottom	4.4	-	209	24.3	24.3	8.2	8.2	31.6	31.6	100.7	100.8	7.0	7.1	6.0					7.1	6.0	4
						4.4	0.0	211	24.4	24.4	8.2	8.2	31.5	31.6	100.9	100.8	7.1	7.1	6.0					7.1	6.0	4
SR2	Fine	Moderate	07:41	5.8	Surface	5.8	0.1	241	24.7	24.7	8.2	8.2	31.6	31.6	94.7	94.7	6.6	6.6	1.7	2.1	4	821456	814167			
						5.8	0.1	234	24.7	24.7	8.2	8.2	31.6	31.6	94.7	94.7	6.6	6.6	1.7							
					Middle	-	0.1	240	-	-	-	-	-	-	-	-	-	-	-					-	-	-
						-	0.1	243	-	-	-	-	-	-	-	-	-	-	-					-	-	-
					Bottom	5.8	0.0	219	24.7	24.7	8.2	8.2	31.6	31.6	94.8	94.9	6.6	6.6	2.6					6.6	2.6	5
						5.8	0.1	211	24.7	24.7	8.2	8.2	31.6	31.6	94.9	94.9	6.6	6.6	2.6					6.6	2.6	4
SR3	Fine	Moderate	07:35	9.2	Surface	9.2	0.4	346	25.1	25.1	8.2	8.2	33.6	33.6	98.9	98.8	6.7	6.7	3.0	9.0	5	822153	807585			
						9.2	0.4	344	25.1	25.1	8.2	8.2	33.6	33.6	98.7	98.8	6.7	6.7	3.2							
					Middle	9.2	0.4	333	25.0	25.0	8.2	8.2	34.1	34.1	96.7	96.7	6.6	6.6	10.3					6.6	10.3	5
						9.2	0.4	329	25.0	25.0	8.2	8.2	34.1	34.1	96.7	96.7	6.6	6.6	10.9					6.6	10.9	4
					Bottom	9.2	0.4	329	24.9	24.9	8.2	8.2	34.2	34.2	97.3	97.4	6.6	6.6	13.3					6.6	13.3	5
						9.2	0.5	328	24.9	24.9	8.2	8.2	34.2	34.2	97.4	97.4	6.6	6.6	13.2					6.6	13.2	5
SR4A	Fine	Moderate	06:27	9.0	Surface	9.0	0.0	197	25.0	25.0	8.1	8.1	34.8	34.8	95.2	95.2	6.5	6.5	8.2	10.0	15	817175	807821			
						9.0	0.1	200	25.0	25.0	8.1	8.1	34.8	34.8	95.2	95.2	6.5	6.5	8.2							
					Middle	9.0	0.0	230	25.0	25.0	8.0	8.0	34.9	34.9	95.0	95.0	6.5	6.5	10.2					6.5	10.2	14
						9.0	0.0	234	24.9	24.9	8.0	8.0	34.9	34.9	95.0	95.0	6.4	6.4	10.4					6.4	10.4	14
					Bottom	9.0	0.0	193	24.9	24.9	8.0	8.0	34.9	34.9	95.0	95.0	6.4	6.5	11.7					6.5	11.7	15
						9.0	0.1	187	24.9	24.9	8.0	8.0	34.9	34.9	95.0	95.0	6.5	6.5	11.6					6.5	11.6	16
SR8	Fine	Moderate	08:08	4.2	Surface	4.2	-	-	24.7	24.7	8.3	8.3	31.4	31.4	101.4	101.6	7.1	7.1	2.4	3.1	5	820372	811605			
						4.2	-	-	24.7	24.7	8.3	8.3	31.4	31.4	101.7	101.6	7.1	7.1	2.4							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	
					Bottom	4.2	-	-	24.6	24.6	8.3	8.3	31.4	31.4	102.1	102.4	7.1	7.2	3.7					7.2	3.7	4
						4.2	-	-	24.6	24.6	8.3	8.3	31.4	31.4	102.7	102.4	7.2	7.2	3.7					7.2	3.7	4

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

Water Quality Monitoring Results on 27 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Moderate	13:40	8.4	Surface	1.0	0.3	196	25.3	8.3	8.3	33.7	33.7	102.9	102.9	7.0	6.8	2.3	7.6	7	7	815632	804246	
						1.0	0.2	189	25.2	8.3	8.3	33.7	33.7	102.8	102.9	7.0		2.4		6				
					Middle	4.2	0.2	207	24.7	8.3	8.3	34.6	34.6	96.1	96.1	6.6		6.6		7.8				8
						4.2	0.2	207	24.7	8.3	8.3	34.6	34.6	96.0	96.1	6.6		6.6		8.2				7
					Bottom	7.4	0.3	199	24.7	8.2	8.2	34.7	34.7	96.4	96.6	6.6		6.6		12.5				7
						7.4	0.2	200	24.7	8.2	8.2	34.7	34.7	96.8	96.6	6.6		6.6		12.6				8
C2	Fine	Moderate	12:41	11.1	Surface	1.0	0.0	166	25.2	8.3	8.3	32.9	32.9	97.3	97.2	6.6	6.6	4.8	8.4	4	9	825704	806965	
						1.0	0.1	167	25.2	8.3	8.3	33.0	33.0	97.1	97.2	6.6		5.1		6				
					Middle	5.6	0.0	153	25.0	8.3	8.3	33.4	33.5	95.9	95.9	6.6		6.6		9.1				8
						5.6	0.0	150	25.0	8.3	8.3	33.5	33.5	95.9	95.9	6.6		6.6		9.5				9
					Bottom	10.1	0.0	149	25.0	8.3	8.3	33.7	33.7	95.9	96.0	6.6		6.6		11.0				12
						10.1	0.0	151	25.0	8.3	8.3	33.7	33.7	96.0	96.0	6.6		6.6		10.8				13
C3	Fine	Moderate	13:32	8.2	Surface	1.0	0.2	81	25.1	8.3	8.3	31.9	31.9	96.4	96.4	6.6	6.6	2.7	3.3	6	8	822101	817824	
						1.0	0.2	77	25.1	8.3	8.3	31.9	31.9	96.4	96.4	6.6		2.7		7				
					Middle	4.1	0.2	56	25.2	8.3	8.3	31.9	31.9	96.4	96.5	6.6		6.6		3.1				7
						4.1	0.2	61	25.2	8.3	8.3	31.9	31.9	96.5	96.5	6.6		6.6		3.2				8
					Bottom	7.2	0.2	64	25.5	8.3	8.3	31.7	31.7	97.2	97.4	6.7		6.7		4.1				10
						7.2	0.3	59	25.6	8.3	8.3	31.6	31.7	97.6	97.4	6.7		6.7		4.1				9
IM1	Fine	Moderate	13:27	6.5	Surface	1.0	0.1	171	25.4	8.3	8.3	34.3	34.3	101.6	101.6	6.9	6.7	4.2	7.6	8	9	818338	806457	
						1.0	0.1	174	25.4	8.3	8.3	34.3	34.3	101.5	101.6	6.9		4.2		8				
					Middle	3.3	0.1	175	24.7	8.3	8.3	34.5	34.5	95.5	95.4	6.5		6.5		7.7				8
						3.3	0.2	168	24.7	8.3	8.3	34.5	34.5	95.3	95.4	6.5		6.5		7.7				8
					Bottom	5.5	0.1	191	24.7	8.3	8.3	34.5	34.5	94.4	94.4	6.5		6.5		10.8				9
						5.5	0.1	187	24.7	8.3	8.3	34.5	34.5	94.4	94.4	6.4		6.5		10.7				10
IM2	Fine	Moderate	13:22	7.4	Surface	1.0	0.1	179	25.3	8.3	8.3	34.2	34.2	100.8	100.8	6.8	6.7	4.6	6.6	8	8	819181	806253	
						1.0	0.1	173	25.3	8.3	8.3	34.2	34.2	100.7	100.8	6.8		4.7		9				
					Middle	3.7	0.1	158	24.7	8.3	8.3	34.4	34.4	96.2	96.2	6.6		6.6		8.1				7
						3.7	0.1	156	24.7	8.3	8.3	34.4	34.4	96.2	96.2	6.6		6.6		8.1				8
					Bottom	6.4	0.1	173	24.7	8.3	8.3	34.5	34.5	96.6	96.7	6.6		6.6		7.0				8
						6.4	0.1	166	24.7	8.3	8.3	34.5	34.5	96.7	96.7	6.6		6.6		7.0				7
IM7	Fine	Moderate	13:05	8.4	Surface	1.0	0.2	75	25.3	8.3	8.3	33.0	33.0	101.2	101.2	6.9	6.8	1.3	4.4	8	9	821365	806823	
						1.0	0.2	78	25.3	8.3	8.3	33.0	33.0	101.2	101.2	6.9		1.4		8				
					Middle	4.2	0.1	103	24.8	8.2	8.2	34.1	34.1	96.2	96.2	6.6		6.6		2.9				9
						4.2	0.1	106	24.8	8.2	8.2	34.1	34.1	96.2	96.2	6.6		6.6		3.0				9
					Bottom	7.4	0.1	99	24.7	8.2	8.2	34.3	34.3	96.6	96.7	6.6		6.6		9.0				9
						7.4	0.1	102	24.7	8.2	8.2	34.3	34.3	96.7	96.7	6.6		6.6		8.7				9

