

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

Construction Phase Monthly EM&A Report No.50 (For February 2020)

March 2020

Airport Authority Hong Kong

3/F International Trade Tower 348 Kwun Tong Road Kwun Tong Kowloon Hong Kong

T +852 2828 5757 F +852 2827 1823 mottmac.hk

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

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March 2020

This Monthly EM&A Report No. 50 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:

Terence Kong

Environmental Team Leader (ETL) Mott MacDonald Hong Kong Limited

Date 13 March 2020



AECOM

12/F, Grand Central Plaza, Tower +852 3922 9797 fax 2, 138 Shatin Rural Committee Road, Shatin, Hong Kong 香港新界沙田鄉事會路 138 號新城 市中央廣場第2座12樓 www.aecom.com

+852 3922 9000 tel

Our Ref : 60440482/C/JCHL200313

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

13 March 2020

Dear Sir,

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

Submission of Monthly EM&A Report No. 50 (February 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 50 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 13 March 2020.

We write to verify the captioned submission in accordance with the requirement stipulated in Condition 3.5 of EP-489/2014.

Should you have any query, please feel free to contact the undersigned at 3922 9376.

Yours faithfully, AECOM Asia Co. Ltd.

while

Jackel Law

Independent Environmental Checker

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Abbreviations

3RS	Three-Runway System	
AAHK	Airport Authority Hong Kong	
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	
CNP	Construction Noise Permit	
CWD	Chinese White Dolphin	
DCM	Deep Cement Mixing	
DEZ	Dolphin Exclusion Zone	
DO	Dissolved Oxygen	
EAR	Ecological Acoustic Recorder	
EIA	Environmental Impact Assessment	
EM&A	Environmental Monitoring & Audit	
EP Environmental Permit		
EPD Environmental Protection Department		
ET	Environmental Team	
FCZ Fish Culture Zone		
HDD Horizontal Directional Drilling		
HKBCF Hong Kong-Zhuhai-Macao Bridge Hong Kong Bound 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	
MTCC	Marine Traffic Control Centre	
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	
SC Sha Chau		

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 50th 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 29 February 2020.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Works in the reclamation areas included deep cement mixing (DCM) works, marine filling, seawall and facilities construction, together with runway and associated works. Land-side works on Existing Airport Island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include site establishment, site office construction, 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	16
Water quality monitoring	13
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 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



Regular Water Quality Monitoring Conducted by ET



Land-Based Theodolite Tracking Survey for CWD at Sha Chau



Impact Air Quality Monitoring Conducted by ET in Tin Sum

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, construction waste, and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

The water quality monitoring results for all parameters, except suspended solids (SS), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, some of the testing results triggered the relevant Action Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Summary of Upcoming Key Issues

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

Stockpiling of compressed materials

DCM Works:

Contract 3205 DCM works

DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Land base ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

Cable ducting works;

- Subgrade compaction and paving works;
- Drainage construction works;
- Operation of aggregate mixing facility; and
- Precast of duct bank and fabrication of steel works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Trench excavation works;
- Backfilling and reinstatement works;
- Piling and structure works; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Plant and equipment mobilisation
- Footing and utilities work;
- Preparation works for box culvert construction; and
- Site establishment.

Third Runway Concourse and Integrated Airport Centres Works:

Contract 3402 New Integrated Airport Centres Enabling Works

- Potable water and seawater works;
- Footing construction;
- Road works; and
- Sewerage and pipe works.

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Excavation works
- · Utilities, drainage, and road work; and
- Piling and structure works.

Automated People Mover (APM) Works:

Contract 3602 Existing APM System Modification Works

Modification works at APM depot.

<u>Airport Support Infrastructure & Logistic Works:</u>

Contract 3721 Construction Support Infrastructure Works

- Site clearance and establishment;
- Excavation for utilities works; and
- Construction of utilities and logistic facilities.

Contract 3722 Construction Support Facilities

Site clearance and establishment.

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of temporary traffic steel deck;
- · Cofferdam installation for box culvert;
- Rising main installation;
- Drilling and grouting works;
- Piling and foundation works; and
- Site clearance.

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^		V	No breach of Limit Level was recorded.	Nil
Breach of Action Level [^]		√	No breach of Action Level was recorded.	Nil
Complaint Received		√	No construction activities-related complaint was received	Nil
Notification of any summons and status of prosecutions		V	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		V	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 updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in **Appendix A**.

1.2 Scope of this Report

This is the 50th 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 29 February 2020.

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**.

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

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environment	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Daniel Sum	2585 8495
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9141

Advanced Works:

Party	Position	Name	Telephone
Contract P560(R) Aviation Fuel Pipeline Diversion Works	Project Manager	Wei Shih	2117 0566
(Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.)	Environmental Officer	Lyn Liu	5172 6543

Deep Cement Mixing (DCM) Works:

Party	Position	Name	Telephone
Contract 3205 DCM	Deputy Project Director	Min Park	9683 0765
(Package 5) (Bachy Soletanche - Sambo Joint Venture)	Environmental Officer	William Chan	5408 3045

Reclamation Works:

Party	Position	Name	Telephone
Contract 3206 Main Reclamation Works	Project Manager	Kim Chuan Lim	3763 1509
(ZHEC-CCCC-CDC Joint Venture)	Environmental Officer	Kwai Fung Wong	3763 1452

Airfield Works:

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway	Deputy Project Director	Kin Hang Chung	9800 0048
(FJT-CHEC-ZHEC Joint Venture)	Environmental Officer	Joe Wong	6182 0351

Party	Position	Name	Telephone	
Contract 3302 Eastern Vehicular Tunnel Advance	Project Manager	Wan Cheung Lee	6100 6075	
Works (China Road and Bridge Corporation)	Environmental Officer	Dennis Ho	5645 0563	
Contract 3303 Third Runway and Associated	Project Manager	Andrew Keung	6277 6628	
Works (SAPR Joint Venture)	Environmental Officer	Pan Fong	9436 9435	

Third Runway Concourse and Integrated Airport Centres Works:

Party	Position	Name	Telephone	
Contract 3402 New Integrated Airport Centres	Contract Manager	Michael Kan	9206 0550	
Enabling Works (Wing Hing Construction Co., Ltd.)	Environmental Officer	Lisa He	5374 3418	
Contract 3403 New	Project Manager	Alice Leung	9220 3162	
Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Environmental Officer	Alpha Chia	9626 1114	

Terminal 2 (T2) Expansion Works:

Party	Position	Name	Telephone
Contract 3501 Antenna Farm and Sewage Pumping	Contracts Manager	Vincent Kwan	9833 1313
Station (Build King Construction Ltd.)	Environmental Officer	Edward Tam	9287 8270
Contract 3503 Terminal 2 Foundation and	Project Manager	Eric Wu	3973 1718
Substructure Works (Leighton – Chun Wo Joint Venture)	Environmental Officer	Malcolm Leung	3973 0850

Automated People Mover (APM) Works:

Party	Position	Name	Telephone
Contract 3602 Existing APM System Modification Works	Project Manager	Kunihiro Tatecho	9755 0351
(Niigata Transys Co., Ltd.)	Environmental Officer	Yolanda Gao	5399 3509

Baggage Handling System (BHS) Works:

Party	Position	Name	Telephone
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	Andy Ng	9102 2739
	Environmental Officer	Eric Ha	9215 3432

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works	Site Agent	Thomas Lui	9011 5340
(China State Construction Engineering (Hong Kong) Ltd.)	Environmental Officer	Xavier Lam	9493 2944
Contract 3722 Western Support Area – Construction Support	Project Manager	Lawrence Chan	9049 3161
Facilities (Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture)	Environmental Officer	Sampson Lo	97529118
Contract 3801 APM and BHS Tunnels on Existing Airport Island	Project Manager	Tony Wong	9642 8672
(China State Construction Engineering (Hong Kong) Ltd.)	Environmental Officer	Fredrick Wong	9842 2703

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-side works on Existing Airport Island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, 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 and details can be referred to Table 1.2 of the Construction Phase Monthly EM&A Report No. 1.

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

Parameters	Status	
Air Quality		
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.	
Impact Monitoring	On-going On-going	
Noise		
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.	
Impact Monitoring	On-going On-going	
Water Quality		
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in 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	On-going	

Parameters	Status
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	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	On-going
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Contamination Assessment Report (CAR) for Terminal 2 Emergency Power Supply System No.1 (Volume 1)	The CAR for Terminal 2 Emergency Power Supply System No.1 (Volume 1) was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Landscape & Visual Plan	The Landscape & Visual Plan was submitted to EPD under EP Condition 2.18
Basalina Manitarina	24.1400460 4. 110441. 141. 1140 040
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	The baseline landscape & visual monitoring result has been reported in
	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring Environmental Auditing	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4. On-going
Impact Monitoring Environmental Auditing Regular site inspection Marine Mammal Watching Plan	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4. On-going On-going
Impact Monitoring Environmental Auditing Regular site inspection Marine Mammal Watching Plan (MMWP) implementation measures Dolphin Exclusion Zone (DEZ) Plan	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4. On-going On-going On-going
Impact Monitoring Environmental Auditing Regular site inspection Marine Mammal Watching Plan (MMWP) implementation measures Dolphin Exclusion Zone (DEZ) Plan implementation measures SkyPier High Speed Ferries (HSF)	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4. On-going On-going On-going On-going
Impact Monitoring Environmental Auditing Regular site inspection Marine Mammal Watching Plan (MMWP) implementation measures Dolphin Exclusion Zone (DEZ) Plan implementation measures SkyPier High Speed Ferries (HSF) implementation measures Construction and Associated Vessels	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4. On-going On-going On-going On-going 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, environmental trainings and regular environmental management meetings were conducted during the reporting period, which are summarised as below:

- Two skipper training sessions provided by ET: 5 and 19 February 2020;
- One environmental briefing on EP and EM&A requirements of the 3RS provided by ET: 20 February 2020;
- Nine environmental management meetings for EM&A review with works contracts: 6, 7, 11, 12, 19, 24, 25 and 28 February 2020.

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 B**.

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 (μg/m³)	Limit Level (μg/m³)
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-2 (Serial No. 296098)	24 Oct 2019	Monthly EM&A Report No. 46, Appendix E
	SIBATA LD-3B-1 (Serial No. 597337)	19 Sep 2019	Monthly EM&A Report No. 45, 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 E of the Construction Phase Monthly EM&A Report No. 46, 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 C**.

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
AR1A	23 - 196	306	500
AR2	7 - 59	298	_

Remark:

Abnormal result was recorded on 28 February 2020 at AR2, which may be potentially caused by malfunction of monitoring equipment. The result was discarded after review.

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 from Project and other activities was observed at the monitoring stations during impact air quality monitoring. It is considered that the monitoring work in the reporting period is effective and there was no adverse impact attributable to the Project activities.

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
N1 - 4		

Note:

- (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	NTi XL2 (Serial No. A2A-14829-E0)	14 Jul 2019	Monthly EM&A Report No. 43, Appendix D
	Rion NL-52 (Serial No. 01287679)	21 Sep 2019	Monthly EM&A Report No. 45, Appendix D
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	21 Sep 2019	Monthly EM&A Report No. 45, Appendix D
	Castle GA607 (Serial No. 040162)	14 Jul 2019	Monthly EM&A Report No. 43, 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}, L₁₀ and L₉₀ were recorded. In addition, site conditions and noise sources were recorded on a record sheet.
- f. Noise measurement results were corrected with reference to the baseline monitoring levels.
- g. Observations were recorded when high intrusive noise (e.g. dog barking, helicopter noise) was observed during the monitoring.

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

Calibration certificates of the sound level meters and acoustic calibrators used in the noise monitoring 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 C**.

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)	
	Leq (30 mins)	Leq (30 mins)	
NM1A ⁽¹⁾	71 - 73	75	
NM4 ⁽¹⁾	61 - 62	70 ⁽²⁾	
NM5 ⁽¹⁾	53 - 57	75	
NM6 ⁽¹⁾	65 - 71	75	

Notes:

- (1) +3dB(A) Façade correction included;
- (2) Reduced to 65dB(A) during school examination periods at NM4. No school examination took place during this reporting period.

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 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, suspended solids (SS), total alkalinity, chromium, and nickel was conducted three days per week, at mid-ebb and mid-flood tides, at a total of 23 water quality monitoring stations, comprising 12 impact (IM) stations, 8 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 and Parameters of Impact Water Quality Monitoring

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	General Parameters
C2	Control Station	806945	825682	DO, pH, Temperature,
C3 ⁽³⁾	Control Station	817803	822109	—Salinity, Turbidity, SS
IM1	Impact Station	807132	817949	DCM Parameters
IM2	Impact Station	806166	818163	Total Alkalinity, Heavy
IM3	Impact Station	805594	818784	Metals ⁽²⁾
IM4	Impact Station	804607	819725	
IM5	Impact Station	804867	820735	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	808140	821830	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809794	822385	
IM11	Impact Station	811460	822057	
IM12	Impact Station	812046	821459	
SR1A ⁽¹⁾	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR2 ⁽³⁾	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
				<u>DCM Parameters</u> Total Alkalinity, Heavy Metals ⁽²⁾⁽⁴⁾
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	

Monitoring Station	Description		Coordinates	Parameters
		Easting	Northing	
SR5A	San Tau Beach SSSI	810696	816593	Conoral Parameters
SR6A ⁽⁵⁾	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	Caminty, Tarbianty, CC
SR8 ⁽⁶⁾	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) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (http://env.threerunwaysystem.com/en/epsubmissions.html). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.
- (3) According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.
- (4) Total alkalinity and heavy metals results are collected at SR2 as a control station for regular DCM monitoring.
- (5) As the access to SR6 was obstructed by the construction activities and temporary structures for Tung Chung New Town Extension, the monitoring location has been relocated to SR6A starting from 8 August 2019.
- (6) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the above-mentioned 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 and regular DCM 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 and regular DCM monitoring are presented in **Table 4.3**.

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

Parameter		7.00.0 = 0.0 (7.1=)		Limit Level (LL)	
	Limit Levels for genera SR1A & SR8)	I water quality mor	nitoring and regula	r DCM monitoring	
General Water Quality Monitoring	DO in mg/L (Surface, Middle & Bottom)	Surface and Middle 4.5mg/L		Surface and Middle 4.1mg/L 5mg/L for Fish Culture Zone (SR7) only	
Morntoring		Bottom 3.4mg/L		Bottom 2.7mg/L	
	Suspended Solids (SS) in mg/L	23	or 120% of upstream control	37	or 130% of upstream control
	Turbidity in NTU	22.6	station at the same tide of the same day, whichever is higher	36.1	station at the same tide of the same day,
Regular	Total Alkalinity in ppm	95		99	
DCM Monitoring	Representative Heavy Metals for regular DCM monitoring (Chromium) in µg/L	0.2		0.2	whichever is higher
	Representative Heavy Metals for regular DCM monitoring (Nickel) in µg/L	3.2		3.6	_
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.
- (4) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (http://env.threerunwaysystem.com/en/epsubmissions.html)
- (5) The Action and Limit Levels for the two representative heavy metals chosen will be the same as that for the intensive DCM monitoring.

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

Control Station Impact Stations

Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2 ⁽¹⁾	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6A, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6A
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, 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	YSI 6920V2 (Serial No. 0001C6A7)	20 Jan 2020	Monthly EM&A Report No. 49,
(measurement of DO, pH,	YSI 6920V2 (Serial No. 00019CB2)	20 Jan 2020	Appendix E
temperature, salinity and turbidity)	YSI ProDSS (Serial No. 17H105557)	23 Dec 2019	Monthly EM&A Report No. 48,
turbidity)	YSI ProDSS (Serial No. 16H104234)	23 Dec 2019	Appendix D
	YSI ProDSS (Serial No. 17E100747)	23 Dec 2019	
Digital Titrator	Titrette Digital Burette 50ml Class A	9 Dec 2019	Monthly EM&A Report No. 48,
(measurement of total alkalinity)	(Serial No. 10N64701)		Appendix D

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, alkalinity and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for heavy metals and SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4°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). Accuracy check of the digital titrator was performed at least once per monitoring day.

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

4.3.3 Laboratory Measurement / Analysis

Analysis of SS and heavy metals have been carried out by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at all the monitoring stations for carrying out the laboratory SS and heavy metals determination. The SS and heavy metals determination works were started within 24 hours after collection of the water samples. The analysis of SS and heavy metals have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS and heavy metals were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

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

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

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix C**.

The water quality monitoring results for all parameters, except SS, obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix D**.

For SS, some of the testing results triggered the corresponding Action Levels, and investigations were conducted accordingly.

Table 4.7 presents the summary of the SS compliance status at IM and SR stations during midebb tide for the reporting period.

Table 4.7: Summary of SS Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR2	SR3	SR4A	SR5A	SR6A	SR7	SR8
01/02/2020																				
04/02/2020																				
06/02/2020																				
08/02/2020																				
11/02/2020																				
13/02/2020																				
15/02/2020																				
18/02/2020																				
20/02/2020																				
22/02/2020																				
25/02/2020																				
27/02/2020																				
29/02/2020																				
No. of result triggereing Action or Limit Level	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 4.8 presents the summary of the SS compliance status at IM and SR stations during mid-flood tide for the reporting period.

Table 4.8: Summary of SS Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR3	SR4A	SR5A	SR6A	SR7	SR8
01/02/2020																			
04/02/2020																			
06/02/2020																			
08/02/2020																			
11/02/2020					D														
13/02/2020					D														
15/02/2020																			
18/02/2020																			
20/02/2020																			
22/02/2020																			
25/02/2020																			
27/02/2020																			
29/02/2020																			
No. of result riggereing Action or Limit Level	0	0	0	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	(
lote: Detaile	d res	ults a	re pre	sente	d in A	ppen	dix D).							•				
_egend:																			
	The monitoring results were within the corresponding Action and Limit Levels																		
	Monitoring result triggered the Action Level at monitoring station located upstream of the Project based on dominant tidal flow																		
D		itoring				the A	ction	Level	at mo	onitori	ng sta	ation	locate	d dov	vnstre	am of	the Pro	oject k	asec

Action Levels were triggered on 11, 13 and 29 February 2020. Some cases occurred at monitoring station upstream of the Project during respective tide and would unlikely be affected by the Project.

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

Investigation focusing on the cases that occurred at monitoring stations located downstream of the Project was carried out. Details of the Project's marine construction activities and site observations on the concerned monitoring days were collected. Findings were summarised in ${f Table \ 4.9}$

Table 4.9: Summary of Findings from Investigation of SS Monitoring Results

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
11/2/2020	DCM works	Around 3km	Localised and enhanced silt curtain deployed	No	No	No
13/2/2020	DCM works	Around 3km	Localised and enhanced silt curtain deployed	No	No	No

The investigations confirmed that DCM works were operating normally on 11 and 13 February 2020 with localised and enhanced silt curtains deployed. The silt curtains were maintained properly and checked by ET regularly.

SS results recorded at IM5 on 11 and 13 February 2020 during mid-flood tide were within their baseline range. Both cases appeared to be isolated with no observable spatial trend to indicate any effect due to Project activities. With no observable silt plume during marine works and mitigation measures implemented properly, the cases were considered not due to Project.

4.5 Conclusion

During the reporting period, it is noted that the vast majority of monitoring results were within their corresponding Action and Limit Levels, while only a minor number of results triggered the corresponding Action Levels, and investigations were conducted accordingly.

Based on the investigation findings, all results that triggered the corresponding Action Levels were not due to the Project. Therefore, the Project did not cause adverse impact at the water quality sensitive receivers. All required actions under the Event and Action Plan were followed. The cases appeared to be due to natural fluctuation or other sources not related to the Project.

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 during weekly site inspection and regular environmental management meetings. These include maintaining mitigation measures properly for reclamation works including DCM works, marine filling, and seawall construction as recommended in the Manual.

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 had 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 B**.

Based on updated information provided by contractors, construction waste generated in the reporting period is summarised in **Table 5.2**.

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.

Along with the design and construction progress, further development on the treatment level/details and the re-use mode for marine sediment generated from 3RS Project has been conducted according to the EIA recommendation.

Table 5.2: Construction Waste Statistics

		Material	Reused in other Projects	C&D Material Transferred to Public Fill (m³)	Waste		General Refuse (tonne)
February 2020 ⁽²⁾⁽³⁾	46,207	41,994	0	5,074	120	6,400	1,011

C&D ⁽¹⁾ Material	C&D	C&D Material	C&D Material	Chemical	Chemical	General
Stockpiled for	Material	Reused in	Transferred to	Waste	Waste	Refuse
Reuse or	Reused in	other Projects	Public Fill	(kg)	(L)	(tonne)
Recycle	the Project	(m ³)	(m ³)			
(m ³)	(m ³)					

Notes:

- (1) C&D refers to Construction and Demolition.
- (2) Metals, paper and/or plastics were recycled in the reporting period.
- (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.

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 STG & ANI will be calculated from the three 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
		NE	EL .		
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
		NV	VL		
1S	804671	814577	5S	808504	821735
1N	804671	831404	5N	808504	828602
2Sb	805475	815457	6S	809490	822075
2Nb	805476	818571	6N	809490	825352
2Sa	805476	820770	7S	810499	822323
2Na	805476	830562	7N	810499	824613
3S	806464	821033	88	811508	821839
3N	806464	829598	8N	811508	824254
4S	807518	821395	9S	812516	821356
4N	807518	829230	9N	812516	824254
		A'			
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
		W	/L		
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	8W	800800	812450
2E	801750	806450	8E	802900	812450
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	· - ··		
		SV	VL		
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
28	803489	803280	7S	808553	800329
2N	803489	806720	7N	808553	807377
38	804484	802509	88	809547	800338
3N	804484	807048	8N	809547	807396
48	805478	802105	98	810542	800423
4N	805478	807556	9N	810542	807462

Waypoint	Easting	Northing	Waypoint	Easting	Northing
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 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 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 10, 11, 12, 17, 18, 20, 21 and 26 February 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of around 452.50 km of survey effort was collected from these surveys and around 91.8% 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 D**.

Sighting Distribution

In February 2020, 13 sightings with 35 dolphins were sighted. All these sightings are on-effort sightings under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in February 2020 is illustrated in **Figure 6.3**. In NWL, CWD sightings were recorded at the western side of Lung Kwu Chau and at the waters off the southwestern side of 3RS works boundary. In WL, CWD sightings mainly clustered at waters around Tai O and Peaked Hill. In SWL, the only CWD sighting was located at the westernmost transect. No sightings of CWD were recorded in NEL survey area.

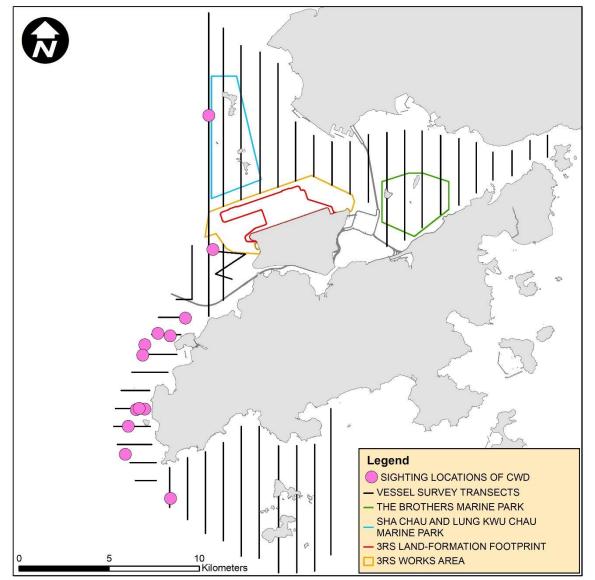


Figure 6.3: Sightings Distribution of Chinese White Dolphins

Remarks: Please note that there are 13 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

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from February 2020. 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)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In February 2020, a total of around 415.32 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 13 on-effort sightings with 35 dolphins were sighted under such condition. Calculation of the encounter rates in February 2020 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from December 2019 to February 2020), a total of around 1260.29 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 36 on-effort sightings and a total number of 112 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of February 2020 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rate STG remains above the Action Level but the running quarterly encounter rate ANI is below the Action Level. Nevertheless, the overall 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)
February 2020	3.13	8.43
Running Quarter from December 2019 to February 2020 ⁽¹⁾	2.86	8.89
Action Level	Running quarterly ⁽¹⁾ ST	G < 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, i.e. the data from December 2019 to February 2020, 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 February 2020, 13 groups with 35 dolphins were sighted, and the average group size of CWDs was 2.7 dolphins per group. Sightings with medium group size (i.e. 3-9 dolphins) were dominant. No CWD sighting with large group size (i.e. 10 or more dolphins) was recorded.

Activities and Association with Fishing Boats

Four sightings of CWD was recorded engaging in feeding activities in February 2020. None of these sightings were observed in association with operating fishing boat.

Mother-calf Pair

In February 2020, one CWD sighing was recorded with the presence of mother-and-unspotted juvenile pair.

6.4.2 Photo Identification

In February 2020, a total number of 21 different CWD individuals were identified for total 27 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

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
NLMM004	20-Feb-20	1	WL	SLMM037	12-Feb-20	7	WL
NLMM071	10-Feb-20	1	NWL		20-Feb-20	3	WL
NLMM073	10-Feb-20	1	NWL			4	WL
NLMM074	10-Feb-20	1	NWL	SLMM058	12-Feb-20	1	AW
SLMM003	12-Feb-20	6	WL	WLMM003	20-Feb-20	1	WL
	20-Feb-20	3	WL	WLMM004	12-Feb-20	1	AW
		4	WL	WLMM007	12-Feb-20	3	WL
SLMM007	12-Feb-20	7	WL	WLMM040	20-Feb-20	2	WL
SLMM012	12-Feb-20	2	WL	WLMM071	12-Feb-20	1	AW
	20-Feb-20	3	WL	WLMM114	12-Feb-20	5	WL
SLMM014	20-Feb-20	3	WL	WLMM122	10-Feb-20	1	NWL
SLMM019	26-Feb-20	15	SWL	WLMM131	20-Feb-20	4	WL
SLMM023	12-Feb-20	2	WL				
SLMM031	20-Feb-20	3	WL				
	26-Feb-20	15	SWL				

6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 19 February 2020 and at SC on 20 February 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. Four CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix D**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in February 2020 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	1	6:00	4	0.67
Sha Chau	1	6:00	0	0
TOTAL	2	12:00	4	0.33

Legend

CWD GROUP OFF LUNG KWU CHAU

LUNG KWU CHAU LAND-BASED STATION

SHA CHAU AND LUNG KWU CHAU

MARINE PARK

Figure 6.4: Plots of First Sightings of All CWD Groups obtained from Land-based Stations

6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) was retrieved on 21 February 2020 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialised team of acousticians) involved manually browsing through spectrograms of every acoustic recording and logging the occurrence of dolphin signals. All potential dolphin detections will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than 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, silt curtains were in place by the contractor for marine filling, in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 3 to 7 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM works and seawall construction in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 679 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in 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 7.2** and **Section 7.3** respectively.

6.7 Timing of Reporting CWD Monitoring Results

Detailed analysis of CWD monitoring results collected by small vessel line-transect survey will be provided in future quarterly reports. Detailed analysis of CWD monitoring results collected by land-based theodolite tracking 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 as scheduled. 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 were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. The weekly site inspection schedule of the construction works is provided in **Appendix C**. Biweekly site inspections were also conducted by the IEC. Besides, *ad-hoc* site inspections were 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 were 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.

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix B**) was monitored regularly in accordance with the Manual. No non-conformity was recorded during the reporting period. Based on the latest Contractors' submitted records, a cumulative total of 231 and 8 trees were retained and transplanted. The Contractors' performance on existing trees maintenance and protection measures on retained and transplanted trees were regularly checked by the ET. In case of non-conformity, specific recommendations would be made, and actions will be carried out according to the Event and Action Plan.

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

7.2 Audit of 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.

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 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 30 to 65 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.

Due to the Novel Coronavirus epidemic, all ferry service between HKIA SkyPier and Macau has been suspended from 4 February 2020. In total, 149 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in February 2020 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in February 2020 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

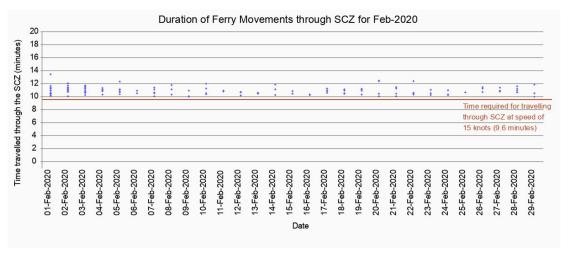


Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for February 2020

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

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

Requirements in the SkyPier Plan	1 to 29 February 2020
Total number of ferry movements recorded and audited	149
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Speed control in speed control zone	The average speeds of all HSFs travelling through the SCZ ranged from 10.9 to 13.6 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in Figure 7.1 .
Daily Cap (including all SkyPier HSFs)	30-65 daily movements (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- Two skipper training sessions were held for contractors' concerned skippers of relevant
 construction vessels to familiarize them with the predefined routes; general education on
 local cetaceans; guidelines for avoiding adverse water quality impact; the required
 environmental practices / measures while operating construction and associated vessels
 under the Project; and guidelines for operating vessels safely in the presence of CWDs.
 The list of all trained skippers was properly recorded and maintained by ET.
- Two skipper training sessions were held by contractors' Environmental Officers.
 Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 5 skippers were trained by ET and 4 skippers were trained by contractors' Environmental Officers. In total, 1318 skippers were trained from August 2016 to February 2020.
- 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 MTCC 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.

7.4 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. The 24-hour DEZs with a 250m radius for marine works were established and implemented by the contractors for DCM works and seawall construction according to their Method Statement for DEZ Monitoring that followed the specifications and requirements of the DEZ Plan.

During the reporting period, ET was notified that no dolphin sightings were recorded within the DEZ by the contractors. The ET checked the dolphin sighting record and relevant records by the contractors to audit the implementation of DEZ.

7.5 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	
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	Accepted / approved
2.11	Marine Mammal Watching Plan	─by EPD
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egretry 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	Submitted to EPD
2.19	Waste Management Plan	
2.20	Supplementary Contamination Assessment Plan	Accepted / approved
3.1	Updated EM&A Manual	by EPD
3.4	Baseline Monitoring Reports	

7.6 Compliance with Other Statutory Environmental Requirements

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

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

7.7.1 Complaints

No construction activities-related complaint was received during the reporting period.

7.7.2 Notifications of Summons or Status of Prosecution

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

7.7.3 Cumulative Statistics

Cumulative statistics on complaints, notifications of summons and status of prosecutions are summarised in ${\bf Appendix}\;{\bf F}.$

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:

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

Stockpiling of compressed materials

DCM Works:

Contract 3205 DCM works

DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Land base ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade compaction and paving works;
- Drainage construction works;
- Operation of aggregate mixing facility; and
- Precast of duct bank and fabrication of steel works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Trench excavation works;
- Backfilling and reinstatement works
- Piling and structure works; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Plant and equipment mobilisation
- Footing and utilities work
- Preparation works for box culvert construction; and
- Site establishment.

Third Runway Concourse and Integrated Airport Centres Works:

Contract 3402 New Integrated Airport Centres Enabling Works

- Potable water and seawater works:
- Footing construction;
- Road works; and
- Sewerage and pipe works.

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Excavation works
- Utilities, drainage, and road work; and
- Piling and structure works.

Automated People Mover (APM) Works:

Contract 3602 Existing APM System Modification Works

Modification works at APM depot.

Airport Support Infrastructure & Logistic Works:

Contract 3721 Construction Support Infrastructure Works

- Site clearance and establishment;
- · Excavation for utilities works; and
- Construction of utilities and logistic facilities.

Contract 3722 Construction Support Facilities

Site clearance and establishment.

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of temporary traffic steel deck;
- Cofferdam installation for box culvert;
- Rising main installation;
- Drilling and grouting works;
- · Piling and foundation works; and
- Site clearance.

8.2 Key Environmental Issues for the Coming Reporting Period

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

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;

- Water quality from DCM works and marine filling;
- DEZ monitoring for ground improvement works (DCM works) and seawall construction;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

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 included reclamation works and land-side works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-side works on Existing Airport Island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, 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, construction waste, and CWD did not trigger the corresponding Action and Limit Levels during the reporting period.

The water quality monitoring results for all parameters, except SS, obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigations and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, some of the testing results triggered the relevant Action Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

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, the daily movements of all SkyPier HSFs in February 2020 were in the range of 30 to 65 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 149 HSF movements under the SkyPier Plan were recorded in the reporting period. The average speeds of all HSFs travelling through the SCZ ranged from 10.9 to 13.6 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

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. Training has 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 MTCC 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

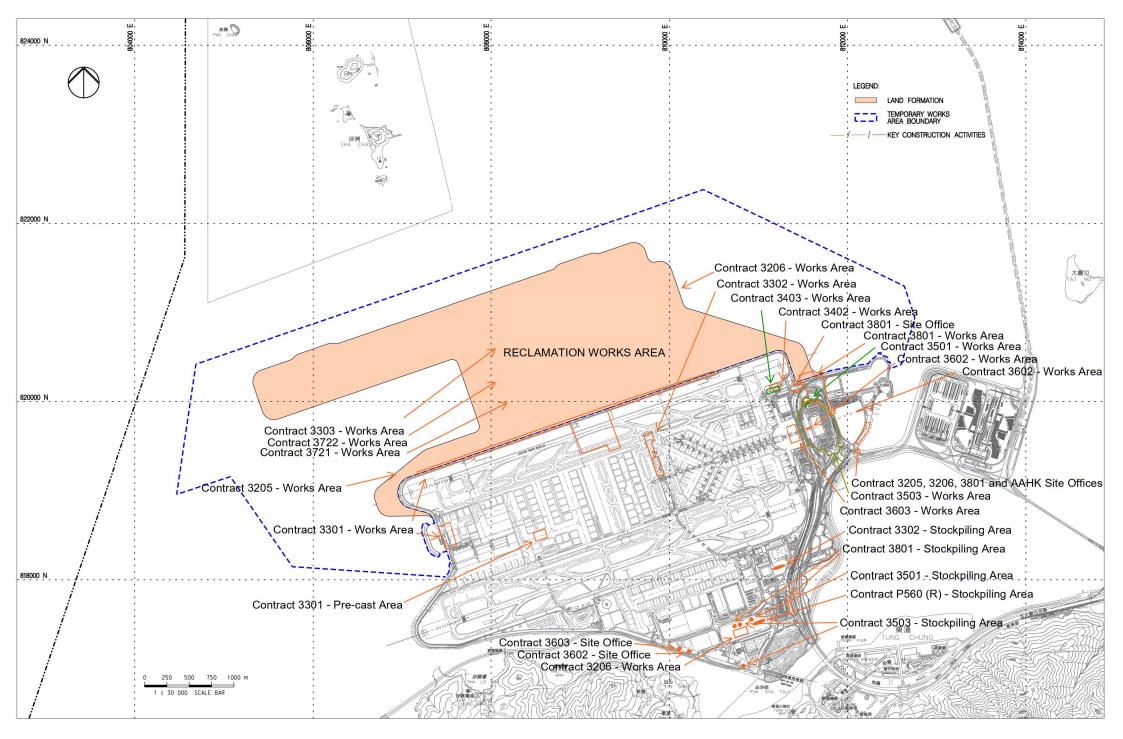
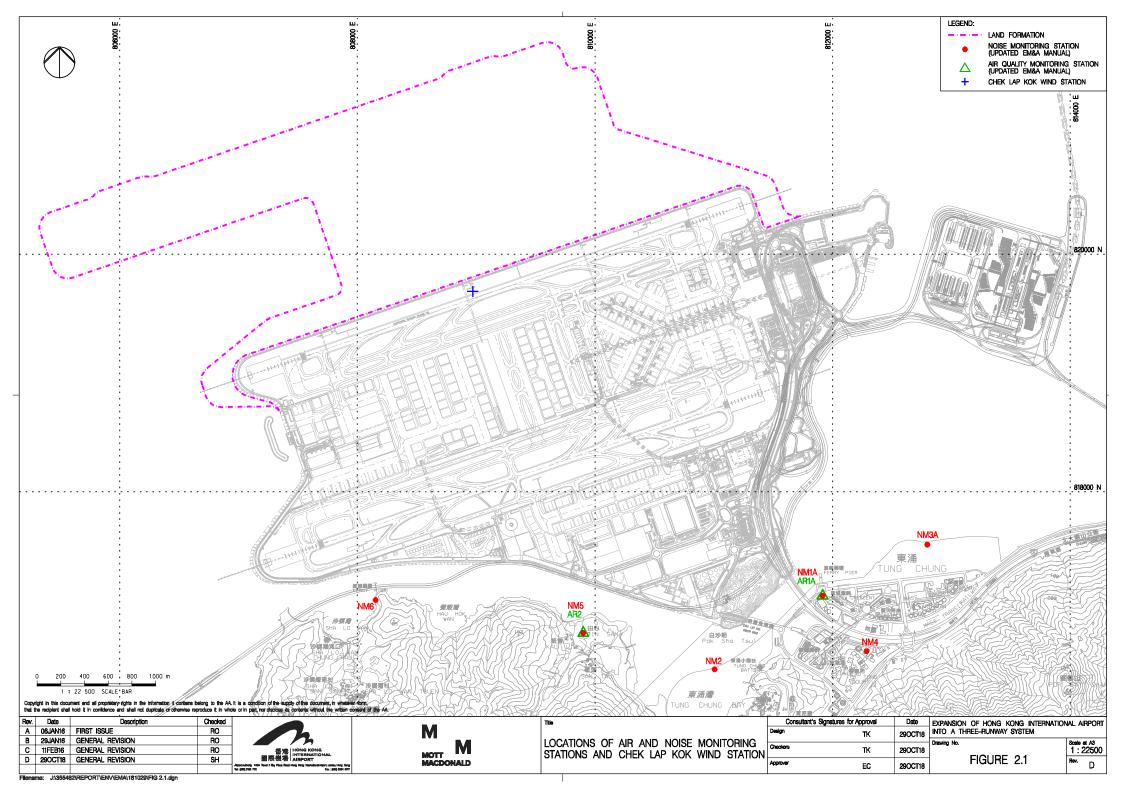
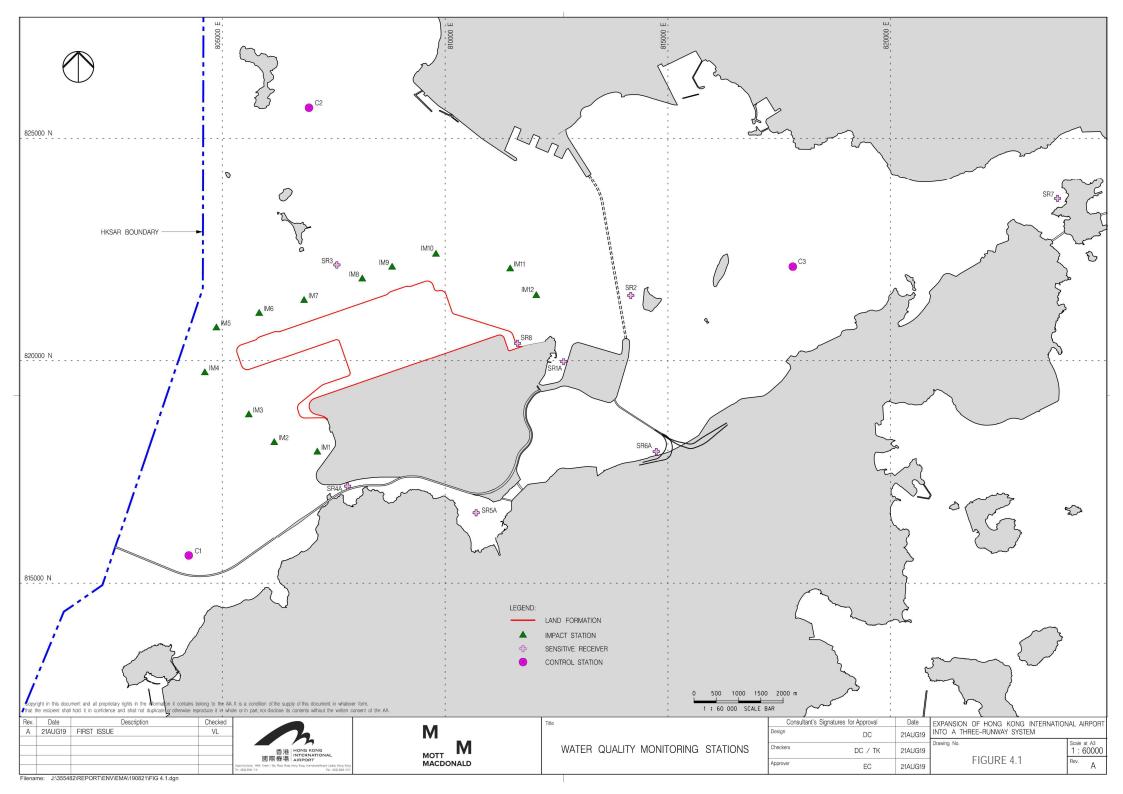
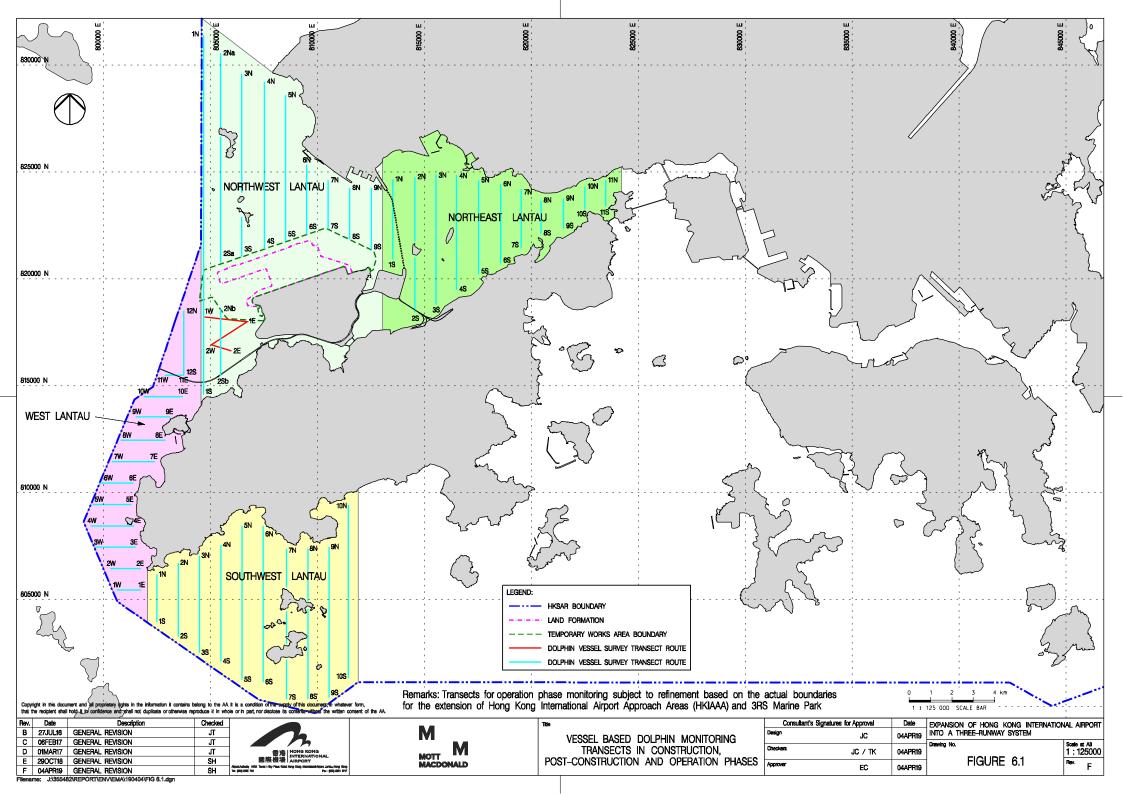
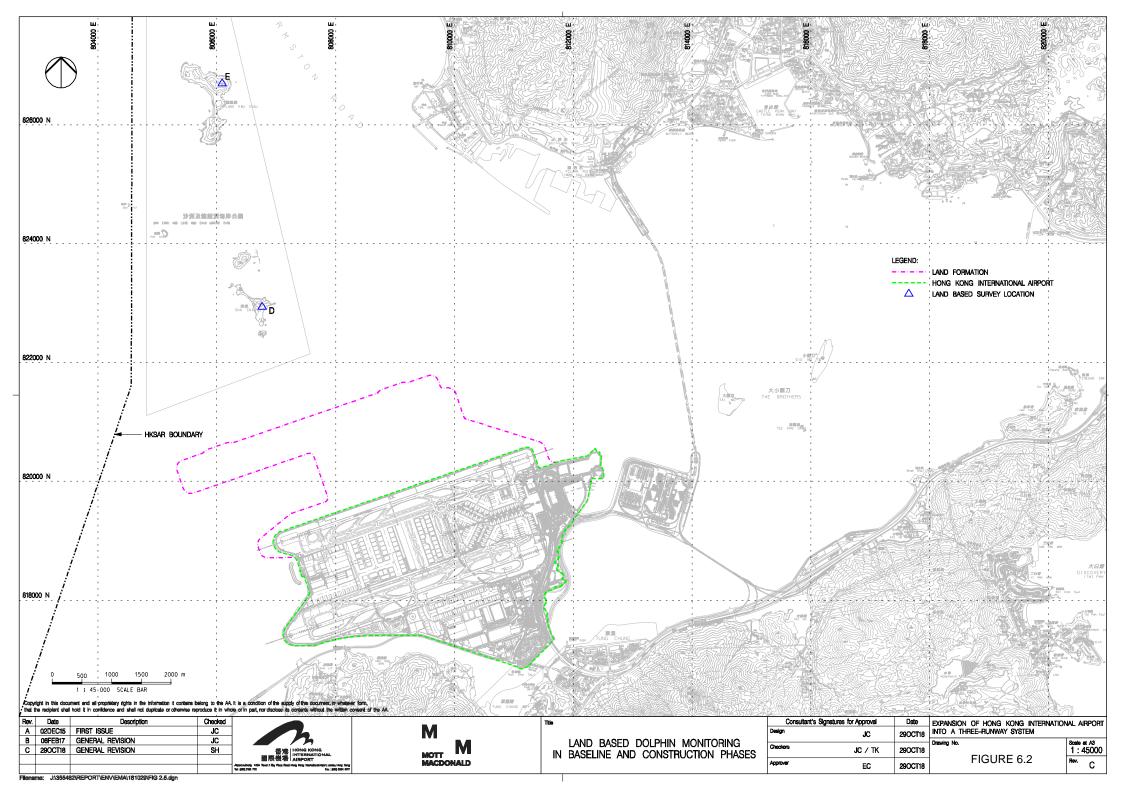


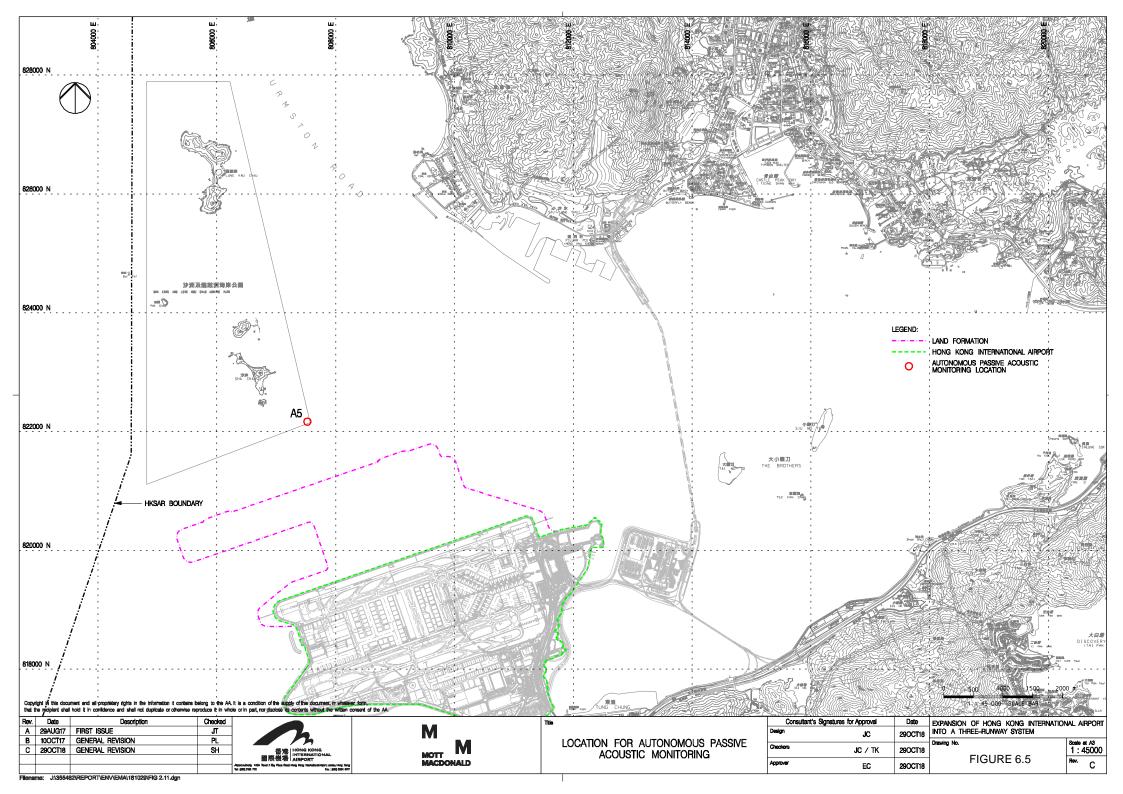
FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES











Appendix A. Contract Description

Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
P560 (R)	Aviation Fuel Pipeline Diversion Works	Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.	Diversion of the existing submarine aviation fuel pipelines will use a horizontal directional drilling (HDD) method forming two rock drill holes by drilling through bedrock from a launching site located at the west of the airport island to a daylighting point adjacent to the offshore receiving platform at Sha Chau. Two new pipelines will be installed through the drilled tunnels. The total length is approximately 5 km. Drilling works will proceed from the HDD launching site at the airport island.
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	The works covered by the Contract 3205 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following • Geophysical surveys; • Supply and placing of geotextile and sand blanket under seawalls; • Supply, maintenance, installation and removal of silt curtain systems; • Preliminary construction trails; • Supply and installation of DCM clusters within the works areas; and • Coring, sampling and testing of DCM treated soils and reporting works.
3206	Reclamation Contract	ZHEC-CCCC-CDC Joint Venture	The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following • Site clearance and demolition; • Geotechnical and ground improvement works; • Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	FJT-CHEC-ZHEC Joint Venture	The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable

Contract No.	Contract Title	Contractor	Key Construction Activities
			ducting systems. The major construction activities include without limitation the following:
			Construction of a new dual taxiway;
			Cable ducting works;
			 Extension of existing portable water supply system; and
			All associated works.
3302	Eastern	China Road and Bridge	The works covered by the Contract 3302 comprise the design and
	Vehicular	Corporation	construction of the first section of the new Eastern Vehicular Tunnel and a
	Tunnel Advance		Road Tunnel Plant Building. The major construction activities include without
	Works		limitation the following:
			 Foundation and structural works;
			 Cast-in / Underground electrical & mechanical works and utility
			services; and
			 All associated testing and commissioning works.
3303	Third Runway and Associated	SAPR Joint Venture	The works covered by the Contract 3303 comprise all elements of permanent works and temporary works required for the completion, commissioning and
	Works		operation of the new North Runway and existing South Runway following the
			closure of the existing North Runway. The major construction activities
			include without limitation the following:
			New runway, taxiways, and associated works;Infrastructure works;
			 Construction of ancillary buildings and facilities;
			 Set up of various airport systems; and
			All associated testing and commissioning works.
3402	New Integrated	Wing Hing Construction	The works covered by the Contract 3402 comprise the enabling works for the
J-102	Airport Centers	Co., Ltd.	new Integrated Airport Centers. The major construction activities include
	Enabling Works	00., Ltd.	without limitation the following:
			Site clearance and demolition;
			Building services works;
			 Utilities diversion and installation works;
			Roadworks including associated facilities; and
			All associated testing and commissioning works.

Contract No.	Contract Title	Contractor	Key Construction Activities
3403	New Integrated Airport Centres – Building and Civil Works	Sun Fook Kong Construction Limited	The works covered by the Contract 3403 comprise the construction of a new Integrated Airport Centre (IAC) and a number of ancillary facilities and Additions and Alteration (A&A) works for converting the existing IAC into a back-up IAC, including without limitation the following: Site clearance and demolition; Building structure and envelope; Building Services and Airport Systems; and Utilities division and installations.
3501	Antenna Farm and Sewage Pumping Station	Build King Construction Limited	The works covered by the Contract 3501 comprise the construction of antenna farm and sewage pumping station. The major construction activities include without limitation the following: • Civil and structural engineering works; • Building services works; • Architectural builder's works and finishes; • Trenchless excavation for sewage rising mains; and • All associated works.
3503	Terminal 2 Foundation and Substructure Works	Leighton - Chun Wo Joint Venture	The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works. The major construction activities include without limitation the following: • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building; • Construction of new South Annex Building; • Diversion and provisions of utilities; and • All associated testing and commissioning works.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems: • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.

Contract No.	Contract Title	Contractor	Key Construction Activities
3603	3RS Baggage Handling System	VISH Consortium	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.
3721	Construction Support Infrastructure Works	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3721 comprise the construction of the infrastructure works and building facilities on the reclaimed land formation. The major construction activities include without limitation the following: Project site road; Utilities; Cargo loading quays; and Security fencing and hoarding.
3722	Western Support Area – Construction Support Facilities	Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture	The works covered by the Contract 3722 comprise the design and construction of support facilities, including site office, Canteen, Safety Induction Centre and Medical Centre, Material Testing Laboratories and Typhoon Shelter, Vehicle Maintenance Facility and Fuel Storage Facility. The major construction activities include without limitation the following: Construction of support facilities; Foundation and structural works; and Building services works.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and • Construction, testing and commissioning of sewerage pumping station; and • Civil and structural engineering works.

Appendix B. 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 ■ 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	-	 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 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 byproducts 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 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 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

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EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?
			Debris Handling 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	Within construction site / Duration of the construction phase	I
			 Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. Transport of Dusty Materials 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	1
			Wheel washing 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	I
			Use of vehicles 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;	Within construction site / Duration of the construction phase	1
			 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. 		
			Site hoarding • 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	I
5.2.6.5	2.1	-	Best Practices for Concrete Batching Plant 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: Cement and other dusty materials	Within Concrete Batching Plant / Duration of the construction phase	N/A



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?
			• 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. 		
			Other raw materials	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			 The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, stock piles and material discharge points; 		
			 All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above the unloading point. In no case shall these hoppers be used as the material storage devices; 		
			• The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same performance;		
			 All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals; 		
			 Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface; 		
			 Conveyors discharged to stockpiles of relevant materials shall be arranged to minimize free fall as far as practicable. All free falling transfer points from conveyors to stockpiles shall be enclosed with chute(s) and water sprayed; 		
			 Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure such as storage bin and should not be handled in open area. Where there is sufficient buffer area surrounding the concrete batching plant, ground stockpiling may be used; 		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 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.	Within Concrete Batching Plant / Duration of the construction phase	
			Loading of materials for batching		N/A
			Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented:		
			(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.		
			Vehicles	Within Concrete	N/A
			 All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and 	Batching Plant / Duration of the construction phase Within Concrete Batching Plant / Duration of the construction phase	
			 All access and route roads within the premises shall be paved and adequately wetted. 		
			Housekeeping		N/A
			A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground, support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any dumping of materials at open area shall be prohibited.		
5.2.6.6	2.1	-	Best Practices for Asphaltic Concrete Plant	Within Concrete Batching Plant / Duration of the construction phase	N/A
			The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted. These include:		
			Design of Chimney		
			• 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;		

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EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented? ⁴
			■ The flue gas exit temperature shall not be less than the acid dew point; and		
			 Release of the chimney shall be directed vertically upwards and not be restricted or deflected. 		
			Cold feed side	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			• 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. 	Within Concrete Batching Plant / Duration of the construction phase	
			Hot feed side		N/A
			• 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; 		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			• All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value; and		
			 Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units). 		
			Material transportation	Within Concrete Batching Plant / Duration of the construction phase	N/A
			• 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. 		
			Control of emissions from bitumen decanting	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the	
			 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; 	construction phase	
			 Proper chimney for the discharge of bitumen fumes shall be provided at high level; 		
			 The emission of bitumen fumes shall not exceed the required emission limit; and 		
			The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles.		
			Liquid fuel	Within Concrete	N/A
			• 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.	Batching Plant / Duration of the construction phase	
			Housekeeping	Within Concrete Batching Plant / Duration of the construction phase	N/A
			 A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis. 		
5.2.6.7	2.1	-	Best Practices for Rock Crushing Plants	Within Concrete	N/A
			The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:	Batching Plant / 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?^
			Crushers		
			• 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. 		
			Vibratory screens and grizzlies	Within Concrete Batching Plant / Duration of the construction phase	N/A
			• 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. 		
			Belt conveyors	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			• Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and		
			Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals.		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Storage piles and bins • 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.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			 The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable; 		
			 All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or 		
			• The stockpiles of aggregates 5 mm in size or less shall be enclosed on 3 sides or suitably located to minimize wind-whipping. Save for fluctuations in stock or production, the average stockpile shall stay within the enclosure walls and in no case the height of the stockpile shall exceed twice the height of the enclosure walls.		
			 Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly. 		
			Rock drilling equipment	Within Concrete	N/A
			 Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities. 	Batching Plant / Duration of the construction phase	
			Hazard to Human Life - Construction Phase		
Table 6.40	3.2	-	Precautionary measures should be established to request barges to move away during typhoons.	Construction Site / Construction Period	1
Table 6.40	3.2	-	 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	-	• Location of all existing hydrant networks should be clearly identified prior to any construction works.	Construction Site / Construction Period	1
			Noise Impact – Construction Phase		
7.5.6	4.3	-	Good Site Practice Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:	Within the Project site / During construction phase / Prior to	1
			 only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; 	commencement of operation	
			 machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; 		



EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion	Mitigation Measures Implemented?^
		 plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; 	Of filedsures	
		 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. 		
4.3	-	Adoption of QPME QPME should be adopted as far as applicable.	Within the Project site / During construction phase / Prior to commencement of operation	I
4.3	-	 Use of Movable Noise Barriers 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
4.3	-	 Use of Noise Enclosure/ Acoustic Shed 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
	4.3	4.3 - 4.3	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. Adoption of QPME QPME should be adopted as far as applicable. Use of Movable Noise Barriers 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. Use of Noise Enclosure/ Acoustic Shed Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and	Ref. Condition • 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. 4.3 - Adoption of QPME • QPME should be adopted as far as applicable. 4.3 - Use of Movable Noise Barriers • 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. 4.3 - Use of Noise Enclosure/ Acoustic Shed • 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



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.2 and 8.8.1.3	5.1	2.26	 Marine Construction Activities General Measures to be Applied to All Works Areas Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; Use of Lean Material Overboard (LMOB) systems shall be prohibited; Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and 	Within construction site / Duration of the construction phase	
			 For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted. 		
			 Specific Measures to be Applied to All Works Areas 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; 	Within construction site / Duration of the construction phase	I
			 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; 	-	I
			Closed grab dredger shall be used to excavate marine sediment;		N/A
			 Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and 		*(The arrangement of silt curtain has been modified. The details can be referred to S Curtain Deployment Plan)
			■ The Silt Curtain Deployment Plan shall be implemented.	_	ı



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works 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 	Within construction site / Duration of the construction phase	N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan) For C7a, I For C8, I *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			■ The silt curtains and silt screens should be regularly checked and maintained.	_	I
			 Specific Measures to be Applied to Land Formation Activities during Marine Filling Works 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	t(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			 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)
			 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 		N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			The silt curtains and silt screens should be regularly checked and maintained.		I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?
			Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion	Within construction	N/A
			 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 	site / Duration of the construction phase	
			 Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure. 		
8.8.1.4	5.1	-	Modification of the Existing Seawall	At the existing	N/A
			• 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.	northern seawall / Duration of the construction phase	
8.8.1.5	5.1	-	Construction of New Stormwater Outfalls and Modifications to Existing Outfalls	Within construction	N/A
			 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. 	site / Duration of the construction phase	
8.8.1.6	5.1	2.27	Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons	Within construction	N/A
8.8.1.7			Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment.	site / Duration of the construction phase	
			For construction of the eastern approach lights at the CMPs		
			 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. 		
8.8.1.8	5.1	-	Construction of Site Runoff and Drainage	Within construction	
			The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:	site / Duration of the construction phase	
			 Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site 	-	I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);	_	
			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;	_	ı
			 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; 	_	1
			 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; 	_	1
			• In the event that contaminated groundwater is identified at excavation areas, this should be treated onsite 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	_	N/A
			• 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.		I
8.8.1.9	5.1	-	Sewage Effluent from Construction Workforce	Within construction	I
			 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. 	site / During construction phase	
8.8.1.10	5.1		General Construction Activities	Within construction	1
8.8.1.11			 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 	site / During construction phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
			Timing of completion of measures	Implemented?^	
			• 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.		
8.8.1.12	5.1	2.28	Drilling Activities for the Submarine Aviation Fuel Pipelines	Within construction	1
8.8.1.13			To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:	site / During	
			 A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; 	construction phase	
			 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. 		
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:	Within construction site / During	I
			 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 	construction phase	
			 Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 		
			Waste Management Implication – Construction Phase		
10.5.1.1	7.1	-	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:		
			• 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;	Project Site Area / During design and construction phase	1
			 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; 		I
			 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; 	-	I
			 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 		1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			■ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.		I
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include:	Project Site Area /	Ţ
			 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; 	Construction Phase	
			 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 		
		every main temporary access should be paved w plates and kept clear of dusty materials. Unpaved	To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.		
10.5.1.3	7.1	-	The following practices should be performed to achieve waste reduction include:	Project Site Area /	1
			 Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; 	Construction Phase	
			 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; 		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			 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	1
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	1
10.5.1.16	7.1	-	The following mitigation measures are recommended during excavation and treatment of the sediments: On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions;	Project Site Area / Construction Phase	I
			 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; 		I
			 All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; 		I
			 Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; 	_	I
			■ Treated and untreated sediment should be clearly separated and stored separately; and	-	I
			 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. 	-	I
10.5.1.18	7.1	-	The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly	Project Site Area / Construction Phase	N/A



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?^
				Timing of completion of measures	implemented?**
			followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal:		
			 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. 		
10.5.1.19	7.1	-	Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented:	Project Site Area / Construction Phase	1
			 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. 		
10.5.1.20	7.1	-	 General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material. 	Project Site Area / Construction Phase	1
10.5.1.21	7.1	-	 The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse. 	Project Site Area / Construction Phase	I
			Land Contamination – Construction Phase		
11.10.1.2	8.1	2.32	For areas inaccessible during site reconnaissance survey	Project Site Area	
to 11.10.1.3			• Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.	inaccessible during site reconnaissance / Prior to Construction Phase	1
			 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. 	-	ı



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			• 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.		I *(CAR for golf course and Terminal 2 Emergency Power Supply System No.1)
			 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. 	_	N/A
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any):	Project Site Area / Construction Phase	N/A
			 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. 		
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	Pre-construction Egretry Survey ■ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of	ı



EIA Ref.	EM&A EP Environmental Protection Measures Ref. Condition		Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^	
12.7.2.3 and 12.7.2.6	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egretry The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretry;	During construction phase at Sheung Sha Chau Island	I
			 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.		
12.7.2.5	9.1	2.30	 Preservation of Nesting Vegetation 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. 		1
12.7.2.4 and 12.7.2.6	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season • All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons.	During construction phase at Sheung Sha Chau Island	I
12.10.1.1	9.3	-	 Ecological Monitoring During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. 	at Sheung Sha Chau Island	I
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	■ Pre-construction phase Coral Dive Survey.	HKIAAA artificial seawall	I
			Marine Ecological Impact – Construction Phase		
13.11.1.3 to 13.11.1.6	-	-	Minimisation of Land Formation Area 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
13.11.1.7 to 13.11.1.10	-	2.31	Use of Construction Methods with Minimal Risk/Disturbance 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	1
			 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; 		I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; 		N/A
			 Avoid bored piling during CWD peak calving season (Mar to Jun); 	-	I
			■ Prohibition of underwater percussive piling; and		I
			 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. 	-	I
13.11.2.1	-	-	Mitigation for Indirect Disturbance due to Deterioration of Water Quality	All works area during	
to 13.11.2.7			 Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; 	the construction phase	1
			 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); 	-	I
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 	-	N/A
			Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.	_	1
13.11.1.12	-	-	Strict Enforcement of No-Dumping Policy	All works area during	I
			 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; 	the construction phase	
			 Mandatory educational programme of the no-dumpling 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	-	-	 Good Construction Site Practices 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	-	-	Minimisation of Land Formation Area	Land formation	1
to 13.11.1.6			• 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.	footprint / during detailed design phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
				to completion of construction	
13.11.5.4	10.3.1	-	SkyPier High Speed Ferries' Speed Restrictions and Route Diversions	Area between the	I
to 13.11.5.13			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	footprint and SCLKC Marine Park during construction phase	
			■ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.		
			Other mitigation measures	Area between the	I
			 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 	footprint and SCLKC Marine Park during construction phase	
			 The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed. 		
13.11.5.14	10.3.1	2.31	Dolphin Exclusion Zone	Marine waters around	
to 13.11.5.18			 Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas; 	land formation works area during construction phase	I
			 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 		I
			 A DEZ would also be implemented during bored piling work but as a precautionary measure only. 		N/A
13.11.5.19	10.4	2.31	Acoustic Decoupling of Construction Equipment	Around coastal works	1
			 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 	area during construction phase	
			 Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works. 		
13.11.5.20	10.6.1	2.29	Spill Response Plan	Construction phase	1
			• 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.		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.5.21 to 13.11.5.23	10.6.1	-	Construction Vessel Speed Limits and Skipper Training A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities; and Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing.	All areas north and west of Lantau Island during construction phase	I
			Fisheries Impact – Construction Phase		
14.9.1.2 to 14.9.1.5	-		 Minimisation of Land Formation Area 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	1
14.9.1.6	-	-	Use of Construction Methods with Minimal Risk/Disturbance 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	1
			 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; 	-	1
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 	_	N/A
			 Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 	_	I
14.9.1.11	-		Strict Enforcement of No-Dumping Policy • 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;	All works area during the construction phase	I
			 Mandatory educational programme of the no-dumpling 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. 		
14.9.1.12	-		 Good Construction Site Practices 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 	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?^
			 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. 		
14.9.1.13	-		Mitigation for Indirect Disturbance due to Deterioration of Water Quality	All works area during	
to 14.9.1.18			 Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; 	the construction phase	1
			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);	_	I
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 	_	N/A
			 Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 		I
			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;	I
				Upon handover and completion of works.	
Table 15.6	12.3	-	CM2 - Reduction of construction period to practical minimum.	All works areas for duration of works;	I
				Upon handover and completion of works.	
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;	I
				Upon handover and completion of works.	
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;	I
				Upon handover and completion of works.	
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;	I
				Upon handover and completion of works. –	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion	Mitigation Measures Implemented?^
				of measures	
				may be disassembled in phases	
Table 15.6	12.3	-	CM6 - Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	CM7 - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works;	1
				Upon handover and completion of works. – may be disassembled in phases	
Table 15.6	12.3	2.3 -	Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall	All existing trees to be retained;	1
			be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	Upon handover and completion of works.	
Table 15.6	12.3	-	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	All existing trees to be affected by the works;	1
			necessary tree root and crown preparation periods shall be allowed in the project programme.	Upon handover and completion of works.	
Table 15.6	12.3	-	CM10 - Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works;	N/A
				Upon handover and completion of works.	
			Cultural Heritage Impact - Construction Phase		
			Not applicable.		



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 Emissions		
			Not applicable.		
			Health Impact - Aircraft Noise		
			Not applicable.		

Notes:

I= implemented where applicable;

N/A= not applicable to the construction works implemented during the reporting month. ^ Checked by ET through site inspection and record provided by the Contractor.

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Feb-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
						WQ General & Regular DCM
						mid-ebb: 18:16 mid-flood: 11:47
2	3	4	5	6	7	8
2	3	Site Inspection] 3	Site Inspection	Site Inspection	0
		Oite inspection		Oile inspection	Oile inspection	
			AR1A, AR2			
			NM1A, NM4, NM5, NM6			
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 08:2	1	mid-ebb: Regular DCM 10:56		mid-ebb: Regular DCM 12:36
		mid-flood: 13:5	6	mid-flood: 15:56		mid-flood: 17:46
9	10	11	12	13	14	15
		Site Inspection	Site Inspection	Site Inspection	Site Inspection	
	CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel)			
		AR1A, AR2				
		NM1A, NM4, NM5, NM6				
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 14:4		mid-ebb: 16:12		mid-ebb: 18:06
		mid-flood: 09:1		mid-flood: 10:25		mid-flood: 11:41
16	17	18	19	20	21	22
	Site Inspection CWD Survey (Vessel)	Site Inspection CWD Survey (Vessel)	Site Inspection CWD Survey (Land-based)	Site Inspection CWD Survey (Vessel, Land-based)	Site Inspection CWD Survey (Vessel)	
	AR1A, AR2	CWD Survey (Vessel)	CWD Survey (Land-based)	CWD Survey (Vessel, Land-based)	CWD Survey (vesser)	AR1A, AR2
	NM1A, NM4, NM5, NM6					
		WQ General & Regular DCM mid-ebb: 09:4	4	WQ General & Regular DCM mid-ebb: 11:46		WQ General & Regular DCM mid-ebb: 12:57
		mid-flood: 14:2		mid-flood: 16:33		mid-flood: 18:04
23	24	25	26	27	28	29
		Site Inspection	Site Inspection	Site Inspection	Site Inspection	
	CWD Survey (Vessel)	· ·	CWD Survey (Vessel)	· ·	i i	
					AR1A, AR2	
					NM1A, NM4, NM5, NM6	
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 14:2		mid-ebb: 15:16		mid-ebb: 16:24
		mid-flood: 08:5	0	mid-flood: 09:22		mid-flood: 10:03
		Notes:				
		CMD. Chinasa White Dalahin				
		CWD - Chinese White Dolphin	NM1A/AR1A - Man Tung Road Park			
		Air modificated Naine Market Code	NM4 - Ching Chung Hau Po Woon Prim	ary School		
		Air quality and Noise Monitoring Station	NM5/AR2 - Village House, Tin Sum	-		
			NM6 - House No. 1, Sha Lo Wan			
		WQ - Water Quality DCM - Deep Cement Mixing				
		DOM - Deep Cement Mixing				

Tentative Monitoring Schedule of Next Reporting Period

Mar-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
	CWD Survey (Vessel)	Site Inspection		Site Inspection	Site Inspection CWD Survey (Vessel)	
	CVVD Curvey (Vessel)			AR1A, AR2	OVVD durvey (vessel)	
				NM1A, NM4, NM5, NM6		
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 19:19 mid-flood: 11:30		mid-ebb: 21:59 mid-flood: 09:29		mid-ebb: 11:40 mid-flood: 16:47
8	9	10	11	12	13	14
	CMD Correspond and beautily	Site Inspection	Site Inspection	Site Inspection	Site Inspection	
	CWD Survey (Land-based)		CWD Survey (Vessel) AR1A, AR2	CWD Survey (Vessel)		
			NM1A, NM4, NM5, NM6			
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 13:39 mid-flood: 07:59		mid-ebb: 14:57 mid-flood: 08:59		mid-ebb: 16:29 mid-flood: 10:02
15	16	17	18	19	20	21
		Site Inspection	Site Inspection	Site Inspection	Site Inspection	
	CWD Survey (Vessel)	CWD Survey (Vessel) AR1A, AR2		CWD Survey (Land-based)		
		NM1A, NM4, NM5, NM6				
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 19:59 mid-flood: 07:04	9	mid-ebb: 10:53 mid-flood: 15:25	3	mid-ebb: 12:10 mid-flood: 17:17
22	23	24	25	26	27	28
		Site Inspection		Site Inspection	Site Inspection	
	CWD Survey (Vessel) AR1A, AR2	CWD Survey (Vessel)				AR1A, AR2
	NM1A, NM4, NM5, NM6					,
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 13:29 mid-flood: 07:41		mid-ebb: 14:19 mid-flood: 08:13		mid-ebb: 15:17 mid-flood: 08:51
29	30	31	<u> </u>	mia-ilood: 08:13		mid-1100d: 08:51
		Site Inspection				
		WQ General & Regular DCM				
		mid-ebb: 17:24	4			
		mid-flood: 10:01 Notes:				
		CWD - Chinese White Dolphin	NM1A/AR1A - Man Tung Road Park			
		Air quality and Noise Monitoring Station	NM4 - Ching Chung Hau Po Woon Prima	ry School		
			NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan			
		WQ - Water Quality	, a second			
		DCM - Deep Cement Mixing				

Appendix D. Monitoring Results

Mott MacDonald Expansion of Hong Kong International Airport into a Three-Runway System
Air Quality Monitoring Results

1-hour TSP Results

Station: AR1A- Man Tung Road Park

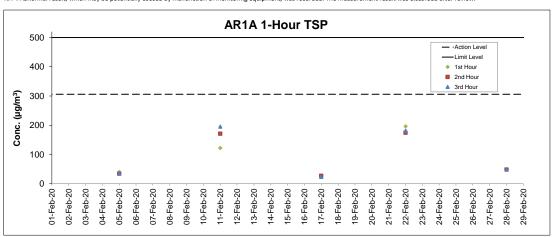
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
05-Feb-20	12:55	Cloudy	5.6	84	40	306	500
05-Feb-20	13:55	Cloudy	5.3	101	34	306	500
05-Feb-20	14:55	Cloudy	5.8	106	35	306	500
11-Feb-20	12:56	Drizzle	6.7	78	122	306	500
11-Feb-20	13:56	Drizzle	5.3	70	171	306	500
11-Feb-20	14:56	Drizzle	1.7	125	195	306	500
17-Feb-20	12:58	Cloudy	5.0	339	27	306	500
17-Feb-20	13:58	Cloudy	5.0	334	27	306	500
17-Feb-20	14:58	Cloudy	5.0	330	23	306	500
22-Feb-20	13:35	Sunny	3.3	256	196	306	500
22-Feb-20	14:35	Sunny	3.3	259	174	306	500
22-Feb-20	15:35	Sunny	2.8	264	181	306	500
28-Feb-20	12:53	Sunny	3.3	39	48	306	500
28-Feb-20	13:53	Sunny	4.2	330	48	306	500
28-Feb-20	14:53	Sunny	2.5	262	48	306	500

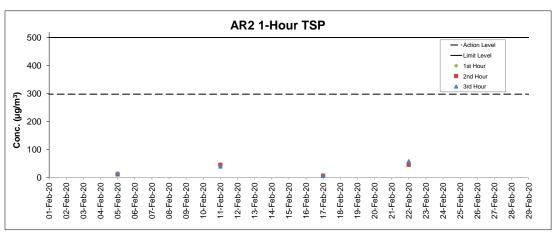
1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
05-Feb-20	9:04	Cloudy	5.6	59	14	298	500
05-Feb-20	10:04	Cloudy	5.3	103	12	298	500
05-Feb-20	11:04	Cloudy	6.7	88	16	298	500
11-Feb-20	9:44	Cloudy	4.7	63	46	298	500
11-Feb-20	10:44	Cloudy	6.1	67	46	298	500
11-Feb-20	11:44	Cloudy	6.1	76	40	298	500
17-Feb-20	9:31	Sunny	5.3	6	8	298	500
17-Feb-20	10:31	Sunny	6.1	28	7	298	500
17-Feb-20	11:31	Sunny	4.7	351	7	298	500
22-Feb-20	9:31	Sunny	2.5	325	45	298	500
22-Feb-20	10:31	Sunny	2.2	307	46	298	500
22-Feb-20	11:31	Sunny	3.3	311	59	298	500
28-Feb-20	9:29	Sunny	5.8	106	NA*	298	500
28-Feb-20	10:29	Sunny	3.9	40	NA*	298	500
28-Feb-20	11:29	Sunny	4.2	52	NA*	298	500

NA*: Abnormal result, which may be potentially caused by malfunction of monitoring equipment, was recorded. The measurement result was discarded after review





- 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 Resu	ults	

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

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured	Measured	
Date	weather	Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
05-Feb-20	Cloudy	15:12	72.7	50.5	
05-Feb-20	Cloudy	15:17	71.0	51.6	
05-Feb-20	Cloudy	15:22	72.2	53.0	71
05-Feb-20	Cloudy	15:27	72.0	51.6	71
05-Feb-20	Cloudy	15:32	73.3	51.4	
05-Feb-20	Cloudy	15:37	73.9	52.4	
11-Feb-20	Cloudy	15:08	75.9	53.2	
11-Feb-20	Cloudy	15:13	73.7	51.6	
11-Feb-20	Cloudy	15:18	72.8	50.3	73
11-Feb-20	Cloudy	15:23	75.3	51.8	/3
11-Feb-20	Cloudy	15:28	74.1	52.1	
11-Feb-20	Cloudy	15:33	70.3	50.5	
17-Feb-20	Cloudy	14:32	68.6	62.5	
17-Feb-20	Cloudy	14:37	69.1	63.3	
17-Feb-20	Cloudy	14:42	70.7	63.2	71
17-Feb-20	Cloudy	14:47	70.4	61.8	/1
17-Feb-20	Cloudy	14:52	70.5	61.5	
17-Feb-20	Cloudy	14:57	72.7	65.0	
28-Feb-20	Sunny	16:40	71.8	50.3	
28-Feb-20	Sunny	16:45	70.8	50.4	
28-Feb-20	Sunny	16:50	71.5	50.7	71
28-Feb-20	Sunny	16:55	73.0	51.8] /1
28-Feb-20	Sunny	17:00	72.1	50.7	
28-Feb-20	Sunny	17:05	72.0	51.3	1