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

Water Quality Monitoring Results on 27 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
IM10	Fine	Moderate	12:30	7.8	Surface	1.0	0.1	62	24.7	24.7	8.3	8.3	30.7	30.7	99.1	99.1	6.9	6.9	1.1	1.1	6	6	822257	809820				
						1.0	0.2	65	24.6	24.6	8.3	8.3	30.8	30.7	99.0	99.1	6.9	6.9	1.1	1.1	7	7						
					Middle	3.9	0.1	64	24.6	24.6	8.3	8.3	30.9	30.9	99.0	99.1	6.9	6.9	2.5	2.5	7	7						
						3.9	0.1	70	24.6	24.6	8.3	8.3	30.9	30.9	99.2	99.1	6.9	6.9	2.4	2.4	6	6						
					Bottom	6.8	0.2	88	24.6	24.6	8.3	8.3	30.9	30.9	99.8	99.9	7.0	7.0	3.1	3.1	7	7						
						6.8	0.2	94	24.6	24.6	8.3	8.3	30.9	30.9	100.0	99.9	7.0	7.0	3.1	3.1	7	7						
IM11	Fine	Moderate	12:39	8.2	Surface	1.0	0.1	92	24.6	24.6	8.3	8.3	31.3	31.3	100.5	100.5	7.0	7.0	1.3	1.3	8	8	821495	810529				
						1.0	0.1	98	24.6	24.6	8.3	8.3	31.3	31.3	100.4	100.5	7.0	7.0	1.3	1.3	9	9						
					Middle	4.1	0.2	67	24.6	24.6	8.3	8.3	31.4	31.4	100.3	100.3	7.0	7.0	2.6	2.6	8	8						
						4.1	0.2	63	24.6	24.6	8.3	8.3	31.4	31.4	100.3	100.3	7.0	7.0	2.5	2.5	7	7						
					Bottom	7.2	0.2	108	24.6	24.6	8.3	8.3	31.5	31.4	100.5	100.6	7.0	7.0	3.5	3.5	7	7						
						7.2	0.1	111	24.6	24.6	8.3	8.3	31.4	31.4	100.7	100.6	7.0	7.0	3.4	3.4	7	7						
IM12	Fine	Moderate	12:43	7.2	Surface	1.0	0.2	82	24.6	24.6	8.3	8.3	31.5	31.5	100.6	100.5	7.0	7.0	1.6	1.6	9	9	821157	811528				
						1.0	0.2	80	24.6	24.6	8.3	8.3	31.5	31.5	100.4	100.5	7.0	7.0	1.6	1.6	8	8						
					Middle	3.6	0.1	82	24.6	24.6	8.3	8.3	31.5	31.5	100.3	100.3	7.0	7.0	2.5	2.5	8	8						
						3.6	0.1	75	24.6	24.6	8.3	8.3	31.5	31.5	100.3	100.3	7.0	7.0	2.6	2.6	8	8						
					Bottom	6.2	0.2	108	24.6	24.6	8.3	8.3	31.5	31.5	100.8	100.9	7.0	7.0	3.7	3.7	7	7						
						6.2	0.2	108	24.6	24.6	8.3	8.3	31.5	31.5	100.9	100.9	7.0	7.0	3.6	3.6	7	7						
SR1A	Fine	Moderate	13:03	4.2	Surface	1.0	0.0	15	24.5	24.5	8.3	8.3	31.6	31.6	100.7	100.7	7.0	7.0	3.2	3.2	7	7	819973	812655				
						1.0	-	15	24.5	24.5	8.3	8.3	31.6	31.6	100.6	100.7	7.0	7.0	3.3	3.3	7	7						
					Middle	2.1	0.0	354	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	8	8
						2.1	0.1	357	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	8	8
					Bottom	3.2	-	2	24.4	24.5	8.3	8.3	31.6	31.6	100.6	100.6	7.0	7.0	4.5	4.5	8	8						
						3.2	0.0	8	24.5	24.5	8.3	8.3	31.6	31.6	100.6	100.6	7.0	7.0	4.6	4.6	9	9						
SR2	Fine	Moderate	13:15	5.0	Surface	1.0	0.2	45	24.8	24.8	8.3	8.3	31.6	31.6	101.2	101.2	7.0	7.0	2.7	2.7	7	7	821445	814146				
						1.0	0.2	38	24.8	24.8	8.3	8.3	31.6	31.6	101.1	101.2	7.0	7.0	2.8	2.8	6	6						
					Middle	-	0.1	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	7	7
						-	0.1	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	7	7
					Bottom	4.0	0.2	48	24.8	24.8	8.3	8.3	31.6	31.5	100.9	100.9	7.0	7.0	3.0	3.0	6	6						
						4.0	0.2	42	24.8	24.8	8.3	8.3	31.5	31.5	100.8	100.9	7.0	7.0	3.0	3.0	7	7						
SR3	Fine	Moderate	12:59	8.9	Surface	1.0	0.1	124	25.1	25.1	8.3	8.3	32.6	32.6	100.0	99.9	6.9	6.9	2.3	2.3	8	8	822139	807556				
						1.0	0.1	127	25.1	25.1	8.3	8.3	32.7	32.6	99.8	99.9	6.8	6.8	2.4	2.4	7	7						
					Middle	4.5	0.1	132	25.0	25.0	8.3	8.3	33.2	33.2	98.3	98.3	6.7	6.7	4.1	4.1	6	6						
						4.5	0.1	129	25.0	25.0	8.3	8.3	33.2	33.2	98.2	98.3	6.7	6.7	3.9	3.9	6	6						
					Bottom	7.9	0.1	97	24.9	24.9	8.3	8.3	34.0	34.0	98.3	98.3	6.7	6.7	9.0	9.0	6	6						
						7.9	0.1	94	24.9	24.9	8.3	8.3	34.0	34.0	98.3	98.3	6.7	6.7	9.0	9.0	6	6						
SR4A	Fine	Moderate	13:55	8.8	Surface	1.0	0.1	53	25.2	25.2	8.4	8.4	34.3	34.3	101.7	101.7	6.9	6.9	4.0	4.0	7	7	817171	807833				
						1.0	0.1	58	25.2	25.2	8.4	8.4	34.3	34.3	101.6	101.7	6.9	6.9	4.0	4.0	7	7						
					Middle	4.4	0.0	51	25.1	25.1	8.4	8.4	34.4	34.4	100.9	100.9	6.9	6.9	3.8	3.8	8	8						
						4.4	0.0	54	25.1	25.1	8.4	8.4	34.4	34.4	100.8	100.9	6.8	6.8	3.8	3.8	7	7						
					Bottom	7.8	0.0	37	25.0	25.0	8.4	8.4	34.5	34.5	99.9	99.9	6.8	6.8	4.1	4.1	8	8						
						7.8	0.0	41	25.0	25.0	8.4	8.4	34.5	34.5	99.8	99.9	6.8	6.8	4.1	4.1	8	8						
SR8	Fine	Moderate	12:48	4.6	Surface	1.0	-	-	24.7	24.7	8.3	8.3	31.5	31.5	101.5	101.5	7.1	7.1	3.0	3.0	6	6	820387	811615				
						1.0	-	-	24.7	24.7	8.3	8.3	31.5	31.5	101.5	101.5	7.1	7.1	3.1	3.1	7	7						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	7	7
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	7	7
					Bottom	3.6	-	-	24.7	24.7	8.3	8.3	31.5	31.5	101.5	101.6	7.1	7.1	4.1	4.1	7	7						
						3.6	-	-	24.7	24.7	8.3	8.3	31.5	31.5	101.6	101.6	7.1	7.1	4.1	4.1	7	7						

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Water Quality Monitoring

Water Quality Monitoring Results on 27 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Moderate	08:35	7.8	Surface	1.0	0.5	35	24.7	24.7	8.2	8.2	34.5	34.5	95.3	95.3	6.5	6.5	9.7	10.9	8	8	815603	804265
						1.0	0.5	34	24.7	8.2	8.2	34.5	34.5	95.2	95.3	6.5	6.5	9.9	10.9	8				
					Middle	3.9	0.5	48	24.6	24.6	8.2	8.2	34.9	34.9	93.5	93.5	6.4	6.5	10.2	10.9	8			
						3.9	0.5	43	24.6	24.6	8.2	8.2	34.9	34.9	93.5	93.5	6.4	6.5	10.3	10.9	8			
					Bottom	6.8	0.5	32	24.6	24.6	8.2	8.2	35.0	35.0	95.0	95.1	6.5	6.5	12.8	10.9	8			
						6.8	0.5	38	24.6	24.6	8.2	8.2	35.0	35.0	95.2	95.1	6.5	6.5	12.3	10.9	8			
C2	Fine	Moderate	09:36	11.0	Surface	1.0	0.6	352	25.1	25.1	8.3	8.3	32.9	32.9	99.0	99.0	6.8	6.7	2.6	5.8	5	5	825685	806966
						1.0	0.5	344	25.1	25.1	8.3	8.3	32.9	32.9	98.9	99.0	6.8	6.7	2.7	5.8	5			
					Middle	5.5	0.6	340	25.1	25.1	8.3	8.3	33.2	33.2	97.3	97.3	6.7	6.5	4.3	5.8	5			
						5.5	0.5	344	25.1	25.1	8.3	8.3	33.2	33.2	97.2	97.3	6.6	6.5	4.2	5.8	5			
					Bottom	10.0	0.6	3	24.8	24.8	8.3	8.3	34.0	34.0	94.7	94.7	6.5	6.5	10.4	5.8	5			
						10.0	0.6	357	24.8	24.8	8.3	8.3	34.0	34.0	94.7	94.7	6.5	6.5	10.3	5.8	4			
C3	Fine	Moderate	08:59	9.0	Surface	1.0	0.5	245	24.5	24.5	8.3	8.3	31.4	31.4	97.2	97.2	6.8	6.8	5.1	6.2	9	8	822107	817786
						1.0	0.6	247	24.5	24.5	8.3	8.3	31.4	31.4	97.2	97.2	6.8	6.8	5.1	6.2	8			
					Middle	4.5	0.5	242	24.5	24.5	8.3	8.3	31.4	31.4	97.5	97.6	6.8	6.8	6.5	6.2	8			
						4.5	0.4	244	24.5	24.5	8.3	8.3	31.4	31.4	97.6	97.6	6.8	6.8	6.6	6.2	9			
					Bottom	8.0	0.5	236	24.5	24.5	8.3	8.3	31.4	31.4	97.9	98.0	6.8	6.8	7.0	6.2	8			
						8.0	0.5	238	24.5	24.5	8.3	8.3	31.4	31.4	98.1	98.0	6.8	6.8	7.0	6.2	8			
IM1	Fine	Moderate	08:47	6.8	Surface	1.0	0.3	20	25.0	25.0	8.2	8.2	34.2	34.2	99.0	98.9	6.7	6.7	5.8	9.2	9	8	818340	806454
						1.0	0.3	12	25.0	25.0	8.2	8.2	34.2	34.2	98.7	98.9	6.7	6.7	6.0	9.2	9			
					Middle	3.4	0.3	24	24.8	24.8	8.2	8.2	34.3	34.3	96.0	96.0	6.6	6.6	9.4	9.2	8			
						3.4	0.3	22	24.8	24.8	8.2	8.2	34.3	34.3	96.0	96.0	6.6	6.6	9.5	9.2	7			
					Bottom	5.8	0.3	33	24.7	24.7	8.2	8.2	34.3	34.3	96.0	96.1	6.6	6.6	12.1	9.2	7			
						5.8	0.2	28	24.7	24.7	8.2	8.2	34.3	34.3	96.1	96.1	6.6	6.6	12.4	9.2	6			
IM2	Fine	Moderate	08:53	7.5	Surface	1.0	0.3	26	24.9	24.9	8.2	8.2	34.2	34.2	97.5	97.4	6.7	6.6	6.4	8.9	8	8	819190	806231
						1.0	0.4	32	24.9	24.9	8.2	8.2	34.2	34.2	97.2	97.4	6.6	6.6	6.8	8.9	8			
					Middle	3.8	0.4	6	24.7	24.7	8.2	8.2	34.3	34.3	95.1	95.1	6.5	6.5	10.0	8.9	8			
						3.8	0.3	8	24.7	24.7	8.2	8.2	34.3	34.3	95.1	95.1	6.5	6.5	9.9	8.9	8			
					Bottom	6.5	0.3	16	24.6	24.6	8.2	8.2	34.5	34.5	94.7	94.8	6.5	6.5	10.5	8.9	8			
						6.5	0.3	17	24.6	24.6	8.2	8.2	34.5	34.5	94.9	94.8	6.5	6.5	10.1	8.9	7			
IM7	Fine	Moderate	09:09	8.4	Surface	1.0	0.3	3	25.3	25.3	8.2	8.2	32.3	32.3	101.7	101.7	7.0	6.7	1.3	4.0	11	10	821344	806829
						1.0	0.3	357	25.3	25.3	8.2	8.2	32.3	32.3	101.6	101.7	7.0	6.7	1.3	4.0	11			
					Middle	4.2	0.3	27	24.7	24.7	8.2	8.2	34.2	34.2	94.0	93.9	6.4	6.4	4.5	4.0	11			
						4.2	0.3	22	24.7	24.7	8.2	8.2	34.3	34.2	93.8	93.9	6.4	6.4	4.7	4.0	10			
					Bottom	7.4	0.3	33	24.7	24.7	8.2	8.2	34.5	34.5	93.5	93.6	6.4	6.4	6.1	4.0	8			
						7.4	0.3	37	24.7	24.7	8.2	8.2	34.5	34.5	93.7	93.6	6.4	6.4	6.1	4.0	8			