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Data	Weather	Time	Measured	Measured	
Date	weather	Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
05-Feb-20	Cloudy	12:56	61.3	55.7	
05-Feb-20	Cloudy	13:01	61.2	56.1	
05-Feb-20	Cloudy	13:06	61.8	57.7	62
05-Feb-20	Cloudy	13:11	61.5	56.0	02
05-Feb-20	Cloudy	13:16	61.6	56.3	
05-Feb-20	Cloudy	13:21	61.3	56.8	
11-Feb-20	Cloudy	14:59	61.3	56.1	
11-Feb-20	Cloudy	15:04	59.7	55.2	
11-Feb-20	Cloudy	15:09	60.0	56.5	62
11-Feb-20	Cloudy	15:14	60.6	55.4	62
11-Feb-20	Cloudy	15:19	60.8	55.7	
11-Feb-20	Cloudy	15:24	62.0	56.2	
17-Feb-20	Sunny	14:56	59.4	55.0	
17-Feb-20	Sunny	15:01	60.4	54.0	
17-Feb-20	Sunny	15:06	60.4	54.4	61
17-Feb-20	Sunny	15:11	60.3	55.0	91
17-Feb-20	Sunny	15:16	59.8	54.4	
17-Feb-20	Sunny	15:21	60.2	55.5	
28-Feb-20	sunny	14:19	59.0	55.0	
28-Feb-20	sunny	14:24	61.9	54.8	
28-Feb-20	sunny	14:29	61.0	56.2	62
28-Feb-20	sunny	14:34	62.1	57.8	62
28-Feb-20	sunny	14:39	60.8	56.8	
28-Feb-20	sunny	14:44	60.6	55.7	

Remarks:

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

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

D-4-	14/4/	T	Measured	Measured	
Date	Weather	Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
05-Feb-20	Cloudy	10:19	58.3	49.1	
05-Feb-20	Cloudy	10:24	54.1	48.0	
05-Feb-20	Cloudy	10:29	53.1	46.6	53
05-Feb-20	Cloudy	10:34	60.0	47.9	33
05-Feb-20	Cloudy	10:39	57.0	48.5	
05-Feb-20	Cloudy	10:44	63.2	49.5	
11-Feb-20	Cloudy	9:52	56.1	46.1	
11-Feb-20	Cloudy	9:57	52.2	47.5	
11-Feb-20	Cloudy	10:02	50.6	47.1	57
11-Feb-20	Cloudy	10:07	60.8	49.2	57
11-Feb-20	Cloudy	10:12	56.4	50.2	
11-Feb-20	Cloudy	10:17	57.1	49.8	
17-Feb-20	Sunny	9:48	57.0	51.6	
17-Feb-20	Sunny	9:53	59.4	52.9	
17-Feb-20	Sunny	9:58	57.1	51.4	53
17-Feb-20	Sunny	10:03	57.3	52.2	33
17-Feb-20	Sunny	10:08	62.3	52.7	
17-Feb-20	Sunny	10:13	60.1	52.2	
28-Feb-20	Sunny	9:50	57.0	50.2	
28-Feb-20	Sunny	9:55	53.9	49.6	
28-Feb-20	Sunny	10:00	53.6	50.5	56
28-Feb-20	Sunny	10:05	56.1	50.8	36
28-Feb-20	Sunny	10:10	54.9	50.4	
28-Feb-20	Sunny	10:15	56.4	49.9	

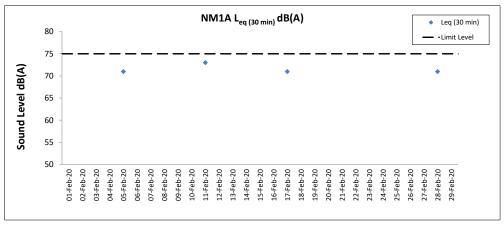
Noise Measurement Results

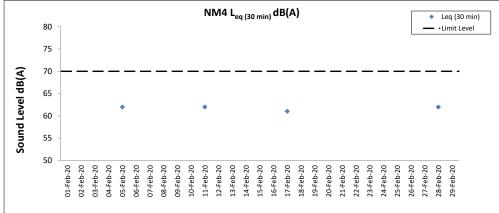
Station: NM6- House No.1 Sha Lo Wan

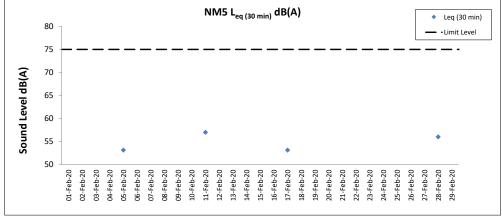
Date	Weather	Time	Measured	Measured	1 (8/4)
Date	weather	Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
05-Feb-20	Cloudy	15:47	70.1	49.5	
05-Feb-20	Cloudy	15:52	72.4	50.3	
05-Feb-20	Cloudy	15:57	72.6	53.1	71
05-Feb-20	Cloudy	16:02	71.5	52.9	/1
05-Feb-20	Cloudy	16:07	67.9	48.9	
05-Feb-20	Cloudy	16:12	72.1	51.0	
11-Feb-20	Cloudy	13:37	71.7	54.6	
11-Feb-20	Cloudy	13:42	61.9	49.5	
11-Feb-20	Cloudy	13:47	57.6	48.9	65
11-Feb-20	Cloudy	13:52	58.4	47.8	05
11-Feb-20	Cloudy	13:57	58.0	43.6	
11-Feb-20	Cloudy	14:02	60.6	46.5	
17-Feb-20	Sunny	13:15	71.6	58.0	
17-Feb-20	Sunny	13:20	57.8	50.5	
17-Feb-20	Sunny	13:25	65.2	51.8	68
17-Feb-20	Sunny	13:30	72.0	52.4	00
17-Feb-20	Sunny	13:35	53.1	48.1	
17-Feb-20	Sunny	13:40	62.3	47.9	
28-Feb-20	Sunny	15:42	69.7	47.3	
28-Feb-20	Sunny	15:47	54.3	45.8	
28-Feb-20	Sunny	15:52	51.5	44.8	66
28-Feb-20	Sunny	15:57	54.1	46.3	00
28-Feb-20	Sunny	16:02	56.2	48.1	
28-Feb-20	Sunny	16:07	73.0	50.4	

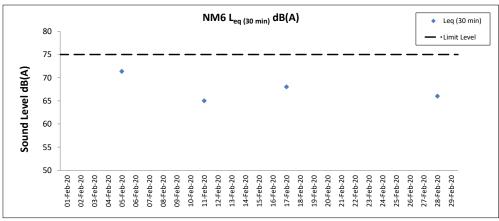
Remarks: +3dB (A) correction was applied to free-field measurement.

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









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.

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

Water Quality Monitoring Results on 01 February 20 during Mid-Ebb Tide

Water Qual	ity Monit	oring Resu	its on		01 February 20	during Mid	וו ממ⊒-	е																		
Monitoring	Weather	Sea	Sampling	Water	Sampling De	epth (m)	Current Speed	Current	Water Te	mperature (°C))	pН	Salinity (ppt)	DO	Saturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg/		Total Alkal (ppm)	Coor	dinate Grid	Coordinate HK Grid	Chromiui (µg/L)	m Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)		, ,	(m/s)	Direction	Value	Average	Value	Average	Value Average	Value	e Average	Value DA	Value	DA	Value	DA	Value [hing)		Value D	DA Value DA
					Surface	1.0	0.3	124 125	18.5 18.5	18.5	8.1	8.1	34.4 34.4	105.4		8.0	3.2		4		85 85				<0.2	0.5
C1	Cloudy	Moderate	17:44	7.9	Middle	4.0	0.3	132	18.5	18.5	8.1	8.1	34.4	104.2	2 104.2	8.0	3.6	4.2	3	4	86	81 815	625	804224	<0.2	0.6
	,				D.W.	4.0 6.9	0.3	134 129	18.5 18.5	40.5	8.1 8.1	0.4	34.4	104.2	,	7.9	3.6 5.7		3		87				<0.2	0.4
					Bottom	6.9 1.0	0.2	133 130	18.5 17.9	18.5	8.1 8.2	8.1	34.4 34.4 30.9	103.9		7.9 7.9 8.2	5.7 1.5		4 <2		88 84				<0.2 <0.2	0.4
					Surface	1.0	0.1	133	17.9	17.9	8.2	8.2	31.0	103.3	3 103.6	8.1	1.6		3		85				<0.2	0.9
C2	Cloudy	Moderate	16:34	11.4	Middle	5.7 5.7	0.3	144 138	18.3 18.3	18.3	8.2	8.2	31.7 31.7	100.0		7.8 7.8	2.2	2.3	<2 2	2	86 8	825	701		<0.2	0.2 0.6 0.7
					Bottom	10.4	0.3	144	18.3	18.3	8.2	8.2	31.8	100.3	100.5	7.8	3.2		3		87				<0.2	0.8
					Surface	10.4	0.3	136 122	18.3 18.7	18.7	8.2 8.2	8.2	31.8 32.5 32.5	97.8		7.8	3.2 2.0		<2 4		88 85				<0.2	0.7
						1.0 4.8	0.2	132 124	18.7 18.7		8.2 8.2		32.5	97.7 97.6		7.5 7.5	2.1 1.9		3		86 88				<0.2 <0.2	0.5
C3	Cloudy	Moderate	18:31	9.5	Middle	4.8	0.2	125	18.7	18.7	8.2	8.2	32.6	97.6	97.0	7.5	1.9	1.9	3	3	89	822	094	01//02	<0.2	0.4
					Bottom	8.5 8.5	0.2	135 141	18.8 18.8	18.8	8.2	8.2	32.6 32.6	98.5		7.6 7.6	1.8		3		90				<0.2	0.4
					Surface	1.0	0.1	121 122	17.8 17.8	17.8	8.2 8.2	8.2	34.0 34.0 34.0	108.		8.4	3.5 3.5		4		86 87				<0.2 <0.2	0.5
IM1	Cloudy	Moderate	18:04	4.7	Middle	-	-	-	-		-		-	-	1.	- 8.4	-	3.4	-	4	- ,	87 817	945	807121		0.2
	Cioday	Moderate	10.01			3.7	0.2	170	17.9		8.1		34.1	107.4	4	8.3	3.3	0	4		- 88	.	0.0		<0.2	0.5
					Bottom	3.7	0.2	187	17.9	17.9	8.1	8.1	34.1	107.4	107.4	8.3	3.3		2		88				<0.2	0.4
					Surface	1.0	0.2	124 125	18.1 18.1	18.1	8.2 8.2	8.2	34.3 34.3	110.		8.5 8.5 8.5	2.8		4		85 86				<0.2 <0.2	0.6
IM2	Cloudy	Moderate	18:11	6.4	Middle	3.2	0.2	119 120	18.1 18.1	18.1	8.2	8.2	34.3 34.3	109.7		8.4 8.4	3.0	3.2	5 5	5	87	818	156		<0.2	0.2 0.6 0.5
					Bottom	5.4	0.2	134	18.1	18.1	8.1	8.1	34.3	108.9	1000	8.4	3.6		5		89				<0.2	0.4
						5.4 1.0	0.2	133 135	18.1 18.2	18.2	8.1 8.2		34.3 34.3 34.3 34.3	108.	3	8.4	3.6 2.8		5 4		89 86				<0.2	0.5
					Surface	1.0	0.4	135 134	18.2 18.2		8.2 8.2	8.2	34.3	107.	7	8.3 8.2 8.3	2.9 3.3		4 5		85				<0.2 <0.2	0.4
IM3	Cloudy	Moderate	18:19	6.6	Middle	3.3	0.3	136	18.2	18.2	8.2	8.2	34.3	106.	7 106.7	8.2	3.2	3.3	5	4	88	818	789	805597	<0.2	0.5
					Bottom	5.6 5.6	0.2	132 122	18.2 18.2	18.2	8.1 8.1	8.1	34.3 34.3	106.		8.2 8.2	3.7		4		89 90				<0.2	0.8
					Surface	1.0	0.4	142 153	18.0 18.0	18.0	8.2 8.2	8.2	33.7 33.7	107.4		8.3	4.3		5 4		86 86			Ĺ	<0.2	0.7
IM4	Cloudy	Moderate	18:28	7.3	Middle	3.7	0.4	156	18.0	18.0	8.2	8.2	33.7	106.8	106.8	8.3	4.2	45	4	4	88	8 819	731	804506	<0.2	0.7
	Cioday	Moderate	10.20	7.0		3.7 6.3	0.4	175 142	18.0 18.0		8.2 8.1		33.7	106.	7	8.3	4.2 5.1		3 4		88				<0.2	0.6
					Bottom	6.3	0.4	148	18.0	18.0	8.1	8.1	33.9	105.4	105.4	8.2	5.0		4		89				<0.2	0.5
					Surface	1.0	0.7	162 168	18.0 18.0	18.0	8.2 8.2	8.2	34.1 34.1	108.		8.4 8.4 8.4	3.8		4 5		85 85				<0.2 <0.2	0.5
IM5	Cloudy	Moderate	18:37	6.9	Middle	3.5	0.6	171 178	18.0 18.0	18.0	8.2	8.2	34.1 34.1	108.		8.4	3.9 4.0	4.5	5 4	4	88	820	745		<0.2	0.2 0.7 0.7
					Bottom	5.9	0.4	175	18.0	18.0	8.1	8.1	34.1	107.	7 1077	8.3	5.8		4		90				<0.2	0.7
					Surface	5.9 1.0	0.5	174 183	18.0 18.3	18.3	8.1 8.2	8.2	34.1 33.2 33.2 33.2	107.		8.4	5.7 1.9		7		89 86	-			<0.2 <0.2	0.8
						1.0 3.4	0.4	187 186	18.3 18.2		8.2 8.1		33.2	108.	2	8.4 8.3	1.9		8		86 88				<0.2 <0.2	0.6
IM6	Cloudy	Moderate	18:47	6.7	Middle	3.4	0.3	173	18.2	18.2	8.1	8.1	33.3	107.8	3 107.9	8.3	1.9	2.1	6	6	88	821	052	003043	<0.2	0.8
					Bottom	5.7 5.7	0.3	180 182	18.2 18.2	18.2	8.1	8.1	33.3 33.3	107.		8.3 8.3	2.4		6 5		90				<0.2	1.0
					Surface	1.0	0.1	230	18.3 18.3	18.3	8.1 8.1	8.1	33.2 33.2	107.		8.3	1.7		2		87				<0.2	0.8
IM7	Cloudy	Moderate	18:57	7.5	Middle	3.8	0.2	241 141	18.3	18.3	8.1	8.1	33.2 33.2 33.2	107.	1 107.1	8.3 8.3	2.0	1.9	3	2	87 88	9 821	330		<0.2 <0.2	0.7
livi7	Cioday	Moderate	10.57	7.5		3.8 6.5	0.3	143 154	18.3 18.2		8.1 8.1		33.2	107.	1	8.3	2.0	1.3	<2 3		89 90	321	550		<0.2	0.7
			<u> </u>		Bottom	6.5	0.2	165	18.2	18.2	8.1	8.1	33.3	106.9	9 106.9	8.3	2.0		2		90				<0.2	0.8
					Surface	1.0	0.1	176 176	18.2 18.2	18.2	8.2	8.2	32.2 32.2 32.2	105.4		8.2	1.7		2		85 86				<0.2	0.5
IM8	Cloudy	Moderate	16:59	6.5	Middle	3.3	0.0	159 160	18.2	18.2	8.2	8.2	32.3 32.3	105.0	105.0	8.2 8.2	1.9	1.8	3 2	3	87	821	821	808137	<0.2	0.5
					Bottom	3.3 5.5	0.0	141	18.2	18.2	8.2	8.2	32.3	104.3	3 1043	8.1	2.0		2		87				<0.2 <0.2	0.3
DA: Depth-Aver					Dottom	5.5	0.1	138	18.1	10.2	8.2	0.2	32.3	104.2	2 104.5	8.1	1.9		3		88				<0.2	0.4

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 01 February 20 during Mid-Ebb Tide

Water Qual	ity Monit	oring Resu	its on		01 February 20	during Mid-	-EDD IIQ	е																			
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	emperature (°C))	pН	Salinity (ppt)	DOS		ssolved xygen	Turbidity	(NTU)	Suspende (mg	ed Solids /L)	Total A (pp	dkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Camping De	pur (III)	(m/s)	Direction	Value	Average	Value	Average	Value Average	Value	Average Valu	e DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA Va	alue DA
					Surface	1.0	0.2	110 115	18.2 18.2	18.2	8.2 8.2	8.2	32.3 32.3	104.5	104.5		2.2	-	2		85 85				<0.2		0.4
IM9	Cloudy	Moderate	17:08	6.2	Middle	3.1	0.1	168 153	18.1 18.1	18.1	8.2	8.2	32.3 32.3	104.0	104.0 8.1	8.1	3.4	3.3	3	3	86 86	86	822072	808799	<0.2	.0.0	0.6
					Bottom	5.2	0.1	132	18.1	18.1	8.2	8.2	32.3 32.3 32.3	103.5	103.5 8.1	8.1	4.2		3		88	1			<0.2	0	0.4
					Surface	5.2 1.0	0.1	137 172	18.1 18.2	18.2	8.2 8.2	8.2	32.2	103.4			1.7		3		86				<0.2	0	0.4
IM10	Cloudy	Moderate	17:17	7.2	Middle	1.0 3.6	0.4	173 138	18.2 18.2	18.2	8.2 8.2	8.2	32.2	105.0	103.6 8.2		1.7	1.9	3	3	86 88	88	822378	809791	<0.2		0.5
IIVITO	Cloudy	Woderate	17.17	1.2		3.6 6.2	0.5	135 134	18.2 18.1		8.2 8.2		32.3	103.5	8.1		1.8 2.3	1.5	3	,	89 89	- 00	022376	809791	<0.2	. 0	0.3
					Bottom	6.2	0.3	138 133	18.1 18.1	18.1	8.2 8.2	8.2	32.4	101.7	7.9	7.9	2.2		2		89 85				<0.2	0	0.3
					Surface	1.0	0.3	130	18.1	18.1	8.2	8.2	32.3	103.8	103.9 8.1	□ 。.	2.1	1	3		85	1			<0.2	0	0.4
IM11	Cloudy	Moderate	17:30	8.8	Middle	4.4	0.3	132 140	18.0 18.0	18.0	8.2 8.2	8.2	32.3 32.3	103.6 103.4	103.5		2.1	2.7	4	4	85 86	86	822068	811451	<0.2	<0.2	0.5 0.4
					Bottom	7.8 7.8	0.2	122 135	18.0 18.0	18.0	8.2	8.2	32.5 32.5	102.4	102.4 8.0		3.8	+ +	3 4		88 89	1			<0.2		0.6
					Surface	1.0 1.0	0.3	161 156	18.0 18.0	18.0	8.2 8.2	8.2	32.3 32.3	105.0	105.0 8.2		2.4		4 5		85 85				<0.2		0.5 0.5
IM12	Cloudy	Moderate	17:37	8.5	Middle	4.3	0.3	122	18.0	18.0	8.2	8.2	32.5 32.6 32.5	103.2	103.2	8.1	2.9	5.2	4	4	88	87	821453	812031	<0.2	-0.2	0.3
					Bottom	4.3 7.5	0.3	127 148	18.0 18.0	18.0	8.2	8.2	32.6	102.5	102 5 8.0	0.0	3.0 10.2		3		89	1			<0.2	0	0.4
					Surface	7.5 1.0	0.2	152	18.0 17.9	17.9	8.2 8.2	8.2	32.6 32.0 32.2 32.2	102.5	104.0 8.1		10.6 2.9		3 4		89				<0.2		-
						1.0 2.6	-	-	17.9	17.5	8.2	0.2	32.2	103.9	8.1	8.1	2.9		5		-	1			-		-
SR1A	Cloudy	Calm	17:54	5.1	Middle	2.6 4.1	-	-	17.9	-	8.2	-	32.2	103.8	8.1		2.8	2.8	3	4	-	1 -	819982	812666	-	. =	-
					Bottom	4.1	-		17.9	17.9	8.2	8.2	32.2	103.8	103.8 8.1	8.1	2.8		4		-				-		
					Surface	1.0	0.2	120 129	17.9 17.9	17.9	8.2 8.2	8.2	32.2 32.2 32.2	104.1 104.0			3.1 3.0	1 1	3		84 85	1			<0.2		0.5
SR2	Cloudy	Moderate	18:07	4.6	Middle	-	-	-	-	-	-	-	-	-		-	-	3.0	-	4	-	86	821443	814156	-	<0.2	- 0.
					Bottom	3.6 3.6	0.3	134 135	17.9 17.9	17.9	8.2 8.2	8.2	32.2 32.2 32.2	103.7	103.7 8.1	8.1	2.9		3		87 87				<0.2		0.5
					Surface	1.0	0.1	199 179	18.3	18.3	8.2	8.2	32.1 32.1 32.1	104.0	104.0 8.1		1.7		2		-				-		-
SR3	Cloudy	Moderate	16:53	8.3	Middle	4.2	0.1	176	18.2	18.2	8.2	8.2	32.2	104.0	104.0 8.1	8.1	2.0	2.1	3	3	-	1 .	822139	807574	-	. =	Ξ.
	,				Bottom	4.2 7.3	0.1	181 132	18.2 18.1	18.1	8.2 8.2	8.2	32.2 32.2 32.5 32.5	104.0 103.5	103.5	8.1	2.1 2.4	1 1	4 2		-				-		-
					Surface	7.3 1.0	0.2	150 88	18.1	17.7	8.2 8.2	8.2	32.5 32.3 33.7 33.7	103.5	110.9		2.7		4		-				-	-+	-
						1.0 4.7	0.4	88 60	17.7 17.7		8.2 8.2		33.7	110.8	8.6		2.5 2.9		5 3		-	1			-		-
SR4A	Cloudy	Calm	17:22	9.4	Middle	4.7	0.3	64 72	17.7	17.7	8.2	8.2	33.7 33.8 33.8	109.8	109.9 8.6		2.9	2.8	4	4	-	-	817187	807796	-		- '
					Bottom	8.4	0.2	73	17.6	17.6	8.2	8.2	33.8	108.0	108.1	0.4	3.1		4		-				-		
					Surface	1.0	0.1	65 69	17.6 17.6	17.6	8.2 8.2	8.2	33.0 33.0 33.0	120.6 120.6	120.6 9.4 9.4		2.9		4		-				-		-
SR5A	Cloudy	Calm	17:07	3.5	Middle	-	-	-	-	-	-	-	-	-	+ - -	+ ***	-	3.1	-	4	-	-	816586	810701	-		
					Bottom	2.5 2.5	0.1	118 129	17.6 17.6	17.6	8.3 8.3	8.3	33.1 33.1 33.1	119.2 119.0	119.1 9.3 9.3		3.3 3.4		4		-	1			-		-
					Surface	1.0	0.0	142 150	18.7	18.7	8.2	8.2	33.2 33.2 33.2	108.4	108.3		2.3		3		-				-	T	-
SR6A	Cloudy	Calm	16:41	4.0	Middle	-	-	-	-	-	-	-		-		8.3	-	2.5	-	3	-		817952	814748	-	. =	-
	,				Bottom	3.0	0.0	78	18.6	18.6	8.2	8.2	33.3 33.3	105.7	105.7 8.1		2.8		3		-	1			-		-
					Surface	3.0 1.0	0.0	81 326	18.6 19.1	19.1	8.2 8.1	8.1	33.3	105.7 96.8	8.1		2.8		2		-		<u> </u>		-	+	-
						1.0 7.9	0.1	327 122	19.1 19.1		8.1 8.1		32.9	96.8 96.1	7.4		1.1 1.3		<2 2		-	-			-		-
SR7	Cloudy	Moderate	19:07	15.8	Middle	7.9 14.8	0.1	129 165	19.1	19.1	8.1	8.1	32.9	96.1	7.3		1.4	1.3	<2 3	2	-	1 -	823653	823763	-	· 🗀	-
					Bottom	14.8	0.1	167	19.2	19.2	8.0	8.0	32.9 32.9	96.1 96.2	96.2 7.3 7.3	7.3	1.5	Ш	<2		-				-		
					Surface	1.0	-	-	17.9 17.9	17.9	8.2 8.2	8.2	32.2 32.2 32.2	104.3	104.3 8.2		3.1 3.1	<u> </u>	4	l	-	1			-	H	-
SR8	Cloudy	Calm	17:45	5.3	Middle	-	-	-	-	-	-	-	-	-		0.2	-	3.0	-	4	-	-	820405	811626	-		
					Bottom	4.3	-	-	17.9 17.9	17.9	8.2 8.2	8.2	32.2 32.2 32.2	104.1			2.9		4	•	-	1			-		-
			1		1	4.3	1 -		17.9	1	6.2	1	34.4	1104.2	1 8.2	- 1	2.9	1 1	4	ı		1	i	1	1	1	- 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 01 February 20 during

01 February 20 during Mid-Flood Tide

Water Qua	lity Monito	oring Resu	lts on		01 February 20	during Mid-		de																				
Monitoring	Weather	Sea	Sampling	Water	Sampling D	epth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Sali	nity (ppt)		aturation (%)	Disso Oxyg		Turbidity(NTU)	Suspende (mg		Total Al		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)		DA Value DA
					Surface	1.0	0.5	43 44	18.0 18.0	18.0	8.2	8.2	34.3	34.3	108.6 108.6	108.6	8.4		2.6	-	5	, ,	86 85	1			<0.2	1.3
C1	Cloudy	Moderate	11:59	7.8	Middle	3.9	0.4	36	18.0	18.0	8.2	8.2	34.3	34.3	108.3	108.3	8.4	8.4	2.6	3.3	5	5	87	87	815614	804225	<0.2	<0.2 0.9 1.0
	Cloudy	Woderate	11.59	7.0	Wildlie	3.9	0.4	38	18.0	10.0	8.2	0.2	34.3	34.3	108.3	100.3	8.4		2.7	3.3	5	, , ,	87	87	013014	804223	<0.2	0.9
					Bottom	6.8	0.4	45 47	18.0 18.0	18.0	8.2	8.2	34.3	34.3	108.0 108.0	108.0	8.3 8.3	8.3	4.7 4.7	-	6 5	ĺ	88 88	1			<0.2	0.6
					Surface	1.0	0.2	202	17.9	17.9	8.2	8.2	30.9	30.9	105.7	105.6	8.3		1.5		<2		87				<0.2	1.0
						1.0 5.1	0.3	205 229	17.9 18.3		8.2 8.2		30.9		105.4 100.3		8.3 7.8	8.1	1.5 2.7	-	3 <2	, ,	87 88	1			<0.2	0.8
C2	Cloudy	Moderate	12:42	10.2	Middle	5.1	0.1	239	18.3	18.3	8.2	8.2	31.7	31.7	100.3	100.3	7.8		2.9	4.3	2	2	88	88	825678	806947	<0.2	1.0
					Bottom	9.2	0.2	262 273	18.2 18.2	18.2	8.2	8.2	31.7	31.7	101.0 101.4	101.2	7.9	7.9	8.6 8.4	-	<2 3	, ,	89 90	1			<0.2	0.8
					Surface	1.0	0.5	290	19.0	19.0	8.1	8.1	32.8	32.8	99.8	99.8	7.6		1.2		2		86				<0.2	0.3
						1.0 6.3	0.5	303 294	19.0 19.2		8.1 8.1		32.8 32.9		99.8 98.0		7.6 7.5	7.6	1.1 2.0	}	3	l	86 88	1			<0.2	0.2
C3	Cloudy	Calm	10:47	12.6	Middle	6.3	0.4	314	19.1	19.2	8.1	8.1	32.9	32.9	98.3	98.2	7.5		1.9	1.8	2	2	88	88	822093	817794	< 0.2	0.3
					Bottom	11.6 11.6	0.3	298 317	19.2 19.2	19.2	8.1	8.1	32.9 32.9	32.9	95.6 95.7	95.7	7.3	7.3	2.5	-	2 <2	, ,	89 89	1			<0.2	0.4
					Surface	1.0	0.2	0	17.8	17.8	8.2	8.2	34.2	34.2	107.7	107.7	8.3		2.5		6		87				<0.2	0.9
					Suitace	1.0	0.2	0	17.8	17.0	8.2	0.2	34.2	34.2	107.6	107.7	8.3	8.3	2.5		7	}	86	1			<0.2	0.9
IM1	Cloudy	Moderate	11:37	4.7	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	2.7	-	8	-	87	817949	807150	-	<0.2
					Bottom	3.7	0.1	357 328	17.8 17.8	17.8	8.1 8.1	8.1	34.2 34.2	34.2	107.0 107.0	107.0	8.3 8.3	8.3	3.0		10 10	}	87 88	1			<0.2	0.9
			1		Surface	1.0	0.1	9	18.1	18.1	8.2	0.0	34.2	34.2	107.6	107.6	8.3		3.4		9		86				<0.2	0.5
					Surface	1.0	0.3	9	18.1	10.1	8.2	8.2	34.2	34.2	107.6	107.6	8.3	8.3	3.3		8	}	87	1			<0.2	0.6
IM2	Cloudy	Moderate	11:28	6.4	Middle	3.2	0.3	10 10	18.1 18.1	18.1	8.2	8.2	34.2	34.2	107.1 107.1	107.1	8.3 8.3		3.5 3.4	3.6	9	9	88 88	88	818185	806151	<0.2	<0.2 0.9 0.8
					Bottom	5.4	0.3	9	18.1	18.1	8.2	8.2	34.2	34.2	106.4	106.4	8.2	8.2	4.2		9	, '	89	1			<0.2	0.8
			1		Surface	5.4 1.0	0.3	9 345	18.1 18.0	40.0	8.2	0.0	34.2	04.4	106.4 107.4	407.4	8.2 8.3		4.1 3.1		8	$\overline{}$	90 86			1	<0.2	0.8
					Surrace	1.0	0.4	317	18.0	18.0	8.2	8.2	34.1	34.1	107.4	107.4	8.3	8.3	3.1		8	, ,	86	1			<0.2	0.8
IM3	Cloudy	Moderate	11:18	6.5	Middle	3.3	0.3	351 323	18.0 18.0	18.0	8.1	8.1	34.1	34.1	107.1 107.1	107.1	8.3 8.3		3.2	4.0	7 6	7	88 87	88	818782	805591	<0.2	<0.2 0.8 0.9
					Bottom	5.5	0.3	345	18.0	18.0	8.1	8.1	34.1	34.1	106.6	106.6	8.2	8.2	5.6		6	, [,]	89	1			<0.2	1.0
						5.5 1.0	0.3	317 1	18.0		8.1		34.1		106.6		8.2 8.4		5.5 3.0		7		89 86				<0.2	1.0 0.6
					Surface	1.0	0.5	1	18.0	18.0	8.2	8.2	34.1	34.1	108.0	108.0	8.4	8.4	2.9		6	, ,	86	1			<0.2	0.7
IM4	Cloudy	Moderate	11:08	7.1	Middle	3.6	0.4	359 330	17.9 17.9	17.9	8.1	8.1	34.1	34.1	107.6 107.6	107.6	8.3 8.3		3.4	3.3	8	8	88 88	88	819728	804627	<0.2	<0.2 0.7 0.8
					Bottom	6.1	0.4	352	17.9	17.9	8.1	8.1	34.1	34.1	107.3	107.3	8.3	8.3	3.5		8	, [,]	89	1			<0.2	1.0
						6.1 1.0	0.4	324 0	17.9 18.0		8.1 8.1		34.1 33.3		107.3 106.8		8.3 8.3		3.4 2.5		8	-	90 86				<0.2 <0.2	1.0 0.9
					Surface	1.0	0.5	0	18.0	18.0	8.1	8.1	33.3	33.3	106.8	106.8	8.3	8.3	2.5		7	ļ	85				< 0.2	1.0
IM5	Cloudy	Moderate	10:56	6.8	Middle	3.4	0.4	359 330	18.0 18.0	18.0	8.1	8.1	33.5 33.5	33.5	106.5 106.5	106.5	8.3 8.3		2.6	3.0	7 6	7	87 88	88	820725	804861	<0.2	<0.2 0.9 1.0
					Bottom	5.8	0.4	2	18.0	18.0	8.1	8.1	33.9	33.9	105.5	105.5	8.2	8.2	3.8		7	ļ	89				<0.2	1.0
						5.8 1.0	0.4	307	18.0		8.1	<u> </u>	33.9 33.3		105.5 106.9		8.2 8.3		3.8 2.1		6		90 85				<0.2	1.0 0.8
					Surface	1.0	0.3	332	18.1	18.1	8.1	8.1	33.3	33.3	106.9	106.9	8.3	8.3	2.1		7	i	86				<0.2	0.6
IM6	Cloudy	Moderate	10:47	6.3	Middle	3.2	0.3	309 309	18.0 18.0	18.0	8.1	8.1	33.3	33.3	106.4 106.4	106.4	8.3 8.3		3.0	2.5	5 6	6	88 88	88	821067	805805	<0.2	<0.2 0.8 0.7
					Bottom	5.3	0.3	315	18.1	18.1	8.1	8.1	33.3	33.3	106.2	106.2	8.2	8.2	2.4		5	i '	89	1			< 0.2	0.8
						5.3 1.0	0.3	322 254	18.1		8.1 8.1		33.3		106.2 107.8		8.2 8.3		2.4		6	==	90 87				<0.2	0.6 1.2
					Surface	1.0	0.3	258	18.3	18.3	8.1	8.1	33.2	33.2	107.8	107.8	8.3	8.3	1.7		7	i '	87	1			<0.2	1.1
IM7	Cloudy	Moderate	10:38	7.6	Middle	3.8	0.2	258 272	18.3 18.3	18.3	8.1	8.1	33.2	33.2	107.3	107.3	8.3 8.3		1.8	1.9	6	6	88 89	89	821339	806826	<0.2	<0.2 1.0 1.2
					Bottom	6.6	0.2	270	18.2	18.2	8.1	8.1	33.3	33.3	106.4	106.4	8.2	8.2	2.1		6	i '	90	1			< 0.2	1.3
					Dottom	6.6 1.0	0.2	275 266	18.2	10.2	8.1	0.1	33.3 32.3	35.5	106.4 106.2	100.4	8.2 8.3	0.2	2.2		6 5		90 85				<0.2	1.3 0.7
					Surface	1.0	0.3	267	18.2	18.2	8.2	8.2	32.3	32.3	106.2	106.2	8.3	8.3	2.2		6	i '	86	1			< 0.2	0.6
IM8	Cloudy	Moderate	12:18	7.6	Middle	3.8	0.3	266 275	18.2 18.2	18.2	8.2 8.2	8.2	32.3 32.3	32.3	105.9 105.9	105.9	8.2 8.2	0.3	2.3	2.2	5 5	5	86 86	86	821808	808160	<0.2	<0.2 0.8 0.7
					Bottom	6.6	0.2	262	18.2	18.2	8.2	8.2	32.3	32.3	105.3	105.3	8.2	8.2	2.0	ŀ	6	i '	87	1			<0.2	0.6
DA: Denth-Ave					Bottom	6.6	0.2	286	18.2	10.2	8.2	0.2	32.3	32.3	105.3	100.3	8.2	0.2	2.1		5		88				<0.2	0.6

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.