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring Results on 27 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA					
IM10	Fine	Moderate	10:03	8.6	Surface	1.0	0.4	313	24.4	24.4	8.3	8.3	31.6	31.6	95.8	95.9	6.7	6.7	6.6	6.6	8	9	822257	809833			
						1.0	0.4	319	24.4	8.3	8.3	31.6	31.6	95.9	95.9	6.7	6.7	6.8	6.8	9							
					Middle	4.3	0.4	289	24.4	24.4	8.2	8.2	31.6	31.6	96.5	96.7	6.7	6.7	7.2	7.2	7.4				7.4	9	
						4.3	0.4	289	24.4	8.2	8.2	31.6	31.6	96.9	96.9	6.8	6.8	7.2	7.2	8							
					Bottom	7.6	0.4	318	24.2	24.2	8.2	8.2	31.7	31.7	99.0	99.3	6.9	7.0	8.2	8.2	7.0				7.0	9	
						7.6	0.4	318	24.1	8.2	8.2	31.7	31.7	99.5	99.5	7.0	7.0	8.2	8.2	10							
IM11	Fine	Moderate	09:57	8.6	Surface	1.0	0.4	296	24.4	24.4	8.2	8.2	31.4	31.4	98.3	98.6	6.9	7.0	3.7	3.7	8	8	821494	810551			
						1.0	0.4	288	24.4	8.2	8.2	31.5	31.5	98.8	98.8	6.9	7.0	3.6	3.6	8							
					Middle	4.3	0.4	288	24.2	24.2	8.2	8.2	31.6	31.6	99.5	99.7	7.0	7.0	4.1	4.1	4.4				4.4	9	
						4.3	0.4	291	24.2	8.2	8.2	31.6	31.6	99.8	99.8	7.0	7.0	4.1	4.1	8							
					Bottom	7.6	0.4	298	24.1	24.1	8.2	8.2	31.7	31.7	100.3	100.5	7.0	7.1	5.5	5.5	7.1				7.1	8	
						7.6	0.4	296	24.0	8.2	8.2	31.7	31.7	100.6	100.6	7.1	7.1	5.6	5.6	9							
IM12	Fine	Moderate	09:52	7.4	Surface	1.0	0.4	293	24.4	24.4	8.2	8.2	31.5	31.5	97.9	98.1	6.8	6.9	6.3	6.3	10	11	821184	811507			
						1.0	0.5	285	24.4	8.2	8.2	31.5	31.5	98.3	98.3	6.9	6.9	6.2	6.2	9							
					Middle	3.7	0.4	273	24.2	24.2	8.2	8.2	31.6	31.6	99.3	99.5	7.0	7.0	7.6	7.6	7.3				7.3	11	
						3.7	0.4	278	24.2	8.2	8.2	31.6	31.6	99.7	99.7	7.0	7.0	7.7	7.7	10							
					Bottom	6.4	0.5	300	24.1	24.1	8.2	8.2	31.7	31.7	100.4	100.6	7.0	7.1	8.1	8.1	7.1				7.1	12	
						6.4	0.5	307	24.1	8.2	8.2	31.7	31.7	100.7	100.7	7.1	7.1	8.1	8.1	13							
SR1A	Fine	Moderate	09:31	4.4	Surface	1.0	0.0	218	24.2	24.2	8.3	8.3	31.6	31.6	97.3	97.4	6.8	6.8	3.1	3.1	9	10	819972	812658			
						1.0	-	215	24.2	8.3	8.3	31.6	31.6	97.5	97.5	6.8	6.8	3.1	3.1	10							
					Middle	2.2	0.0	230	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	3.6
						2.2	0.0	226	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	10
					Bottom	3.4	0.1	204	24.2	24.2	8.3	8.3	31.6	31.6	98.3	98.6	6.9	6.9	4.0	4.0	6.9				6.9	11	
						3.4	-	201	24.2	8.3	8.3	31.6	31.6	98.8	98.8	6.9	6.9	4.1	4.1	10							
SR2	Fine	Moderate	09:19	4.8	Surface	1.0	0.1	223	24.5	24.5	8.2	8.2	31.4	31.4	96.3	96.3	6.7	6.7	5.7	5.7	9	10	821457	814165			
						1.0	0.2	217	24.5	8.2	8.2	31.4	31.4	96.3	96.3	6.7	6.7	5.6	5.6	9							
					Middle	-	0.2	228	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	6.2
						-	0.2	235	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	10
					Bottom	3.8	0.1	202	24.5	24.5	8.2	8.2	31.4	31.4	96.5	96.6	6.7	6.7	6.7	6.7	6.7				6.7	10	
						3.8	0.1	196	24.5	8.2	8.2	31.4	31.4	96.6	96.6	6.7	6.7	6.7	6.7	10							
SR3	Fine	Moderate	09:17	9.3	Surface	1.0	0.4	353	25.2	25.2	8.2	8.2	32.6	32.6	101.0	101.0	6.9	6.9	1.6	1.6	8	6	822130	807558			
						1.0	0.4	355	25.2	8.2	8.2	32.6	32.6	100.9	100.9	6.9	6.9	1.7	1.7	7							
					Middle	4.7	0.4	331	24.9	24.9	8.2	8.2	33.5	33.6	97.1	97.0	6.6	6.6	6.5	6.5	7.4				7.4	6	
						4.7	0.4	324	24.9	8.2	8.2	33.6	33.6	96.9	96.9	6.6	6.6	7.0	7.0	7							
					Bottom	8.3	0.4	331	24.8	24.8	8.2	8.2	34.1	34.1	95.6	95.7	6.5	6.5	13.8	13.8	6.5				6.5	4	
						8.3	0.4	337	24.8	8.2	8.2	34.1	34.1	95.7	95.7	6.5	6.5	13.7	13.7	6							
SR4A	Fine	Moderate	08:17	9.1	Surface	1.0	0.0	205	24.7	24.7	8.4	8.4	34.4	34.4	95.5	95.5	6.5	6.5	10.4	10.4	7	8	817210	807800			
						1.0	0.0	200	24.7	8.4	8.4	34.4	34.4	95.4	95.4	6.5	6.5	10.8	10.8	7							
					Middle	4.6	0.1	198	24.7	24.7	8.5	8.5	34.5	34.5	95.1	95.1	6.5	6.5	12.5	12.5	11.9				11.9	7	
						4.6	0.0	196	24.7	8.5	8.5	34.5	34.5	95.1	95.1	6.5	6.5	12.6	12.6	8							
					Bottom	8.1	0.1	187	24.7	24.7	8.5	8.5	34.5	34.5	95.2	95.2	6.5	6.5	13.1	13.1	6.5				6.5	8	
						8.1	0.1	189	24.7	8.5	8.5	34.5	34.5	95.2	95.2	6.5	6.5	12.4	12.4	8							
SR8	Fine	Moderate	09:48	4.0	Surface	1.0	-	-	24.3	24.3	8.2	8.2	31.6	31.6	100.1	100.2	7.0	7.0	4.0	4.0	9	9	820379	811634			
						1.0	-	-	24.2	8.2	8.2	31.6	31.6	100.3	100.3	7.0	7.0	3.9	3.9	9							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	4.2
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	9
					Bottom	3.0	-	-	24.1	24.1	8.2	8.2	31.7	31.7	100.9	101.1	7.1	7.1	4.5	4.5	7.1				7.1	10	
						3.0	-	-	24.1	8.2	8.2	31.7	31.7	101.2	101.2	7.1	7.1	4.5	4.5	9							

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	15:07	8.4	Surface	1.0	0.1	204	<u>24.7</u>	8.3	8.3	31.1	31.1	95.0	94.9	6.6	6.6	4.7	5	6	815618	804245		
						1.0	0.2	197	24.6	8.3	31.1	94.7	6.6	4.8	6									
					Middle	4.2	0.0	196	24.5	8.3	8.3	31.2	31.2	94.0	93.9	6.6		5.1	5					
						4.2	0.0	195	24.6	8.3	31.2	93.7	6.5	5.8	6									
					Bottom	7.4	0.1	198	24.5	8.3	8.3	31.3	31.3	93.6	94.1	6.5		15.3	6					
						7.4	0.1	202	24.4	8.3	31.3	94.6	6.6	13.3	6									
C2	Fine	Moderate	14:00	9.0	Surface	1.0	0.2	351	24.9	8.8	8.8	30.6	30.6	94.8	94.8	6.6	6.6	7.2	6	7	825691	806955		
						1.0	0.3	344	24.9	8.8	30.6	94.7	6.6	7.4	6									
					Middle	4.5	0.1	345	24.9	8.8	8.8	30.7	30.7	94.5	94.5	6.6		7.5	6					
						4.5	0.2	349	24.9	8.8	30.7	94.5	6.6	7.6	6									
					Bottom	8.0	0.2	344	24.9	8.7	8.7	30.8	30.8	94.3	94.2	6.6		8.0	8					
						8.0	0.2	350	24.9	8.7	30.8	94.1	6.5	7.9	8									
C3	Fine	Moderate	15:10	11.0	Surface	1.0	0.2	78	25.3	8.2	8.2	34.4	34.4	95.8	95.8	6.5	6.5	1.3	6	6	822105	817786		
						1.0	0.2	84	25.3	8.2	34.4	95.8	6.5	1.2	7									
					Middle	5.5	0.1	76	25.2	8.2	8.2	34.4	34.4	93.8	93.8	6.4		1.9	6					
						5.5	0.2	80	25.2	8.2	34.4	93.8	6.4	2.0	7									
					Bottom	10.0	0.1	75	25.2	8.2	8.2	34.3	34.3	94.2	94.3	6.4		10.1	6					
						10.0	0.1	73	25.3	8.2	34.2	94.3	6.4	10.1	6									
IM1	Fine	Moderate	14:55	6.6	Surface	1.0	0.0	126	24.7	8.3	8.3	31.1	31.1	95.4	95.6	6.6	6.7	6.5	6	7	818339	806455		
						1.0	0.0	118	24.7	8.3	31.2	95.7	6.7	6.7	7									
					Middle	3.3	0.0	116	24.6	8.3	8.3	31.2	31.2	96.5	96.7	6.7		6.9	8					
						3.3	-	108	24.6	8.3	31.3	96.9	6.8	7.2	7									
					Bottom	5.6	0.0	144	24.4	8.3	8.3	31.4	31.4	97.8	98.0	6.8		7.8	8					
						5.6	0.0	143	24.4	8.3	31.5	98.1	6.9	7.7	8									
IM2	Fine	Moderate	14:47	7.2	Surface	1.0	0.0	46	24.7	8.3	8.3	31.3	31.4	97.5	97.6	6.8	6.8	5.2	8	10	819200	806212		
						1.0	0.1	45	24.7	8.3	31.4	97.6	6.8	5.0	9									
					Middle	3.6	0.1	34	24.6	8.3	8.3	31.5	31.5	97.4	97.4	6.8		4.7	8					
						3.6	0.1	31	24.6	8.4	31.5	97.3	6.8	4.9	10									
					Bottom	6.2	0.1	67	24.6	8.4	8.4	31.5	31.5	97.2	97.3	6.8		6.0	12					
						6.2	0.1	71	24.6	8.4	31.5	97.3	6.8	6.4	12									
IM7	Fine	Moderate	14:25	7.6	Surface	1.0	0.2	59	24.9	8.3	8.3	30.4	30.5	97.1	97.1	6.8	6.8	4.2	5	5	821329	806825		
						1.0	0.2	58	24.8	8.3	30.6	97.1	6.8	4.5	4									
					Middle	3.8	0.1	74	24.8	8.3	8.3	30.7	30.8	97.0	97.0	6.8		5.0	5					
						3.8	0.1	68	24.8	8.3	30.8	97.0	6.8	5.4	4									
					Bottom	6.6	0.1	71	24.7	8.3	8.3	31.0	30.9	97.5	97.7	6.8		6.0	5					
						6.6	0.1	73	24.8	8.3	30.9	97.9	6.8	5.8	6									

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA					
																									Value	Average	Value
IM10	Fine	Moderate	14:00	8.0	Surface	1.0	0.0	327	25.4	25.4	8.3	8.3	32.1	32.2	99.5	99.5	6.8	6.8	6.8	6.8	2.7	7	822243	809840			
						1.0	0.1	332	25.4	8.3	8.3	32.2	32.2	99.4	99.5	6.8	6.8	6.8	6.8	2.7	7						
					Middle	4.0	0.0	338	25.4	25.4	8.3	8.3	32.8	32.8	98.6	98.6	6.7	6.7	6.7	6.7	2.8	7					
						4.0	0.1	343	25.4	25.4	8.3	8.3	32.8	32.8	98.5	98.6	6.7	6.7	6.7	6.7	2.8	8					
					Bottom	7.0	0.1	355	25.1	25.1	8.3	8.3	33.5	33.5	97.1	97.3	6.6	6.6	6.6	6.6	3.1	8					
						7.0	0.0	358	25.1	25.1	8.3	8.3	33.5	33.5	97.4	97.3	6.6	6.6	6.6	6.6	3.1	9					
IM11	Fine	Moderate	14:08	8.5	Surface	1.0	0.0	322	25.1	25.1	8.3	8.3	33.6	33.6	97.6	97.6	6.7	6.7	6.7	6.7	3.8	7	821495	810537			
						1.0	0.0	328	25.1	25.1	8.3	8.3	33.6	33.6	97.5	97.6	6.7	6.7	6.7	6.7	4.0	6					
					Middle	4.3	0.1	350	25.1	25.1	8.3	8.3	33.6	33.6	97.2	97.2	6.6	6.6	6.6	6.6	4.5	6					
						4.3	0.1	352	25.1	25.1	8.3	8.3	33.6	33.6	97.2	97.2	6.6	6.6	6.6	6.6	4.5	7					
					Bottom	7.5	0.0	356	25.1	25.1	8.3	8.3	33.6	33.6	97.0	97.0	6.6	6.6	6.6	6.6	4.3	8					
						7.5	0.0	0	25.1	25.1	8.3	8.3	33.6	33.6	97.0	97.0	6.6	6.6	6.6	6.6	4.3	7					
IM12	Fine	Moderate	14:13	8.8	Surface	1.0	0.1	319	25.3	25.3	8.3	8.3	33.7	33.7	98.9	98.9	6.7	6.7	6.7	6.7	3.2	6	821157	811497			
						1.0	0.0	325	25.2	25.3	8.3	8.3	33.7	33.7	98.8	98.9	6.7	6.7	6.7	6.7	3.4	6					
					Middle	4.4	0.0	311	25.1	25.1	8.3	8.3	33.7	33.7	97.7	97.7	6.7	6.7	6.7	6.7	6.5	6					
						4.4	0.0	312	25.1	25.1	8.3	8.3	33.7	33.7	97.6	97.7	6.6	6.6	6.6	6.6	6.8	6					
					Bottom	7.8	0.0	335	25.1	25.1	8.3	8.2	33.6	33.6	97.1	97.1	6.6	6.6	6.6	6.6	12.1	7					
						7.8	0.1	331	25.1	25.1	8.2	8.2	33.6	33.6	97.1	97.1	6.6	6.6	6.6	6.6	13.3	7					
SR1A	Fine	Moderate	14:39	5.4	Surface	1.0	0.0	36	25.4	25.4	8.3	8.3	33.7	33.7	101.6	101.6	6.9	6.9	6.9	6.9	1.8	6	819979	812655			
						1.0	0.0	37	25.4	25.4	8.3	8.3	33.7	33.7	101.5	101.5	6.9	6.9	6.9	6.9	1.8	5					
					Middle	2.7	0.0	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	7
						2.7	0.1	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	7
					Bottom	4.4	0.0	41	25.2	25.2	8.3	8.3	33.8	33.8	100.0	100.0	6.8	6.8	6.8	6.8	2.0	7					
						4.4	-	36	25.2	25.2	8.3	8.3	33.8	33.8	100.0	100.0	6.8	6.8	6.8	6.8	2.0	8					
SR2	Fine	Moderate	14:52	5.0	Surface	1.0	0.1	54	25.3	25.3	8.3	8.3	33.7	33.7	99.9	99.7	6.8	6.8	6.8	6.8	2.7	7	821443	814181			
						1.0	0.1	59	25.3	25.3	8.3	8.3	33.7	33.7	99.5	99.7	6.8	6.8	6.8	6.8	2.8	6					
					Middle	-	0.1	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	7
						-	0.1	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	7
					Bottom	4.0	0.1	32	25.1	25.1	8.2	8.2	33.7	33.7	98.2	98.2	6.7	6.7	6.7	6.7	3.7	8					
						4.0	0.1	36	25.1	25.1	8.2	8.2	33.7	33.7	98.2	98.2	6.7	6.7	6.7	6.7	3.7	7					
SR3	Fine	Moderate	14:19	8.6	Surface	1.0	0.2	33	24.9	24.9	8.6	8.6	30.0	30.0	96.9	96.8	6.8	6.8	6.8	6.8	4.7	3	822161	807570			
						1.0	0.2	27	24.9	24.9	8.6	8.6	30.0	30.0	96.7	96.8	6.8	6.8	6.8	6.8	4.8	3					
					Middle	4.3	0.1	32	24.9	24.9	8.6	8.6	30.1	30.1	96.5	96.5	6.7	6.7	6.7	6.7	6.2	3					
						4.3	0.0	31	24.9	24.9	8.6	8.6	30.1	30.1	96.4	96.5	6.7	6.7	6.7	6.7	10.7	3					
					Bottom	7.6	0.1	31	25.3	25.4	8.6	8.6	29.9	29.9	96.2	96.2	6.7	6.7	6.7	6.7	11.7	5					
						7.6	0.1	26	25.4	25.4	8.6	8.6	29.8	29.9	96.2	96.2	6.7	6.7	6.7	6.7	11.9	6					
SR4A	Fine	Moderate	15:21	8.8	Surface	1.0	0.0	94	24.8	24.8	8.3	8.3	31.1	31.1	96.8	96.9	6.7	6.7	6.7	6.7	6.9	8	817165	807802			
						1.0	0.1	94	24.8	24.8	8.3	8.3	31.1	31.1	96.9	96.9	6.7	6.7	6.7	6.7	7.0	9					
					Middle	4.4	0.0	64	24.8	24.8	8.3	8.3	31.2	31.2	97.1	97.2	6.8	6.8	6.8	6.8	7.2	8					
						4.4	0.0	66	24.8	24.8	8.3	8.3	31.2	31.2	97.2	97.2	6.8	6.8	6.8	6.8	7.2	8					
					Bottom	7.8	0.0	70	24.7	24.7	8.3	8.3	31.2	31.2	97.7	97.9	6.8	6.8	6.8	6.8	7.3	8					
						7.8	0.0	71	24.7	24.7	8.3	8.3	31.2	31.2	98.1	98.1	6.8	6.8	6.8	6.8	7.2	8					
SR8	Fine	Moderate	14:17	5.7	Surface	1.0	-	-	25.3	25.3	8.3	8.3	33.6	33.6	100.3	100.3	6.8	6.8	6.8	6.8	2.5	5	820399	811600			
						1.0	-	-	25.3	25.3	8.3	8.3	33.6	33.6	100.2	100.2	6.8	6.8	6.8	6.8	2.6	6					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	6
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	6
					Bottom	4.7	-	-	25.0	25.1	8.2	8.2	33.6	33.6	97.7	97.8	6.7	6.7	6.7	6.7	6.4	7					
						4.7	-	-	25.1	25.1	8.2	8.2	33.6	33.6	97.8	97.8	6.7	6.7	6.7	6.7	6.6	7					

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
 Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	10:45	8.4	Surface	1.0	0.4	24	24.5	24.5	8.4	8.4	31.0	31.0	95.1	95.1	6.7	6.6	6.8	6.8	9	8	815596	804236
						1.0	0.4	29	24.5	8.4	8.4	31.0	31.0	95.0	95.0	6.6	6.6	6.8	6.8	10				
					Middle	4.2	0.4	49	24.4	8.4	8.4	31.3	31.4	94.5	94.6	6.6	6.6	7.7	7.7	9	9			
						4.2	0.4	52	24.4	8.4	8.4	31.4	31.4	94.6	94.6	6.6	6.6	7.7	7.7	8	8			
					Bottom	7.4	0.4	41	24.3	8.4	8.4	31.4	31.4	94.9	95.0	6.6	6.7	8.0	8.0	7	7			
						7.4	0.4	43	24.3	8.4	8.4	31.4	31.4	95.1	95.0	6.7	6.7	8.0	8.0	7	7			
C2	Fine	Moderate	12:02	9.4	Surface	1.0	0.4	358	24.7	24.7	8.2	8.2	29.8	29.8	96.2	96.4	6.7	6.8	6.6	6.6	6	5	825665	806946
						1.0	0.4	355	24.7	8.2	8.2	29.9	29.9	96.6	96.4	6.8	6.8	6.6	6.6	7	7			
					Middle	4.7	0.4	353	24.7	8.2	8.2	29.9	29.9	97.1	97.2	6.8	6.8	7.7	7.7	5	5			
						4.7	0.4	350	24.7	8.2	8.2	30.0	30.0	97.3	97.2	6.8	6.8	7.8	7.8	5	5			
					Bottom	8.4	0.4	5	24.7	8.2	8.2	30.1	30.1	98.2	98.2	6.9	6.9	8.1	8.1	5	5			
						8.4	0.3	358	24.7	8.2	8.2	30.0	30.0	99.1	98.7	6.9	6.9	8.1	8.1	4	4			
C3	Fine	Moderate	08:41	12.5	Surface	1.0	0.4	259	25.1	25.1	8.1	8.1	33.7	33.7	95.9	95.9	6.5	6.5	3.0	3.0	9	7	822092	817783
						1.0	0.4	262	25.1	8.1	8.1	33.7	33.7	95.8	95.8	6.5	6.5	3.0	3.0	8				
					Middle	6.3	0.4	270	25.1	8.1	8.1	33.8	33.8	94.7	94.7	6.5	6.5	3.7	3.7	7	7			
						6.3	0.4	271	25.1	8.1	8.1	33.8	33.8	94.7	94.7	6.4	6.4	3.8	3.8	6	6			
					Bottom	11.5	0.4	252	25.1	8.1	8.1	33.9	33.9	93.1	93.1	6.3	6.3	5.5	5.5	6	6			
						11.5	0.4	247	25.1	8.1	8.1	33.9	33.9	93.1	93.1	6.3	6.3	5.7	5.7	6	6			
IM1	Fine	Moderate	11:02	6.2	Surface	1.0	0.3	16	24.5	24.5	8.3	8.3	31.1	31.1	92.7	92.7	6.5	6.5	4.3	4.3	12	12	818365	806459
						1.0	0.3	22	24.4	8.3	8.3	31.1	31.1	92.7	92.7	6.5	6.5	4.3	4.3	12				
					Middle	3.1	0.3	34	24.4	8.3	8.3	31.1	31.1	93.0	93.1	6.5	6.5	5.6	5.6	12	12			
						3.1	0.3	33	24.4	8.3	8.3	31.1	31.1	93.1	93.1	6.5	6.5	5.5	5.5	12	12			
					Bottom	5.2	0.3	33	24.4	8.3	8.3	31.1	31.1	93.4	93.5	6.5	6.6	6.9	6.9	11	11			
						5.2	0.3	35	24.4	8.3	8.3	31.1	31.1	93.6	93.5	6.6	6.6	6.9	6.9	11	11			
IM2	Fine	Moderate	11:10	7.0	Surface	1.0	0.3	18	24.5	24.5	8.2	8.2	31.1	31.1	94.1	94.1	6.6	6.6	7.4	7.4	9	9	819172	806217
						1.0	0.3	18	24.5	8.2	8.2	31.1	31.1	94.1	94.1	6.6	6.6	7.5	7.5	10				
					Middle	3.5	0.3	17	24.4	8.2	8.2	31.2	31.2	94.6	94.9	6.6	6.6	8.0	8.0	9	9			
						3.5	0.4	14	24.4	8.3	8.3	31.2	31.2	95.2	94.9	6.7	6.7	8.1	8.1	10	10			
					Bottom	6.0	0.3	3	24.4	8.3	8.3	31.2	31.2	96.7	97.0	6.8	6.8	9.8	9.8	9	9			
						6.0	0.3	2	24.5	8.3	8.3	31.1	31.2	97.2	97.0	6.8	6.8	9.8	9.8	9	9			
IM7	Fine	Moderate	11:31	8.2	Surface	1.0	0.3	20	24.8	24.8	8.3	8.3	29.8	29.8	97.0	97.1	6.8	6.8	1.6	1.6	6	5	821364	806842
						1.0	0.3	20	24.7	8.3	8.3	29.9	29.9	97.2	97.4	6.8	6.8	1.5	1.5	7				
					Middle	4.1	0.2	9	24.7	8.3	8.3	30.0	30.1	97.3	97.4	6.8	6.8	2.4	2.4	5	5			
						4.1	0.2	8	24.7	8.3	8.3	30.1	30.1	97.4	97.4	6.8	6.8	2.4	2.4	5	5			
					Bottom	7.2	0.2	345	24.6	8.3	8.3	30.4	30.3	98.2	98.5	6.9	6.9	3.6	3.6	4	4			
						7.2	0.2	351	24.6	8.3	8.3	30.3	30.3	98.7	98.5	6.9	6.9	3.6	3.6	5	5			