01 February 20 during Mid-Flood Tide

Water Qual	lity Monit	oring Resu	lts on		01 February 20	during Mid		ide																		
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	mperature (°C)		рH	Salinity (ppt)	DO S	aturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg/	d Solids /L)	Total Al (pp		Coordinate HK Grid	Coordinate HK Grid	Chromit (µg/L)	
Station	Condition	Condition	Time	Depth (m)	3		(m/s)	Direction	Value	Average	Value	Average		Value	Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)			DA Value DA
					Surface	1.0	0.4	280 285	17.9 17.9	17.9	8.1	8.1	32.3 32.3	106.8	106.8	8.4 8.4 8.4	2.6	1	9		85 86			-	<0.2 <0.2	0.6
IM9	Cloudy	Moderate	12:13	7.2	Middle	3.6	0.3	291 313	17.9 17.9	17.9	8.1 8.1	8.1	32.3 32.3	106.3 106.2	106.3	8.3	3.2	2.9	6 8	8	88 88	88	822108	808823	<0.2	<0.2 0.6 0.6
					Bottom	6.2 6.2	0.3	290 305	17.9 17.9	17.9	8.1 8.1	8.1	32.3 32.3	106.1	106.1	8.3 8.3	3.0 2.9		8 7		89 89				<0.2 <0.2	0.7
					Surface	1.0	0.6	282 288	18.0 18.0	18.0	8.1	8.1	32.3 32.3	106.8	106.8	8.3	1.6 1.6		6 5		84 85				<0.2 <0.2	0.4
IM10	Cloudy	Moderate	12:07	8.0	Middle	4.0	0.5	281 302	18.0	18.0	8.1 8.1	8.1	32.3 32.3 32.3	106.9	106.9	8.3 8.3	2.2	2.4	6	6	87 87	86	822382	809814	-O 2	<0.2 0.7 0.6
					Bottom	7.0 7.0	0.5	263	18.0 18.0	18.0	8.1 8.1	8.1	32.4 32.4 32.4	105.4	105.4	8.2 8.2 8.2	2.5		6		87 88			•	<0.2	0.8
					Surface	1.0	0.5	278 314	17.9	17.9	8.1	8.1	32.3	107.1	107.0	8.4	2.5		6		85				<0.2	0.8
IM11	Cloudy	Moderate	11:56	8.8	Middle	1.0 4.4	0.5 0.5	326 319	17.9 17.9	17.9	8.1 8.1	8.1	32.3 32.5 32.5 32.5	106.9 105.2	105.2	8.4 8.2 8.3	3.0	3.0	5 6	6	86 88	88	822056	811459	<0.2	0.8
	,				Bottom	4.4 7.8	0.5	323 327	17.9 17.9	17.9	8.1 8.1	8.1	32.5	105.1 104.9	104.9	8.2 8.2 8.2	3.1 3.5		6 7		88 89				<0.2	0.8
					Surface	7.8 1.0	0.4	341 301	17.9 18.2	18.2	8.1 8.1	8.1	32.5 32.3 32.2 32.2	104.9	106.6	8.2	3.5 1.8		7		90 85				<0.2 <0.2	0.7
IM12	Claudu	Moderate	11.50	8.6	Middle	1.0 4.3	0.6	312 299	18.2 18.1	18.1	8.1 8.1	8.1	32.2	106.5		8.3 8.3	1.8 2.7	2.6	8	8	85 87	87	821463		<0.2	<0.2 0.7 0.7
IIVI12	Cloudy	Woderate	11:52	0.0		4.3 7.6	0.6 0.5	309 303	18.1 18.0		8.1 8.1		32.2 32.3 32.3	106.2		8.2	2.6 3.4	2.0	8	٥	88 88	07	021403		<0.2	0.7
					Bottom	7.6	0.5	308	18.0	18.0	8.1	8.1	32.3	105.0	1	8.2 8.3	3.4 2.4		8		89				<0.2	0.7
					Surface	1.0	-	-	18.0	18.0	8.1	8.1	32.0 32.0	106.5	106.6	8.3	2.2	1	8		-				-	-
SR1A	Cloudy	Moderate	11:19	5.2	Middle	2.6 4.2	-	-	18.0	-	8.1	-	32.0	- 405.0	-	8.3	2.3	2.4	- 6	7	-	-	819978	812653		
					Bottom	4.2	-	-	18.0	18.0	8.1	8.1	32.0	105.6		8.3	2.4		6		-				-	-
					Surface	1.0	0.1	22 23	18.4 18.4	18.4	8.1 8.1	8.1	32.3 32.3	103.0	103.0	8.0 8.0 8.0	2.4		7		84 85			-	<0.2	0.8
SR2	Cloudy	Moderate	11:08	5.1	Middle	-	-	-	-	-	-	-	-	-	-	-	-	2.3	-	7	-	86	821486	814157	-	<0.2 - 0.7
					Bottom	4.1 4.1	0.2	1	18.4 18.4	18.4	8.1 8.1	8.1	32.4 32.4 32.4	102.8 102.9	102.9	8.0 8.0	2.3		7		87 87			-	<0.2 <0.2	0.7
					Surface	1.0	0.3	222 224	18.3 18.3	18.3	8.2 8.2	8.2	32.1 32.1	105.8 105.7	105.8	8.2 8.2 8.2	1.5		6 5		-			-	-	-
SR3	Cloudy	Moderate	12:24	8.4	Middle	4.2	0.2	224 231	18.3 18.2	18.3	8.2	8.2	32.2 32.2 32.2	104.7	104.6	8.1	2.0	1.9	6	5	-	-	822134	807573	-	
					Bottom	7.4	0.2	245 266	18.2 18.2	18.2	8.2 8.2	8.2	32.4 32.3	103.9 104.0	104.0	8.1 8.1	2.3		3		-				-	-
					Surface	1.0	0.1	163 164	17.6 17.6	17.6	8.2	8.2	33.6 33.6	106.8	106.8	8.3	2.3		7		-				-	-
SR4A	Cloudy	Calm	12:20	8.7	Middle	4.4 4.4	0.1 0.1	104 113	17.7 17.7	17.7	8.2 8.2	8.2	34.0 34.0	106.8 106.8	106.8	8.3 8.3	2.4	2.4	7 8	7	-	-	817190	807820	-	
					Bottom	7.7	0.1	45 49	17.8 17.8	17.8	8.2 8.2	8.2	34.1 34.1	106.4	106.4	8.2 8.2	2.5		6		-			-	-	-
					Surface	1.0	0.3	287 293	17.5 17.5	17.5	8.2 8.2	8.2	33.4 33.4 33.4	108.5		8.5	2.7		6		-				-	-
SR5A	Cloudy	Calm	12:48	3.4	Middle	-	-	-	-	-	-	-		-		- 8.5	-	2.9	-	6	-	-	816579	810684	-	
					Bottom	2.4	0.2	299 304	17.4 17.4	17.4	8.2 8.2	8.2	33.5 33.5	107.6	107.6	8.4 8.4	3.1		6		-			-	-	-
					Surface	1.0	0.1	159 169	17.7	17.7	8.1 8.1	8.1	32.5 32.6 32.6	102.8	102.8	8.1	2.3		4		-					
SR6A	Cloudy	Calm	13:24	3.9	Middle	-	-	-	-	-	-	-		-		- 8.1	2.3	2.3	-	5	-	_	817945	814746	-	
					Bottom	2.9	0.1	151	18.5	18.5	8.0	8.0	33.2	99.8	99.8	7.7	2.3		5		-				-	-
					Surface	2.9 1.0	0.1	163 57	18.5 19.3	19.3	8.0 8.1	8.1	33.2 33.2 33.0 33.0	99.8 95.7	95.7	7.7	1.2		5		-				\equiv	
SR7	Cloudy	Moderate	10:16	15.7	Middle	1.0 7.9	0.2	62 46	19.3 19.4	19.4	8.1 8.1	8.1	33.0	95.6 95.1		7.2 7.2	1.8	1.7	6 7	7	-		823633	823762	-	
	/				Bottom	7.9 14.7	0.2	46 42	19.4 19.4	19.4	8.1 8.1	8.1	33.1	95.1 95.2	95.2	7.2 7.2 7.2	1.7 2.1	"	8		-				-	-
					Surface	14.7	0.2	- 43	19.4 17.9	17.9	8.1 8.1	8.1	33.1 33.1 32.3 32.3	95.2 105.7	105.7	7.2 1.2 8.3	2.0 3.1		7		-				-	-
CD0	Claudi	Madazat -	44-20	F 4		1.0	-	-	17.9	17.9	8.1	0.1	32.3	105.6	105.7	8.3	3.3		8 -		-		020200	044635	-	-
SR8	Cloudy	Moderate	11:39	5.4	Middle	4.4	-	-	- 17.9	-	8.1		32.4	104.8		8.2	3.3	3.2	9	8	-	-	820380	811635	-	-
					Bottom	4.4	-	-	17.9	17.9	8.1	8.1	32.4 32.4	104.8		8.2	3.3		8		-					-

04 February 20 during Mid-Ebb Tide

Water Qual	ity Monite	oring Resu	its on		04 February 20	during Mid-	Ebb Tid	е																		
Monitoring	Weather	Sea	Sampling	Water	Sampling De	epth (m)	Current Speed	Current	Water Te	emperature (°C)	рН	Salinity (ppt)	DO	Saturation (%)	Dissolve Oxygen	Turbio	ty(NTU)	Suspende (mg	ed Solids g/L)	Total All (ppr		Coordinate HK Grid	Coordinate HK Grid	Chromi (µg/L	
Station	Condition	Condition	Time	Depth (m)	J,,		(m/s)	Direction	Value	Average	Value	Average	Value Average	e Valu	ie Average	Value D	A Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA Value D
					Surface	1.0	0.0	289 300	18.6 18.6	18.6	8.1 8.1	8.1	33.4 33.4	114.		8.7 8.7	1.6	-	<u>4</u> 5	-	86 85				<0.2	0.6
C1	Cloudy	Moderate	08:37	7.7	Middle	3.9 3.9	0.0	349 349	18.7 18.7	18.7	8.1 8.1	8.1	33.7 33.7	113.		8.6 8.6	2.2	2.4	6 5	5	87 87	87	815634	804252	<0.2	<0.2 0.6 0
					Bottom	6.7	0.1	79	18.8	18.8	8.1	8.1	34.1 34.1 34.1	110.	.8 110.0	8.4 8.4	3.5	1	6	‡	89 89				<0.2	0.5
					Surface	1.0	0.1	80 224	18.6	18.6	8.0	8.0	31.7	111.	4 1114	8.6	4.4		5		86				<0.2	1.3
C2	Cloudy	Moderate	10:00	11.4	Middle	1.0 5.7	0.2	229 137	18.6 18.7	18.7	8.0 8.0	8.0	31.7	111.	.1 108.1	8.6 8.3	5 4.4	4.8	5 5	6	87 89	88	825678	806945	<0.2 <0.2	<0.2
02	Cloudy	modorato	10.00			5.7 10.4	0.0	142 323	18.7 18.8		8.0 7.8		33.4	108.	.1	8.3 8.2	4.8		7	"	88 90	00	020070	000010	<0.2	1.4
					Bottom	10.4	0.1	332 257	18.8 19.4	18.8	7.8 7.9	7.8	33.9 34.5 34.5	107. 95.	.1	8.2 8 7.1	5.2	1	6	<u> </u>	90 86				<0.2	1.4
					Surface	1.0	0.1	275 286	19.4	19.4	7.9	7.9	34.5	95.	95.1	7.1 7.	4.4	1	7	‡	86				<0.2	1.4
C3	Cloudy	Moderate	08:08	11.4	Middle	5.7	0.1	287	19.4	19.4	7.9	7.9	34.5 34.5	95.0 95.0	0 95.0	7.1	4.6	4.8	7	7	88 87	88	822118	817818	<0.2	1.4
					Bottom	10.4 10.4	0.1	268 293	19.4 19.4	19.4	7.9	7.9	34.5 34.5	96.3	3 90.3	7.2 7.2	5.4		7		90 90				<0.2 <0.2	1.3
					Surface	1.0	0.1	20 20	18.8 18.8	18.8	8.1	8.1	34.2 34.2	111.		8.4 8.4 8	2.2	+	7		86 86				<0.2	0.3
IM1	Cloudy	Moderate	08:58	4.7	Middle	-	-	-	-	-	-	-	-	H		- °	* -	2.3	-	7	-	87	817932	807140	-	<0.2 - 0
					Bottom	3.7 3.7	0.0	22 22	18.6 18.6	18.6	8.1 8.1	8.1	34.2 34.2	108.		8.3 8.3	3 2.5	4	6	‡	88 88				<0.2	0.3
					Surface	1.0	0.1	58 63	18.7	18.7	8.1 8.1	8.1	34.2 34.2 34.2	111.	.2 1112	8.5 8.5	1.5		5		86 87				<0.2	0.4
IM2	Cloudy	Moderate	09:05	6.8	Middle	3.4	0.0	41	18.7	18.7	8.1	8.1	34.2	110.	.6	8.4	1.5	1.6	6	6	88	88	818177	806178	<0.2	<0.2 0.4 0
					Bottom	3.4 5.8	0.0	44 48	18.7 18.7	18.7	8.1 8.1	8.1	34.2 34.2 34.2	110.	.5 100.5	8.4 8.3 8	1.5 3	_	7	<u> </u>	87 89				<0.2	0.4
					Surface	5.8 1.0	0.1	48 229	18.7 18.8	18.8	8.1 8.1	8.1	34.2	109.	.7 110.7	8.3	2.0		6 8		90 86				<0.2 <0.2	0.4
IM3	Cloudy	Moderate	09:13	6.5	Middle	1.0 3.3	0.0	230 334	18.8 18.8	18.8	8.1 8.1	8.1	34.3 34.3 34.3	110.	.7	8.4 8.3	4 2.0	2.2	7 8		85 87	87	818769	805580	<0.2	<0.2 0.3 0
IIVIO	Cloudy	Woderate	03.13	0.5		3.3 5.5	0.0	355 256	18.8 18.8		8.1 8.1		34.3	109.	.6	8.3 8.2	2.0	- 2.2	9 8	"	87 89	0,	010703	003300	<0.2	0.3
					Bottom	5.5 1.0	0.0	273 358	18.8 18.6	18.8	8.1 8.1	8.1	34.3	108.	.3	8.2 8.6	2.7	1-	8 5	<u> </u>	89 86				<0.2	0.3
					Surface	1.0	0.1	329 2	18.6	18.6	8.1	8.1	32.4	111.	.9	8.6 8.3	16		5	‡	85 87				<0.2	1.1
IM4	Cloudy	Moderate	09:23	7.4	Middle	3.7 6.4	0.1	2	18.9	18.9	8.1	8.1	34.2	108.	.7	8.3	3.6	3.0	6	6	87	87	819723	804590	<0.2	1.1
					Bottom	6.4	0.0	296 307	18.9	18.9	8.1 8.1	8.1	34.3 34.3	107. 107.	.5	8.2 8.2	3.9		7	<u> </u>	89 88				<0.2	0.5
					Surface	1.0	0.1	283 284	18.5 18.5	18.5	8.1 8.1	8.1	31.0 31.0	113.	.4	8.9 8.8 8	1.7		5 6		85 85				<0.2	1.2
IM5	Cloudy	Moderate	09:32	6.9	Middle	3.5 3.5	0.1	31 33	18.9 18.9	18.9	8.1 8.1	8.1	34.0 34.1	109.		8.4	2.2	2.9	7	6	87 86	87	820734	804870	<0.2	<0.2 1.3 1
					Bottom	5.9 5.9	0.1	354 326	18.7 18.7	18.7	8.1 8.1	8.1	34.3 34.3	107.		8.2 8	2 4.7	+	7		89 88				<0.2	1.3
					Surface	1.0	0.0	214 214	18.3 18.3	18.3	8.1 8.1	8.1	28.8 28.8	117.		9.3	1.2	-	6 7		85 86				<0.2	1.7
IM6	Cloudy	Moderate	09:41	6.3	Middle	3.2 3.2	0.1	65 66	18.7 18.7	18.7	8.1 8.1	8.1	33.8 33.8	108.		8.3 8.3	3.8	3.2	5 6	6	87 87	87	821068	805805	<0.2	<0.2 1.7 1
					Bottom	5.3	0.1	78	18.7	18.7	8.1 8.1	8.1	34.2 34.2 34.2	107.	.7 107.7	8.2 8.2 8.2	16		6	†	88				<0.2	1.7
					Surface	1.0	0.1	83 170	18.4	18.4	8.1	8.1	29.6	118.	.1 1181	9.3	1.3		5		85				<0.2	1.6
IM7	Cloudy	Moderate	09:50	7.8	Middle	1.0 3.9	0.1	186 146	18.4 18.6	18.6	8.1 8.1	8.1	33.2	118.	.0	9.3 8.5	1.9	2.6	6	6	85 86	86	821339	806825	<0.2	<0.2
	Jioudy	.nodoratb	00.00		Bottom	3.9 6.8	0.0	148 77	18.6 18.7	18.7	8.1 8.1	8.1	34.2	110.	.8 107.9	8.5 8.2 8	1.9	∃	6 7]	86 88	50	JE 1000	300023	<0.2	1.6
						6.8 1.0	0.1	81 264	18.7 18.4		8.1 8.0		34.2	107.	.9	8.2 ° 8.9	4.8	\perp	6	\vdash	88 86				<0.2	1.6
					Surface	1.0	0.0	265 88	18.4	18.4	8.0 7.9	8.0	28.9	112.	.7 112.7	8.9 8.5	16	1	7	1	86 90				<0.2	1.6
IM8	Cloudy	Moderate	09:35	7.1	Middle	3.6 6.1	0.1	88 12	18.7	18.7	7.9 7.9	7.9	32.8	111.	.3 111.3	8.5	5.2	5.1	6	6	89 90	89	821842	808149	<0.2	<0.2 1.7 1
DA: Depth-Aver					Bottom	6.1	0.1	12	18.7	18.7	7.9	7.9	34.0 34.0	108.		8.3	3 5.6		4	<u> </u>	90				<0.2	1.6

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

Water Quality Monitoring Results on

04 February 20 during Mid-Ebb Tide

1.0

1.0

4.4

4.4

7.8

1.0

1.0

4.2

4.2

7.4

7.4

1.0

1.0

2.5

2.5

2.9

2.9

1.0

8.2

8.2

15.4

15.4

1.0

4.1

0.1

0.1

0.1

0.2

0.1

0.1

0.0

0.0

0.0

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0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.1

0.1

230

230

145

149

241

252

315

321

67

69

294

313

293

308

89

103

107

50

52

56

58

10

18.4

18.4

18.7

18.7

18.8

18.8

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19.5

19.5

19.5

19.6

19.6

18.9

18.9

18.5

18.5

19.5

Suspended Solids Nickel (µg/L) Salinity (ppt) Turbidity(NTU) Water Water Temperature (°C) рΗ Coordinate Sampling Coordinate Monitoring Current (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value DA Value DA Value DA Value DA (Northing) (Easting) Value DA Value Value Average 0.1 18.4 1.0 0.1 304 18.4 8.0 28.9 9.1 4.4 86 <0.2 1.6 3.6 0.2 123 134 18.7 7.9 7.9 32.9 32.9 112.9 8.7 5.3 88 90 <0.2 1.5 Cloudy IM9 Moderate 09:28 7.2 Middle 112.9 5.7 88 822107 808792 <0.2 3.6 0.2 18.7 5.3 6.2 0.2 112 18.7 111.6 111.6 7.5 90 < 0.2 1.6 7.9 33.8 8.5 Bottom 18.7 7.9 33.8 111.6 8.5 7.9 8.5 0.2 117 18.7 33.8 7.5 90 16 6.2 <0.2 0.1 18.4 4.5 1.6 8.0 8.9 Surface 18.4 8.0 113.1 8.0 29.4 113.1 8.9 85 1.5 1.0 0.1 86 18.4 4.5 < 0.2 0.2 18.7 18.7 111.1 1.6 8.0 32.8 32.8 8.5 8.5 4.9 88 89 <0.2 3.9 4 IM10 Cloudy Moderate 09:19 7.8 Middle 18.7 8.0 32.8 111.1 88 822367 809808 <0.2 4.9 6 6.8 0.1 338 18.6 7.9 108.8 108.8 5.9 6 90 <0.2 1.5 33.6 18.6 7.9 33.6 8.3 Bottom 6.8 0.1 354 18.6 7.9 33.6 108.8 8.3 5.9 90 < 0.2 1.6 1.0 0.0 123 18.4 6.5 86 1.6 8.0 8.3 30.5 106.5 <0.2 Surface 18.4 8.0 30.5 106.5 1.0 0.0 132 18.4 8.0 30.5 106.5 8.3 6.5 86 <0.2 1.6 1.6 3.9 0.1 273 18.7 7.9 104.4 6.2 88 <0.2 33.5 8.0 IM11 Cloudy 822038 811479 Moderate 09:07 7.8 Middle 18.7 7.9 33.5 104.4 88 <0.2 0.1 18.7 87 3.9 <0.2 284 6.2 6.8 18.7 7.9 33.9 105.8 8.1 5.4 90 <0.2 1.5 Rottom 18.7 7.9 33.9 105.8 8 1 6.8 0.1 310 18.7 7.9 33.9 105.8 8.1 5.4 90 1.5 203 18.6 8.0 33.8 33.8 106.4 106.4 5.0 86 <0.2 1.6 Surface 18.6 8.0 33.8 106.4 1.0 0.1 18.6 8.0 8.1 5.0 4 86 <0.2 1.6 4.2 0.1 223 18.7 5.3 89 <0.2 1.5 Middle 821437 IM12 Cloudy Moderate 09:00 8.0 33.8 105.4 0.1 18.7 8.0 105.4 5.3 88 1.7 4.2 7.4 0.1 175 18.7 7.9 105.9 5.1 90 <0.2 1.6 Bottom 18.7 7.9 33.9 105.9 8.1 7.4 0.1 187 18.7 7.9 33.9 105.9 8.1 5.1 4 90 < 0.2 1.6 1.0 18.4 8.0 33.7 107.5 8.3 4.9 Surface 18.4 8.0 33.7 107.5 1.0 18.4 8.0 33.7 107.5 8.3 4.9 6 2.4 SR1A Cloudy Moderate 08:44 Middle 819975 812654 2.4 3.8 18.4 106.9 8.2 5.0 9 8.2 Bottom 18.4 7.9 33.6 106.9 3.8 18.4 7.9 33.6 106.9 8.2 5.0 8 1.0 0.0 298 18.7 7.9 33.8 104.6 5.1 86 <0.2 1.7 Surface 18.7 7.9 33.8 104.6 1.0 0.0 18.7 7.9 33.8 104.6 8.0 5.1 7 85 <0.2 1.8 SR2 Cloudy Moderate 08:30 4.6 Middle 821468 814154 <0.2 18.8 105.4 105.4 <0.2 1.8 Bottom 105.4 3.6 0.0 341 18.8 7.9 33.9 8.0 5.1 90 <0.2 17

8.0

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8.1

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8.0

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79

7.9

79

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18.7

18.7

18.7

18.5

18.5

18.5

18.9

18.5

8.0

8.1

8.1

8.1

8.1

8.1

8.0

7.9

7.9

8.0

29.2

29.2

33.2

33.2

34.3

34.1

34.1

34.1

34.1

34.2

34.2

33.8

33.8

33.8

34.7

347

34.7

34.7

29.4

33.2

33.7

112.5

1125

108.4

108.4

108.5 108.5

110.5 110.5

108.8

108.5

105.9

106.0

111.6

111.5

110.5

108.4

91.3

91.3

89.2

89.2

87.0

87.0

107.7

105.5

33.7

29.2

34.1

34.1

34.2

33.8

33.8

33.4

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8.2

8.2

8.1

8.5

112.5

108.4

108.5

110.5

108.7

106.0

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110.4

107.9

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89.2

87.0

107.7

105.5

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6.0

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1.9

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2.2

2.1

2.1

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3.4

3.4

6.2

6.2

6.2

8

7

7

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6

7

7

4

5

4

4

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822142

817189

816601

817969

823628

820399

807572

807814

810699

814739

823754

811639

-

-

DA: Depth-Averaged

SR3

SR4A

SR5A

SR6A

SR7

SR8

Cloudy

Rainy

Rainy

Rainy

Cloudy

Cloudy

Moderate

Calm

Calm

Calm

Moderate

Moderate

09:41

08:15

07:58

07:32

07:39

8.8

8.4

3.5

3.9

5.1

Bottom

Surface

Middle

Rottom

Surface

Middle

Bottom

Surface

Middle

Bottom

Surface

Middle

Bottom

Surface

Middle

Bottom

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

08:52

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

04 February 20 during Mid-Flood Tide

Water Qua	ity Monit	oring Resu	ilts on		04 February 20	during Mid-	Flood Tic	de																					
Monitoring	Weather	Sea	Sampling	Water	Sampling De	anth (m)	Current Speed	Current	Water Te	mperature (°C)		рН	Salir	nity (ppt)		turation %)	Dissol Oxyg		Turbidity(NTU)	Suspender (mg/		otal All (ppi		Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel	l (µg/L)
Station	Condition	Condition	Time	Depth (m)	Oampling Di	spur (III)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	/alue	DA	(Northing)	(Easting)	Value DA	Value	DA
					Surface	1.0	0.1	141 144	18.8 18.8	18.8	8.1 8.1	8.1	34.0		115.5 115.5	115.5	8.8	-	1.4		6	-	86 86				<0.2	0.4	1
C1	Cloudy	Moderate	13:18	7.5	Middle	3.8	0.1	187	18.9	18.9	8.1	8.1	34.0	34.0	113.1	113.1	8.6	8.7	2.2	2.8	6	5	88	88	815608	804239	<0.2	0.4	0.4
	,				Bottom	3.8 6.5	0.1 0.1	199 190	18.9 18.9	18.9	8.1 8.1	8.1	34.0 34.1	24.1	113.0 112.2	112.2	8.6 8.5	8.5	2.5 4.8		6 3		88 89				<0.2	0.3	1
						6.5 1.0	0.1	207 156	18.9 18.6		8.1		34.1 31.6		112.1 111.6		8.5 8.7	0.5	4.2 4.5		3		89 85				<0.2	0.4 1.3	
					Surface	1.0	0.2	162	18.6	18.6	8.0	8.0	31.6	31.0	111.6	111.6	8.7	8.5	4.5		3		86				<0.2	1.3	<u> </u>
C2	Cloudy	Moderate	12:12	11.6	Middle	5.8 5.8	0.2	155 162	18.7 18.7	18.7	7.9 7.9	7.9	33.5 33.5	33.5	107.9 107.9	107.9	8.3 8.3		4.8 4.8	4.8	3 <2	3	88 87	88	825663	806944	<0.2 <0.2	1.4	1.4
					Bottom	10.6 10.6	0.4	172 183	18.8 18.8	18.8	7.9 7.9	7.9	33.9 33.9		109.5	109.5	8.3 8.3	8.3	5.2 5.2		3	-	90				<0.2	1.4	
					Surface	1.0	0.1 0.1	122 137	19.6 19.6	19.6	7.9 7.9	7.9	34.6 34.6	34.6	93.4 93.4	93.4	7.0	Ì	4.4 4.4		<2 2	l	86 87				<0.2 <0.2	0.9	
СЗ	Cloudy	Moderate	14:26	11.4	Middle	5.7	0.1	141	19.5	19.5	7.9	7.9	34.6	34.6	94.3	94.3	7.1	7.1	4.2	4.3	<2	2	88	88	822098	817823	<0.2	0.9	0.0
					Bottom	5.7 10.4	0.1	156 159	19.5 19.5	19.5	7.9 7.9	7.9	34.6 34.6	34.6	94.3 97.3	97.3	7.1 7.3	7.3	4.2 4.3		2 <2	E	87 90				<0.2 <0.2	0.8	
					-	10.4	0.2	167 74	19.5 18.9		7.9 8.1		34.6		97.3 114.0		7.3 8.7	7.0	4.3 1.7		<2 4		90 86				<0.2	0.9	\vdash
					Surface	1.0	0.1	77	18.9	18.9	8.1	8.1	34.1	34.1	113.8	113.9	8.6	8.7	1.7		5	F	87				<0.2	0.4	ļ
IM1	Cloudy	Moderate	12:59	4.8	Middle	-	-		-	-	-	-			-	-	-	-	-	3.2	-	4	-	87	817963	807144	- <0.2	-	0.4
					Bottom	3.8	0.1 0.1	41 45	18.7 18.7	18.7	8.1 8.1	8.1	34.2 34.2		110.6 110.5	110.6	8.4 8.4	8.4	4.5 5.0		3 4		88 88				<0.2 <0.2	0.4	
					Surface	1.0	0.2	35 35	18.9 18.9	18.9	8.1 8.1	8.1	34.1	34.1	112.0 111.9	112.0	8.5 8.5		2.3		5 4	-	86 85				<0.2	0.4	
IM2	Cloudy	Moderate	12:51	6.8	Middle	3.4 3.4	0.1 0.1	33 34	18.9 18.9	18.9	8.1 8.1	8.1	34.2 34.2		110.6 110.4	110.5	8.4 8.4	8.5	4.0 4.0	3.6	6 5	5	87 88	88	818181	806151	<0.2	0.4	1 04
					Bottom	5.8	0.1	27	18.8	18.8	8.1	8.1	34.3	24.2	109.0	109.1	8.3	8.3	4.4		5		89				<0.2	0.3	<u>†</u>
					Surface	5.8 1.0	0.1	30 78	18.8 18.7	18.7	8.1 8.1	8.1	34.3	22.0	109.1 111.7	111.7	8.3 8.5		4.2 1.9		5 5		90 86				<0.2 <0.2	0.4	H
11.40	Observation	Madania	40.44	0.0		1.0 3.3	0.2	79 83	18.7 18.9		8.1 8.1		33.9 34.3		111.6 110.8		8.5 8.4	8.5	1.9 2.6	3.1	5 5	_	86 88		040774	205024	<0.2	0.6	0.6
IM3	Cloudy	Moderate	12:44	6.6	Middle	3.3 5.6	0.1 0.0	81 86	18.9 18.9	18.9	8.1 8.1	8.1	34.3 34.3	34.3	110.7 109.1	110.8	8.4 8.3		2.6 4.7	3.1	6 5	°	87 90	88	818771	805604	<0.2 <0.2 <0.2	0.7	0.6
					Bottom	5.6	0.0	87	18.9	18.9	8.1	8.1	34.3	34.3	109.1	109.1	8.3	8.3	4.8		6		89				<0.2	0.6	
					Surface	1.0	0.0	65 66	18.8 18.8	18.8	8.1 8.1	8.1	33.8 33.8		112.3 112.2	112.3	8.6	8.5	1.8 1.8		4 5		85 86				<0.2	0.8	1
IM4	Cloudy	Moderate	12:35	7.5	Middle	3.8	0.1	71 72	19.0 19.0	19.0	8.1 8.1	8.1	34.3	34.3	110.5	110.5	8.4	0.0	1.9 1.9	2.4	4	4	88 87	88	819708	804622	<0.2	2 0.8	
					Bottom	6.5 6.5	0.1	76 75	18.9 18.9	18.9	8.1 8.1	8.1	34.3	24.2	108.3 108.3	108.3	8.2 8.2	8.2	3.6 3.6		2	F	89 90				<0.2 <0.2	0.8	
					Surface	1.0	0.2	74	18.5	18.5	8.1	8.1	30.9	20.0	115.6	115.6	9.0		1.6		5		85				<0.2	1.2	乛
IM5	Cloudy	Moderate	12:28	6.8	Middle	1.0 3.4	0.2	80 65	18.5 18.9	18.9	8.1 8.1	8.1	30.9 34.2	24.2	115.6 109.0	109.0	9.0 8.3	8.7	1.6 3.3	3.1	6 5	6	86 87	88	820712	804883	<0.2	1.2	1.3
IIVIO	Cioday	Woderate	12.20	0.0		3.4 5.8	0.2	77 38	18.9 18.8		8.1 8.1		34.2 34.3		109.0 107.3		8.3 8.2		3.3 4.3	5.1	6	ľ	88 89		020712	004003	<0.2	1.3	1.5
					Bottom	5.8 1.0	0.1	39 86	18.8 18.5	18.8	8.1 8.1	8.1	34.3	34.3	107.3 120.0	107.3	8.2 9.4	8.2	4.4 1.4	'	5		90 85				<0.2 <0.2	1.3	<u> </u>
					Surface	1.0	0.2	74	18.5	18.5	8.1	8.1	30.5	30.5	119.8	119.9	9.4	8.9	1.4		5		85				<0.2	1.5	<u>†</u>
IM6	Cloudy	Moderate	12:20	6.5	Middle	3.3	0.1	72 76	18.7 18.7	18.7	8.1 8.1	8.1	34.1	34.1	108.9	108.9	8.3	-	3.4	3.1	5 4	5	87 86	87	821081	805808	<0.2	1.5	1.6
					Bottom	5.5 5.5	0.1 0.1	81 69	18.7 18.7	18.7	8.1 8.1	8.1	34.3		107.5 107.5	107.5	8.2 8.2	8.2	4.5 4.6		5 4	-	89 88				<0.2	1.7]
					Surface	1.0	0.1	46 43	18.4	18.4	8.1 8.1	8.1	28.9	20.0	120.1	120.0	9.5 9.5		1.3		4 3		85 84				<0.2 <0.2	1.8	
IM7	Cloudy	Moderate	12:12	7.9	Middle	4.0	0.1	66	18.6	18.6	8.1	8.1	32.8	22.0	112.4	112.4	8.6	9.1	1.8	2.4	4	5	86	87	821360	806846	<0.2	2 1.7	1.8
	/			***	Bottom	4.0 6.9	0.1	62 43	18.6 18.8	18.8	8.1 8.1	8.1	32.9 34.2	24.2	112.3 108.0	108.0	8.6 8.2	0.2	1.8 4.3		7		87 89				<0.2	1.8	
			1		-	6.9 1.0	0.2	45 99	18.8 18.5		8.1 8.0		34.2 29.7	34.2	108.0		8.2 8.8	8.2	4.2 5.3		6		88 86				<0.2	1.7	<u> </u>
					Surface	1.0	0.4	104	18.5	18.5	8.0	8.0	29.7	29.7	112.3	112.3	8.8	8.6	5.3		6	ļ	87				<0.2	1.4	Ī
IM8	Cloudy	Moderate	12:38	7.5	Middle	3.8	0.4	89 97	18.7 18.7	18.7	7.9 7.9	7.9	33.3 33.3	33.3	109.4 109.4	109.4	8.4 8.4		5.2 5.2	6.4	5 6	5	88 87	88	821844	808163	<0.2 <0.2	1.4] 1.4
					Bottom	6.5 6.5	0.1 0.1	67 67	18.8 18.8	18.8	7.8 7.8	7.8	34.2	34.2	109.3	109.3	8.3 8.3	8.3	8.6 8.6		5 4	F	90 90				<0.2	1.4	<u> </u>
DA: Depth-Ave					•	. 0.0		,			,														•				

04 February 20 during Mid-Flood Tide

	,	orning ixesu			04 i ebitaary 20	during wild-												_							$\overline{}$			
Monitoring	Weather	Sea	Sampling	Water	Complian Day	nath (no)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)		aturation (%)	Disso		Turbidity(NTU)	Suspende (mg		Total Alka (ppm)	. 000		Coordinate	Chromi (µg/L	
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	otn (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value		(Grid orthing)	HK Grid (Easting)	Value	DA Value DA
					Surface	1.0	0.3	89	18.6	18.6	8.0	8.0	30.0	30.0	111.7	111.7	8.7		6.2		5		87		-		<0.2	1.4
						1.0 3.4	0.3	97 80	18.6 18.7		8.0 7.9		30.0		111.7 109.8		8.7 8.4	8.6	6.2 7.5		5 4		85 88				<0.2	1.4
IM9	Cloudy	Moderate	12:42	6.8	Middle	3.4	0.4	80	18.7	18.7	7.9	7.9	33.2	33.2	109.8		8.4		7.5	7.7	4	5	88	88 82	2115	808797	<0.2	<0.2
					Bottom	5.8 5.8	0.2	97 99	18.7 18.7	18.7	7.9	7.9	33.9 33.9	33.9	107.7 107.7	107.7	8.2 8.2	8.2	9.2 9.4		5 4		90				<0.2	1.5
					Surface	1.0	0.5	94	18.6	18.6	7.9	7.9	30.9	30.9	113.5	113.5	8.8		4.9		6		86		一		<0.2	1.4
						1.0 3.5	0.5	101 79	18.6 18.7		7.9 7.9		30.9		113.5 110.9		8.8 8.5	8.7	4.9 5.8		4 5		86 88				<0.2	1.4
IM10	Cloudy	Moderate	12:48	6.9	Middle	3.5	0.3	84	18.7	18.7	7.9	7.9	33.1	33.1	110.9	110.9	8.5		5.8	5.2	4	4	89	88 82	2381	809797	<0.2	1.4
					Bottom	5.9 5.9	0.4	70 75	18.6 18.6	18.6	7.9	7.9	33.2 33.2	33.2	109.9 109.9	109.9	8.4 8.4	8.4	4.8		3		90				<0.2	0.9
					Surface	1.0	0.1 0.1	112 122	18.5 18.5	18.5	8.0	8.0	31.0 31.0	31.0	108.9 108.9	108.9	8.5 8.5		4.8 4.8		5 6		86				<0.2	0.9
IM11	Cloudy	Moderate	13:00	7.6	Middle	3.8	0.1	154	18.8	18.8	8.0	8.0	33.8	33.8	105.7	105.7	8.1	8.3	5.4	5.2	5	5	86 88	88 82	2043	811468	<0.2	<0.2 0.9 0.9
IIVITT	Cloudy	Woderate	13.00	7.0	Wildele	3.8 6.6	0.2	155 188	18.8 18.8	10.0	8.0	0.0	33.8	33.0	105.7 105.9	103.7	8.1		5.4 5.3	5.2	5 6	3	89 90	00 02	2043	011400	<0.2	0.9
					Bottom	6.6	0.2	202	18.8	18.8	8.0	8.0	33.9 33.9	33.9	105.9	105.9	8.1 8.1	8.1	5.3		5		90				<0.2	0.9
					Surface	1.0	0.1	241 246	18.7 18.7	18.7	8.0	8.0	33.5 33.5	33.5	108.5 108.5	108.5	8.3 8.3		4.9 4.9		4		86 86				<0.2	1.1
IM12	Cloudy	Moderate	13:05	8.0	Middle	4.0	0.1	254	18.8	18.8	8.0	8.0	33.7	33.7	106.1	105.9	8.1	8.2	5.2	5.0	3	4	88	88 82	1475	812044	<0.2	-0.2 1.0 1.0
	,					4.0 7.0	0.1	270 161	18.8 18.8		8.0 7.9		33.7 34.0		105.7 107.4		8.1 8.2		5.2 4.9		<u>4</u> 5		90				<0.2	0.9
					Bottom	7.0	0.2	161	18.8	18.8	7.9	7.9	34.0	34.0	107.4	107.4	8.2	8.2	4.9		6		90				<0.2	0.9
					Surface	1.0	-	-	18.9 18.9	18.9	7.9	7.9	34.0	34.0	105.3 105.3	105.3	8.0	8.0	4.7		5 6		-				-	-
SR1A	Cloudy	Moderate	13:48	4.0	Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	8.0	-	4.7	-	5	-	- 81	9979	812666	-	
					Bottom	3.0	-	-	18.9	18.9	7.9	7.9	34.2	34.2	105.5	105.5	8.0	8.0	4.7		4		-				-	-
						3.0 1.0	0.2	321	18.9 19.0		7.9		34.2		105.5 104.6		8.0 7.9	0.0	4.7 4.8		4		87		\rightarrow		<0.2	1.0
					Surface	1.0	0.2	341	19.0	19.0	7.9	7.9	34.1	34.1	104.6	104.6	7.9	7.9	4.8		5		86				<0.2	0.9
SR2	Cloudy	Moderate	14:04	4.5	Middle	-	-	-	-	-	-	-	-		-	-	-		-	4.8	-	4		88 82	1453	814185		<0.2 - 1.0
					Bottom	3.5	0.1	28	19.0	19.0	7.9	7.9	34.1	34.1	105.0		8.0	8.0	4.8		4		90				<0.2	1.0
					Surface	3.5 1.0	0.1	29 129	19.0 18.5	18.5	7.9 8.0	8.0	34.1 29.4	29.4	105.0 111.7	111.7	8.0 8.8		4.8 4.9		3 5		90		\rightarrow		<0.2	0.9
					Sunace	1.0 4.4	0.4	136 117	18.5 18.7	10.5	8.0 7.9	0.0	29.4 33.1	29.4	111.7 109.6	1111.7	8.8 8.4	8.6	4.9 5.5		4 5		-				-	-
SR3	Cloudy	Moderate	12:32	8.8	Middle	4.4	0.3	125	18.7	18.7	7.9	7.9	33.1	33.1	109.6	109.6	8.4		5.5	7.0	4	4	=	- 82	2163	807573		- 🗀 -
					Bottom	7.8 7.8	0.3	100 104	18.9 18.9	18.9	7.9	7.9	34.3	34.3	106.4 106.4		8.1 8.1	8.1	10.6 10.6		3		-				-	-
					Surface	1.0	0.1	43	19.0	19.0	8.1	8.1	34.1	34.1	107.4	107.4	8.3		1.6		7		-		$\overline{}$			-
						1.0 4.4	0.1	46 184	19.0 19.0		8.1 8.0		34.1 34.1		107.4 107.1		8.3 8.3	8.3	1.6 2.2		7		-				-	-
SR4A	Cloudy	Calm	13:38	8.7	Middle	4.4	0.3	188	19.0	19.0	8.0	8.0	34.1	34.1	107.1	107.1	8.3	1	2.2	2.8	6	6	-	- 81	7184	807832	-	
					Bottom	7.7	0.3	179 188	19.0 19.0	19.0	8.0	8.0	34.1	34.1	106.6 106.6	106.6	8.2 8.2	8.2	4.6 4.5		4 5		-				-	-
					Surface	1.0	0.2	282 287	19.0 19.0	19.0	8.1 8.1	8.1	33.7	33.7	106.8 106.7	106.8	8.3 8.3		2.2		4		-					-
SR5A	Cloudy	Calm	13:54	3.6	Middle	-	-	-	-		-	-	-		-		-	8.3	-	3.1	-	4		- 81	6602	810702		
Orton	O.Outa,	Odim	10.01	0.0		2.6	0.1	195	18.9		8.0		33.9		105.4		8.2		4.1	0	5		-	"	2002	010102	-	-
					Bottom	2.6	0.1	203	18.9	18.9	8.0	8.0	33.9	33.9	105.4	105.4	8.2	8.2	4.0		4		-				-	-
					Surface	1.0	0.1	243 246	19.0 19.0	19.0	8.1	8.1	33.7	33.7	109.9	109.9	8.5 8.5		1.9		4		-				-	-
SR6A	Cloudy	Calm	14:25	4.1	Middle	-	-	-	-	-	-		-		-		-	8.5	-	2.5	-	4		- 81	7977	814759	-	
					D-#	3.1	0.1	171	19.0	40.0	8.1	0.4	33.8	00.0	108.1	108.1	8.4	0.4	3.0		3		-				-	-
					Bottom	3.1 1.0	0.1	174	19.0	19.0	8.1	8.1	33.8	33.8	108.0	108.1	8.3	8.4	3.1		4		-				\Box	-
					Surface	1.0	0.1 0.1	280 304	19.6 19.6	19.6	7.9 7.9	7.9	34.6 34.6	34.6	91.9 91.9	91.9	6.9	6.9	4.2 4.2		<2 3		-					-
SR7	Cloudy	Moderate	14:57	16.5	Middle	8.3 8.3	0.1	254 255	19.6 19.6	19.6	7.9 7.9	7.9	34.7	34.7	91.7 91.7	91.7	6.9	0.5	4.4	4.3	3 <2	3	-	- 82	3627	823739	-	
					Bottom	15.5	0.1	97	19.6	19.6	7.9	7.9	34.7	34.7	93.8	93.8	7.0	7.0	4.3		3							-
						15.5	0.2	104	19.6 18.7		7.9 8.0		34.7 33.6		93.8		7.0 8.3	7.0	4.3		3				\rightarrow		╁	-
					Surface	1.0	-	-	18.7	18.7	8.0	8.0	33.6	33.6	108.8	108.8	8.3	8.3	4.8		4		-					-
SR8	Cloudy	Moderate	13:21	5.3	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	4.8	-	3	-	- 82	20408	811645	-	
					Bottom	4.3	-	-	18.7	18.7	8.0	8.0	33.5	33.5	108.9	108.9	8.3	8.3	4.8		<2		-				-	
	L		I			4.3		-	18.7		8.0	L	33.5		108.9	L	8.3		4.8		3		<u> </u>					

06 February 20 during Mid-Fbb Tide

Water Qua	lity Monit	oring Resu	lts on		06 February 20	during Mid-	Ebb Tide	9																					
Monitoring	Weather	Sea	Sampling	Water	Sampling De	epth (m)	Current Speed	Current	Water Te	emperature (°C)	рН	Salini	ity (ppt)		aturation (%)	Disso Oxyg		Turbidity	NTU)	Suspende (mg		Total Al		Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	e Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA	Value DA
					Surface	1.0	0.2	212 216	18.8 18.8	18.8	8.4	8.4	33.3	33.3	102.7 102.6	102.7	7.8 7.8		3.4	.	7 8		81 82				<0.2	i F	0.7
C1	Cloudy	Rough	10:48	8.3	Middle	4.2 4.2	0.1	163 169	18.8 18.8	18.8	8.4 8.4	8.4	33.3 33.3	33.3	102.7 102.7	102.7	7.8	7.8	3.4 3.4	3.4	8	8	84 84	84	815596	804256	<0.2	<0.2	0.6 0.7
					Bottom	7.3	0.1	189	18.8	18.8	8.4	8.4	33.3	33.3	102.7	102.8	7.8	7.8	3.4		8		85				<0.2	, t	0.7
					Surface	7.3	0.1	205 163	18.8 18.7	18.7	8.4 8.2	8.2	33.3 32.1	32.1	102.8	106.2	7.8 8.2		3.5 2.0		9 5		85 83				<0.2	\rightarrow	0.6
						1.0 5.7	0.2	168 149	18.7 18.7		8.2 8.2		32.1 32.3		106.1 100.1		8.2 7.7	8.0	2.0		6 4		83 85				<0.2	r F	0.7
C2	Cloudy	Rough	11:37	11.4	Middle	5.7	0.3	163	18.7	18.7	8.2	8.2	32.3	32.3	100.1	100.1	7.7		2.6	2.9	5	5	84 86	85	825704	806964	<0.2	<0.2	0.6 0.5 0.5
					Bottom	10.4 10.4	0.2	158 161	18.8 18.8	18.8	8.2 8.2	8.2	32.6 32.6	32.6	97.5 97.5	97.5	7.5 7.5	7.5	3.9 4.0		3		86				<0.2		0.6
					Surface	1.0	0.0	42 42	19.3 19.3	19.3	8.2	8.2	33.3	33.3	88.9 88.9	88.9	6.7	6.7	2.2		5 6		85 84				<0.2	í F	0.6
СЗ	Cloudy	Moderate	09:50	12.5	Middle	6.3 6.3	0.0	84 90	19.3 19.3	19.3	8.2 8.2	8.2	33.3 33.3	33.3	88.5 88.5	88.5	6.7 6.7	6.7	2.7 2.7	2.5	6	6	86 86	86	822094	817792	<0.2	<0.2	0.5 0.4
					Bottom	11.5 11.5	0.1	104 111	19.3	19.3	8.2	8.2	33.3	33.3	88.5 88.6	88.6	6.7	6.7	2.8		5		87 88				<0.2	, [0.5
					Surface	1.0	0.1	219	18.5	18.5	8.4	8.4	33.0	33.0	104.8	104.7	8.0		3.2		9		82				<0.2	=	0.6
IM1	Cloudy	Moderate	11:13	4.8	Middle	1.0	0.1	222	18.5		8.4		33.0		104.6		8.0	8.0	3.3	3.4	9	8	82	83	817965	807149	<0.2	<0.2	0.5 - 0.6
IIVI	Cioddy	Woderate	11.13	4.0		3.8	0.0	226	18.5		8.4		33.0		103.0		7.9		3.5	3.4	7		- 84		617905	807149	<0.2	1 40.2	0.8
					Bottom	3.8	0.0	227 177	18.5	18.5	8.4	8.4	33.0 33.2	33.0	102.8	102.9	7.9	7.9	3.5		6		84				<0.2		0.6
					Surface	1.0	0.1	178	18.6	18.6	8.4	8.4	33.2	33.2	104.1	104.1	7.9	7.9	4.0		8		82				<0.2	,	0.7
IM2	Cloudy	Rough	11:23	7.3	Middle	3.7	0.1	154 166	18.6 18.6	18.6	8.4 8.4	8.4	33.2 33.2	33.2	103.9 103.8	103.9	7.9 7.9		6.8	6.5	7	7	83 84	83	818165	806142	<0.2 <0.2	<0.2	0.6 0.5
					Bottom	6.3	0.0	196 211	18.6 18.6	18.6	8.4	8.4	33.2	33.2	103.6	103.6	7.9	7.9	8.6 8.7		7 8		84 85				<0.2	í F	0.7
					Surface	1.0	0.1	203 214	18.6 18.6	18.6	8.4 8.4	8.4	33.2 33.2	33.2	103.7 103.6	103.7	7.9 7.9		3.8 3.8		4		81 81				<0.2	ī	0.6
IM3	Cloudy	Rough	11:32	6.7	Middle	3.4	0.1	182	18.6	18.6	8.4 8.4	8.4	33.2 33.2	33.2	103.3	103.3	7.9 7.9	7.9	3.7	3.6	6	7	84	84	818805	805615	<0.2	<0.2	0.8 0.7
					Bottom	3.4 5.7	0.1	185 161	18.6 18.6	18.6	8.4	8.4	33.2	33.2	102.9	102.9	7.8	7.8	3.2		7 9		85				<0.2 <0.2	, t	0.6
					Surface	5.7 1.0	0.1	164 197	18.6 18.5	18.5	8.4 8.4	8.4	33.2 33.0	33.0	102.9 105.0	105.0	7.8 8.0		3.4 2.8		10 10		86 83				<0.2	=	0.8
						1.0 3.9	0.3	209 181	18.5 18.5		8.4 8.4		33.0 33.0		104.9 104.1		8.0 8.0	8.0	2.8		9		84 84				<0.2	í	0.6
IM4	Cloudy	Rough	11:42	7.7	Middle	3.9 6.7	0.2	182 161	18.5 18.5	18.5	8.4 8.4	8.4	33.0 33.0	33.0	104.0 103.0	104.1	8.0 7.9		2.8	2.8	8	9	85 85	84	819735	804590	<0.2	<0.2	0.5 0.6 0.6
					Bottom	6.7	0.1	166	18.5	18.5	8.4	8.4	33.0	33.0	102.8	102.9	7.9	7.9	2.8		8		85				<0.2		0.6
					Surface	1.0	0.3	224 243	18.6 18.6	18.6	8.4 8.4	8.4	32.7 32.7	32.7	106.2 106.1	106.2	8.1 8.1	8.1	2.4 2.4		5 6		82 82				<0.2 <0.2	ıt	0.8
IM5	Cloudy	Rough	11:55	7.3	Middle	3.7	0.3	217 222	18.5 18.5	18.5	8.4 8.4	8.4	32.8 32.8	32.8	104.7 104.5	104.6	8.0		2.9 3.0	2.9	5 6	6	84 84	84	820728	804869	<0.2	<0.2	0.5 0.7
					Bottom	6.3	0.2	197 214	18.5 18.5	18.5	8.4	8.4	32.8	32.8	103.4	103.3	7.9 7.9	7.9	3.3 3.4		6 7		85 85				<0.2	r F	0.7
					Surface	1.0	0.3	244 254	18.6 18.6	18.6	8.4	8.4	32.5 32.5	32.5	104.5	104.5	8.0		2.4		7		81 82				<0.2	ī	0.8
IM6	Cloudy	Rough	12:06	7.0	Middle	3.5	0.3	240	18.6	18.6	8.4	8.4	32.5	32.5	103.7	103.7	7.9	8.0	2.6	5.6	7	6	83	83	821042	805808	<0.2	<0.2	0.9
		-			Bottom	3.5 6.0	0.3	252 233	18.6 18.6	18.6	8.4 8.4	8.4	32.5 32.5	32.5	103.6 103.1	103.1	7.9 7.9	7.9	2.6 12.0		7 6		83 84				<0.2 <0.2	ıt	0.7
					Surface	1.0	0.2	255 245	18.6 18.6		8.4 8.4		32.5 32.5		103.1 105.8	105.8	7.9 8.1	7.0	11.9 1.9		5 7		85 83			1	<0.2	\dashv	0.8
						1.0 4.1	0.3	268 238	18.6 18.5	18.6	8.4 8.3	8.4	32.5 32.6	32.5	105.7 104.2		8.1 8.0	8.1	1.9 2.2		7		83 84				<0.2 <0.2	, [0.5
IM7	Cloudy	Rough	12:17	8.1	Middle	4.1	0.3	249	18.5	18.5	8.3	8.3	32.6	32.6	103.9	104.1	8.0		2.3	2.3	6	6	85	84	821362	806842	<0.2	<0.2	0.7
					Bottom	7.1 7.1	0.2	247 270	18.5 18.5	18.5	8.3 8.3	8.3	32.8 32.7	32.7	103.3 103.3	103.3	7.9 7.9	7.9	2.8 2.8		5 6		85 86				<0.2 <0.2		0.6
					Surface	1.0	0.2	98 104	18.5 18.5	18.5	8.2 8.2	8.2	32.6 32.6	32.6	102.7 102.6	102.7	7.9 7.9	70	3.7	1	8 7		84 84				<0.2	i F	0.3
IM8	Cloudy	Moderate	11:12	8.1	Middle	4.1 4.1	0.1	90 96	18.5 18.5	18.5	8.2 8.2	8.2	32.6 32.6	32.6	102.1 102.1	102.1	7.9 7.9	7.9	3.4 3.3	3.7	7 6	7	85 85	85	821834	808158	<0.2	<0.2	0.6 0.5
					Bottom	7.1	0.2	94	18.5	18.5	8.2 8.2	8.2	32.6 32.6	32.6	100.0	99.9	7.7	7.7	4.2 4.2		6		87 87				<0.2	, ‡	0.7
DA: Depth-Aver	roand				<u> </u>	7.1	0.2	101	18.5		8.2		32.6		99.7	L	1.1		4.2		5		8/				<u.2< td=""><td></td><td>0.0</td></u.2<>		0.0

Water Qual	ity Monit	oring Resu	lts on		06 February 20	during Mid-	Ebb Tide	9																			
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	emperature (°C)	рН	Salinity (ppt)	DO S	Saturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg/		Total Al		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l		lickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average			Average	Value DA		DA	Value	DA	Value	DA	(Northing)	(Easting)			'alue DA
					Surface	1.0	0.2	52 55	18.5 18.5	18.5	8.2	8.2	32.5 32.5	104.5	104.5	8.1 8.1 8.1	2.8		5 6		84 83				<0.2		1.1
IM9	Cloudy	Moderate	11:06	7.5	Middle	3.8	0.2	48 51	18.5 18.5	18.5	8.2	8.2	32.5 32.5	103.2	103.2	8.0	3.0	3.0	5 6	4	84 85	85	822093	808802	<0.2	<0.2	1.2 1.0
					Bottom	6.5	0.2	37 40	18.4 18.4	18.4	8.2 8.2	8.2	32.5 32.5	101.6	101.6	7.9 7.8	3.0	1	2		87 87				<0.2 <0.2	1	1.1
					Surface	1.0 1.0	0.1	69 69	18.5	18.5	8.2	8.2	32.5 32.5 32.5	100.8	100.8	7.8	3.1		3		84				<0.2	0	0.6
IM10	Cloudy	Moderate	10:58	7.0	Middle	3.5	0.2	81	18.5	18.5	8.2	8.2	32.5	100.1	100.1	7.7	3.0	3.2	3	4	85	86	822376	809782	<0.2	.0.0	0.6
	,				Bottom	3.5 6.0	0.2	87 59	18.5 18.7	18.7	8.2 8.2	8.2	32.5 32.7 32.7 32.7	100.0 97.4	97.4	7.7 7.5 7.5	3.1	1	7		86 87				<0.2	0	0.5
					Surface	1.0	0.1	59 136	18.7 18.9	18.9	8.2	8.2	32.7 32.8 32.8 32.8	97.4 96.5	96.5	7.5	3.5		6 8		88 84				<0.2		0.4
						1.0 4.5	0.1	147 112	18.9 18.9		8.2 8.2		32.8	96.5 96.4		7.4 7.4	2.9	1	8 7	_	84 85				<0.2	0	0.5
IM11	Cloudy	Moderate	10:47	8.9	Middle	4.5 7.9	0.1	113 94	18.9 18.9	18.9	8.2 8.2	8.2	32.8 32.8 32.8	96.3 95.8	96.4	7.4	2.9 3.0	2.9	7 5	7	86 87	86	822078	811476	<0.2	<0.2	0.8 0.9 0.7
					Bottom	7.9	0.1	100	18.9	18.9	8.2	8.2	32.8	95.7		7.3	3.0		6		87				<0.2	0	0.7
					Surface	1.0	0.1	162 170	18.9 18.9	18.9	8.2 8.2	8.2	32.8 32.8	97.0 97.0	97.0	7.4	3.0	1	10		84 84				<0.2	0	0.4
IM12	Cloudy	Moderate	10:40	9.8	Middle	4.9 4.9	0.2	146 154	18.9 18.9	18.9	8.2 8.2	8.2	32.8 32.8	96.6 96.5	96.6	7.4	2.8	3.0	7 8	8	85 86	86	821469	812044	<0.2 <0.2	<0.2	0.5 0.5
					Bottom	8.8 8.8	0.1	208 215	18.9 18.9	18.9	8.2 8.2	8.2	32.8 32.8	95.9 95.8	95.9	7.3 7.3	3.4		7		88 87				<0.2		0.4
					Surface	1.0	-	-	18.2 18.2	18.2	8.2 8.2	8.2	32.5 32.5	96.7 96.7	96.7	7.5 7.5 7.5	3.0		7		-				-		
SR1A	Cloudy	Moderate	10:24	4.9	Middle	2.5 2.5		-	-	-	-	-		-		- /:	-	3.0	-	6	-	-	819979	812661	-		-
					Bottom	3.9	-	-	18.2 18.2	18.2	8.2 8.2	8.2	32.5 32.5	96.4 96.4	96.4	7.5 7.5	3.1	1	6		-				-	_	-
					Surface	1.0	0.1	317 318	19.1	19.1	8.2 8.2	8.2	33.0 33.0 33.0	92.4 92.4	92.4	7.0	2.3		5		84 84				<0.2		0.4
SR2	Cloudy	Moderate	10:12	5.2	Middle	1.0	0.2	-	19.1	-	- 8.2	-		92.4		7.0 7.0	-	2.4	- 6	. 6	-	85	821486	814176	- <0.2	-0.2	- 0.4
	,				Bottom	4.2	0.1	314	19.1	19.1	8.2	8.2	33.1 33.0	92.0	92.0	7.0 7.0	2.4	1	7		- 86				<0.2	0	0.3
					Surface	4.2 1.0	0.1	332 198	19.1 18.6	18.6	8.2 8.2	8.2	32.6	92.0 101.6	101.6	7.8	2.4		7 6		86				<0.2		- 0.4
SR3	Cloudy	Moderate	11:17	9.2	Middle	1.0 4.6	0.2	207 201	18.6 18.6	18.6	8.2 8.2	8.2	32.6 32.6 32.6 32.6	101.5	101.0	7.8 7.8	2.8	2.9	7 6	. ,	-		822130	807547	-	\vdash	-
SKS	Cloudy	Woderate	11.17	5.2	Bottom	4.6 8.2	0.2	214 170	18.6 18.6	18.6	8.2 8.2		32.6 32.6 32.6 32.6	101.0 99.5	99.5	7.8 7.7 7.7	2.9	2.9	7	. '	-		622130	807347	-		
						8.2 1.0	0.2	170 100	18.6 18.6		8.2 8.4	8.2	32.6	99.5 102.8		7.7	3.1	<u> </u>	6 11		-				-	-	-
					Surface	1.0 4.7	0.1	105 77	18.6 18.6	18.6	8.4 8.3	8.4	33.2 33.2 33.2	102.7	102.8	7.8 7.8	3.3	1	10 10		-				-		-
SR4A	Cloudy	Moderate	10:26	9.3	Middle	4.7 8.3	0.2	83 62	18.6 18.6	18.6	8.3	8.3	33.2	101.9		7.8	3.5	3.5	9	10	-	-	817204	807802	-		-
					Bottom	8.3	0.1	66	18.6	18.6	8.3	8.3	33.2	101.7		7.8	3.7		9	•	-				-		-
					Surface	1.0	0.1	239 260	18.4 18.4	18.4	8.3 8.3	8.3	33.7 33.7	101.2	101.2	7.8 7.8 7.8	3.1	1	9		-				-		-
SR5A	Cloudy	Moderate	10:07	5.0	Middle	-	-	-	-	-	-	-		Ė		-	-	3.3	-	8	-	-	816608	810682	-		-
					Bottom	4.0	0.1	252 271	18.4 18.4	18.4	8.3 8.3	8.3	33.7 33.7	100.9		7.8 7.7	3.4	<u> </u>	6 7		-				-	_	-
					Surface	1.0	0.0	357 328	18.6 18.6	18.6	8.2	8.2	33.7 33.7	99.1 99.1		7.6 7.6 7.6	3.0 2.9		7		-				-	_	-
SR6A	Cloudy	Moderate	09:38	4.5	Middle	-	-	-	-	-	-	-	-	-	-	- 7.6	-	2.9	-	6	-	-	817966	814741	-		
					Bottom	3.5 3.5	0.0	147 157	18.6 18.6	18.6	8.1 8.1	8.1	33.8 33.8	99.5 99.7	99.6	7.6 7.6	2.9 3.0	1	6		-				-	F	-
					Surface	1.0	0.2	54 55	19.3	19.3	8.2	8.2	33.3 33.3 33.3	88.4 88.4	00.4	6.7	2.0	•	4		-						-
SR7	Fine	Moderate	09:22	15.8	Middle	7.9	0.2	60	19.3	19.3	8.1	8.1	33.3	88.2	88.2	6.7	2.5	2.2	4	4	-	-	823627	823731		_	<u>.</u>
					Bottom	7.9 14.8	0.2	65 61	19.3 19.3	19.3	8.1 8.1	8.1	33.3 33.3	88.2 88.1	88.1	6.7 6.7 6.7	2.5	1	5		-				-	E	-
					Surface	14.8	0.2	63	19.3 18.8	18.8	8.1 8.2	8.2	32.6	88.1 98.5	00.5	7.6	2.2 3.9		7		-				-	+	-
SR8	Cloudy	Moderate	10:32	4.7	Middle	1.0	-	-	18.8	10.0	8.2	0.2	32.6	98.4	30.3	7.6	3.9	3.9	5	6	-		820393	811644	-	F	-
ono	Cloudy	woderate	10.32	4.7		3.7	-	-	- 18.8	-	8.2	-	32.7	97.7		7.5	3.9	3.9	- 6	. 0	-	-	020393	011044	-	· _	-
					Bottom	3.7	-	-	18.8	18.8	8.2	8.2	32.7 32.7	97.6	97.7	7.5	3.8		6		-				-		

06 February 20 during Mid-Flood Tide

Water Qua	lity Monite	oring Resu	lts on		06 February 20	during Mid-	Flood Ti	de																			
Monitoring	Weather	Sea	Sampling	Water	Sampling De	epth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Sali	nity (ppt)		aturation (%)	Disso Oxyg		Turbidity(NTU)	Suspende (mg	ed Solids /L)	Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chron (µg/	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value		Value	Average	Value	DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.1	49 51	18.6 18.6	18.6	8.4	8.4	33.1	33.1	104.2	104.2	8.0		7.6	-	7		84			<0.2	0.7
C1	Claudu	Madazata	15:38	7.9	Middle	4.0	0.1	78	18.6	18.7	8.4	8.4	33.1	22.4	104.0	104.0	8.0	8.0	7.7	8.0	8	7	84 84	815605	804224	<0.2	0.5
Ci	Cloudy	Moderate	15.36	7.9	ivildale	4.0	0.1	88	18.7	10.7	8.4	0.4	33.1	33.1	104.0	104.0	8.0		7.5	0.0	7	′	84	015005	004224	<0.2	0.4
					Bottom	6.9	0.1	18 20	18.7 18.7	18.7	8.4	8.4	33.1	33.1	103.0	103.0	8.0	8.0	8.4 9.0	-	6 8	-	85 85			<0.2	0.5
					0	1.0	0.1	17	18.7	40.7	8.2	0.0	32.1	00.4	106.2	400.0	8.2		2.0		7		83			<0.2	0.6
					Surface	1.0	0.2	17	18.7	18.7	8.2	8.2	32.1	32.1	106.2	106.2	8.2	8.0	2.0	[6	Ī	83			<0.2	0.6
C2	Cloudy	Rough	14:15	11.5	Middle	5.8 5.8	0.2	14 14	18.7 18.7	18.7	8.2	8.2	32.3	32.3	100.0 99.9	100.0	7.7		2.7	2.9	6	6	84 84	825667	806960	<0.2	<0.2 0.6 0.6
					Bottom	10.5	0.4	17	18.8	18.8	8.2	8.2	32.6	32.6	98.0	98.0	7.5	7.5	4.2		5	İ	86			<0.2	0.6
					Bottom	10.5	0.4	17	18.8	10.0	8.2	0.2	32.6		98.0	30.0	7.5	7.5	4.1		6		85			<0.2	0.6
					Surface	1.0	0.1	216 219	19.3 19.3	19.3	8.2	8.2	33.1		92.4 92.3	92.4	7.0		1.7	F	5 4	ł	85 85			<0.2	0.4
СЗ	Cloudy	Moderate	16:14	12.3	Middle	6.2	0.1	243	19.3	19.3	8.3	8.3	33.2	33.2	90.9	90.9	6.9	7.0	1.7	1.6	3	4	87 07	822132	817815	<0.2	0.3
	Oloddy	modorato	10.11	12.0	madio	6.2 11.3	0.1	263 256	19.3 19.4		8.3 8.3		33.2	00.2	90.9		6.9 6.9		1.7		4		87 88	OLLIGE	011010	<0.2	0.3
					Bottom	11.3	0.2	272	19.4	19.4	8.3	8.3	33.2	33.2	90.6	90.6	6.9	6.9	1.5	ŀ	3	1	88			<0.2	0.3
					Surface	1.0	0.1	169	18.6	18.6	8.4	8.4	33.1	33.1	102.8	102.8	7.9		5.3		8		82			<0.2	0.7
						1.0	0.1	184	18.6		8.4		33.1		102.8		7.9	7.9	5.8	-	7	ł	82			<0.2	0.6
IM1	Cloudy	Moderate	15:10	4.6	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	5.1	-	7	- 84	817958	807146	-	<0.2 - 0.7
					Bottom	3.6	0.1	182	18.6	18.6	8.4	8.4	33.1	33.1	104.9	104.9	8.0	8.0	4.6	[7	Ī	85			<0.2	0.8
						3.6 1.0	0.1	182 354	18.6 18.7		8.4		33.1		104.8 105.6		8.0		4.6 3.0		7		85 82			<0.2	0.7
					Surface	1.0	0.2	326	18.7	18.7	8.4	8.4	33.2	33.2	105.5	105.6	8.0	8.0	3.1	į	8		82			<0.2	0.7
IM2	Cloudy	Moderate	15:02	7.0	Middle	3.5 3.5	0.1	333 356	18.7 18.7	18.7	8.4	8.4	33.2	33.2	105.2 105.1	105.2	8.0	0.0	3.1	3.5	7	8	84 84	818182	806178	<0.2 <0.2	<0.2 0.5 0.5
						6.0	0.1	287	18.7		8.4		33.2		104.1		7.9		4.2	-	8	•	85			<0.2	0.4
					Bottom	6.0	0.1	300	18.7	18.7	8.4	8.4	33.2	33.2	104.0	104.1	7.9	7.9	4.2		9		85			<0.2	0.5
					Surface	1.0	0.2	340 313	18.5 18.5	18.5	8.4	8.4	33.1	33.1	106.7 106.7	106.7	8.2 8.2		2.4	-	7	-	82 82			<0.2	0.5
IM3	Cloudy	Moderate	14:53	6.4	Middle	3.2	0.1	311	18.5	18.5	8.4	8.4	33.1	33.1	106.1	106.1	8.1	8.2	2.6	2.5	8	8	84 04	818789	805589	< 0.2	0.5
livis	Cidddy	Woderate	14.55	0.4	ivildale	3.2	0.1	321	18.5	10.5	8.4	0.4	33.1	33.1	106.0	100.1	8.1		2.8	2.5	8	°	84	010709	000000	<0.2	0.5
					Bottom	5.4 5.4	0.0	232 233	18.5 18.5	18.5	8.4	8.4	33.2	33.2	105.8 105.8	105.8	8.1 8.1	8.1	2.6	-	8 9	ł	86 86			<0.2	0.7
	i i				Surface	1.0	0.0	24	18.6	18.6	8.4	8.4	32.6	32.6	106.5	106.5	8.2		2.7		6		84			<0.2	0.6
					Gundoo	1.0 3.8	0.0	26 32	18.6 18.6		8.4 8.4	0.1	32.6 32.7	02.0	106.5 105.8	100.0	8.1 8.1	8.1	2.7		7 6		84			<0.2	0.6
IM4	Cloudy	Moderate	14:42	7.5	Middle	3.8	0.1	34	18.6	18.6	8.4	8.4	32.7	32.7	105.7	105.8	8.1		2.7	2.7	7	6	85 85	819721	804592	<0.2	<0.2 0.6 0.6
					Bottom	6.5	0.1	329	18.6	18.6	8.4	8.4	32.7	32.7	104.5	104.5	8.0	8.0	2.8	[5	Į	86			<0.2	0.6
						6.5 1.0	0.1	343 277	18.6 18.7		8.4 8.4		32.7 32.6		104.5		8.0 8.3		2.8 1.9		5 6		85 82			<0.2 <0.2	0.6
					Surface	1.0	0.2	286	18.7	18.7	8.4	8.4	32.6	32.6	108.4	108.4	8.3	8.3	1.9	Į	6	İ	82			<0.2	0.7
IM5	Cloudy	Moderate	14:33	7.1	Middle	3.6	0.2	284 302	18.7 18.7	18.7	8.4	8.4	32.6 32.6	32.6	107.9 107.8	107.9	8.2	0.5	2.0	2.1	7	6	84 85 84	820728	804849	<0.2	<0.2 0.6 0.6
						6.1	0.2	34	18.5		8.4		32.8		107.8		8.1		2.6	-	5		85			<0.2	0.7
					Bottom	6.1	0.1	34	18.6	18.6	8.4	8.4	32.8	32.8	105.2	105.3	8.0	8.1	2.6		4		86			<0.2	0.6
					Surface	1.0	0.2	24 25	18.6 18.6	18.6	8.4	8.4	32.5 32.5	32.5	105.2 105.1	105.2	8.1 8.0		2.0		3	ŀ	83			<0.2	0.5
IM6	Cloudy	Moderate	14:26	6.9	Middle	3.5	0.1	26	18.6	18.6	8.3	8.3	32.5	32.5	104.4	104.4	8.0	8.0	2.1	2.2	4	4	84	821069	805815	<0.2	1.0
livio	Cidddy	Woderate	14.20	0.5	ivildale	3.5	0.1	23	18.6	10.0	8.3	0.3	32.5	32.3	104.3	104.4	8.0		2.2	2.2	4	7	85	021009	003013	<0.2	1.0 0.6
					Bottom	5.9 5.9	0.1	11 12	18.6 18.6	18.6	8.3	8.3	32.5 32.5	32.5	103.7	103.7	7.9	7.9	2.4	-	4	ł	85 85			<0.2	0.7
	i i				Surface	1.0	0.1	28	18.6	18.6	8.4	8.4	32.5	32.5	105.6	105.6	8.1		2.0		4	İ -	84		Ì	<0.2	0.6
					Guilace	1.0	0.1	30	18.6 18.5		8.4		32.5 32.6	J2.J	105.5 104.1	100.0	8.1	8.1	2.0	ļ	5 4	1	84			<0.2	0.6
IM7	Cloudy	Moderate	14:15	7.9	Middle	4.0	0.1	16 17	18.5	18.5	8.4	8.4	32.6	32.6	104.1	104.1	8.0		2.4	2.4	4	5	85 85 85	821369	806835	<0.2	<0.2 0.7 0.7
					Bottom	6.9	0.2	14	18.5	18.5	8.4	8.4	32.6	32.6	103.8	103.9	8.0	8.0	2.6	Į	5	Ī	86			<0.2	0.7
	1					6.9	0.2	13 359	18.5 18.6		8.4		32.6 32.6		103.9		8.0 7.9		2.7		6	<u> </u>	86		<u> </u>	<0.2	0.7
					Surface	1.0	0.4	341	18.6	18.6	8.2	8.2	32.6	32.6	102.8	102.8	7.9	7.9	2.8	ŀ	6	t	83			<0.2	0.6
IM8	Cloudy	Rough	14:41	7.7	Middle	3.9	0.4	328	18.6	18.6	8.2	8.2	32.6	32.6	102.1	102.1	7.9	1.5	3.1	5.2	6	6	85 85	821828	808131	< 0.2	0.7
		·				3.9 6.7	0.4	326 345	18.6 18.6		8.2 8.2		32.6 32.6		102.0		7.9 7.8	_	3.0 9.7	}	5 6	+	85 87			<0.2	0.7
					Bottom	6.7	0.1	338	18.6	18.6	8.2	8.2	32.6	32.6	100.9	100.9	7.8	7.8	9.7		5		87			<0.2	0.6

06 February 20 during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	lts on		06 February 20	during Mid-	Flood Ti	de																					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	h (m)	Current Speed	Current	Water Te	mperature (°C)		рН	Sali	nity (ppt)	DO Sar (%	turation %)	Disso Oxy		Turbidity(I	NTU)	Suspende (mg/		Total A (pp		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l		el (µg/L)
Station	Condition	Condition	Time	Depth (m)	3 1		(m/s)	Direction	Value	Average	Value	Averaç		Average		Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value		
					Surface	1.0	0.3	289 291	18.6 18.6	18.6	8.2	8.2	32.6 32.6	32.6	102.6 102.5	102.6	7.9 7.9	7.9	2.9	-	6 5		84 83				<0.2	0.6	
IM9	Cloudy	Moderate	14:48	6.9	Middle	3.5 3.5	0.4	272 276	18.6 18.6	18.6	8.2 8.2	8.2	32.6 32.6		102.1 102.2	102.2	7.9 7.9	7.9	3.0	3.4	6 5	5	85 85	85	822083	808793	<0.2	<0.2 0.6	0.6
					Bottom	5.9 5.9	0.2	280 283	18.6 18.6	18.6	8.2	8.2	32.6 32.6		99.0 99.0	99.0	7.6 7.6	7.6	4.4 4.6	F	5 5		86 86				<0.2 <0.2	0.5 0.6	i
					Surface	1.0	0.5 0.5	282 283	18.9 18.9	18.9	8.2 8.2	8.2	32.7 32.7		99.6 99.6	99.6	7.6 7.6		2.3		6		83 83				<0.2	0.5 0.5	
IM10	Cloudy	Moderate	14:59	6.7	Middle	3.4 3.4	0.3	283 291	18.9 18.9	18.9	8.2 8.2	8.2	32.7	22.7	98.8 98.8	98.8	7.6 7.6	7.6	2.4	2.5	5	6	85 85	85	822374	809771	<0.2	<0.2	0.6
					Bottom	5.7 5.7	0.4	279 281	18.9	18.9	8.2 8.2	8.2	32.7	32.7	98.0 98.0	98.0	7.5 7.5	7.5	2.7	þ	6		87 87				<0.2	0.7	
					Surface	1.0	0.1	270	18.9	18.9	8.2	8.2	32.7 32.7	22.7	99.6 99.6	99.6	7.6 7.6		2.4		6		83				<0.2	0.7	=
IM11	Cloudy	Rough	15:11	8.2	Middle	1.0 4.1	0.1	272 243	18.9 18.9	18.9	8.2	8.2	32.7	32.7	99.2	99.2	7.6	7.6	2.4	2.6	5	5	83 85	85	822065	811479	<0.2	<0.2	0.6
					Bottom	4.1 7.2	0.1 0.2	244 285	18.9 18.9	18.9	8.2 8.2	8.2	32.7 32.7	22.7	99.2 97.9	97.9	7.6 7.5	7.5	2.4 3.0		6 4		86 87				<0.2 <0.2	0.7	1
					Surface	7.2 1.0	0.2	286 236	18.9 18.9	18.9	8.2 8.2	8.2	32.7 32.8	22.0	97.9 98.8	98.8	7.5 7.6		2.9 2.4		5 5		88 84				<0.2	0.7 0.6	
IM12	Claudu	Moderate	15:17	8.6	Middle	1.0 4.3	0.1	254 258	18.9 18.9	18.9	8.2	8.2	32.8 32.8		98.8 98.1	98.1	7.6 7.5	7.6	2.4	2.7	6 5	. 6	84 85	86	821439	812064	<0.2	<0.2	
IIVI12	Cloudy	Woderate	15.17	0.0		4.3 7.6	0.1 0.2	281 161	18.9 18.9		8.2 8.2		32.8 32.8		98.0 96.0		7.5 7.3		2.4 3.2	2.7	6 5	. 6	86 87	00	021439	812064	<0.2	0.6	0.0
					Bottom	7.6 1.0	0.2	172	18.9 18.9	18.9	8.2 8.2	T T	32.8 32.9	32.8	96.0 96.0	96.0	7.3 7.3	7.3	3.2		6		88				<0.2	0.6	
					Surface	1.0	-	-	18.9	18.9	8.2	8.2	32.9		95.9	96.0	7.3	7.3	2.3	ļ	5		-				-	-	‡
SR1A	Cloudy	Moderate	15:41	4.6	Middle	2.3		-	-	-	-	<u> </u>	-	-	-	-	-		-	2.3	-	6	-	-	819972	812662	-		ļ ·
					Bottom	3.6 3.6	-	-	18.9 18.9	18.9	8.2 8.2	8.2	32.9 32.9	32.9	94.7	94.7	7.2 7.2	7.2	2.4 2.5		7		-				-	-	
					Surface	1.0 1.0	0.2	221 234	18.9 18.9	18.9	8.2	8.2	32.9 32.9		97.5 97.4	97.5	7.5 7.5	7.5	2.2	E	6 6		84 84				<0.2	0.5 0.5	1
SR2	Cloudy	Moderate	15:52	4.9	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	2.2	-	5	-	85	821457	814158	-	<0.2	0.6
					Bottom	3.9 3.9	0.1	219 220	18.9 18.9	18.9	8.2	8.2	32.9 32.9	32.9	96.7 96.7	96.7	7.4 7.4	7.4	2.2	-	5 4		86 87				<0.2	0.7	
					Surface	1.0 1.0	0.4	225 232	18.6 18.6	18.6	8.2 8.2	8.2	32.6 32.6		102.3 102.3	102.3	7.9 7.9		2.8 2.8		4 5	,	-				-	-	П
SR3	Cloudy	Rough	14:34	9.0	Middle	4.5 4.5	0.3	216 223	18.6 18.6	18.6	8.2	8.2	32.6 32.6	22.6	102.0	102.0	7.9 7.9	7.9	2.9	2.9	4	5	-	-	822139	807556	-		
					Bottom	8.0 8.0	0.3	209 205	18.6 18.6	18.6	8.2 8.2	8.2	32.6 32.6	32.6	100.3	100.3	7.7	7.7	3.0	ļ	6		-				-	-	‡ ∥
					Surface	1.0	0.1	235 237	18.5 18.5	18.5	8.4 8.4	8.4	33.1 33.1		105.0	105.0	8.0		2.8		8 7						-	-	一
SR4A	Cloudy	Moderate	15:56	8.9	Middle	4.5 4.5	0.2	287	18.6	18.6	8.4	8.4	33.2	33.2	104.9	104.9	8.0	8.0	2.3	3.2	7	7	-	.	817200	807789	-		١. ا
					Bottom	7.9	0.2	294 271	18.6 18.6	18.6	8.4 8.4	8.4	33.2	22.2	104.9 104.5	104.5	8.0	8.0	4.1	þ	6						_	-	1
					Surface	7.9 1.0	0.3	276 287	18.6 18.5	18.5	8.4 8.4	8.4	33.2 33.1	33.1	104.5 105.5	105.5	8.0 8.1		4.5 1.8		7		-			<u> </u>	-	+	\vdash
SR5A	Cloudy	Calm	16:23	4.8	Middle	1.0	0.2	295	18.5	-	8.4		33.1		105.5	-	8.1	8.1	1.8	2.0	6	. 6	-		816596	810700	-	-	1 .
GROA	Cioddy	Cairi	10.25	4.0	Bottom	3.8	0.1	294	18.5	18.5	8.4	8.4	33.1	33.1	105.4	105.4	8.1	8.1	2.1	2.0	5	. "	-		010330	010700	-	-	+
						3.8 1.0	0.1	288 250	18.5 18.5		8.4	<u> </u>	33.1 33.3		105.4 106.8		8.1	0.1	2.2 3.4		6 5		-				-	-	\vdash
					Surface	1.0	0.1	251	18.5	18.5	8.2	8.2	33.3	33.3	106.9	106.9	8.2	8.2	3.5	F	5		-				-	-	!
SR6A	Cloudy	Calm	16:55	4.4	Middle	3.4	0.1	273	- 18.5	-	8.2	-	33.3	-	106.6	-	- 8.2		4.5	3.9	3	. 4	-	-	817966	814746	-	-	<u> </u>
					Bottom	3.4	0.1	278	18.5	18.5	8.2	8.2	33.3	33.3	106.6	106.6	8.2	8.2	4.3		3	•					-		<u> </u>
					Surface	1.0	0.1	280 306	19.3 19.3	19.3	8.3	8.3	33.3 33.3	33.3	88.8 88.7	88.8	6.7	6.7	2.0		3		-				-		‡
SR7	Cloudy	Moderate	16:42	15.4	Middle	7.7	0.1 0.1	243 240	19.3 19.3	19.3	8.3	8.3	33.3 33.3	33.3	88.4 88.4	88.4	6.7 6.7		1.8 1.8	1.9	3 4	4	-	-	823636	823733	-	- 🗀	<u> </u>
					Bottom	14.4 14.4	0.1	196 188	19.3 19.3	19.3	8.3	8.3	33.3 33.3		88.5 88.5	88.5	6.7	6.7	1.9 2.0		4 5		-				-	-	1
					Surface	1.0	-	-	18.9 18.9	18.9	8.2 8.2	8.2	32.8 32.8		99.0 99.0	99.0	7.6 7.6	7.0	2.4	F	4		-				-	-	
SR8	Cloudy	Moderate	15:27	4.5	Middle	-	-	-	-	-	-	-	-	-		-	-	7.6	-	2.4	-	4	-	-	820381	811613	-		i - ∥
					Bottom	3.5 3.5		-	18.9 18.9	18.9	8.2	8.2	32.8		98.0 98.0	98.0	7.5 7.5	7.5	2.5 2.5	ļ	4		-				-		‡ ∥
DA: Donth Avor		<u> </u>			I	J.U			10.5		0.2		JZ.0	<u> </u>	JU.U		1.0		ن. ے		J		,			<u> </u>			\perp