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA		
IM10	Fine	Moderate	09:58	7.8	Surface	1.0	0.4	273	25.0	25.0	8.2	8.2	33.7	33.7	97.3	97.3	6.6	6.6	4.9	6.6	7	7	822258	809822				
						1.0	0.4	271	25.0	8.2	8.2	33.7	33.7	97.2	97.3	6.6	6.6	5.2	6.6	6	6.6							
					Middle	3.9	0.4	280	25.0	8.2	8.2	33.7	33.7	96.6	96.6	6.6	6.6	8.7	6.6	7	6.6	7			7			
						3.9	0.4	284	25.0	8.2	8.2	33.7	33.7	96.6	96.6	6.6	6.6	9.2	6.6	6	6.6	6			6.6			
					Bottom	6.8	0.4	263	25.0	8.2	8.2	33.7	33.7	96.5	96.5	6.6	6.6	11.8	6.6	7	6.6	7			6.6			
						6.8	0.5	262	25.0	8.2	8.2	33.7	33.7	96.5	96.5	6.6	6.6	11.4	6.6	7	6.6	7			6.6			
IM11	Fine	Moderate	09:52	8.0	Surface	1.0	0.4	278	25.0	25.0	8.2	8.2	33.7	33.7	95.7	95.7	6.5	6.5	5.3	6.5	7	6.5	821514	810546				
						1.0	0.4	280	25.0	8.2	8.2	33.7	33.7	95.7	95.7	6.5	6.5	5.1	6.5	8	6.5							
					Middle	4.0	0.5	286	25.0	8.2	8.2	33.7	33.7	95.7	95.7	6.5	6.5	5.2	6.5	7	6.5	7			6.5			
						4.0	0.4	288	25.0	8.2	8.2	33.7	33.7	95.7	95.7	6.5	6.5	5.3	6.5	7	6.5	7			6.5			
					Bottom	7.0	0.4	301	24.9	8.2	8.2	33.7	33.7	95.9	95.9	6.6	6.6	9.1	6.6	6	6.6	6			6.6			
						7.0	0.4	297	24.9	8.2	8.2	33.7	33.7	96.0	96.0	6.6	6.6	9.3	6.6	6	6.6	6			6.6			
IM12	Fine	Moderate	09:45	8.7	Surface	1.0	0.5	283	25.0	25.0	8.2	8.2	33.7	33.7	94.3	94.3	6.4	6.4	6.0	6.4	5	6.4	821148	811538				
						1.0	0.5	279	25.0	8.2	8.2	33.7	33.7	94.3	94.3	6.4	6.4	6.0	6.4	6	6.4							
					Middle	4.4	0.5	295	24.9	8.2	8.2	33.7	33.7	94.2	94.2	6.4	6.4	8.3	6.4	7	6.4	7			6.4			
						4.4	0.5	290	24.9	8.2	8.2	33.7	33.7	94.2	94.2	6.4	6.4	8.3	6.4	6	6.4	6			6.4			
					Bottom	7.7	0.5	281	24.9	8.2	8.2	33.7	33.7	94.2	94.2	6.4	6.4	11.3	6.4	7	6.4	7			6.4			
						7.7	0.5	275	24.9	8.2	8.2	33.7	33.7	94.3	94.3	6.4	6.4	10.8	6.4	6	6.4	6			6.4			
SR1A	Fine	Moderate	09:15	5.9	Surface	1.0	-	200	25.0	25.0	8.2	8.2	33.7	33.7	95.8	95.8	6.5	6.5	10.3	6.5	9	6.5	819982	812657				
						1.0	0.1	192	25.0	8.2	8.2	33.7	33.7	95.8	95.8	6.5	6.5	10.4	6.5	8	6.5							
					Middle	3.0	0.0	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	11.2	8
						3.0	0.0	195	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	8
					Bottom	4.9	0.1	190	25.0	8.2	8.2	33.7	33.7	95.7	95.7	6.5	6.5	11.9	6.5	7	6.5	7			6.5			
						4.9	0.0	186	25.0	8.2	8.2	33.7	33.7	95.7	95.7	6.5	6.5	12.1	6.5	8	6.5	8			6.5			
SR2	Fine	Moderate	09:00	4.3	Surface	1.0	0.1	231	25.0	25.0	8.2	8.2	33.5	33.5	95.1	95.1	6.5	6.5	7.9	6.5	8	6.5	821454	814167				
						1.0	0.1	232	25.0	8.2	8.2	33.5	33.5	95.1	95.1	6.5	6.5	8.0	6.5	9	6.5							
					Middle	-	0.1	234	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	8.9	9
						-	0.1	231	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	9
					Bottom	3.3	0.1	252	25.0	8.2	8.2	33.5	33.5	95.6	95.6	6.5	6.5	9.8	6.5	10	6.5	10			6.5			
						3.3	0.1	258	25.0	8.2	8.2	33.5	33.5	95.7	95.7	6.5	6.5	10.0	6.5	9	6.5	9			6.5			
SR3	Fine	Moderate	11:41	7.6	Surface	1.0	0.3	350	24.7	24.7	8.2	8.2	29.6	29.7	96.3	96.3	6.8	6.8	5.6	6.8	4	6.8	822145	807583				
						1.0	0.3	354	24.6	8.2	8.2	29.7	29.7	96.3	96.3	6.8	6.8	5.6	6.8	4	6.8							
					Middle	3.8	0.3	359	24.6	8.2	8.2	29.8	29.8	96.5	96.7	6.8	6.8	6.6	6.8	4	6.8							
						3.8	0.3	354	24.6	8.2	8.2	29.8	29.8	96.8	96.8	6.8	6.8	6.5	6.8	5	6.8							
					Bottom	6.6	0.3	331	24.6	8.2	8.2	29.9	29.9	97.7	97.7	6.9	6.9	7.9	6.9	5	6.9							
						6.6	0.4	329	24.6	8.2	8.2	29.9	29.9	98.5	98.1	6.9	6.9	7.8	6.9	6	6.9							
SR4A	Fine	Moderate	10:26	9.0	Surface	1.0	0.0	205	24.5	24.5	9.1	9.1	31.1	31.1	93.3	93.3	6.5	6.5	5.5	6.5	9	6.5	817188	807823				
						1.0	0.0	212	24.5	9.1	9.1	31.1	31.1	93.2	93.2	6.5	6.5	5.6	6.5	9	6.5							
					Middle	4.5	0.0	205	24.5	9.1	9.1	31.2	31.2	93.4	93.5	6.5	6.5	6.1	6.5	10	6.5							
						4.5	0.1	211	24.5	9.1	9.1	31.2	31.2	93.5	93.5	6.5	6.5	6.1	6.5	11	6.5							
					Bottom	8.0	0.0	192	24.5	9.1	9.0	31.2	31.2	93.7	93.7	6.5	6.5	7.4	6.5	11	6.5							
						8.0	0.0	194	24.5	9.0	9.0	31.2	31.2	93.7	93.7	6.5	6.5	7.4	6.5	12	6.5							
SR8	Fine	Moderate	09:41	5.2	Surface	1.0	-	-	25.0	25.1	8.2	8.2	33.2	33.2	96.2	96.2	6.6	6.6	3.7	6.6	7	6.6	820368	811618				
						1.0	-	-	25.1	8.2	8.2	33.2	33.2	96.2	96.2	6.6	6.6	3.7	6.6	7	6.6							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	7.6	7
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	7
					Bottom	4.2	-	-	24.9	24.9	8.2	8.2	33.6	33.6	95.1	95.1	6.5	6.5	11.0	6.5	8	6.5						
						4.2	-	-	24.9	24.9	8.2	8.2	33.6	33.6	95.1	95.1	6.5	6.5	12.1	6.5	7	6.5						

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
 Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
02-Aug-22	SWL	1	1.000	SUMMER	32166	3RS ET	P
02-Aug-22	SWL	2	49.360	SUMMER	32166	3RS ET	P
02-Aug-22	SWL	1	0.900	SUMMER	32166	3RS ET	S
02-Aug-22	SWL	2	13.830	SUMMER	32166	3RS ET	S
03-Aug-22	SWL	2	37.908	SUMMER	32166	3RS ET	P
03-Aug-22	SWL	3	16.069	SUMMER	32166	3RS ET	P
03-Aug-22	SWL	2	13.392	SUMMER	32166	3RS ET	S
03-Aug-22	SWL	3	2.121	SUMMER	32166	3RS ET	S
05-Aug-22	NEL	2	32.840	SUMMER	32166	3RS ET	P
05-Aug-22	NEL	3	4.400	SUMMER	32166	3RS ET	P
05-Aug-22	NEL	2	9.760	SUMMER	32166	3RS ET	S
11-Aug-22	NEL	2	25.380	SUMMER	32166	3RS ET	P
11-Aug-22	NEL	3	11.030	SUMMER	32166	3RS ET	P
11-Aug-22	NEL	2	5.090	SUMMER	32166	3RS ET	S
11-Aug-22	NEL	3	5.300	SUMMER	32166	3RS ET	S
12-Aug-22	NWL	2	59.600	SUMMER	32166	3RS ET	P
12-Aug-22	NWL	3	4.100	SUMMER	32166	3RS ET	P
12-Aug-22	NWL	2	12.200	SUMMER	32166	3RS ET	S
16-Aug-22	NWL	1	2.500	SUMMER	32166	3RS ET	P
16-Aug-22	NWL	2	61.700	SUMMER	32166	3RS ET	P
16-Aug-22	NWL	1	1.000	SUMMER	32166	3RS ET	S
16-Aug-22	NWL	2	10.600	SUMMER	32166	3RS ET	S
22-Aug-22	AW	2	4.640	SUMMER	32166	3RS ET	P
22-Aug-22	WL	2	14.811	SUMMER	32166	3RS ET	P
22-Aug-22	WL	3	3.683	SUMMER	32166	3RS ET	P
22-Aug-22	WL	2	9.049	SUMMER	32166	3RS ET	S
22-Aug-22	WL	3	0.380	SUMMER	32166	3RS ET	S
23-Aug-22	WL	2	15.132	SUMMER	32166	3RS ET	P
23-Aug-22	WL	3	2.753	SUMMER	32166	3RS ET	P
23-Aug-22	WL	2	8.498	SUMMER	32166	3RS ET	S
23-Aug-22	WL	3	1.397	SUMMER	32166	3RS ET	S
23-Aug-22	AW	2	4.810	SUMMER	32166	3RS ET	P
05-Sep-22	NWL	2	4.260	AUTUMN	32166	3RS ET	P
05-Sep-22	NWL	3	59.410	AUTUMN	32166	3RS ET	P
05-Sep-22	NWL	3	11.830	AUTUMN	32166	3RS ET	S
06-Sep-22	SWL	2	32.266	AUTUMN	32166	3RS ET	P
06-Sep-22	SWL	3	14.290	AUTUMN	32166	3RS ET	P
06-Sep-22	SWL	4	4.930	AUTUMN	32166	3RS ET	P
06-Sep-22	SWL	2	9.989	AUTUMN	32166	3RS ET	S
06-Sep-22	SWL	3	3.100	AUTUMN	32166	3RS ET	S
06-Sep-22	SWL	4	1.060	AUTUMN	32166	3RS ET	S
08-Sep-22	NEL	2	37.420	AUTUMN	32166	3RS ET	P
08-Sep-22	NEL	2	9.580	AUTUMN	32166	3RS ET	S
09-Sep-22	NWL	2	60.720	AUTUMN	32166	3RS ET	P
09-Sep-22	NWL	2	12.700	AUTUMN	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
14-Sep-22	SWL	2	39.365	AUTUMN	32166	3RS ET	P
14-Sep-22	SWL	3	14.270	AUTUMN	32166	3RS ET	P
14-Sep-22	SWL	2	8.365	AUTUMN	32166	3RS ET	S
14-Sep-22	SWL	3	7.270	AUTUMN	32166	3RS ET	S
19-Sep-22	AW	2	4.810	AUTUMN	32166	3RS ET	P
19-Sep-22	WL	2	15.142	AUTUMN	32166	3RS ET	P
19-Sep-22	WL	3	4.527	AUTUMN	32166	3RS ET	P
19-Sep-22	WL	2	7.648	AUTUMN	32166	3RS ET	S
19-Sep-22	WL	3	1.973	AUTUMN	32166	3RS ET	S
20-Sep-22	AW	3	4.890	AUTUMN	32166	3RS ET	P
20-Sep-22	WL	2	9.992	AUTUMN	32166	3RS ET	P
20-Sep-22	WL	3	7.720	AUTUMN	32166	3RS ET	P
20-Sep-22	WL	4	2.060	AUTUMN	32166	3RS ET	P
20-Sep-22	WL	2	7.128	AUTUMN	32166	3RS ET	S
20-Sep-22	WL	3	3.000	AUTUMN	32166	3RS ET	S
20-Sep-22	WL	4	1.100	AUTUMN	32166	3RS ET	S
21-Sep-22	NEL	2	1.300	AUTUMN	32166	3RS ET	P
21-Sep-22	NEL	3	29.290	AUTUMN	32166	3RS ET	P
21-Sep-22	NEL	4	7.080	AUTUMN	32166	3RS ET	P
21-Sep-22	NEL	3	8.100	AUTUMN	32166	3RS ET	S
21-Sep-22	NEL	4	0.930	AUTUMN	32166	3RS ET	S
03-Oct-22	AW	2	4.950	AUTUMN	32166	3RS ET	P
03-Oct-22	WL	2	13.331	AUTUMN	32166	3RS ET	P
03-Oct-22	WL	3	6.143	AUTUMN	32166	3RS ET	P
03-Oct-22	WL	2	6.235	AUTUMN	32166	3RS ET	S
03-Oct-22	WL	3	2.682	AUTUMN	32166	3RS ET	S
07-Oct-22	NEL	2	7.950	AUTUMN	32166	3RS ET	P
07-Oct-22	NEL	3	28.710	AUTUMN	32166	3RS ET	P
07-Oct-22	NEL	2	5.340	AUTUMN	32166	3RS ET	S
07-Oct-22	NEL	3	5.400	AUTUMN	32166	3RS ET	S
11-Oct-22	NWL	3	51.620	AUTUMN	32166	3RS ET	P
11-Oct-22	NWL	4	12.480	AUTUMN	32166	3RS ET	P
11-Oct-22	NWL	3	11.700	AUTUMN	32166	3RS ET	S
17-Oct-22	NEL	2	3.700	AUTUMN	32166	3RS ET	P
17-Oct-22	NEL	3	29.010	AUTUMN	32166	3RS ET	P
17-Oct-22	NEL	4	4.400	AUTUMN	32166	3RS ET	P
17-Oct-22	NEL	2	2.000	AUTUMN	32166	3RS ET	S
17-Oct-22	NEL	3	5.990	AUTUMN	32166	3RS ET	S
17-Oct-22	NEL	4	1.900	AUTUMN	32166	3RS ET	S
19-Oct-22	NWL	2	3.000	AUTUMN	32166	3RS ET	P
19-Oct-22	NWL	3	55.820	AUTUMN	32166	3RS ET	P
19-Oct-22	NWL	4	4.880	AUTUMN	32166	3RS ET	P
19-Oct-22	NWL	2	1.900	AUTUMN	32166	3RS ET	S
19-Oct-22	NWL	3	9.600	AUTUMN	32166	3RS ET	S
20-Oct-22	WL	2	2.923	AUTUMN	32166	3RS ET	P
20-Oct-22	WL	3	17.160	AUTUMN	32166	3RS ET	P
20-Oct-22	WL	2	2.614	AUTUMN	32166	3RS ET	S
20-Oct-22	WL	3	7.390	AUTUMN	32166	3RS ET	S
20-Oct-22	AW	3	4.870	AUTUMN	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
24-Oct-22	SWL	4	39.360	AUTUMN	32166	3RS ET	P
24-Oct-22	SWL	5	14.879	AUTUMN	32166	3RS ET	P
24-Oct-22	SWL	3	1.400	AUTUMN	32166	3RS ET	S
24-Oct-22	SWL	4	6.610	AUTUMN	32166	3RS ET	S
24-Oct-22	SWL	5	6.751	AUTUMN	32166	3RS ET	S
27-Oct-22	SWL	3	41.851	AUTUMN	32166	3RS ET	P
27-Oct-22	SWL	4	11.520	AUTUMN	32166	3RS ET	P
27-Oct-22	SWL	3	13.879	AUTUMN	32166	3RS ET	S
27-Oct-22	SWL	4	2.000	AUTUMN	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months are presented for reference only.

CWD Small Vessel Line-transect Survey

Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
02-Aug-22	1	1432	CWD	2	SWL	2	59	ON	3RS ET	22.1841	113.8680	SUMMER	NONE	P
02-Aug-22	2	1507	CWD	15	SWL	2	80	ON	3RS ET	22.1795	113.8497	SUMMER	PURSE SEINER	P
03-Aug-22	1	1311	FP	1	SWL	3	61	ON	3RS ET	22.1528	113.8974	SUMMER	NONE	P
03-Aug-22	2	1433	CWD	4	SWL	2	194	ON	3RS ET	22.1988	113.8683	SUMMER	NONE	P
03-Aug-22	3	1522	CWD	1	SWL	2	21	ON	3RS ET	22.1893	113.8493	SUMMER	NONE	P
22-Aug-22	1	1039	CWD	1	WL	2	42	ON	3RS ET	22.2615	113.8551	SUMMER	NONE	S
22-Aug-22	2	1125	CWD	3	WL	2	345	ON	3RS ET	22.2418	113.8320	SUMMER	NONE	P
22-Aug-22	3	1136	CWD	1	WL	2	10	ON	3RS ET	22.2418	113.8295	SUMMER	NONE	P
22-Aug-22	4	1212	CWD	4	WL	2	19	ON	3RS ET	22.2144	113.8309	SUMMER	NONE	P
22-Aug-22	5	1246	CWD	3	WL	2	313	ON	3RS ET	22.2007	113.8245	SUMMER	NONE	S
22-Aug-22	6	1312	CWD	1	WL	3	11	ON	3RS ET	22.1869	113.8327	SUMMER	NONE	P
23-Aug-22	1	1118	CWD	3	WL	2	98	ON	3RS ET	22.2326	113.8360	SUMMER	NONE	P
23-Aug-22	2	1141	CWD	8	WL	2	416	ON	3RS ET	22.2226	113.8353	SUMMER	NONE	P
23-Aug-22	3	1206	CWD	1	WL	2	40	ON	3RS ET	22.2141	113.8262	SUMMER	NONE	P
23-Aug-22	4	1226	CWD	1	WL	2	1368	ON	3RS ET	22.2059	113.8236	SUMMER	NONE	P
23-Aug-22	5	1242	CWD	9	WL	2	363	ON	3RS ET	22.1956	113.8350	SUMMER	NONE	P
23-Aug-22	6	1317	CWD	9	WL	3	251	ON	3RS ET	22.1873	113.8356	SUMMER	NONE	P
06-Sep-22	1	1028	FP	3	SWL	2	143	ON	3RS ET	22.2171	113.9358	AUTUMN	NONE	P
06-Sep-22	2	1036	FP	2	SWL	2	275	ON	3RS ET	22.2029	113.9361	AUTUMN	NONE	P
06-Sep-22	3	1039	FP	5	SWL	2	370	ON	3RS ET	22.1981	113.9363	AUTUMN	NONE	P
06-Sep-22	4	1046	FP	14	SWL	2	235	ON	3RS ET	22.1842	113.9364	AUTUMN	NONE	P
06-Sep-22	5	1048	FP	5	SWL	2	157	ON	3RS ET	22.1828	113.9364	AUTUMN	NONE	P
06-Sep-22	6	1056	FP	1	SWL	2	147	ON	3RS ET	22.1686	113.9358	AUTUMN	NONE	P
06-Sep-22	7	1100	FP	2	SWL	2	137	ON	3RS ET	22.1624	113.9360	AUTUMN	NONE	P
06-Sep-22	8	1103	FP	3	SWL	2	22	ON	3RS ET	22.1594	113.9357	AUTUMN	NONE	P
06-Sep-22	9	1120	CWD	2	SWL	2	113	ON	3RS ET	22.1563	113.9275	AUTUMN	NONE	P
06-Sep-22	10	1135	FP	9	SWL	2	32	ON	3RS ET	22.1707	113.9277	AUTUMN	NONE	P
06-Sep-22	11	1137	FP	12	SWL	2	551	ON	3RS ET	22.1725	113.9287	AUTUMN	NONE	P
06-Sep-22	12	1158	CWD	4	SWL	2	1022	ON	3RS ET	22.2000	113.9173	AUTUMN	NONE	P
06-Sep-22	13	1225	FP	1	SWL	2	72	ON	3RS ET	22.1715	113.9190	AUTUMN	NONE	P
06-Sep-22	14	1248	FP	3	SWL	2	127	ON	3RS ET	22.1508	113.9081	AUTUMN	NONE	P
06-Sep-22	15	1309	CWD	6	SWL	2	741	ON	3RS ET	22.1637	113.9039	AUTUMN	NONE	S

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
06-Sep-22	16	1431	CWD	1	SWL	2	114	ON	3RS ET	22.1980	113.8879	AUTUMN	NONE	P
09-Sep-22	1	0952	CWD	1	NWL	2	569	ON	3RS ET	22.3771	113.8701	AUTUMN	NONE	P
09-Sep-22	2	1205	CWD	2	NWL	2	1048	ON	3RS ET	22.3862	113.8881	AUTUMN	NONE	P
14-Sep-22	1	1056	FP	5	SWL	2	270	ON	3RS ET	22.1846	113.9354	AUTUMN	NONE	P
14-Sep-22	2	1110	FP	2	SWL	2	179	ON	3RS ET	22.1548	113.9356	AUTUMN	NONE	P
14-Sep-22	3	1126	FP	1	SWL	2	125	ON	3RS ET	22.1641	113.9281	AUTUMN	NONE	P
14-Sep-22	4	1152	FP	2	SWL	2	111	ON	3RS ET	22.1946	113.9177	AUTUMN	NONE	P
14-Sep-22	5	1227	FP	3	SWL	3	5	ON	3RS ET	22.1541	113.9063	AUTUMN	NONE	P
19-Sep-22	1	1043	CWD	4	WL	2	233	ON	3RS ET	22.2606	113.8419	AUTUMN	NONE	P
19-Sep-22	2	1157	CWD	5	WL	3	386	ON	3RS ET	22.2045	113.8357	AUTUMN	NONE	P
19-Sep-22	3	1230	CWD	5	WL	3	308	ON	3RS ET	22.1957	113.8343	AUTUMN	NONE	P
20-Sep-22	1	1054	CWD	2	WL	2	505	ON	3RS ET	22.2502	113.8471	AUTUMN	NONE	P
03-Oct-22	1	1052	CWD	1	WL	2	1260	ON	3RS ET	22.2556	113.8359	AUTUMN	NONE	S
03-Oct-22	2	1114	CWD	2	WL	2	1016	ON	3RS ET	22.2418	113.8335	AUTUMN	NONE	P
03-Oct-22	3	1125	CWD	3	WL	2	91	ON	3RS ET	22.2374	113.8260	AUTUMN	NONE	S
03-Oct-22	4	1130	CWD	5	WL	2	497	ON	3RS ET	22.2356	113.8262	AUTUMN	NONE	S
03-Oct-22	5	1210	CWD	3	WL	3	16	ON	3RS ET	22.2214	113.8202	AUTUMN	NONE	S
03-Oct-22	6	1236	CWD	6	WL	2	838	ON	3RS ET	22.2058	113.8297	AUTUMN	NONE	P
03-Oct-22	7	1300	CWD	4	WL	3	98	ON	3RS ET	22.2036	113.8226	AUTUMN	NONE	S
03-Oct-22	8	1323	CWD	2	WL	3	450	ON	3RS ET	22.1879	113.8359	AUTUMN	NONE	P
20-Oct-22	1	1054	CWD	2	WL	3	210	ON	3RS ET	22.2417	113.8383	AUTUMN	NONE	P
20-Oct-22	2	1124	CWD	5	WL	3	411	ON	3RS ET	22.2326	113.8370	AUTUMN	NONE	P
20-Oct-22	3	1200	CWD	3	WL	2	266	ON	3RS ET	22.2263	113.8373	AUTUMN	NONE	S
24-Oct-22	1	1150	FP	1	SWL	5	172	ON	3RS ET	22.1787	113.9215	AUTUMN	NONE	S
27-Oct-22	1	1151	FP	2	SWL	3	137	ON	3RS ET	22.1780	113.9211	AUTUMN	NONE	S
27-Oct-22	2	1210	FP	1	SWL	3	427	ON	3RS ET	22.1428	113.9146	AUTUMN	NONE	S
27-Oct-22	3	1403	CWD	1	SWL	3	7	ON	3RS ET	22.1909	113.8781	AUTUMN	NONE	P