Water Qua	lity Monit	toring Resu	ılts on		08 February 20	during Mid-	Ebb Tide)																					
Monitoring	Weather	Sea	Sampling	Water	Sampling De	pth (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Sali	nity (ppt)		aturation (%)	Disso Oxy		Turbidity(NTU)	Suspende (mg		Total Alk (ppm		Coordinate HK Grid	Coordinate HK Grid	Chron (µg		Nickel (µg/L
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Averag	je Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		DA	(Northing)	(Easting)	Value		Value DA
					Surface	1.0	0.0	21	18.6 18.6	18.6	8.1	8.1	32.7	32.7	102.6	102.6	7.9		8.1 8.4		8 8		86 87				<0.2		0.7
C1	Cloudy	Moderate	12:10	8.4	Middle	4.2 4.2	0.0	256 275	18.5 18.5	18.5	8.1 8.1	8.1	32.8 32.8	32.8	102.1 101.9	102.0	7.9 7.9	7.9	9.7 9.7	8.9	8	8	88 89	88	815625	804223	<0.2	-0.2	0.8 0.7
					Bottom	7.4	0.0	299	18.5	18.5	8.1	8.1	32.8	32.8	101.7	101.8	7.8	7.8	8.8		8		90				<0.2		0.5
					Surface	7.4 1.0	0.0	327 354	18.5 18.7	18.7	8.1	8.3	32.8 32.9	32.9	101.8	100.4	7.8		8.8 3.7		6		90 85				<0.2		0.6
						1.0 5.1	0.2	326 37	18.7 18.7		8.3 8.3		32.9		100.4		7.7 7.7	7.7	3.7 6.4		6		86 89				<0.2	1 6	0.9
C2	Cloudy	Moderate	13:29	10.1	Middle	5.1	0.2	37	18.7	18.7	8.3	8.3	33.2	33.2	100.1	100.1	7.7		6.5	7.2	5	6	89	88	825690	806945	<0.2	<0.2	0.7
					Bottom	9.1 9.1	0.4 0.5	49 50	18.6 18.6	18.6	8.3 8.3	8.3	33.8 33.8	33.8	99.9 99.8	99.9	7.6	7.6	11.2 11.9		5 5		90 90				<0.2 <0.2		1.0
					Surface	1.0	0.4	77 79	19.2 19.2	19.2	8.2	8.2	34.2	34.2	89.9 90.0	90.0	6.8		6.4		3		86 86				<0.2		0.6
C3	Cloudy	Moderate	11:25	10.1	Middle	5.1 5.1	0.3	82 86	19.2 19.2	19.2	8.2 8.2	8.2	24.2	34.2	88.7 88.7	88.7	6.7	6.8	9.1 9.1	8.7	4	4	88 89	88	822129	817805	<0.2		0.8 0.6
					Bottom	9.1	0.3	80	19.2	19.2	8.2	8.2	34.2	34.2	88.9	88.9	6.7	6.7	10.7		4		90				<0.2		0.5
					Surface	9.1	0.3	83 227	19.2 18.6	18.6	8.2	8.1	34.2 33.1	33.1	88.9 100.0	100.0	6.7 7.7		10.7 5.9		5		90 86				<0.2		1.0
						1.0	0.1	242	18.6	10.0	8.1	0.1	33.1	33.1	100.0	100.0	7.7	7.7	6.0		6		87				<0.2	1 -	1.0
IM1	Cloudy	Moderate	12:30	5.0	Middle	-	-	-	-	-	-	-		-		-	-		-	5.8	-	5	-	88	817958	807117	-	<0.2	1.0
					Bottom	4.0	0.0	239 260	18.6 18.6	18.6	8.1 8.1	8.1	33.1 33.1	33.1	99.9 99.6	99.8	7.7	7.7	5.8 5.7		6		90				<0.2		0.9
					Surface	1.0	0.1	69 75	18.4 18.4	18.4	8.1 8.1	8.1	32.3 32.3	32.3	104.1 103.9	104.0	8.1		5.7 5.8		6 7		86 87				<0.2		1.2
IM2	Cloudy	Moderate	12:37	7.2	Middle	3.6	0.1	9	18.5	18.5	8.1	8.1	32.8 32.9	32.8	101.2	101.2	7.8	7.9	9.6	8.6	7	7	88	88	818154	806188	<0.2	-0.2	1.3
					Bottom	6.2	0.1 0.1	305	18.5 18.5	18.5	8.1	8.1	32.8	32.8	99.5	99.5	7.7	7.7	10.1		7		87 90				<0.2		1.3
					Surface	1.0	0.1	327 13	18.5 18.5		8.1	8.1	32.8 32.6		99.4 104.0	104.0	7.7 8.0		10.7 7.6		6		90 86				<0.2		1.2
						1.0 3.9	0.1 0.1	14 347	18.5 18.5	18.5	8.1 8.1		32.6 32.6	32.6	103.9 103.5		8.0	8.0	7.8 8.1		7		85 88				<0.2 <0.2		1.2
IM3	Cloudy	Moderate	12:43	7.7	Middle	3.9	0.1	319	18.5	18.5	8.1	8.1	32.6	32.6	103.4	103.5	8.0		8.1	8.6	7	7	87	88	818770	805612	<0.2	<0.2	1.3
					Bottom	6.7 6.7	0.1 0.1	280 305	18.5 18.5	18.5	8.1 8.1	8.1	32.8 32.8	32.8	102.2 102.2	102.2	7.9 7.9	7.9	10.0 10.0		7 8		90				<0.2		1.3
					Surface	1.0	0.2	329 338	18.5 18.5	18.5	8.1	8.1	32.4 32.4	32.4	104.4	104.4	8.1 8.1		6.9 7.0		7		87 86				<0.2		1.3
IM4	Cloudy	Moderate	12:51	6.7	Middle	3.4 3.4	0.2	340 349	18.5 18.5	18.5	8.1 8.1	8.1	32.4 32.4	32.4	103.4 103.4	103.4	8.0	8.1	7.1 7.1	7.1	7	7	88 89	88	819732	804586	<0.2	-0.2	1.3 1.2
					Bottom	5.7	0.2	357	18.3	18.3	8.1	8.1	32.6	32.6	103.0	103.0	8.0	8.0	7.3		7		90				<0.2		1.4
					Surface	5.7 1.0	0.2	328 10	18.2 18.5	18.5	8.1 8.1	8.1	32.6 32.5	32.5	102.9 104.6	104.6	8.0		7.4 7.8		8		90 85				<0.2 <0.2		1.4
						1.0 3.9	0.3	10 6	18.5 18.5		8.1 8.1		32.5 32.6		104.6 104.2		8.1 8.0	8.1	7.8 9.2		8		86 88				<0.2	1 1	1.1
IM5	Cloudy	Moderate	12:57	7.7	Middle	3.9	0.3	6	18.5	18.5	8.1	8.1	32.6	32.6	104.2	104.2	8.0		9.3	9.1	8	8	88	88	820732	804866	<0.2	<0.2	1.0
					Bottom	6.7	0.3	6	18.5 18.5	18.5	8.1 8.1	8.1	32.6 32.6	32.6	103.4 103.4	103.4	8.0	8.0	10.2 10.4		10 9		90				<0.2 <0.2		0.9 1.1
					Surface	1.0	0.1	129 141	18.5 18.5	18.5	8.1	8.1	32.9 32.9	32.9	102.4 102.4	102.4	7.9		7.4 7.4		7 6		86 87				<0.2		0.9
IM6	Cloudy	Moderate	13:05	7.1	Middle	3.6	0.1	122	18.5	18.5	8.1	8.1	32.9 32.9	32.9	102.0	102.0	7.8	7.9	7.3	7.4	8	7	87	88	821045	805821	<0.2	-02	0.9
					Bottom	3.6 6.1	0.1	122 120	18.5 18.5	18.5	8.1	8.1	32.9	32.9	101.8	101.8	7.8	7.8	7.3 7.5		7		89 90				<0.2		1.3
						1.0	0.1	130 220	18.5 18.6		8.1		33.0 32.4		101.8		7.8	7.0	7.5 3.8		4		90 86				<0.2		0.7
					Surface	1.0 3.9	0.1	221 85	18.6 18.6	18.6	8.1 8.1	8.1	32.5 32.9	32.4	101.9 100.8	102.0	7.9 7.8	7.9	3.9 6.2		4 5		87 88				<0.2		0.6
IM7	Cloudy	Moderate	13:12	7.7	Middle	3.9	0.1	93	18.6	18.6	8.1	8.1	32.9	32.9	100.8	100.8	7.8		6.3	5.7	4	5	89	88	821352	806837	<0.2	<0.2	0.8
					Bottom	6.7 6.7	0.0	125 128	18.5 18.4	18.5	8.1	8.1	33.0 33.0	33.0	101.3 101.4	101.4	7.8	7.8	6.9 6.9		4 6		90				<0.2		0.7
					Surface	1.0	0.4	76 76	18.7 18.7	18.7	8.3 8.3	8.3	33.0 33.0	33.0	100.9 100.9	100.9	7.7		3.0		5		85 86				<0.2		0.6
IM8	Cloudy	Moderate	13:04	7.3	Middle	3.7	0.3	82	18.7	18.7	8.3	8.3	33.0	33.0	100.1	100.1	7.7	7.7	3.2	3.5	5	6	88	88	821848	808133	< 0.2	-0.2	0.8
					Bottom	3.7 6.3	0.3	82 78	18.7 18.7	18.7	8.3 8.3	8.3	33.0 33.4	33.3	100.0 99.0	99.0	7.7	7.6	3.3 4.2		5 7		88 89				<0.2		0.8
DA: Depth-Ave					DOILOTTI	6.3	0.3	85	18.7	10./	8.3	0.3	33.3	33.3	99.0	99.0	7.6	7.0	4.2		6		90				<0.2		0.4

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

08 February 20 during Mid-Ebb Tide Water Quality Monitoring Results on Dissolved Turbidity(NTU) Suspended Solids Salinity (ppt) Nickel (µg/L) Water Water Temperature (°C) nН Coordinate Sampling Coordinate Monitorino Current Sampling Depth (m) HK Grid HK Grid Direction Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Average Value Value DA Value DA Value DA Value DA (Northing) (Easting) DA Value Average Value 0.3 0.8 Surface 100.6 8.3 7.7 0.3 88 18.7 100.5 3.4 86 < 0.2 0.9 3.8 0.3 102 18.7 8.3 8.3 99.6 99.6 7.6 7.6 3.3 5 4 89 89 0.7 IM9 Cloudy Moderate 12:59 7.6 Middle 33.3 99.6 3.9 88 822089 808827 0.7 0.3 18.7 <0.2 6.6 0.3 96 8.3 7.6 7.6 90 0.7 18.6 33.5 99.0 4.9 <0.2 Bottom 18.6 8.3 33.5 99.0 7.6 99.0 8.3 6.6 0.3 18.6 33.5 5.0 0.5 99 ٩n <0.2 0.4 18.7 14 8.3 Surface 18.7 8.3 33.9 100.0 8.3 100.0 7.6 16 87 0.5 1.0 0.4 90 18.7 33.9 5.0 < 0.2 5.9 6.0 18.7 8.3 8.3 99.4 99.4 88 89 4.6 0.4 88 7.6 7 <0.2 0.6 IM10 Cloudy Moderate 12:53 9.2 Middle 18.7 8.3 33.9 99.4 5.9 10 88 822366 809804 <n 2 0.5 4.6 18.7 0.4 8.2 0.3 83 18.7 8.3 33.9 7.6 6.8 8 90 <0.2 0.5 99.1 18.7 99.1 7.6 Bottom 8.3 33.9 8.2 0.3 90 18.7 8.3 33.9 99.1 7.6 6.8 8 90 <0.2 0.4 1.0 0.1 182 18.7 5.3 0.7 8.3 7.5 86 <0.2 33.8 99.0 Surface 18.7 8.3 33.8 99.0 1.0 0.1 18.7 8.3 33.8 98.9 7.5 5.3 6 86 <0.2 0.6 4.6 0.1 141 18.7 7.5 7.5 6.4 6 88 <0.2 0.5 8.3 33.9 98.5 IM11 Cloudy 822043 811438 Moderate 12:43 9.1 Middle 18.7 8.3 33.9 98.5 88 0.6 4.6 0.1 147 18.7 88 <0.2 0.6 6.3 8.1 130 8.3 6.6 90 <0.2 0.6 Bottom 18.7 8.3 33.9 97.7 7.5 8.1 0.2 138 18.7 8.3 33.9 97.7 7.5 6.5 90 0.6 0.3 18.8 8.3 98.5 98.5 85 <0.2 0.6 98.5 7.5 Surface 18.8 8.3 33.8 1.0 0.3 127 18.8 8.3 33.8 5.1 6 85 <0.2 0.4 3.8 0.3 107 18.8 8.3 5.8 88 <0.2 0.4 98.2 Middle 821463 IM12 Cloudy Moderate 12:38 7.6 18.8 8.3 33.8 98.2 0.3 18.8 8.3 7.5 5.8 89 0.5 6.6 0.2 112 18.8 8.3 33.8 97.7 7.4 8.4 89 <0.2 0.5 Bottom 18.8 8.3 33.8 97.7 7.4 7.4 6.6 0.2 116 18.8 8.3 33.8 97.6 8.3 8 90 <0.2 0.6 1.0 18.8 8.3 33.8 97.1 7.4 5.4 6 Surface 18.8 8.3 33.8 97.1 1.0 18.8 8.3 33.8 97.1 7.4 5.3 7 2.6 SR1A Cloudy Moderate 12:00 Middle 819979 812665 2.6 33.8 4.2 18.8 8.3 96.8 7.4 6.3 7.4 Bottom 18.8 8.3 33.8 96.8 4.2 18.8 8.3 33.8 96.8 7.4 6.3 8 1.0 0.2 65 18.8 8.3 96.6 6.0 87 <0.2 0.5 Surface 18.8 8.3 33.8 96.6 1.0 0.2 66 18.8 8.3 33.8 96.6 7.4 6.0 8 88 <0.2 0.6 SR2 Cloudy Moderate 11:44 4.5 Middle 89 821458 814171 < 0.2 0.5 18.8 96.4 96.4 7.3 5.9 5.9 <0.2 0.4 3.5 33.8 96.4 0.2 66 18.8 8.3 33.8 90 < 0.2 0.6 1.0 0.4 112 18.6 8.3 33.8 101.8 7.8 6.6 10 Surface 8.3 33.8 101.8 1.0 0.4 122 18.6 8.3 33.8 101.8 7.8 6.6 9 4.9 0.4 83 18.6 8.3 33.9 101.2 7.7 9.1 7 SR3 Cloudy Moderate 13:11 9.8 18.6 101.2 822143 807587 7.7 4.9 0.5 90 18.6 8.3 33.9 101.2 9.3 8 8.3 100.6 7.7 8.8 9.0 8.8 0.4 60 61 18.6 34.0 8 Bottom 18.6 8.3 100.6 7.7 0.4 18.6 9 1.0 0.3 91 18.6 8.1 33.1 102.1 7.8 6.4 8 Surface 18.6 8.1 33.1 102.1 7.8 6.5 6.1 1.0 0.3 97 8.1 33.1 102.0 9 18.6 -4.3 18.6 7.8 8 0.3 8.1 33.1 807824 SR4A Cloudy Moderate 11:43 8.5 Middle 18.6 8.1 33.1 101.9 817195 7.8 4.3 74 8.1 6.0 0.3 18.6 33.1 9 0.2 18.6 8.1 7.8 33.1 101.8 6.3 Rottom 18.6 8.1 33.1 101.8 7.8 7.5 0.2 70 18.6 8.1 33.1 6.2 107 1.0 0.1 18.7 8.1 32.9 96.4 7.4 5.3 8 Surface 18.7 8.1 32.9 96.4 1.0 0.1 110 18.7 8.1 32.9 96.4 7.4 5.3 8 SR5A Cloudy 11:25 4.4 Middle 816606 810683 Moderate 3.4 0.1 137 18.7 96.4 7.4 8.1 5.3 32.9 Bottom 18.7 8.1 32.9 96.5 7.4 3.4 0.1 143 18.7 18.9 8.0 Surface 18.9 8.0 32.9 94.6 328 18.9 4.4 4 SR6A Cloudy Moderate 10:57 4.3 Middle 817966 814735 3.3 18.8 96.5 7.4 7.4 4.9 4 96.6 Bottom 7.9 3.3 18.8 1.0 0.4 35 19.1 8.2 34.0 89.5 89.4 6.8 2.9 6 Surface 89.5 1.0 0.5 37 19 1 8.2 34.1 6.8 3.0 8.2 0.3 26 19.2 8.2 34.2 89.5 6.8 3.2 4 SR7 Cloudy Moderate 10:58 Middle 89.5 823638 823744 89.5

8.2

8.1

8.3

8.3

8.3 8.3

8.3

8.1

19.2

18.9

18.9

34.2

34.2

34.2

33.8

33.8

89.2

97.4 97.4

97.3

33.8

6.8

6.7

7.4

7.4

-

7.4

89.2

97.4

97.3

3.3

5.0 5.0

5.1

5.0

5.3

6

5

4

5

5

5

820386

811612

-

DA: Depth-Averaged

SR8

Cloudy

Moderate

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

12:29

3.7

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

8.2

15.3

15.3

1.0

2.7

Bottom

Surface

Middle

0.4

0.3

0.3

28

4

19.2

19.2

19.2

18.9

18 9

18.9

18.9

08 February 20 during Mid-Flood Tide

Water Qual	ity wonit	oning Rest	iits oii		08 February 20	during Mid	-F1000 11	ue																					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Dissol Oxyg		Turbidity(I	NTU)	Suspended mg/l		Total Alkalin (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		Nickel (µ	g/L)
Station	Condition	Condition	Time	Depth (m)		,	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value D		(Easting)	Value	DA	Value [DA
					Surface	1.0	0.1	42 44	18.6 18.6	18.6	8.1 8.1	8.1	32.9 32.9	32.9	99.9 99.7	99.8	7.7		7.5 7.7		7		87 86			<0.2	Ŧ	0.8	
C1	Cloudy	Moderate	17:10	8.4	Middle	4.2	0.1	49	18.6	18.6	8.1	8.1	33.0	33.0	99.3	99.3	7.6	7.7	9.0	8.6	6	7	89 88	815621	804226	<0.2		0.7	0.7
	,					4.2 7.4	0.1	47 18	18.6 18.6		8.1 8.1		33.0 33.1		99.3 99.3		7.6 7.6		9.1	-	6		90			<0.2		0.6	
					Bottom	7.4	0.1	19	18.6	18.6	8.1	8.1	33.1	33.1	99.3	99.3	7.6	7.6	9.3		7		90			<0.2		0.6	
					Surface	1.0	0.1	15 16	18.7 18.7	18.7	8.3	8.3	33.0 33.0	33.0	101.8	101.8	7.8	7.8	3.2		5		85 86			<0.2		0.6	
C2	Fine	Moderate	16:03	9.2	Middle	4.6 4.6	0.2	16 16	18.7 18.7	18.7	8.3 8.3	8.3	33.1 33.1	33.1	101.8	101.8	7.8 7.8	′.0	3.5 3.4	3.5	6 5	7	89 89	825680	806936	<0.2	<0.2	0.7	8.0
					Bottom	8.2	0.4	17	18.7	18.7	8.3	8.3	33.2	33.2	101.6	101.6	7.8	7.8	3.9		10		90			<0.2		0.8	
						8.2 1.0	0.4	18 225	18.7 19.3		8.4 8.3		33.2 34.2	04.0	101.5 89.4		7.8 6.7	-	4.0 2.2		11 6		90 83			<0.2		0.9	=
					Surface	1.0 5.1	0.1	228 231	19.3 19.2	19.3	8.3 8.2	8.3	34.2 34.2	34.2	89.4 89.2	89.4	6.7 6.7	6.7	2.2		5		83 87			<0.2 <0.2		0.5 0.5	
C3	Fine	Moderate	18:05	10.2	Middle	5.1	0.1	251	19.2	19.2	8.2	8.2	34.2	34.2	89.2	89.2	6.7		2.2	2.5	6	8	88	822099	817781	<0.2	<0.2	0.5	0.5
					Bottom	9.2	0.2	254 261	19.2 19.2	19.2	8.2	8.2	34.2	34.2	88.9 89.0	89.0	6.7	6.7	3.1		12 12		91			<0.2		0.6	
					Surface	1.0	0.1	88 95	18.6 18.6	18.6	8.1 8.1	8.1	33.0 33.0	33.0	100.0	100.0	7.7		6.7 6.9		5		88 86			<0.2	Ĺ	0.9 1.0	
IM1	Cloudy	Moderate	16:48	4.8	Middle	-	-	-	-		-	_	-		-	_	-	7.7	-	6.8	-	5	- 89	817944	807120	-	<0.2	_	0.9
	Oloudy	modorato	10.10	1.0		3.8	0.1	- 76	18.6		8.1		33.1		101.1		7.8		6.8	0.0	- 6	Ü	90	017011	007.120	<0.2	L	0.8	,.0
					Bottom	3.8	0.1	80	18.6	18.6	8.1	8.1	33.1	33.1	101.4	101.3	7.8	7.8	6.7		5		90			<0.2		0.8	
					Surface	1.0	0.2	342 315	18.5 18.5	18.5	8.1 8.1	8.1	32.6 32.6	32.6	103.2	103.1	7.9	7.9	5.9 6.0	E	6		87 86			<0.2		0.9	
IM2	Cloudy	Moderate	16:40	7.2	Middle	3.6 3.6	0.1	354 326	18.5 18.5	18.5	8.1 8.1	8.1	32.8	32.8	101.7	101.7	7.8	"	7.8	8.2	6	6	88 89	818170	806142	<0.2		0.9	1.0
					Bottom	6.2	0.1	288	18.5	18.5	8.1	8.1	32.9	32.9	101.7	101.8	7.8	7.8	10.8		6		90			<0.2		1.0	
					Surface	6.2 1.0	0.1	288 333	18.5 18.6	18.6	8.1 8.1	8.1	32.9 32.5	32.5	101.8	103.2	7.8 8.0		10.9 6.5		5 6		91 86			<0.2 <0.2	Ĺ	1.1	_
						1.0 3.3	0.2	347 315	18.6 18.6		8.1 8.1		32.5 32.6		103.1 102.5		8.0 7.9	8.0	6.6 8.1		6		86 88			<0.2		1.1	
IM3	Cloudy	Moderate	16:33	6.6	Middle	3.3	0.0	320	18.6	18.6	8.1	8.1	32.7	32.7	102.4	102.5	7.9		8.3	8.2	6	6	88	818799	805575	<0.2	<0.2	0.8	1.0
					Bottom	5.6 5.6	0.0	246 246	18.5 18.5	18.5	8.1 8.1	8.1	32.8 32.8	32.8	102.5	102.6	7.9 7.9	7.9	10.0 9.8	-	6 5		91 91			<0.2		0.9	
					Surface	1.0	0.0	26 26	18.6 18.6	18.6	8.1 8.1	8.1	32.5 32.5	32.5	103.6	103.6	8.0	-	5.7 5.8	-	5 6		85 87			<0.2		1.0	
IM4	Cloudy	Moderate	16:25	7.8	Middle	3.9	0.1	21	18.6	18.6	8.1	8.1	32.5	32.5	103.0	103.0	7.9	8.0	6.0	6.0	5	6	88	819741	804606	<0.2	-0.2	1.0	1.0
	,				Bottom	3.9 6.8	0.1	21 332	18.6 18.6	18.6	8.1 8.1	8.1	32.5 32.5	32.5	103.0 102.7	102.7	7.9 7.9	7.9	6.0		6 5		90			<0.2		0.9 1.0	
						6.8 1.0	0.1	337 31	18.6 18.5		8.1 8.1		32.5 32.4		102.7 104.8		7.9 8.1	7.5	6.2 6.1		6 7		90 86			<0.2		1.0	
					Surface	1.0	0.2	30	18.5	18.5	8.1	8.1	32.4	32.4	104.7	104.8	8.1	8.1	6.2		6		85			<0.2		1.2	
IM5	Cloudy	Moderate	16:16	7.4	Middle	3.7	0.2	27 29	18.5 18.5	18.5	8.1 8.1	8.1	32.6 32.6	32.6	103.8	103.8	8.0	_	8.4 8.4	7.6	7	7	87 88	820740	804866	<0.2		0.9	1.1
					Bottom	6.4	0.1	39 42	18.5 18.5	18.5	8.1 8.1	8.1	32.6 32.6	32.6	103.9	103.9	8.0	8.0	8.4		7		90			<0.2		1.0	
					Surface	1.0	0.2	25	18.6	18.6	8.1	8.1	33.0	33.0	102.7	102.7	7.9		5.7		9		86			<0.2		1.2	
IM6	Cloudy	Moderate	16:08	7.2	Middle	1.0 3.6	0.2	26 22	18.6 18.6	18.6	8.1 8.1	8.1	33.0 33.0	33.0	102.7 102.5	102.5	7.9 7.9	7.9	5.7 5.7	5.7	9	8	86 88 88	821072	805844	<0.2		0.9	1.0
livio	Cloudy	Moderate	16.06	1.2		3.6 6.2	0.1	24 27	18.6 18.6		8.1 8.1		33.0 33.0		102.5 102.4		7.9 7.9		5.7 5.7	5.7	8	٥	90	621072	005044	<0.2		1.0	1.0
					Bottom	6.2	0.1	25	18.6	18.6	8.1	8.1	33.0	33.0	102.3	102.4	7.9	7.9	5.7		4		91			<0.2		1.0	
					Surface	1.0	0.1	28 28	18.6 18.6	18.6	8.1 8.1	8.1	32.6 32.7	32.6	102.3	102.3	7.9		4.1	-	6 5		85 87			<0.2	-	1.2	
IM7	Cloudy	Moderate	16:01	7.8	Middle	3.9 3.9	0.1	16 17	18.6 18.6	18.6	8.1 8.1	8.1	32.9 33.0	32.9	101.1	101.1	7.8 7.8	7.9	5.3 5.3	5.0	4 5	5	88 89	821342	806827	<0.2	<0.2	1.0	1.1
					Bottom	6.8	0.1	13	18.6	18.6	8.1	8.1	33.0	33.0	101.0	101.0	7.8	7.8	5.6		4		90			<0.2		1.0	
						6.8 1.0	0.2	14 298	18.6 18.7		8.1 8.4		33.0		101.0		7.8		5.6 3.2		5		90 85			<0.2		1.0 0.7	\dashv
					Surface	1.0	0.4	304 280	18.7	18.7	8.4	8.4	33.5 33.9	33.5	102.5	102.5	7.8	7.8	3.2	ļ	4		85			<0.2		0.9	
IM8	Fine	Moderate	16:52	8.0	Middle	4.0	0.4	283	18.6	18.6	8.4 8.4	8.4	33.9	33.9	100.8 100.8	100.8	7.7	H	6.0	5.0	6 4	5	90 89	821852	808158	<0.2	<0.2	0.8	8.0
					Bottom	7.0 7.0	0.1	256 260	18.6 18.6	18.6	8.3 8.3	8.3	33.9	33.9	100.0	100.0	7.6 7.6	7.6	5.8 5.9	F	6 5		91 91			<0.2		0.8	
					1				10.0		0.0		, 00.0						J.U		Ü			_1		, ~~.~		~	

08 February 20 during Mid-Flood Tide

Water Qua	lity Monit	oring Resi	ults on		08 February 20	during Mid-	Flood Ti	de																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water To	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg/		Total Alkalini (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chror		Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Average		Average	Value DA	Value	DA	Value	DA	Value DA		(Easting)	Value		Value DA
					Surface	1.0 1.0	0.3	286 288	18.7 18.7	18.7	8.4	8.4	33.2 33.2	33.2	103.0	103.0	7.9 7.9 7.9	3.1 3.1	+	6	-	86 86			<0.2	1 -	0.7
IM9	Fine	Moderate	16:57	7.4	Middle	3.7 3.7	0.4	284 286	18.7 18.7	18.7	8.4 8.4	8.4	33.3 33.3	33.3	102.4 102.2	102.3	7.8 7.8	3.1 3.1	4.2	5 5	5	88 89	822098	808818	<0.2	<0.2	0.6 0.6
					Bottom	6.4	0.2	272 279	18.7	18.7	8.3	0.2	33.9	33.9	99.9	99.9	7.6 7.6	6.3		5	Ī	90			<0.2	i t	0.6
					Surface	1.0	0.5	276	18.7	18.7	8.3		33.4	33.4	100.1	100.1	7.7	3.5		8		85			<0.2		0.7
IM10	Fine	Moderate	17:04	7.2	Middle	1.0 3.6	0.5 0.3	282 295	18.7 18.7	18.7	8.3 8.3	8.3	33.4 33.5	33.5	100.1 98.9	98.9	7.7 7.6	3.5 3.6	3.6	7	8	86 89 88	822376	809815	<0.2	<0.2	0.7
IIWITO	1 110	Woderate	17.04	7.2		3.6 6.2	0.3	283 271	18.7 18.7		8.3 8.3		33.5 33.8		98.9 98.1	98.0	7.6 7.5	3.5 3.8	5.0	8 10	Ů	89 90	022370	003013	<0.2	\0.2	0.8
					Bottom	6.2 1.0	0.5 0.1	272 260	18.7 18.8	18.7	8.3 8.3	8.3	33.8 33.8	33.8	97.9 99.7		7.5 7.5 7.6	3.8		9		90 85			<0.2	\vdash	0.7
					Surface	1.0	0.1	249	18.8	18.8	8.3	8.3	33.8	33.8	99.6	99.7	7.6	3.3		6	<u> </u>	85			<0.2		0.8
IM11	Fine	Moderate	17:13	8.1	Middle	4.1 4.1	0.1 0.1	243 247	18.8 18.8	18.8	8.3	8.3	33.8 33.8	33.8	98.7 98.5	98.6	7.5	3.2	3.3	6	8	88 89	822056	811450	<0.2	<0.2	0.7
					Bottom	7.1 7.1	0.2	282 292	18.8 18.8	18.8	8.3 8.3	8.3	33.8 33.8	33.8	98.0 98.0	98.0	7.5 7.5	3.5 3.5	+	10 9	-	90 90			<0.2	1 -	0.7
					Surface	1.0	0.1 0.1	231 235	18.9 18.9	18.9	8.3 8.3	8.3	33.8 33.8	33.8	98.1 98.1	98.1	7.5 7.5	3.2 3.2	-	7		85 86			<0.2		0.6
IM12	Fine	Moderate	17:18	9.0	Middle	4.5 4.5	0.1	245 258	18.9 18.9	18.9	8.3 8.3	83	33.8 33.8	33.8	97.7 97.7	97.7	7.4 7.4	3.4 3.4	3.4	7	9	88 88	821446	812057	<0.2		0.7
					Bottom	8.0	0.2	250	18.9	18.9	8.3		33.8	33.8	97.0	97.1	7.4	3.6		11		89			<0.2		0.8
					Surface	1.0	0.2	255	18.9 18.8	18.8	8.3	8.3	33.8 33.9	33.9	97.1 96.9	96.9	7.4	3.6		12 7		-			<0.2	一	0.6
SR1A	Fine	Moderate	17:34	3.9	Middle	1.0 2.0	-	-	18.8		8.3		33.9		96.9		7.4	3.4	3.5	8	8	-	819979	812666	-	1 1	-
SKIA	rine	Woderate	17.34	3.5		2.0	-	-	18.8		8.3	-	33.9		96.7		7.4	3.5	3.5	7	ů	-	019979	812000	-	ı - F	
					Bottom	2.9	0.2	- 225	18.8	18.8	8.3	8.3	33.9	33.9	96.7	96.7	7.4 7.4	3.5		8		83			<0.2		0.8
					Surface	1.0	0.2	226	19.1	19.1	8.3	8.3	34.0	34.0	95.5	95.5	7.2	3.2		7		84			<0.2	1	0.7
SR2	Fine	Moderate	17:45	5.2	Middle	-	-	-	-	-	-	-	-	-	-	-	- '.2	-	3.2	-	8	- 86	821441	814185	-	<0.2	0.7
					Bottom	4.2 4.2	0.1	219 231	19.0 19.0	19.0	8.3 8.3	8.3	34.0 34.0	34.0	95.5 95.6	95.6	7.2 7.3	3.2	-	8 9	-	88 88			<0.2	1 }	0.6
					Surface	1.0	0.4	12 13	18.7 18.7	18.7	8.4	8.4	33.3	33.3	101.9 101.9	101.9	7.8	4.4	-	5 4	-	-				ī	-
SR3	Fine	Moderate	16:23	8.2	Middle	4.1 4.1	0.3	13 14	18.7 18.6	18.7	8.4	8.4	33.5 33.5	33.5	101.6 101.5	101.6	7.8 7.8 7.8	6.2 6.4	6.8	5 4	7	-	822167	807549	-	1 - 1	-
					Bottom	7.2	0.3	10	18.6	18.6	8.3	8.3	33.9 33.9	33.9	100.2	100.2	7.7 7.7	9.8		13 12	ļ				-	1	-
					Surface	1.0	0.1	238	18.5	18.5	8.1	8.1	32.5	32.5	104.9	104.8	8.1	4.6		9		-			-		-
SR4A	Cloudy	Moderate	17:32	8.6	Middle	1.0 4.3	0.1	240 284	18.5 18.5	18.5	8.1 8.1	8.1	32.5 32.7	32.7	104.7 103.9	103.9	8.1 8.0 8.1	4.8 5.1	5.0	8	8	-	817168	807822	-	1. 1	
SK4A	Cloudy	Woderate	17.32	6.0		4.3 7.6	0.2	289 278	18.5 18.5		8.1 8.1		32.7 32.8		103.8 103.7		8.0	5.2 5.3	5.0	8	٥	-	817108	807822	-	ı - F	-
					Bottom	7.6 1.0	0.3	284 295	18.5	18.5	8.1 8.1	8.1	32.8 33.0	32.8	103.7	103.7	8.0 8.0 7.8	5.3 5.4		8 5		-			-	\vdash	-
					Surface	1.0	0.2	297	18.7	18.7	8.1	8.1	33.0	33.0	101.1	101.1	7.8 7.8	5.3		5	Ī	-			-	1	
SR5A	Cloudy	Moderate	17:48	4.7	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.5		5	-	816604	810692		ı -	-
					Bottom	3.7	0.1 0.1	288 295	18.7 18.7	18.7	8.1		33.0 33.0	33.0	101.0 101.0	101.0	7.8 7.8	7.6 7.8		5 6		-			-	Ш	-
					Surface	1.0	0.1	238 208	18.8 18.8	18.8	8.1 8.1	8.1	32.8 32.8	32.8	98.1 98.1	98.1	7.5 7.5 7.5	3.9	-	4 5		-				1	-
SR6A	Cloudy	Moderate	18:22	4.0	Middle	-		-	-	-	-	-	-	-	-	-	- 7.5	-	3.9	-	5		817944	814756	-	-	
					Bottom	3.0 3.0	0.1	244 234	18.8	18.8	8.1 8.1	8.1	32.8 32.8	32.8	98.1 98.2	98.2	7.5 7.5	4.0		6	<u> </u>	-			-	1	-
					Surface	1.0	0.1	280	18.8	19.2	8.3	8.3	34.2	34.2	88.1	88.1	6.6	2.5		5		-			-	一	-
SR7	Fine	Moderate	18:32	15.3	Middle	1.0 7.7	0.1 0.1	299 245	19.2 19.2	19.2	8.3 8.2	8.2	34.2 34.2	34.2	88.1 87.8	87.8	6.7 6.6	2.4 3.8	3.2	4 5	5	-	823659	823752	-	ı .	
OK/	1 =10	woodlate	10.32	13.3		7.7 14.3	0.1 0.1	247 198	19.2 19.2		8.2 8.2		34.2 34.2		87.8 88.3		6.6	3.9 3.2	5.2	5 7	Ĭ		023039	023102	-	ı F	
					Bottom	14.3	0.1	207	19.2	19.2	8.2	8.2	34.2	34.2	88.4 98.8	88.4	6.7 6.7	3.1		6		-	1	1	-	\dashv	-
					Surface	1.0	-		18.8	18.8	8.3	8.3	33.8	33.8	98.8	98.8	7.5	3.6		9	ļ	-				, ,	
SR8	Fine	Moderate	17:27	4.1	Middle	-	-	-	-	-	-	-		-		-	-	-	3.7	-	11	-	820375	811612	-	ı - H	-
					Bottom	3.1 3.1	-	-	18.8 18.8	18.8	8.3		33.8 33.8	33.8	98.4 98.4	98.4	7.5 7.5	3.8	-	12 12	_	-			-	<u>. </u>	-

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

11 February 20 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	lts on		11 February 20	during Mid-	Ebb Tid	е																			
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	emperature (°C)	рН	Salinity (ppt)	DO S	Saturation (%)	Dissolved Oxygen	Turbidit	(NTU)	Suspende (mg		Total All (ppi		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l		Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value Average	Value	Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA Va	/alue DA
					Surface	1.0	0.1	211 224	18.2 18.2	18.2	8.2	8.2	31.9 31.9	98.3 98.2	98.3	7.7	11.9	-	12 13		85 85				<0.2		1.2
C1	Cloudy	Moderate	14:28	7.6	Middle	3.8	0.1	217 218	18.1 18.1	18.1	8.2	8.2	32.0 32.0 32.0	98.0 98.1	98.1	7.6 7.7	15.4 15.7	14.0	15 15	14	87 87	87	815622	804270	<0.2	-0.2	1.1 1.2
					Bottom	6.6	0.1	248	18.1	18.1	8.2	8.2	32.0	99.4	99.6	7.8	14.1	1	13		88				<0.2	1	1.1
					Surface	1.0	0.1	257 131	18.1 18.6	18.6	8.2 7.9	7.9	32.0 32.0 33.0 33.0	99.7 96.0		7.8	14.8 8.6		15 8		88 86				<0.2		1.1
						1.0 5.8	0.1	144 121	18.6 18.5		7.9 7.9		33.0	95.9 95.6		7.4 7.4	8.6	1	8		85 90				<0.2	- 1	1.1
C2	Cloudy	Moderate	13:02	11.5	Middle	5.8	0.0	129	18.5	18.5	7.9	7.9	33.0	95.6	95.6	7.4	12.2	10.6	9	9	88 90	88	825672	806938	<0.2	<0.2	1.0
					Bottom	10.5 10.5	0.1	165 167	18.5 18.5	18.5	7.9	7.9	33.0 33.0	96.0 96.0	96.0	7.4 7.4	11.1		9		91				<0.2	1	1.1
					Surface	1.0	0.3	243 253	18.8 18.8	18.8	7.9	7.9	34.2 34.2	90.8	90.8	6.9 6.9	4.1		4		86 87				<0.2		0.7 0.7
СЗ	Cloudy	Moderate	15:11	12.0	Middle	6.0	0.3	249 261	18.8 18.8	18.8	7.9 7.9	7.9	34.2 34.2	91.4 91.4	91.4	6.9	4.7 4.7	4.7	8 7	6	88 89	88	822103	817793	<0.2		0.7
					Bottom	11.0	0.2	244	18.8	18.8	7.9	7.9	34.2 34.2 34.2	93.7	93.7	7.1 7.1	5.3	1	8		90				<0.2	0	0.6
					Surface	11.0	0.2	246 109	18.8 18.4	18.4	8.3	8.3	32.6	98.0	98.0	7.6	5.3 5.2		11		86				<0.2	1	1.2
IM1	Cloudy	Moderate	14:07	4.8	Middle	1.0	0.0	119	18.4		8.3		32.6	98.0		7.6	5.3	5.6	10	10	86	87	817931	807117	<0.2		1.3
IIVI I	Cloudy	Woderate	14.07	4.0		3.8	0.1	- 281	18.3	-	8.3		32.6	98.0		7.6	- 6.0	3.6	- 9	10	- 88	01	617931	807117	<0.2		1.3
					Bottom	3.8	0.1	290	18.3	18.3	8.3	8.3	32.6 32.6 32.0 32.0	98.1	98.1	7.6 7.6 7.7	6.0		8		88				<0.2	1	1.2
					Surface	1.0	0.1	119	18.2	18.2	8.3	8.3	32.0	98.9	98.9	7.7	11.5	1	18		85				<0.2	1	1.2
IM2	Cloudy	Moderate	13:59	7.0	Middle	3.5 3.5	0.1	109 113	18.2 18.2	18.2	8.2	8.2	32.2 32.2	98.0 98.0	98.0	7.6	14.6 16.1	15.8	18 20	20	88 88	88	818152	806170	<0.2	<0.2	1.4 1.4
					Bottom	6.0	0.1	171 172	18.2 18.2	18.2	8.2	8.2	32.2 32.2	98.0 98.0	98.0	7.6 7.6	20.3	+	22 24		89 89				<0.2		1.4
					Surface	1.0 1.0	0.1	200 200	18.2 18.2	18.2	8.3 8.3	8.3	32.1 32.1 32.1	98.6 98.6	98.6	7.7	12.8		18 19		86 85				<0.2		1.0
IM3	Cloudy	Moderate	13:47	7.2	Middle	3.6	0.1	185	18.2	18.2	8.3	8.3	32.3	98.0	98.0	7.6	13.8	16.2	18	21	88	88	818769	805586	<0.2	-0.2	1.0
					Bottom	3.6 6.2	0.1	199 128	18.2 18.2	18.2	8.3 8.3	8.3	32.3 32.3 32.3	98.0 98.0	98.0	7.6 7.6 7.6	14.2 21.3	1	19 24		88 89				<0.2 <0.2	0	0.9
					Surface	6.2 1.0	0.1	133 275	18.2 18.2	18.2	8.3 8.3	8.3	32.3 32.2 32.2 32.2	98.0 98.0		7.6	22.2 19.3		27 22		89 85				<0.2	1	1.0
						1.0 3.5	0.1	291 12	18.2 18.2		8.3 8.2		32.2	98.0 97.8		7.6 7.6	21.3	1	24 21		86 88				<0.2	1	1.2
IM4	Cloudy	Moderate	13:33	6.9	Middle	3.5 5.9	0.0	12 54	18.2 18.2	18.2	8.2 8.3	8.2	32.3	97.8 97.8	97.8	7.6	16.6	18.2	21 21	22	88 89	88	819703	804619	<0.2	<0.2	1.2 1.1 1.1
					Bottom	5.9	0.0	58	18.2	18.2	8.3	8.3	32.3	97.8	97.8	7.6	16.5		20		89				<0.2	1	1.2
					Surface	1.0	0.2	242 234	18.2 18.2	18.2	8.2 8.2	8.2	32.0 32.0	98.7 98.7	98.7	7.7	23.7	1	25 29		86 86				<0.2 <0.2	1	1.4
IM5	Cloudy	Moderate	13:24	7.3	Middle	3.7	0.1	254 225	18.2 18.2	18.2	8.2	8.2	32.0 32.0	98.7 98.7	98.7	7.7	21.9	22.6	26 25	<u>26</u>	87 87	87	820727	804875	<0.2		1.2
					Bottom	6.3 6.3	0.1	218 201	18.2 18.2	18.2	8.2 8.2	8.2	32.0 32.0	98.9 98.9	98.9	7.7 7.7	23.4	1	25 24		88 89				<0.2		1.3
					Surface	1.0	0.1	276 292	18.3	18.3	8.2	8.2	32.4 32.4 32.4	97.4 97.4	97.4	7.6	21.1		26 26		86 86				<0.2	1	1.0
IM6	Cloudy	Moderate	13:13	7.1	Middle	3.6	0.1	270	18.3	18.3	8.2	8.2	32.4	97.4	97.4	7.6	19.7	20.7	26	27	87	87	821083	805815	<0.2	-0.2	1.2
	,					3.6 6.1	0.1	275 285	18.3 18.3	18.3	8.2 8.2	8.2	32.4 32.4 32.4 32.4	97.4 97.4		7.6 7.6 7.6	20.7		25 27	=	88 89				<0.2	1	1.1
					Bottom	6.1 1.0	0.1	305 260	18.3 18.2		8.2 8.2		32.4	97.5 97.6	97.5	7.6 7.6 7.6	20.5		30 24		88 87				<0.2		1.1 0.9
					Surface	1.0	0.1	261 243	18.2	18.2	8.2	8.2	32.4	97.6	97.6	7.6	15.3	1	26		87				<0.2	1	1.0
IM7	Cloudy	Moderate	13:02	7.5	Middle	3.8	0.0	262	18.2	18.2	8.2	8.2	32.4 32.4	97.2 97.2	97.2	7.5 7.5	18.0	17.4	26 26	<u>26</u>	88	88	821352	806843	<0.2	<0.2	1.0
					Bottom	6.5 6.5	0.0	342 351	18.2 18.2	18.2	8.2 8.2	8.2	32.4 32.4 32.4	97.1 97.1	97.1	7.5 7.5	19.0	<u>L</u>	26 27		89 90				<0.2 <0.2	0	0.9 0.7
					Surface	1.0	0.1	65 69	18.5 18.5	18.5	7.8 7.8	7.8	33.3 33.3	98.3 98.3	98.3	7.6 7.6	6.8		12 12		86 86				<0.2		0.7
IM8	Cloudy	Moderate	13:38	7.8	Middle	3.9	0.1	59 59	18.4	18.4	7.9	7.9	33.6 33.6 33.6	98.7 98.7	98.7	7.6 7.6	9.5 9.5	8.7	14	15	87 89	88	821818	808149	-n 2	-0.2 0	0.7
					Bottom	6.8	0.1	54	18.3	18.3	7.9	7.9	33.7	100.1	100.1	7.7	9.8	1	16		90				<0.2	0	0.6
DA: Denth-Aver						6.8	0.1	56	18.3		7.9		33.7	100.1	1	7.7	9.8		17	l	90				<0.2	0	0.7

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

Water Quality Monitoring Results on 11 February 20 during Mid-Ebb Tide

Station Condition Conditio	Nater Qual	ity Monit	toring Resu	Its on		11 February 20	during Mid	-Ebb Tide	e																				
Martin	Monitoring	Weather	Sea	Sampling	Water	Sampling D	onth (m)			Water Te	emperature (°C)		рН	Sali	nity (ppt)				Turbidity	(NTU)								Nicke	(µg/
Mathors Math	Station	Condition	Condition	Time	Depth (m)	Sampling D	opui (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA	Value	DA	Value	DA			Value DA	Value	С
Monthage Monthage						Surface					18.5		7.9		33.2		97.5	7.6											Г
Martine Mart	IM9	Cloudy	Moderate	13:44	7.1	Middle	3.6	0.2	145	18.4	18.4	7.9	7.9	33.3	33.3	97.1	97.1	7.5	4.8	5.5	10	11	87	88	822082	808832	<0.2	0.9	İ,
Martin M		,				Pottom					10.4		7.0		22.4		00.2	7.0		1		ŀ		1					ł
Marie Mari																		7.6											Ļ
Monthage Monthage						Surface	1.0	0.3	138	18.4	18.4	7.9	7.9	33.7	33.7	96.8	96.8	7.4 7.4	8.0	1	12	ļ	87				<0.2	0.8	1
Martin M	IM10	Cloudy	Moderate	13:50	7.3	Middle					18.4		7.9		33.7		96.7	7.4		8.7		12		88	822400	809817			1
Martin Clusty Modernia 1-2						Bottom				18.4	18.4		7.9		33.7		98.3		9.2		12	Ī	90	1			<0.2	0.6	ĺ
Mile						Surface	1.0	0.4	78	18.5	18.5	7.9	79	33.6	33.6	97.4	97.4	7.5	6.0		9		86				<0.2	0.6	F
Mile																				-				1			-O 2		ł
M12 Marie	IM11	Cloudy	Moderate	14:02	7.5	Middle	3.8	0.5	81	18.5	18.5	7.9	7.9	33.6	33.6	97.4	97.4	7.5	7.4	7.5	10	10	89	88	822050	811454	<0.2	0.8	1
Martin						Bottom					18.5		7.9		33.7		97.8			+		ŀ		1					ł
Martin M						Surface					18.5		7.9		33.7		97.6												Ī
Set Set	IM12	Cloudy	Moderate	14:10	8.1	Middle	4.1	0.5	53	18.5	18.5	7.9	7.9	33.7	33.7	97.1	97.1	7.4	7.9	7.2	7	8	88	88	821460	812067	<0.2	0.5	
Secondary Moderate 14.56		,																7.6		1				1			<0.2	0.6	ł
Section Sect						Bottom					18.5		7.9		33.7		99.2	7.6										_	Ļ
Section Sect						Surface		_			18.6		7.9		33.7		96.7	7.4					-	1					Ì
Second S	SR1A	Cloudy	Moderate	14:36	4.9	Middle		-	-	-	-	-	-	-	-	-	-	- '-	-	4.5	-	8	-	-	819971	812657		-	ļ
SRA Cloudy Moderate 14.7 4.5 Sutface 1.0 0.4 82 18.8 18.6 79 79 33.7 37 86.9 86.9 74 74 4.0 1.0 0.4 0.7 18.6 18.6 79 79 78 33.7 37 86.9 86.9 74 74 4.0 1.0 0.4 1.0 0.4 0.7 18.6 18.6 79 79 78 33.7 37 86.9 86.9 74 74 4.0 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0						Bottom	3.9	-	-		18.6		7.9		33.7		96.6				_		-				-		1
SR2 Cloudy Moderate 14.47 4.5 Middle 14.47 4.5 Middle 1.0 0.4 697 N8.68 1.6 1.8 7.9 7.0 3.37 3.37 6.5 6.6 7.4 7.4 4.0 9 9 9 9 9 9 9 9 9						Curtons		0.4	82		40.6		7.0		22.7		00.0				-		- 88				<0.2	0.7	F
SREA Clously Moderate 15:40 42 53 46 16:50							1.0	0.4	87		10.0	7.9	7.5	33.7	33.1	96.9	30.3					F	86	1				_	ļ
SRA Cloudy Moderate 13.32 8.3 Surface 1.0 0.3 115 116.4 18.4 8.0 8.0 8.7 8.7 9.7 9.8 93.7 8.7 8.7 8.7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	SR2	Cloudy	Moderate	14:47	4.5	Middle	-	-	-	-	-	-	-	-	-	-	-	-		4.1	-	9	-	89	821461	814182	-	-	1
SR3						Bottom					18.6		7.9	33.7	33.7		96.6			1		ŀ		1					ł
SRA Cloudy Moderate 13.32 8.3 Middle 4.2 0.3 131 18.3 18.3 7.9 7.9 337 37.7 92.9 7.7 7.7 13.1 2.2 2.0 1. 82127 807562 1						Surface					18.4		8.0		33.7		98.7						-					\vdash	Ī
Second S	SR3	Cloudy	Moderate	13:32	8.3	Middle	4.2	0.3	131	18.3	18.3	7.9	79	33.7	33.7	99.2	99.2	7.6	15.4	14.3	23	20		1.	822127	807562			ļ
SR4A Cloudy Calim 14-50 Surface 10 0.3 0.3 1.4 18.3 18.3 18.3 8.3	Cito	Cioday	modorato	10.02	0.0													77					-	-	022121	00,002	-	-	ł
SRAA Cloudy Calm 14:50 9.3 Middle 4.7 0.2 70 18.3 18.3 8.3 8.3 8.3 8.2 92. 98.0 98.0 7.7 7.7 10.2 11.1 11.2 11.2 11.2 11.2 11.2 11.2						Bottom	7.3	0.3	134	18.3	18.3	7.9	7.9	33.7		100.5		7.7	13.1		20		-				-		Ĺ
SREA PLOUSY Calm 14:50 P. Bottom 4.7 0.2 70 18.3 18.3 8.3 8.2 8.2 8.2 8.2 8.6 8.3 8.2 8.2 8.2 8.6 8.0 7.7 11.2 10.0						Surface	1.0			18.3	18.3		8.3		32.2		98.3	77		1		ŀ	-				-	_	l
Secondary Seco	SR4A	Cloudy	Calm	14:50	9.3	Middle					18.3		8.3		32.2		98.0	7.7		10.9		14	-	-	817206	807816	-		ļ
SR5A Cloudy Calm 15:07 3.8						Bottom	8.3	0.2	54	18.3	18.3	8.3	8.3	32.2	32.2	97.9	97.9	7.7	11.8	1	14	İ	-				-	-	1
SRSA Cloudy Calm 15.07 3.8 Middle																		7.7					-			<u> </u>		_	F
Refer Fig. 1.							1.0	0.1	11	18.4	18.4	8.3	8.3	32.6	32.6	96.9	96.9	7.5	6.2		8		-				-		ĺ
SRA Cloudy Moderate 14:22 5.3 Middle 1.6.4 18.8 18.9 18.9 18.9 18.9 18.9 18.9 18.9	SR5A	Cloudy	Calm	15:07	3.8	Middle	-	-	-	-	-		-	_	-	Ė	-	-	-	5.7	-	9		-	816574	810709	-		1
SREA Fractal Part Surface 1.0 0.0 2.3 18.5 18.5 8.2 8.2 32.5 32.5 99.5 99.5 77. 7.7 7.8 3.5 7.8 7.						Bottom					18.4		8.3		32.6		96.8			1		ŀ	-	1			\vdash		ł
SR6A Cloudy Calm 15:41 4.1 Middle						Surface	1.0	0.0	23	18.5	18.5	8.2	8.2	32.5	32.5	99.5	99.5	7.7	3.5		7								Γ
Bottom 3.1 0.0 36 18.4 18.4 8.2 8.2 32.5 32.5 38.9 98.9 7.6 7.7 4.3 6 6 5 5 5 5 6 6 5 5 5 5 6 6 5 5 5 5 6 6 5 5 5 5 6 6 5 5 5 5 5 6 6 5 5 5 5 5 6 6 5 5 5 5 5 5 6 6 5 5 5 5 5 5 5 6 6 5	SR6A	Cloudy	Calm	15:41	4.1	Middle	-	-	-	-	_	-	_	-		-		7.7	-	3.9	-	7		1.	817947	814727		-	1
SR7 Cloudy Moderate 15:40 16.6		,	-				3.1		36		40.4	8.2	0.0		00.5	98.8	00.0	7.6		-		.	-	1			\vdash		ł
SR7 Cloudy Moderate 15:40 16.6 Middle 15:40 16.6 Middle 15:40 16.6 Middle 15:40 16.6 Middle 15:40 16.6 Middle 15:40 16.6 Middle 15:40 16.6 Middle 15:40 16.6 Middle 15:40 16.6 Middle 15:40 16:4						Bottom					18.4							7.7					-				-		Ļ
SR7 Cloudy Moderate 15:40 166 Middle 8.3 0.4 46 18:9 18:9 7.9 7.9 34.2 34.2 88.7 8.7 6.7 5.1 4.3 5 6 6 82658 82374						Surface	1.0	0.4	31	18.9	18.9	7.9	7.9	34.2		89.4	89.4	6.8	2.3		7	ŀ	-	1			-	-	1
Bottom 15.6 0.3 39 18.9 18.9 7.9 7.9 34.2 34.2 84.2 84.2 84.2 84.2 84.2 84.2 84.2 8	SR7	Cloudy	Moderate	15:40	16.6	Middle					18.9		7.9		34.2		88.7	6.7		4.3		6	-	-	823658	823734			ł
SR8 Cloudy Moderate 14:22 5.3 Surface 1.0 - 18.6 18.6 7.9 7.9 33.7 33.7 97.4 97.4 7.5 7.5 4.9 8 - 820376 811632						Bottom	15.6	0.3	39	18.9	18.9	7.9	7.9	34.2	34.2	90.4	90.4	6.9	5.4		6		-	1				-	İ
SR8 Cloudy Moderate 14:22 5.3 Middle 18.5 7.9 33.7 97.4 7.5 7.5 4.9 8 820376 811632						Surface	1.0	- 0.3	- 42	18.6	18.6	7.9	7.0	33.7	33.7	97.4	97.4	7.5	4.9		8					1		Ė	ř
SK8 Cloudy Moderate 14:22 5.3 Middle							1.0	-	-	18.6	10.0	7.9	1.3	33.7	55.7	97.4	31.4	7.5	4.9		8	. [-	1			-	-	ł
	SR8	Cloudy	Moderate	14:22	5.3	Middle	-	-	-	-	-	-	<u> </u>	-	<u> </u>	-	-	-	-	5.9	-	8	-	1 -	820376	811632		-	ĺ
						Bottom		-	-		18.5		7.9				100.8	7.7				ŀ	-	1				-	ł

11 February 20 during Mid-Flood Tide

Water Qua	lity Monite	oring Resu	lts on		11 February 20	during Mid-		de																				
Monitoring	Weather	Sea	Sampling	Water	Sampling D	epth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Sali	nity (ppt)		aturation (%)	Disso Oxyg		Turbidity(NTU)	Suspende (mg		Total Al		Coordinate HK Grid	Coordinate HK Grid	Chron (µg/	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	<u> </u>	Average		Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.5	42 43	18.1 18.1	18.1	8.2	8.2	31.9	31.9	98.5 98.5	98.5	7.7		18.0 20.2	ŀ	19 18		86 86				<0.2	0.9
C1	Cloudy	Moderate	09:36	7.9	Middle	4.0	0.5	35	18.1	18.1	8.2	8.2	32.0		98.1	98.1	7.6	7.7	27.4	40.0	23	23	87	87	815614	804234	<0.2	-0.2 1.0 0.9
					Bottom	4.0 6.9	0.5 0.5	36 32	18.1 18.2	18.2	8.2 8.2	8.2	32.0 32.3	32.3	98.1 98.1	98.1	7.6 7.6	7.6	27.5 71.7	ł	21 29		87 89				<0.2	0.8
						6.9 1.0	0.5	34 335	18.2 18.6		8.2 7.9	<u> </u>	32.3 32.9		98.1 96.7		7.6 7.4	7.6	75.0 6.2		25 10		89 86				<0.2	1.1 0.8
					Surface	1.0	0.5	308	18.6	18.6	7.9	7.9	32.9	32.9	96.7	96.7	7.4	7.4	6.3		10		85				<0.2	0.8
C2	Cloudy	Moderate	10:00	11.5	Middle	5.8 5.8	0.5 0.5	344 348	18.5 18.5	18.5	7.9	7.9	33.0	33.0	96.4 96.4	96.4	7.4		10.3 10.3	9.7	11 11	11	88 89	88	825677	806943	<0.2	<0.2 1.0 0.9
					Bottom	10.5 10.5	0.4	345 355	18.5 18.5	18.5	7.9 7.9	7.9	33.0 33.0		98.1 98.1	98.1	7.6 7.6	7.6	12.6 12.6	ŀ	10 11		90 90				<0.2 <0.2	0.9
					Surface	1.0	0.4	278	18.6	18.6	7.7	7.7	33.7		96.2	96.2	7.4		7.0		7		86				<0.2	0.7
00	Delan	Madaga	00.04		Middle	1.0 5.6	0.4	302 278	18.6 18.6		7.7	-	33.7 33.7		96.2 95.5		7.4 7.3	7.4	7.0	40.0	7	7	86 88		000000	047044	<0.2 <0.2	0.6
C3	Rainy	Moderate	08:24	11.1	Middle	5.6 10.1	0.4	299 283	18.6 18.6	18.6	7.7 7.7	7.7	33.7 33.7		95.5 95.7	95.5	7.3 7.3		11.7 11.8	10.2	7	,	87 90	88	822092	817814	<0.2	<0.2 0.7 0.7 0.8 0.7
					Bottom	10.1	0.3	309	18.6	18.6	7.7	7.7	33.7	33.1	95.7	95.7	7.3	7.3	11.8		7		90				<0.2	0.7
					Surface	1.0	0.2	333 306	18.3 18.3	18.3	8.2	8.2	32.6 32.6		96.8 96.9	96.9	7.5 7.5		7.0 6.9		21 19		87 86				<0.2	0.8
IM1	Cloudy	Moderate	09:56	4.7	Middle	-	-	÷	-	-	-	-	-	-	-	-	-	7.5	-	6.9	-	18	-	87	817969	807123	-	<0.2 - 0.8
					Bottom	3.7	0.2	342	18.3	18.3	8.2	8.2	32.5		97.9	98.0	7.6	7.6	6.9		20		87				<0.2	0.9
						3.7 1.0	0.2	359 7	18.3		8.2		32.5 32.2		98.0 98.8		7.6	7.0	6.9 15.1		12 20		88 86				<0.2	0.8
					Surface	1.0 3.4	0.3	7	18.2 18.2	18.2	8.3 8.3	8.3	32.2 32.3	32.2	98.7 98.0	98.8	7.7 7.6	7.7	15.2 19.3		20 20		87 88				<0.2 <0.2	1.1
IM2	Cloudy	Moderate	10:05	6.8	Middle	3.4	0.3	3	18.2	18.2	8.3	8.3	32.3		98.0	98.0	7.6		17.9	25.3	19	20	88	88	818157	806165	< 0.2	1.0
					Bottom	5.8	0.3	5	18.2 18.2	18.2	8.3	8.3	32.3		98.0	98.0	7.6	7.6	41.7 42.6		22 21		89 89				<0.2	0.9
					Surface	1.0 1.0	0.4	354 326	18.2 18.2	18.2	8.3 8.3	8.3	32.1 32.1	32.1	98.9 98.9	98.9	7.7		18.8 17.9		23 23		86 86				<0.2 <0.2	1.0
IM3	Cloudy	Moderate	10:12	7.0	Middle	3.5	0.4	354	18.2	18.2	8.3	8.3	32.1	32.1	98.7	98.7	7.7	7.7	22.6	24.2	22	23	88	88	818792	805596	<0.2	.0.0 1.2 1.0
	,				B-11	3.5 6.0	0.4	326 349	18.2 18.2		8.3 8.3		32.1 32.1		98.7 98.8		7.7 7.7		19.8 32.9	ŀ	24 24		88 89				<0.2	1.2
					Bottom	6.0 1.0	0.3	359 2	18.2 18.2	18.2	8.3 8.3	8.3	32.1 31.9		98.8 98.8	98.8	7.7 7.7	7.7	33.4 26.9		22 22		88 86				<0.2	1.2
					Surface	1.0	0.6	2	18.2	18.2	8.3	8.3	31.9	31.9	98.8	98.8	7.7	7.7	27.4		22		86				<0.2	1.0
IM4	Cloudy	Moderate	10:22	6.9	Middle	3.5 3.5	0.6	3	18.2 18.2	18.2	8.3	8.3	32.0 32.0		98.7 98.8	98.8	7.7		26.1 25.9	33.6	23 24	24	87 87	87	819740	804586	<0.2	<0.2 0.9 1.0
					Bottom	5.9 5.9	0.5 0.5	358 329	18.2 18.2	18.2	8.3 8.3	8.3	32.0 32.0		99.0 99.0	99.0	7.7	7.7	47.1 48.2		25 28		88 88				<0.2	1.0
					Surface	1.0	0.8	12	18.2	18.2	8.3	8.3	32.1	32.1	99.1	99.1	7.7		15.7		27		86				<0.2	1.0
IM5	Cloudy	Moderate	10:31	7.2	Middle	1.0 3.6	0.8	12 13	18.2 18.2	18.2	8.3 8.3	8.3	32.1 32.1		99.1 98.7	98.7	7.7 7.7	7.7	17.8 21.5	23.9	27 30	20	86 88	88	820741	804885	<0.2	<0.2
livio	Cloudy	Widderate	10.31	1.2		3.6 6.2	0.8	13 19	18.2 18.2		8.3 8.3		32.1 32.1		98.7 98.8		7.7		20.6 34.8	23.5	31 31	29	88 89	- 00	020741	804883	<0.2	1.0
					Bottom	6.2	0.7	20	18.2	18.2	8.3	8.3	32.1	32.1	98.9	98.9	7.7	7.7	32.9		28		89				<0.2	1.0
					Surface	1.0	0.5 0.5	352 324	18.2 18.2	18.2	8.3	8.3	32.4 32.4	32.4	97.6 97.6	97.6	7.6 7.6	76	8.8 8.9	ŀ	18 16		87 86				<0.2	0.7
IM6	Cloudy	Moderate	10:39	6.9	Middle	3.5 3.5	0.5 0.6	0	18.2 18.2	18.2	8.3	8.3	32.4 32.4		97.6 97.7	97.7	7.6 7.6	7.6	9.7 9.8	9.9	18 16	17	88 88	88	821045	805840	<0.2	<0.2 1.0 0.9
					Bottom	5.9	0.5	2	18.2	18.2	8.2	8.2	32.5	22.5	97.9	98.0	7.6	7.6	11.1		19		89				<0.2	1.0
						5.9 1.0	0.5	2 144	18.2 18.2		8.3		32.5 32.4		98.0 97.3		7.6 7.6		11.0 16.8		17 30		89 87				<0.2	0.9
					Surface	1.0	0.1	151 150	18.2 18.2	18.2	8.3 8.2	8.3	32.4 32.4	32.4	97.3 97.2	97.3	7.6 7.5	7.6	18.1 16.4		29 29		87 88				<0.2	0.7
IM7	Cloudy	Moderate	10:51	7.6	Middle	3.8	0.1	157	18.2	18.2	8.2	8.2	32.4	32.4	97.2	97.2	7.5		16.3	17.8	27	28	89	88	821365	806820	<0.2	<0.2
					Bottom	6.6	0.1	140 143	18.2 18.2	18.2	8.2	8.2	32.4	32.4	97.1 97.1	97.1	7.5 7.5	7.5	19.5 19.8		25 27		89 89				<0.2	0.8
	İ				Surface	1.0	0.1	81 87	18.4	18.4	7.9	7.9	33.3		97.6 97.6	97.6	7.5		5.3		13		86 86				<0.2	0.8
IM8	Cloudy	Moderate	09:38	7.4	Middle	3.7	0.2	86	18.4	18.4	7.9	7.9	33.4	22.4	97.3	97.3	7.5	7.5	6.1	5.7	13	12	87	88	821849	808152	<0.2	0.9
	Sistery	oderate	55.56			3.7 6.4	0.2	89 103	18.4 18.4		7.9 7.9		33.4 33.4		97.3 97.8		7.5 7.5	7.5	6.1 5.8	J.,	12 9		88 90	50	32.043	555152	<0.2	0.9
DA: Depth-Ave					Bottom	6.4	0.1	108	18.4	18.4	7.9	7.9	33.4	33.4	97.8	97.8	7.5	7.5	5.8		10		90				<0.2	0.7

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

Water Quality Monitoring Results on 11 February 20 during Mid-Flood Tide

Water Qua	ity Monite	oring Kesu	its on		11 February 20	during Mid-	Flood I	iae																		
Monitoring	Weather	Sea	Sampling	Water	Sampling D	enth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Sal	nity (ppt)		Saturation (%)	Dissolved Oxygen	Turbidit	y(NTU)	Suspende (mg		Total Alkalin (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chror (µg	
Station	Condition	Condition	Time	Depth (m)	Camping D	opur (III)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA	Value	DA	Value DA		(Easting)	Value	DA Value DA
					Surface	1.0	0.2	255 260	18.4 18.4	18.4	7.9	7.9	33.5 33.5		96.7 96.7	96.7	7.4	6.2		12 11		85 87			<0.2	0.7
IM9	Cloudy	Moderate	09:32	7.3	Middle	3.7	0.2	272	18.4	18.4	7.9	7.9	33.5	22 E	96.7	96.7	7.4	9.9	10.0	10	11	88 00	822101	808821	<0.2	.0.2 0.7
	,				Bottom	3.7 6.3	0.2	295 269	18.4 18.4	18.4	7.9 7.9	7.9	33.5 33.5		96.7 98.0	98.0	7.4 7.5 7.5	9.9	+	11 10		90			<0.2	0.8
						6.3 1.0	0.3	275 307	18.4 18.4		7.9		33.5 33.6		98.0 97.9		7.5 7.5 7.5	13.9 10.8		9 14		90 85			<0.2	0.7
					Surface	1.0	0.5	328	18.4	18.4	7.9	7.9	33.6	33.6	97.9	97.9	7.5	10.8	1	16	İ	86			<0.2	0.8
IM10	Rainy	Moderate	09:25	7.4	Middle	3.7	0.5 0.6	304 310	18.4 18.4	18.4	7.9 7.9	7.9	33.6 33.6	33.0	97.9 97.9	97.9	7.5 7.5	11.4 11.4	11.7	16 18	17	87 88	822400	809811	<0.2 <0.2	<0.2 0.7 0.8
					Bottom	6.4	0.5	310 338	18.4 18.4	18.4	7.9	7.9	33.6 33.6		99.6	99.6	7.7 7.7	13.0	-	20 19	1	90			<0.2	0.8
					Surface	1.0	0.6	282 307	18.4 18.4	18.4	7.9 7.9	7.9	33.7	22.7	97.1 97.1	97.1	7.5 7.5	16.2 16.2		18 20		87 86			<0.2 <0.2	0.8
IM11	Rainy	Moderate	09:14	7.8	Middle	3.9	0.6	295	18.4	18.4	7.9	7.9	33.7	33.7	97.3	97.3	7.5	17.1	17.3	20	18	88 88	822072	811439	<0.2	0.8
	,					3.9 6.8	0.6	309 300	18.4 18.4		7.9 7.9		33.7 33.7		97.3 99.1		7.5	17.1	+ ****	18 16		91			<0.2	0.8
					Bottom	6.8	0.5	321 282	18.4 18.4	18.4	7.9 7.9	7.9	33.7	33.7	99.1 97.6		7.6 7.6 7.5	18.6	1	18 13		90 87			<0.2	0.8
					Surface	1.0	0.6	301	18.4	18.4	7.9	7.9	33.7	33.7	97.6	97.6	7.5	10.9	1	14	İ	86			<0.2	0.8
IM12	Rainy	Moderate	09:09	8.7	Middle	4.4	0.6	279 304	18.4 18.4	18.4	7.9	7.9	33.7	33.7	97.9 97.9	97.9	7.5	12.6 12.6	11.9	15 14	14	88 87	821457	812025	<0.2 <0.2	<0.2 0.7 0.7
					Bottom	7.7	0.5	283 289	18.4 18.4	18.4	7.9	7.9	33.7		99.4	99.4	7.6 7.6	12.3	7	15 15		90			<0.2	0.7
					Surface	1.0	-	-	18.4 18.4	18.4	7.8	7.8	33.8	33.8	97.2 97.2	97.2	7.5 7.5	3.2		6					-	-
SR1A	Cloudy	Moderate	08:54	4.9	Middle	2.5	-	-	-	-	-		-	-	-		7.5	- 3.2	3.4	-	7		819979	812664	-	
					Bottom	2.5 3.9	-	-	18.4	18.4	7.8	7.8	33.8	33.8	99.5	99.6	7.6 7.7	. 3.5	-	- 8		-			-	-
						3.9 1.0	0.1	169	18.4 18.4		7.8 7.8	 	33.8		99.7 98.8		7.7	3.6 12.3	1	9 18		- 88			<0.2	0.8
					Surface	1.0	0.1	176	18.4	18.4	7.8	7.8	33.7		98.8	98.8	7.6 7.6	40.0	1	18	İ	89			<0.2	0.8
SR2	Cloudy	Moderate	08:44	4.8	Middle	-	-	-	-	-		-	-	-	-	-	-	-	12.6	-	16	- 89	821445	814179	-	<0.2 - 0.8
					Bottom	3.8	0.1	192 207	18.4 18.4	18.4	7.8	7.8	33.7		101.3	101.3	7.8 7.8	12.8	+	14 13		90			<0.2	0.8
					Surface	1.0	0.2	38 40	18.5 18.5	18.5	7.9 7.9	7.9	33.1 33.1		97.6 97.6	97.6	7.5 7.5	6.5		12 11		-			-	-
SR3	Cloudy	Moderate	09:43	8.8	Middle	4.4	0.2	37	18.5	18.5	7.9	7.9	33.1	33.1	97.3	97.3	7.5	7.0	7.1	11	11	<u> </u>	822133	807553	-	. 🖃 .
	,				Bottom	4.4 7.8	0.2	40 20	18.5 18.5	18.5	7.9 7.9	7.9	33.1 33.2	22.2	97.3 98.4	98.4	7.5 7.6 7.6	7.0	Ⅎ	11 11	İ	-			-	-
						7.8	0.2	21 266	18.5 18.2		7.9 8.2	_	33.2 32.6	1	98.4 95.5		7.6	7.7	+	10 8		-			-	-
					Surface	1.0 4.6	0.2	271 217	18.2 18.3	18.2	8.2 8.2	8.2	32.6 32.6		95.5 95.4	95.5	7.4 7.4	6.3	1	9	Ĭ	-			-	-
SR4A	Rainy	Calm	09:13	9.1	Middle	4.6	0.2	214	18.3	18.3	8.2	8.2	32.6	32.6	95.4	95.4	7.4	6.5	6.6	7	9	-	817206	807816	-	
					Bottom	8.1 8.1	0.2	265 264	18.3 18.3	18.3	8.2	8.2	32.6 32.6		95.1 95.1	95.1	7.4 7.4	7.3		11 10		-			-	-
					Surface	1.0	0.2	274 280	18.3 18.3	18.3	8.2	8.2	32.6 32.6		95.3 95.3	95.3	7.4	6.8		11		-			-	-
SR5A	Rainy	Calm	08:52	3.7	Middle	-	-	-	-	-	-	-	-	-	-	-	- '.4	-	6.9	-	10	<u> </u>	816587	810673	-	
					Bottom	2.7	0.2	283	18.3	18.3	8.2	8.2	32.6		95.9	96.0	7.4 7.4	7.1		9	İ	-			-	-
					Surface	1.0	0.2	295 221	18.3 18.4	18.4	8.2 8.1	8.1	32.6 32.6	32.6	96.0 95.0	95.0	7.4	7.1 4.4	1	9		-			-	
						1.0	0.1	221	18.4		8.1	0.1	32.6	32.0	95.0	33.0	7.3	4.5	٠	- 8		-			-	-
SR6A	Rainy	Calm	08:26	4.0	Middle	3.0	0.1	- 215	18.4	-	8.1	<u> </u>	32.6		95.0	-	7.3	5.3	4.9	- 10	9	= -	817960	814730	-	
					Bottom	3.0	0.1	215	18.4	18.4	8.1	8.1	32.6	32.6	95.1	95.1	7.3	5.3		9		-			-	-
					Surface	1.0	0.2	180 190	18.7 18.7	18.7	7.7	7.7	34.0 34.0	34.0	92.8 92.8	92.8	7.1 7.1 7.1	10.2 10.2	Ⅎ	15 14	†	-			-	-
SR7	Rainy	Moderate	07:57	16.8	Middle	8.4 8.4	0.2	187 191	18.7 18.7	18.7	7.6 7.6	7.6	34.0		92.4 92.4	92.4	7.1 7.1 7.1	7.7	8.3	10 11	12	-	823632	823727	-	
					Bottom	15.8 15.8	0.1	282	18.7	18.7	7.6 7.6	7.6	34.0	24.0	92.0 91.8	91.9	7.0 7.0	7.1	7	11	1	-			-	-
					Surface	1.0	- 0.1	309	18.4	18.4	7.9	7.9	33.6	22.6	97.9	97.9	7.5	5.2	1	11						-
SR8	Cloudy	Moderate	09:02	5.0	Middle	1.0	-	-	18.4		7.9	1	33.6		97.9		7.5	5.2	5.8	10	10	-	820388	811630	-	-
070	Cibuay	woderate	09.02	5.0		4.0	-	-	18.4	-	7.9	Ŀ	33.7		100.2		7.7	6.3	3.6	- 9	10	F	020368	011030	-	
					Bottom	4.0	-	-	18.4	18.4	7.9	7.9	33.7		100.2		7.7 7.7	6.3		10		-			-	