Abbreviations: STG# = Sighting Number; GP SZ = 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; P/S = Primary Transect / Secondary Transect

Notes:

CWD monitoring survey data of the two preceding survey months are presented for reference only. No relevant figure or text will be mentioned in this 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 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 347.168 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 12 on-effort sightings and total number of 37 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in October 2022 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in October 2022

$$STG = \frac{12}{347.168} \times 100 = 3.46$$

Encounter Rate by Number of Dolphins (ANI) in October 2022

$$ANI = \frac{37}{347.168} \times 100 = 10.66$$

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

A total of 1223.656 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 38 on-effort sightings and total number of 135 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)

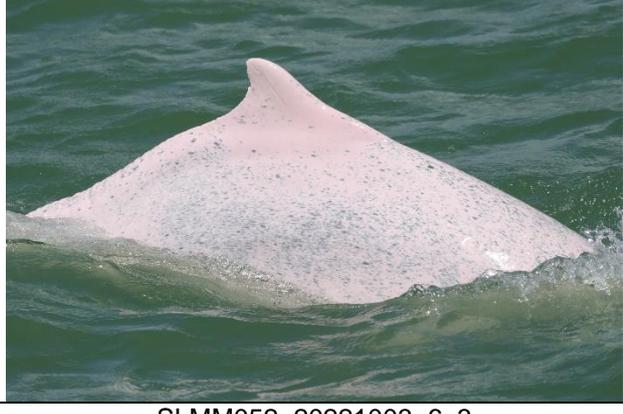
$$STG = \frac{38}{1223.656} \times 100 = 3.11$$

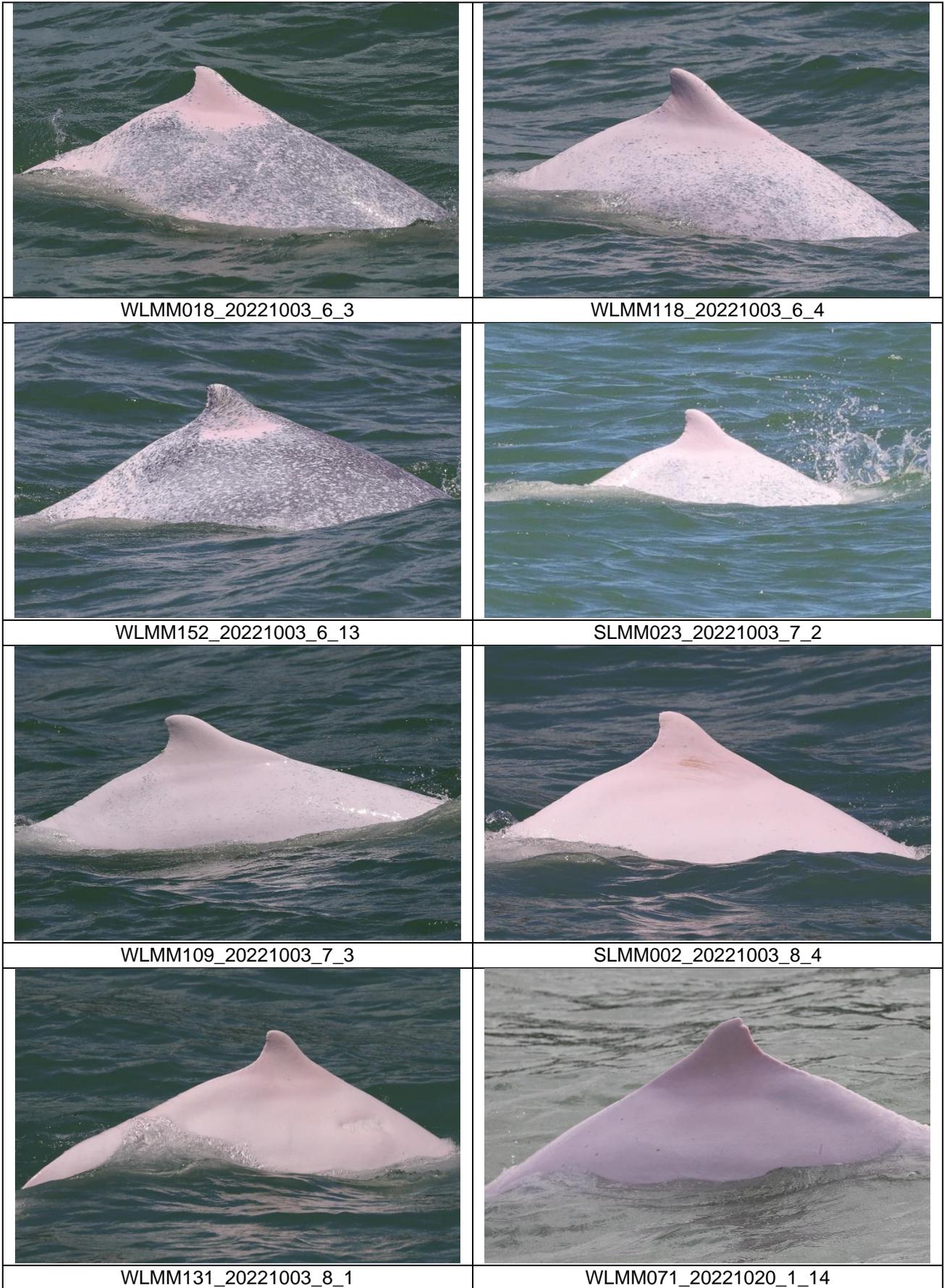
Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{135}{1223.656} \times 100 = 11.03$$

CWD Small Vessel Line-transect Survey

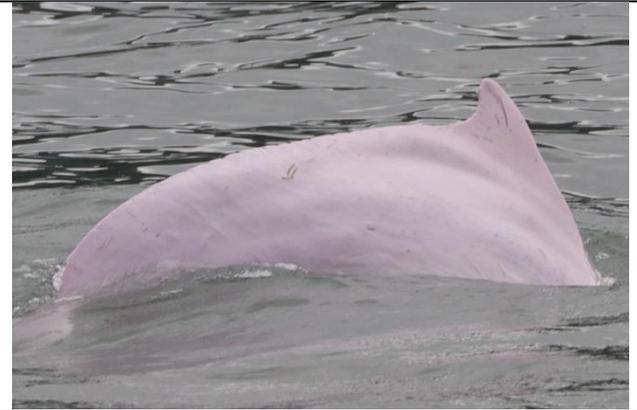
Photo Identification

	
SLMM058_20221003_3_13	WLMM052_20221003_4_1_Left
	
WLMM176_20221003_4_1_Right	SLMM007_20221003_5_8
	
WLMM152_20221003_5_4	SLMM025_20221003_6_3
	
SLMM052_20221003_6_3	WLMM007_20221003_6_10





WLMM168_20221020_1_3_Right



WLMM001_20221020_2_2



WLMM114_20221020_2_1



SLMM002_20221020_3_3



SLMM037_20221020_3_9



SLMM014_20221027_3_3

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

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
17/Oct/22	Lung Kwu Chau	9:01	15:01	6:00	3	3	0	NA
27/Oct/22	Sha Chau	10:41	16:41	6:00	2	3	0	NA

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

Appendix D. Calibration Certificates



Certificate of Calibration

校正證書

Certificate No. : C225999
證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- Self-calibration was performed before the test.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C220381
CL281	Multifunction Acoustic Calibrator	AV210017

- Test procedure : MA101N.

- Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L _A	A	Fast	94.00	1	94.4	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 130	L _A	A	Fast	94.00	1	94.4 (Ref.)
				104.00		104.4
				114.00		114.4

IEC 61672 Class 1 Spec. : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L _A	A	Fast	94.00	1	94.4	Ref.
			Slow			94.4	± 0.3

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

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Certificate of Calibration

校正證書

Certificate No. : C225999
證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L _A	A	Fast	94.00	63 Hz	68.2	-26.2 ± 1.5
					125 Hz	78.2	-16.1 ± 1.5
					250 Hz	85.7	-8.6 ± 1.4
					500 Hz	91.2	-3.2 ± 1.4
					1 kHz	94.4	Ref.
					2 kHz	95.7	+1.2 ± 1.6
					4 kHz	95.5	+1.0 ± 1.6
					8 kHz	93.4	-1.1 (+2.1 ; -3.1)
					16 kHz	86.5	-6.6 (+3.5 ; -17.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L _C	C	Fast	94.00	63 Hz	93.6	-0.8 ± 1.5
					125 Hz	94.3	-0.2 ± 1.5
					250 Hz	94.4	0.0 ± 1.4
					500 Hz	94.5	0.0 ± 1.4
					1 kHz	94.4	Ref.
					2 kHz	94.3	-0.2 ± 1.6
					4 kHz	93.6	-0.8 ± 1.6
					8 kHz	91.5	-3.0 (+2.1 ; -3.1)
					16 kHz	84.5	-8.5 (+3.5 ; -17.0)

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Certificate of Calibration

校正證書

Certificate No. : C225999
證書編號

- Remarks : - UUT Microphone Model No. : UC-59 & S/N : 22018
- Mfr's Spec. : IEC 61672 Class 1
- Uncertainties of Applied Value :
- | | | |
|--------|------------------|--------------------------|
| 94 dB | : 63 Hz - 125 Hz | : ± 0.35 dB |
| | 250 Hz - 500 Hz | : ± 0.30 dB |
| | 1 kHz | : ± 0.20 dB |
| | 2 kHz - 4 kHz | : ± 0.35 dB |
| | 8 kHz | : ± 0.45 dB |
| | 16 kHz | : ± 0.70 dB |
| 104 dB | : 1 kHz | : ± 0.10 dB (Ref. 94 dB) |
| 114 dB | : 1 kHz | : ± 0.10 dB (Ref. 94 dB) |
- The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

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Website/網址: www.suncreation.com

Appendix E. Status of Environmental Permits and Licenses

	Description	Permit/ Reference No.	Status
EIAO	Environmental Permit	EP-489/2014	Approved on 7 Nov 2014

Contract No.	Description	Location	Permit/ Reference No.	Status
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0683-22	Valid from 13 Aug 2022 to 30 Jan 2023
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3302	Notification of Construction Work under APCO	Works area of 3302	484487	Receipt acknowledged by EPD on 20 Sep 2022
		Staging area of 3302	479482	Receipt acknowledged by EPD on 6 May 2022
			485105	Receipt acknowledged by EPD on 7 Oct 2022
			479481	Receipt acknowledged by EPD on 6 May 2022
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019
	Discharge License under WPCO	Works area of 3302	WT00034539-2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Works area of 3302	WT00034541-2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS0242-22	Valid from 20 Apr 2022 to 19 Oct 2022
			GW-RS0841-22	Valid from 20 Oct 2022 to 19 Apr 2023
			GW-RS0427-22	Valid from 3 Jun 2022 to 2 Nov 2022
3303	Notification of Construction Work under APCO	Works area of 3303	483049	Receipt acknowledged by EPD on 11 Aug 2022
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3303	WT00035689-2020	Valid from 11 May 2020 to 31 May 2025
		Works area of 3303	WT00036734-2020	Valid from 1 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0291-22	Valid from 16 May 2022 to 14 Nov 2022
			GW-RS0458-22	Valid from 8 Jun 2022 to 5 Dec 2022
		Works area of 3303 (Reclamation area)	GW-RS0805-22	Valid from 24 Sep 2022 to 19 Mar 2023
3305	Notification of Construction Work under APCO	Works area of 3305	460857	Receipt acknowledged by EPD on 12 Oct 2020
	Registration as Chemical Waste Producer	Works area of 3305	5213-951-A3024-01	Completion of Registration on 13 Nov 2020
	Bill Account for disposal	Works area of 3305	A/C 7035360	Approval granted from EPD on 9 Oct 2019
3306	Registration as Chemical Waste Producer	Works area of 3306	8335-951-C4434-01	Completion of Registration on 1 Apr 2020
	Bill Account for disposal	Works area of 3306	A/C 7035868	Approval granted from EPD on 27 Nov 2019
3307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379-01	Completion of Registration on 8 Jun 2020
	Discharge License under WPCO	Works area of 3307	WT00036926-2020	Valid from 31 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0586-22	Valid from 6 Aug 2022 to 5 Feb 2023
3308	Bill Account for disposal	Works area of 3308	A/C 7038988	Approval granted from EPD on 24 Nov 2020
3310	Notification of Construction Work under APCO	Works area of 3310	485057	Receipt acknowledged by EPD on 10 Dec 2021
	Registration as Chemical Waste Producer	Works area of 3310	5213-951-C4682-01	Completion of Registration on 21 Dec 2021
	Discharge License under WPCO	Works area of 3310	WT00039654-2021	Valid from 31 Dec 2021 to 31 Dec 2026
	Bill Account for disposal	Works area of 3310	A/C 7042793	Approval granted from EPD on 4 Jan 2022

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3310 (Existing airport)	GW-RS0612-22	Valid from 29 Jul 2022 to 26 Jan 2023
		Works area of 3310 (Reclamation area)	GW-RS0731-22	Valid from 1 Sep 2022 to 28 Feb 2023
	Construction Noise Permit (Percussive Piling)	Works area of 3310 (Reclamation area)	PP-RS0017-22	Valid from 1 Oct 2022 to 31 Mar 2023
3402	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
3403	Notification of Construction Work under APCO	Works area of 3403	485039	Receipt acknowledged by EPD on 06 Oct 2022
		Works area of 3403 (with Area 17 and Area 15)	475369	Receipt acknowledged by EPD on 28 Dec 2021
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951-S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841-2020	Valid from 5 Jun 2020 to 30 Jun 2025 Approved variation on 9 Jun 2022
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0655-22	Valid from 1 Sep 2022 to 28 Feb 2023
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0659-22	Valid from 15 Aug 2022 to 30 Nov 2022
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0801-22	Valid from 8 Oct 2022 to 30 Oct 2022
3404	Bill Account for disposal	Works area of 3404	A/C 7035158	Approval granted from EPD on 12 Sep 2019
3405	Notification of Construction Work under APCO	Works area of 3405	484926	Receipt acknowledged by EPD on 30 Sep 2022
		Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020
	Discharge License under WPCO	Works area of 3405	WT00037084-2020	Valid from 17 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0788-22	Valid from 24 Sep 2022 to 19 Mar 2023
3408	Notification of Construction Work under APCO	Works area of 3408	461958	Receipt acknowledged by EPD on 17 Nov 2020
		Works area of 3408	WPN 5218-951-B2621-01	Completion of Registration on 16 Jul 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3408	WT00038836-2021	Valid from 27 Sep 2021 to 30 Sep 2026
	Bill Account for disposal	Works area of 3408	A/C 7039063	Approval granted from EPD on 2 Dec 2020
	Construction Noise Permit (General Works)	Works area of 3408	GW-RS0790-22	Valid from 24 Sep 2022 to 19 Mar 2023
3508	Notification of Construction Work under APCO	Works area of 3508	459017	Receipt acknowledged by EPD on 19 Aug 2020
			459469	Receipt acknowledged by EPD on 4 Sep 2020
		Works area of 3508 (Area J)	467132	Receipt acknowledged by EPD on 3 May 2021
	Registration as Chemical Waste Producer	Works area of 3508	WPN-5218-951-G2898-01	Completion of Registration on 28 Sep 2020
	Discharge License under WPCO	Works area of 3508	WT00037209-2020	Valid from 28 Jan 2022 to 31 Mar 2026
			WT00037523-2021	Valid from 24 Aug 2022 to 30 Apr 2026
			WT00037225-2020	Valid from 11 Jan 2022 to 30 Apr 2026
			WT00037549-2021	Valid from 1 Apr 2021 to 30 Apr 2026
	Bill Account for disposal	Works area of 3508	7038224	Approval granted from EPD on 8 Sep 2020
	Construction Noise Permit (General Works)	Works area of 3508	GW-RS0525-22	Valid from 8 Jul 2022 to 5 Jan 2023
		Works area of 3508	GW-RS0759-22	Valid from 17 Sep 2022 to 16 Mar 2023
		Works area of 3508	GW-RS0527-22	Valid from 8 Jul 2022 to 1 Jan 2023
	Construction Noise Permit (Special Case)	Works area of 3508	GW-RS0486-22	Valid from 23 Jun 2022 to 5 Oct 2022
		Works area of 3508	GW-RS0824-22	Valid from 2 Oct 2022 to 27 Nov 2022
Works area of 3508		GW-RS0831-22	Valid from 12 Oct 2022 to 9 Apr 2023	
Works area of 3508		GW-RS0844-22	Valid from 14 Oct 2022 to 31 Mar 2023	
3601	Notification of Construction Work under APCO	Works area of 3601	451762	Receipt acknowledged by EPD on 10 Dec 2019
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951-C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 7029991	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3601	GW-RS0370-22	Valid from 1 Jun 2022 to 30 Nov 2022
3602	Notification of Construction	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Work under APCO			
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0766-22	Valid from 28 Sep 2022 to 27 Mar 2023
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Site office of 3603	5296-951-S4069-01	Completion of Registration on 22 Jan 2018
		Test Loop Site of 3603	8334-512-S4273-01	Completion of Registration on 17 Sep 2020
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0335-22	Valid from 24 May 2022 to 23 Nov 2022
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 7035234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0436-22 GW-RS0877-22	Valid from 10 Jun 2022 to 10 Nov 2022 Valid from 23 Oct 2022 to 21 Feb 2023
3723	Notification of Construction Work under APCO	3723A	464440	Receipt acknowledged by EPD on 9 Feb 2021
		3723B	464444	Receipt acknowledged by EPD on 9 Feb 2021
	Registration as Chemical Waste Producer	3723A	WPN 5218-951-T3920-01	Completion of Registration on 9 Feb 2021
		3723B	WPN 5218-951-T3921-01	Completion of Registration on 9 Feb 2021
	Discharge License under WPCO	Works area of 3723A & 3723B	WT00039451-2021	Valid from 28 Oct 2021 to 31 Oct 2023
	Bill Account for disposal	Works area of 3723A	A/C 7039755	Approval granted from EPD on 24 Feb 2021
		Works area of 3723B	A/C 7039754	Approval granted from EPD on 24 Feb 2021
3728	Registration as Chemical Waste Producer	Works area of 3728	WPN 5111-951-S3467-03	Completion of Registration on 7 May 2021
	Discharge License under WPCO	Works area of 3728	WT00037809-2021	Valid from 27 Jul 2021 to 31 Jul 2026

Contract No.	Description	Location	Permit/ Reference No.	Status
3733	Bill Account for disposal	Works area of 3728	A/C 7039409	Approval granted from EPD on 22 Jan 2021
	Notification of Construction Work under APCO	Works area of 3733	472772	Receipt acknowledged by EPD on 18 Oct 2021
	Registration as Chemical Waste Producer	Works area of 3733	474728	Receipt acknowledged by EPD on 9 Dec 2021
	Bill Account for disposal	Works area of 3733	7041945	Approval granted from EPD on 21 Oct 2021
3801	Construction Noise Permit (General Works)	Works area of 3733	GW-RS0440-22	Valid from 10 Jun 2022 to 9 Dec 2022
	Notification of Construction Work under APCO	Works area of 3801	451991	Receipt acknowledged by EPD on 18 Dec 2019
				477839
		Stockpiling area of 3801	454269	Receipt acknowledged by EPD on 12 Mar 2020
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works area of 3801	WT00041429-2022	Valid from 16 Aug 2022 to 31 Aug 2027
		Stockpiling area of 3801	WT00037354-2021	Valid from 8 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works area of 3801	GW-RS0744-22	Valid from 4 Sep 2022 to 28 Feb 2023
	3802	Notification of Construction Work under APCO	Works area of 3802	458122
Registration as Chemical Waste Producer		Works area of 3802	WPN 5218-951-G2895-01	Completion of Registration on 28 Aug 2020
		Works area of 3802 (Existing Airport)	WPN 5218-951-G2945-01	Completion of Registration on 29 Sep 2020
Discharge License under WPCO		Works area of 3802	WT00037032-2020	Valid from 25 May 2021 to 31 May 2026
		Works area of 3802 (Existing Airport)	WT00039092-2021	Valid from 30 Nov 2021 to 31 Nov 2026
			WT00041807-2022	Valid from 3 Oct 2022 to 31 Oct 2027
Bill Account for disposal		Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
Construction Noise Permit (General Works)		Works area of 3802	GW-RS0778-22	Valid from 24 Sep 2022 to 19 Mar 2023
		Works area of 3802 (Ventilation Building)	GW-RS0587-22	Valid from 18 Jul 2022 to 17 Jan 2023
		Works area of 3802	GW-RS0592-22	Valid from 21 Jul 2022 to 17 Jan 2023
3901A	Notification of Construction	Works area of 3901A	466883	Receipt acknowledged by EPD on 26 Apr 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
	Work under APCO			
	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901A	EP/RS/0000443 053	Approval granted on 11 Dec 2020
	Specified Process license under APCO	Works area of 3901A	L-3-261(1)	Valid from 14 Sep 2020 to 13 Sep 2024
	Landfill Disposal of Waste Concrete from Batching Plant	Works area of 3901A	EP195/01/18	Valid from 20 June 2022 to 19 March 2023
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951-K3400-01	Completion of Registration on 17 Jul 2020
	Bill Account for disposal	Works area of 3901A	A/C 7037889	Approval granted from EPD on 20 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0517-22	Valid from 5 Aug 2022 to 4 Feb 2023
3901B	Notification of Construction Work under APCO	Works area of 3901B	466885	Receipt acknowledged by EPD on 26 Apr 2021
	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901B	EP/RS/0000438 488	Approval granted on 26 Jun 2020
	Specified Process license under APCO	Works area of 3901B	L-3-262(1)	Valid from 17 Nov 2020 to 16 Nov 2024
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951-G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0552-22	Valid from 5 Aug 2022 to 4 Feb 2023
3913	Specified Process license under APCO	Works area of 3913	L-15-040 (1)	Valid from 29 Mar 2021 to 28 Mar 2025
	Registration as Chemical Waste Producer	Works area of 3913	5213-951-S4405-01	Completion of Registration on 22 Jul 2022
	Bill Account for disposal	Works area of 3913	A/C 7044632	Approval granted from EPD on 18 Aug 2022
	Construction Noise Permit (General Works)	Works area of 3913	GW-RS0799-22	Valid from 24 Sep 2022 to 19 Mar 2023

Appendix F. Cumulative Statistics on Exceedances, Environmental Complaints, Notification of Summons and Status of Prosecutions

Statistics for Exceedances for 1-hour TSP, Noise, Water, Waste, CWD Monitoring

		Total no. recorded in the reporting period	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	1
	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 Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	1	0	0
From 28 December 2015 to end of the reporting period	56	2	2