13 February 20 during Mid-Ebb Tide

Water Qua	lity Moni	toring Res	ults on		13 February 20	during Mid-	Ebb Tid	е																		
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)	DOS	aturation (%)	Dissolved Oxygen	Turbid	ty(NTU)	Suspende (mg		Total Alkal (ppm)	Coordina HK Gri			ım Nickel (μg/L)
Station	Condition	Condition	Time	Depth (m)	3 1	. ()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value D/	Value	DA	Value	DA	Value [A (Northin			DA Value DA
					Surface	1.0	0.1 0.1	213 227	18.5 18.5	18.5	8.2	8.2	31.4	31.4	95.1 95.1	95.1	7.4	11.7		14 15		83 83			<0.2	0.9
C1	Rainy	Rough	15:47	7.5	Middle	3.8 3.8	0.1 0.1	211 216	18.5 18.5	18.5	8.2 8.2	8.2	31.5 31.5	31.5	95.0 95.0		7.4	14.8 15.3	15.2	12 12	13	85 84	5 81561	804261	<0.2	0.2 0.9 0.8
					Bottom	6.5 6.5	0.0	254 272	18.5 18.5	18.5	8.2 8.2	8.2	31.5 31.5	31.5	95.2 95.2	95.2	7.4 7.4	18.4	7	11 12	İ	87 86			<0.2	0.7 0.8
					Surface	1.0	0.1	215 200	18.8	18.8	7.9	7.9	31.3	31.2	94.2	94.2	7.3	3.7		5		84 85			<0.2	1.6
C2	Rainy	Rough	14:31	10.5	Middle	5.3	0.0	212	18.8	18.8	7.9	7.9	31.7	31.7	93.7		7.2 7.2	8.5 9.3	9.4	5	5	OE	5 82566	806932	40.2	0.2 1.7 1.7
					Bottom	9.5 9.5	0.1	168 174	18.8	18.8	7.9	7.9	32.3	32.3	93.5 93.5	02.5	7.2 7.2	15.4	1	5		86 86			<0.2	1.8
					Surface	1.0	0.3	154 157	18.9 18.9	18.9	7.9	7.9	33.8	33.8	89.6 89.7	80.7	6.8	3.4		5		82 82			<0.2	1.0
СЗ	Rainy	Moderate	16:24	10.6	Middle	5.3	0.3	143 157	18.9	18.9	7.9	7.9	33.8	33.8	90.3		6.9	4.4	4.2	6	6	8/1	4 82212	817806	40.2	0.2 0.8 0.8
					Bottom	9.6 9.6	0.2	149 157	18.9	18.9	7.9	7.9	33.8	33.8	91.5 91.6		7.0 7.0 7.0	17	7	6	•	85 86			<0.2	0.8
					Surface	1.0	0.0	116 126	18.7	18.7	8.2 8.2	8.2	31.4 31.4	31.4	95.4 95.3	95.4	7.4	6.3		9		83			<0.2	0.9 1.0
IM1	Rainy	Moderate	15:28	4.8	Middle	-	-	-	-	-	-	-	-	-	-	-	7.4		7.7	-	11		5 81796	807110		0.2 - 0.9
					Bottom	3.8	0.1	276 284	18.7	18.7	8.2	8.2	31.8	31.8	94.3		7.3 7.3	9.2	7	12	•	86 86			<0.2	0.9
					Surface	1.0	0.1	118	18.5	18.5	8.2 8.2	8.2	31.2 31.2	31.2	96.0 95.9		7.5	9.0		12		83 84			<0.2	0.9
IM2	Rainy	Moderate	15:20	7.0	Middle	3.5 3.5	0.1	100	18.5	18.5	8.2 8.2	8.2	31.3 31.3	31.3	95.5 95.5		7.4 7.4	11.8	12.8	13	12	85	5 81814	806158	-0.2	0.2 0.9 0.9
					Bottom	6.0 6.0	0.1	170 185	18.5	18.5	8.2 8.2	8.2	31.4 31.4	31.4	95.2 95.2	05.2	7.4 7.4	17.6	7	12	•	87 87			<0.2	0.8
					Surface	1.0	0.1	216 227	18.5 18.5	18.5	8.2 8.2	8.2	31.4	31.4	95.6 95.6	05.6	7.4	19.2	1	23		83			<0.2	1.2
IM3	Rainy	Moderate	15:12	6.9	Middle	3.5 3.5	0.1	188 191	18.5	18.5	8.2	8.2	31.5	31.5	95.5 95.5	95.5	7.4 7.4	20.6	20.5	24 24	23	85	5 81876	805574	<0.2	0.2 0.9 1.0
					Bottom	5.9 5.9	0.1	122	18.6	18.6	8.2 8.2	8.2	31.6 31.6	31.6	95.5 95.5	95.5	7.4 7.4	22.2	1	24	•	87 87			<0.2	1.0
					Surface	1.0	0.1	281 296	18.5	18.5	8.2 8.2	8.2	31.2 31.2	31.2	95.4 95.4	95.4	7.4	17.0	1	22		83			<0.2	1.1
IM4	Rainy	Moderate	15:00	7.3	Middle	3.7	0.0	14 14	18.5	18.5	8.2	8.2	31.3	31.3	95.1 95.1	95.1	7.4	18.4	18.8	20	19	86	6 81973	804587	<0.2	0.2 1.0 1.0
					Bottom	6.3	0.0	65 65	18.5	18.5	8.2 8.2	8.2	31.3	31.3	95.1 95.1	95.1	7.4 7.4	21.0	7	17	İ	88 87			<0.2	0.9
					Surface	1.0	0.2	350 359	18.5	18.5	8.2 8.2	8.2	31.1	31.1	94.8	0/18	7.4	17.0	1	16 17		83 84			<0.2	1.1
IM5	Rainy	Moderate	14:50	6.8	Middle	3.4 3.4	0.1	342 315	18.5	18.5	8.2 8.2	8.2	31.1 31.1	31.1	94.7	04.7	7.4 7.4	18.4	18.8	18	18	96	5 82075	804859	-O 2	0.2 1.0 1.0
					Bottom	5.8	0.1	17 17	18.5	18.5	8.2	8.2	31.1	31.1	94.6	946	7.4 7.4	20.6	7	18	İ	87 87			<0.2	1.0
					Surface	1.0	0.1	284 291	18.6	18.6	8.2 8.2	8.2	31.6 31.6	31.6	94.7	04.7	7.3	15.8 15.8	+	19		84			<0.2	1.2
IM6	Rainy	Moderate	14:39	7.0	Middle	3.5 3.5	0.1	272	18.6	18.6	8.2 8.2	8.2	31.5 31.6	31.5	94.7		7.3 7.3	19.8	18.0	25 26	<u>24</u>	96	6 82105	805819	40.2	0.2 1.2 1.2
					Bottom	6.0 6.0	0.1	286 302	18.6	18.6	8.2 8.2	8.2	31.6 31.6	31.6	94.7		7.3 7.3	10.2		26 25	†	88 87			<0.2	1.1
					Surface	1.0	0.1	254 270	18.7	18.7	8.2 8.2	8.2	31.3	31.3	94.9	94.9	7.4	10.5		15 16		84 84			<0.2 <0.2	1.1
IM7	Rainy	Moderate	14:30	8.2	Middle	4.1 4.1	0.0	267 276	18.6	18.6	8.2 8.2	8.2	31.5 31.5	31.5	94.9 94.7 94.7	947	7.4 7.3 7.3	12.8	14.0	19	17	87	6 82133	806824	40.2	0.2 0.9 1.0
					Bottom	7.2 7.2	0.0	346 348	18.6 18.6	18.6	8.2 8.2	8.2	31.6 31.6	31.6	94.7 94.6 94.6	04.6	7.3 7.3 7.3	18.6	1	17 17 19		86 88 89			<0.2 <0.2 <0.2	0.9
					Surface	1.0 1.0	0.0 0.1 0.1	66	18.6 18.8 18.8	18.8	7.9 7.9	7.9	31.6 31.5 31.5	31.5	94.6 94.8 94.7	0/18	7.3	5.5		5		83			<0.2	2.0
IM8	Rainy	Moderate	15:01	7.5	Middle	3.8	0.1	72 59	18.8	18.8	7.9	7.9	31.9	31.9	94.8	95.0	7.3	8.5	9.6	6	5	84	5 82182	808143	<0.2	0.2 2.0 2.0
					Bottom	3.8 6.5	0.1	62 54	18.8	18.7	7.9 8.0	8.0	31.9 32.5	32.5	95.1 96.4	96.4	7.4 7.4	8.9	_	5		85 85			<0.2	1.9
						6.5	0.1	55	18.7	l .	8.0		32.5		96.3		7.4	14.3		5		86			< 0.2	1.9

13 February 20 during Mid-Ebb Tide

Water Qua	lity Moni	toring Res	ults on		13 February 20	during Mid-	-Ebb Tid	le																					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salir	nity (ppt)	DO S	aturation (%)	Dissolv Oxyge		Turbidity(NTU)	Suspende (mg.		Total Alk (ppn		Coordinate HK Grid	Coordinate HK Grid	Chromiu (µg/L)	m Nicke	el (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value [DA Value	e DA
					Surface	1.0	0.2	132 133	18.8	18.8	7.9	7.9	31.6 31.6	31.6	94.9	94.9	7.3	-	4.3 4.5	-	6		84 84				<0.2	1.1	-
IM9	Rainy	Moderate	15:07	7.4	Middle	3.7	0.2	145	18.8	18.8	7.9	7.9	31.8	31.9	94.3	94.4	7.3	7.3	6.2	5.7	6	. 7	85	85	822073	808816	<0.2	0.2 1.3	1.0
					Bottom	3.7 6.4	0.2	156 101	18.8 18.8	40.0	7.9 7.9	7.0	31.9 32.3	32.3	94.5 94.8	94.8	7.3	7.3	6.3 6.5	t	7		85 87				<0.2	1.2	
					Bottom	6.4	0.4	106	18.8	18.8	7.9 8.0	7.9	32.3 33.0	32.3	94.7	94.8	7.3 7.2	7.3	6.6 9.3		8 13		87				<0.2	1.4	
					Surface	1.0	0.3	122 122	18.8	18.8	8.0	8.0	33.0	33.0	94.1	94.2	7.2	7.2	9.4	Ė	12		85 85				<0.2	1.4	
IM10	Rainy	Moderate	15:13	8.2	Middle	4.1	0.3	116 119	18.8 18.8	18.8	8.0	8.0	33.0	33.0	94.1	94.3	7.2 7.2	··-	10.6 10.7	10.5	14 12	13	86 86	86	822380	809794	<0.2	0.2 1.2	
					Bottom	7.2	0.2	109	18.8	18.8	8.0	8.0	33.1	33.1	95.5	95.5	7.3	7.3	11.4	Į	12		87				<0.2	1.1	
					Surface	7.2 1.0	0.2	112 76	18.8	18.7	8.0	9.0	33.1 32.8	22.0	95.4 93.9	94.1	7.3 7.2		11.4 8.0		13 9		87 84				<0.2	1.2 0.9	
					Surface	1.0 4.2	0.4	79 79	18.7 18.7		8.0	8.0	32.8 32.8	32.8	94.3 94.2	-	7.2	7.2	8.2 9.9	F	8		84 85				<0.2	0.8	7 1
IM11	Rainy	Moderate	15:23	8.4	Middle	4.2	0.5	79	18.7	18.7	8.0	8.0	32.8	32.8	94.4	94.3	7.3		10.1	9.9	7	8	85	85	822064	811453	<0.2	0.8	0.8
					Bottom	7.4	0.4	80 83	18.7 18.7	18.7	8.0	8.0	32.8	32.8	95.9 96.2	96.1	7.4	7.4	11.5 11.5	H	7		87 87				<0.2	0.9	
					Surface	1.0	0.4	58 58	18.7 18.7	18.7	8.0	8.0	32.8 32.8	32.8	93.7 94.0	93.9	7.2 7.2		8.7 9.1	-	11 10		83 83				<0.2	0.8	
IM12	Rainy	Moderate	15:29	8.0	Middle	4.0	0.5	62	18.7	18.7	8.0	8.0	32.9	32.9	94.3	94.3	7.2	7.2	10.7	10.8	11	10	84	84	821449	812068	<0.2	0.8	١ ا
2	rtuiry	Wodorato	10.25	0.0		4.0 7.0	0.5	67 51	18.7 18.7		8.0		32.9 32.9		94.3 95.8		7.2 7.4		11.2 12.6	.0.0	10 10		84 85	٠.	021110	0.2000	<0.2	0.8	
					Bottom	7.0	0.4	53	18.7	18.7	8.0	8.0	32.9	32.9	95.8	95.8	7.4	7.4	12.6 9.6		10 9		85				<0.2	0.9	
					Surface	1.0	-	-	18.7	18.7	8.0	8.0	32.8	32.8	93.9 93.6	93.8	7.2	7.2	9.6		10		-				-		-
SR1A	Rainy	Calm	15:49	4.4	Middle	2.2	-	-	-	-	-	-	-		-		-	′.2	-	9.7		10	-	-	819974	812665	-		
					Bottom	3.4	-	-	18.7	18.7	8.0	8.0	32.9	32.9	92.6	92.7	7.1	7.1	9.9	İ	10		-				-		
						3.4 1.0	0.4	76	18.7		8.0 7.9		32.9 32.9		92.7 93.6	93.6	7.1		9.7 7.3		11 8		83				<0.2	0.8	+
					Surface	1.0	0.4	82	18.8	18.8	7.9	7.9	32.9	32.9	93.6	93.6	7.2	7.2	7.4	Į	9		83				<0.2	0.8	1
SR2	Rainy	Moderate	16:01	5.0	Middle		-	-		-	-	-	-	-		-	-	•		9.3	-	9	-	84	821461	814143	-	0.2	0.8
					Bottom	4.0	0.3	68 70	18.8	18.8	7.9	7.9	33.1	33.1	94.2	94.2	7.2	7.2	11.2 11.2	ŀ	9 10		85 85				<0.2	0.8	-
					Surface	1.0	0.3	113 121	18.8 18.8	18.8	7.9 7.9	7.9	31.7	31.7	94.4	94.7	7.3		6.9 7.7		6		-				-		
SR3	Rainy	Rough	14:55	9.1	Middle	4.6	0.3	132	18.8	18.8	7.9	7.9	32.5	32.5	94.7	94.7	7.3	7.3	12.3	11.9	6	. 7	-		822161	807593	-	. 🗀	1.
OKO	Raily	Rough	14.55	3.1		4.6 8.1	0.3	142 127	18.8 18.7		7.9 7.9		32.5 32.8		94.7		7.3		12.3 16.1	11.5	7		-		022101	007333	-	· -	- 1
					Bottom	8.1	0.3	128	18.7	18.7	7.9	7.9	32.8	32.8	94.1	94.2	7.2	7.2	16.2		8		-				-	╧	1
					Surface	1.0	0.2	79 81	18.6 18.6	18.6	8.2	8.2	31.3	31.3	95.4 95.4	95.4	7.4	7.4	11.6 11.6	ŀ	15 17		-				-	<u> </u>	-
SR4A	Rainy	Calm	16:08	8.8	Middle	4.4 4.4	0.2	70 71	18.6 18.6	18.6	8.2 8.2	8.2	31.4	31.4	95.2 95.2	95.2	7.4	′.4	11.8 11.9	12.3	15 14	15	-	-	817180	807795	-].
					Bottom	7.8	0.2	58	18.6	18.6	8.2	8.2	31.5	31.5	95.3	95.3	7.4	7.4	13.8	Į	15		-				-		1
						7.8 1.0	0.2	61 15	18.6 18.7	1	8.2 8.2		31.5 31.6		95.3 94.3		7.4		13.4 3.4		14 11		-				-	÷	+
					Surface	1.0	0.1	16	18.7	18.7	8.2	8.2	31.6	31.6	94.3	94.3	73	7.3	3.4	F	12		-				-]
SR5A	Rainy	Calm	16:24	3.7	Middle					-	-	-	-	-		-			-	3.6		11	-	-	816602	810680	-		
					Bottom	2.7	0.1	12 12	18.7 18.7	18.7	8.2 8.2	8.2	31.7	31.7	94.6 94.6	94.6	7.3	7.3	3.8	ŀ	11 10		-				-	-	-
					Surface	1.0	0.0	18	18.7	18.7	8.2	8.2	31.4	31.4	95.0	95.0	7.4		10.5		9		-				-		
SR6A	Rainy	Calm	16:59	4.0	Middle	1.0	0.0	18 -	18.7		8.2		31.4		95.0		7.4	7.4	10.5	11.1	8	. 9			817974	814724	-	. 🗀	1.
OROA	Raily	Calif	10.55	4.0		3.0	0.0	- 41	18.7	-	- 8.1		31.7		94.3	-	7.3		11.6	-	- 10		-		017374	014724	-	-	- 1
					Bottom	3.0	0.0	42	18.7	18.7	8.1	8.1	31.7	31.7	94.4	94.4	7.3	7.3	11.7		9	•	-				-	خل	
					Surface	1.0	0.4	35 35	18.9 18.9	18.9	7.9	7.9	33.8	33.8	87.1 87.2	87.2	6.6	6.6	3.4 3.2	ŀ	7		-				-	E	1
SR7	Rainy	Moderate	16:54	15.7	Middle	7.9 7.9	0.4	44 45	18.9 18.9	18.9	7.9 7.9	7.9	33.9 33.9	33.9	86.9 86.8	86.9	6.6 6.6	0.0	4.8 4.8	4.8	7 6	7	-	-	823630	823761	-	. <u> </u>	-
					Bottom	14.7	0.3	39	18.9	18.9	7.9	7.9	33.9	33.9	87.4	87.5	6.6	6.7	6.2	į	7		-					Ė	1
						14.7	0.3	42	18.9		7.9 8.0		33.9		87.6 93.3		7.2		6.2 9.5		8 10		-			l 	-	-	+
					Surface	1.0		-	18.7	18.7	8.0	8.0	32.8	32.8	93.6	93.5	7.2	7.2	10.0	ļ	10		-				-	Ŀ	1
SR8	Rainy	Moderate	15:38	5.1	Middle					-		-		-		-	-		-	10.2	-	10	-	-	820385	811622	-	· 🗀	<u> </u>
					Bottom	4.1 4.1	-	-	18.7 18.7	18.7	8.0	8.0	32.9 32.9	32.9	93.6 93.7	93.7	7.2	7.2	10.9 10.2	F	10 10		-				-	-	4

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

Water Qua	lity Monit	toring Res	ults on		13 February 20	during Mid-	-Flood T	ide																						
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Te	mperature (°C)		pН	Salir	nity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity(1	ITU) ^S	uspende (mg/	d Solids /L)		Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chron (µg		Nickel (ıg/L)
Station	Condition	Condition	Time	Depth (m)	55, 55		(m/s)	Direction	Value	Average		Average		Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value			DA
					Surface	1.0	0.4	29 0	18.5 18.5	18.5	8.1	8.1	31.2	31.2	95.6 95.6	95.6	7.4	7.4	12.2 12.4	-	12 11		82 83	+			<0.2		0.7	
C1	Rainy	Rough	10:48	7.6	Middle	3.8	0.3	22 23	18.6 18.6	18.6	8.0	8.0	31.6 31.6	31.6	95.1 95.1	95.1	7.4	′.4	15.5 15.5	15.0	12 11	12	85 85	85	815633	804250	<0.2		0.7	0.7
					Bottom	6.6	0.3	20	18.6	18.6	8.0	8.0	31.6 31.6	31.6	95.5 95.5	95.5	7.4	7.4	17.0	E	11		87 87	1			<0.2		0.8	
					Surface	6.6 1.0	0.3	21 340	18.8	18.8	7.9	7.9	31.3	31.3	93.7	93.8	7.2		3.7		12 5		83				<0.2		1.8	-
C2	Daine	Davish	11:12	10.3	Middle	1.0 5.2	0.5	313 0	18.8 18.8	18.8	7.9 7.9	7.9	31.4 31.6	31.6	93.9 94.2	94.3	7.3 7.3	7.3	3.9 7.9	8.3	5 6		84 85	86	825693	806926	<0.2		1.7	4.0
02	Rainy	Rough	11:12	10.3		5.2 9.3	0.4	0 23	18.8 18.8		7.9 7.9		31.6 32.3		94.3 94.4		7.3 7.3		8.8 12.8	0.3	5 5	. 5	85 88	00	625693	800926	<0.2	L	1.8	1.0
					Bottom	9.3	0.6	23 238	18.8	18.8	7.9	7.9	32.3	32.3	94.4	94.4	7.3	7.3	12.7		5		88 81				<0.2		1.8	
					Surface	1.0	0.5	250	18.8	18.8	7.9	7.9	32.9	32.9	94.0	94.0	7.2	7.2	4.3		6		81	1			<0.2		1.1	
С3	Rainy	Moderate	09:23	10.5	Middle	5.3 5.3	0.0	249 273	18.8 18.8	18.8	7.8 7.9	7.8	33.2 33.2	33.2	93.5 93.4	93.5	7.2 7.1		14.2 14.1	14.8	6	6	84 84	83	822132	817802	<0.2	<0.2	1.0	1.0
					Bottom	9.5 9.5	0.4	251 275	18.8 18.8	18.8	7.8	7.8	33.2	33.2	93.3 93.4	93.4	7.1	7.1	26.2 26.2	-	6		85 85	+			<0.2		0.9	
					Surface	1.0	0.2	343 316	18.7 18.7	18.7	8.1 8.1	8.1	31.7	31.7	94.6 94.6	94.6	7.3		10.3 10.3		12 13		84 85	-			<0.2		0.9	
IM1	Rainy	Rough	11:10	4.5	Middle	-	-	-	-	-	Ė	-	-	-	-	-	-	7.3	-	10.7	-	11	-	85	817970	807130	-	<0.2	_	0.9
					Bottom	3.5 3.5	0.1	330 354	18.7 18.7	18.7	8.1	8.1	31.8 31.8	31.8	94.7	94.7	7.3	7.3	11.1	F	9		86	1			<0.2	þ	1.0	
					Surface	1.0	0.4	16	18.5	18.5	8.2	8.2	31.0	31.0	95.9	95.9	7.5		11.6		13		86 83				<0.2		1.0	-
IM2	Rainy	Rough	11:21	7.0	Middle	1.0 3.5	0.4	16 1	18.5 18.5	18.5	8.2 8.2	8.2	31.0 31.4	31.4	95.9 95.2	95.2	7.5 7.4	7.5	11.7 16.0	15.5	14 14	15	83 85	85	818182	806175	<0.2	-0.2	0.8	11
IIVIZ	reality	rtougii	11.21	7.0		3.5 6.0	0.4	1 350	18.5 18.6		8.2 8.1		31.4 31.6		95.2 95.3	95.3	7.4 7.4		15.8 18.8	15.5	16 17	. 13	86 87	- 00	010102	000173	<0.2	-	0.9 1.4	
					Bottom	6.0 1.0	0.3	322 348	18.6 18.5	18.6	8.1 8.2	8.1	31.6 30.9	31.6	95.3 95.4		7.4	7.4	19.1 13.0		17 18		88 83				<0.2		1.4	_
					Surface	1.0	0.4	320 339	18.5	18.5	8.2	8.2	30.9	30.9	95.2 95.0	95.3	7.4	7.4	13.2		17		84 86	1			<0.2	F	1.4	
IM3	Rainy	Rough	11:29	6.9	Middle	3.5	0.4	312	18.5	18.5	8.2	8.2	31.3	31.3	95.0	95.0	7.4		16.9	16.6	18	17	86	86	818788	805579	<0.2	<0.2	1.5	1.5
					Bottom	5.9 5.9	0.3	323 338	18.6 18.6	18.6	8.2	8.2	31.4 31.4	31.4	95.2 95.2	95.2	7.4	7.4	19.9 19.8		14 16		87 87				<0.2		1.4	
					Surface	1.0	0.7	5	18.5 18.5	18.5	8.2 8.2	8.2	31.0	31.0	94.8 94.8	94.8	7.4	7.4	20.6 20.4	-	32 33		83 84	ł			<0.2		1.5	
IM4	Rainy	Rough	11:40	7.4	Middle	3.7	0.7	5 5	18.5 18.5	18.5	8.2	8.2	31.1	31.1	94.7 94.7	94.7	7.4	′	21.2 21.3	21.6	33 30	31	86 87	86	819745	804597	<0.2	<0.2	1.5	1.5
					Bottom	6.4 6.4	0.6	2 2	18.5 18.5	18.5	8.2	8.2	31.1	31.1	94.7 94.7	94.7	7.4	7.4	22.8 23.0		30 26		87 88	1			<0.2		1.5	
					Surface	1.0	0.8	15 15	18.5	18.5	8.2 8.2	8.2	31.2	31.2	95.1 95.1	95.1	7.4		18.6 18.7		27 26	,	83 84				<0.2		1.3	
IM5	Rainy	Rough	11:47	7.2	Middle	3.6	0.7	17	18.5	18.5	8.2	8.2	31.2 31.2	31.2	95.0	95.0	7.4	7.4	19.8	20.1	27	28	87	86	820727	804870	<0.2		1.4	1.4
		-			Bottom	3.6 6.2	0.8	17 18	18.5 18.5	18.5	8.2 8.2	8.2	31.2	31.2	95.0 95.1	95.1	7.4 7.4	7.4	20.3 21.9	E	29 28	. –	87 88	1			<0.2		1.4	
					Surface	6.2 1.0	0.7	18 104	18.5 18.6	18.6	8.2 8.2	8.2	31.2 31.7	31.7	95.1 94.6	94.6	7.4		21.5 14.3		30 22		88 83				<0.2		1.5	-
						1.0 3.6	0.3	112 103	18.6 18.6		8.2 8.2		31.7 31.7		94.6 94.6		7.3 7.3	7.3	14.4 15.7		22 23		82 87	7			<0.2		1.0	
IM6	Rainy	Rough	11:56	7.1	Middle	3.6 6.1	0.3	113 107	18.6 18.6	18.6	8.2 8.2	8.2	31.7 31.7	31.7	94.6 94.9	94.6	7.3 7.4		15.8 18.2	16.0	22 20	22	86 87	85	821045	805848	<0.2	<0.2	1.5	1.2
					Bottom	6.1	0.3	112	18.6	18.6	8.2	8.2	31.7	31.7	94.9	94.9	7.4	7.4	17.8		22	,	87				<0.2		1.2	
					Surface	1.0	0.2	70 72	18.7 18.7	18.7	8.2	8.2	31.3 31.3	31.3	94.9 94.9	94.9	7.4	7.4	10.9 10.8		14 14		84 85	1			<0.2		1.0 0.8	
IM7	Rainy	Rough	12:04	8.3	Middle	4.2	0.2	75 77	18.6 18.6	18.6	8.2	8.2	31.5 31.5	31.5	94.8 94.8	94.8	7.3	··· }	16.7 17.3	15.8	15 16	16	87 87	87	821338	806817	<0.2	<0.2	1.0	1.0
					Bottom	7.3 7.3	0.2	72 76	18.6 18.6	18.6	8.3 8.3	8.3	31.6 31.6	31.6	95.0 95.0	95.0	7.4	7.4	19.6 19.7	F	16 18		88 88	1			<0.2	Г	1.0 0.9	
					Surface	1.0	0.1	106 107	18.8	18.8	7.9 7.9	7.9	31.7 31.7	31.7	93.5 93.9	93.7	7.2		6.0	-	10		81 82	1			<0.2		1.3	=
IM8	Rainy	Rough	10:46	7.4	Middle	3.7	0.1	83	18.8	18.8	7.9 7.9	7.9	31.7	31.7	93.3 93.2	93.3	7.2	7.2	6.9	7.5	10	10	85 85	85	821828	808121	<0.2		1.4	1.4
		-			Bottom	3.7 6.4	0.1 0.1	90 91	18.8 18.8	18.8	7.9	7.9	31.7	31.7	93.6	93.6	7.2	7.2	7.1 9.2	L	11 9		87	1			<0.2	F	1.4	
DA: Denth-Aver	لـــــا				Douom	6.4	0.1	98	18.8	.0.0	7.9	L	31.7	J	93.6	00.0	7.2		9.5		10		87				<0.2		1.4	

13 February 20 during Mid-Flood Tide

Water Qua	lity Monit	toring Resu	ults on		13 February 20	during Mid	-Flood T	ide																					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	mperature (°C)		pН	Salir	ity (ppt)	DO S	aturation (%)	Dissolve Oxyger		idity(NTU	Suspend (mg	ed Solids y/L)		Alkalinity pm)	Coordinate HK Grid	HK Grid	Chror (µg		Nickel (
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value [)A Val	ie D/	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA	Value	DA
					Surface	1.0	0.2	256 256	18.8 18.8	18.8	7.9	7.9	32.0	32.0	94.1 94.0	94.1	7.3	8.		14	-	81 81	-			<0.2		1.5	
IM9	Rainy	Rough	10:39	7.3	Middle	3.7	0.2	260	18.8	18.8	7.9	7.9	32.2	32.2	94.5	94.5	7.3	.3 15		12	12	84	84	822099	808794	<0.2	<0.2	1.5	1.5
livis	Rally	Kougii	10.39	7.3	Wildlie	3.7 6.3	0.2	281 267	18.8 18.8	10.0	7.9 7.9	1.5	32.2	32.2	94.4 94.8	34.3	7.3	15 - 15	4	11	12	84 85	04	022099	000794	<0.2	<0.2	1.4	1.5
					Bottom	6.3	0.2	269	18.8	18.8	7.9	7.9	32.2	32.2	95.0	94.9	7.3	.3 15		10	1	86	1			<0.2	ı İ	1.5	
					Surface	1.0	0.6	316	18.7 18.7	18.7	7.9 7.9	7.9	32.6 32.6	32.6	93.9 93.9	93.9	7.2 7.2	10		18 17		82				<0.2	ī	1.0	
IM10	Rainy	Rough	10:30	8.4	Middle	1.0 4.2	0.6	331 315	18.7	18.7	7.9	7.9	32.6	32.7	93.9	93.6	7.2	.2 11		18	18	82 85	84	822374	809814	<0.2	<0.2	1.0	4.0
IIVITO	Rainy	Rougn	10.30	0.4	iviidale	4.2	0.7	337	18.7	10.7	7.9	7.9	32.7	32.1	93.6	93.6	7.2	11	6	17	10	85	04	022374	009014	<0.2	<0.2	1.0	1.0
					Bottom	7.4	0.5	320 337	18.7 18.7	18.7	7.9	7.9	32.7	32.7	93.6 93.8	93.7	7.2	.2 12		19 17	1	86 86	1			<0.2	ı İ	1.0	
					Surface	1.0	0.7	307	18.7	18.7	7.9	7.9	32.7	32.7	94.0	94.0	7.2	12		19	_	81				<0.2		1.0	
						1.0 4.3	0.7	316 316	18.7 18.7		7.9 7.9		32.7 32.8		93.9 94.0		7.2	.2 12	a a	17	1	82 85	١			<0.2	1 Г	0.9	
IM11	Rainy	Moderate	10:20	8.6	Middle	4.3	0.7	342	18.7	18.7	7.9	7.9	32.8	32.8	93.9	94.0	7.2	18	1 16.	21	20	85	84	822073	811439	<0.2	<0.2	1.0	1.0
					Bottom	7.6 7.6	0.5	315 323	18.7 18.7	18.7	7.9	7.9	32.9	32.9	94.7 94.6	94.7	7.3	.3 18		20 22	1	86 86	1			<0.2	ıŀ	0.9 1.0	
					Surface	1.0	0.7	307	18.7	18.7	7.9	7.9	33.0	33.0	93.2	93.2	7.1	14		24		82				<0.2	П	0.9	
						1.0 4.1	0.8	315 309	18.7 18.7		7.9 7.9		33.0 33.0		93.1 92.8		7.1	.1 14	3	24	1	83 84	1			<0.2	1	1.0 0.9	
IM12	Rainy	Moderate	10:14	8.2	Middle	4.1	0.7	320	18.7	18.7	7.9	7.9	33.0	33.0	92.9	92.9	7.1	15	3 15.	24	24	84	84	821441	812047	<0.2	<0.2	1.0	1.0
					Bottom	7.2 7.2	0.6	306 332	18.7 18.7	18.7	7.9	7.9	33.0	33.0	93.3	93.3	7.2	.2 16		25 24	 	85 85	1			<0.2	ıŀ	0.9 1.0	
					Surface	1.0	-	-	18.8	18.8	7.9	7.9	32.9	32.9	93.5	93.5	7.2	2.		6		-				-	ıπ	-	
						1.0 2.3		-	18.8		7.9		32.9		93.4		7.2	.2 2.		- 6	1	-	1			-	ıŀ	-	
SR1A	Rainy	Calm	09:57	4.5	Middle	2.3	-	-	-	•	-	-	-	-	-	-	-	-	2.9	-	6	-	1 .	819978	812654	-	ı † †	-	-
					Bottom	3.5	-	-	18.8 18.8	18.8	7.9	7.9	33.1	33.1	94.0	94.1	7.2	.2 3.		7	1	-	1			-	ıŀ	-	
					Surface	1.0	0.6	299	18.7	18.7	7.9	7.9	32.8	32.8	94.6	94.6	7.3	22	3	29		82				<0.2	ΠĪ	1.1	
						1.0	0.7	324	18.7		7.9		32.8		94.6		7.3	.3 23	_	30	1	82	+			<0.2	ı ŀ	1.2	
SR2	Rainy	Moderate	09:43	5.6	Middle	-	-	-	-	•	-	-	-	-	-	-	-	-	28.	-	31	-	84	821469	814168	-	<0.2	-	1.1
					Bottom	4.6 4.6	0.6	299 320	18.7 18.8	18.7	7.9	7.9	33.0	33.0	95.5 95.6	95.6	7.3	.3 33		33	1	83 88	+			<0.2	ıŀ	1.1	
					Surface	1.0	0.1	6	18.8	18.8	7.9	7.9	31.4	31.4	94.4	94.6	7.3	4.		7		-				-	ıπ	-	
						1.0 4.4	0.1	6 10	18.8 18.8		7.9 7.9		31.4 31.5		94.7 94.1		7.3	.3 4.	_	8 8	1	-	-			-	ıŀ		
SR3	Rainy	Rough	10:53	8.7	Middle	4.4	0.2	10	18.8	18.8	7.9	7.9	31.5	31.5	94.2	94.2	7.3	6.	5.3	8	8	-	1 -	822123	807588	-	1 1	-	-
					Bottom	7.7	0.1	53 54	18.8 18.8	18.8	7.9	7.9	31.6 31.6	31.6	94.4	94.5	7.3	.3 6.		8	1	-	1			-	ıŀ	-	
					Surface	1.0	0.2	60	18.7	18.7	8.1	8.1	31.9	31.9	93.0	93.0	7.2	8.		9		-				-	ΠĪ	-	
						1.0 4.6	0.2	61 82	18.7 18.7		8.1 8.1		31.9 32.0		93.0 92.7		7.2	.2 8.		9	1	-	1			-	ıŀ	-	
SR4A	Rainy	Moderate	10:25	9.1	Middle	4.6	0.2	83	18.7	18.7	8.1	8.1	32.0	32.0	92.7	92.7	7.2	9.	9.6	10	12	-	1 -	817199	807794	-	1 - 1	-	-
					Bottom	8.1 8.1	0.2	72 75	18.7 18.7	18.7	8.1 8.1	8.1	32.0	32.0	93.2	93.2	7.2	.2 10		16 14	1	-	1			-	ıŀ	-	
					Surface	1.0	0.2	282	18.7	18.7	8.0	8.0	32.1	32.1	91.9	91.9	7.1	9.		16		-				-			
						1.0	0.2	296	18.7		8.0		32.1		91.9		7.1	.1 9.		16	1	-	1			-	ıŀ	-	
SR5A	Rainy	Moderate	10:05	3.6	Middle	-	-	-	-	-	-	-	-	-	-	-	-		11.	-	15	-	i -	816576	810706	-	1 - 1	-	-
					Bottom	2.6	0.2	287 299	18.7 18.7	18.7	8.0	8.0	32.1	32.1	92.2 92.2	92.2	7.1	.1 12		14 12	1	-	-			-	ıŀ	-	
					Surface	1.0	0.1	239	18.8	18.8	8.1	8.1	32.2	32.2	93.1	93.1	7.2	5.	i	7		-				-		-	
						1.0	0.1	262	18.8		8.1		32.2		93.1		7.2	.2 5.		7	1	-	-			-	ıŀ	-	
SR6A	Rainy	Moderate	09:37	3.9	Middle	-	-	-	-	-	-	-	-	-	-	-	-	_		-	7	-	1 -	817954	814756	-	1 - 1	-	-
					Bottom	2.9	0.1	235 250	18.8 18.8	18.8	8.1 8.1	8.1	32.2	32.2	94.2	94.3	7.3	.3 5.		7	_	-	-			-	ı ŀ		
					Surface	1.0	0.3	301	18.8	18.8	7.7	7.7	33.6	33.5	91.8	91.4	7.0	9.		7						-	П	荁	
						1.0	0.4	318 280	18.8 18.8		7.7		33.5 33.6		91.0 90.9		6.9 6.9	.9 10	4	7	1	-	1		1	\vdash	ı	-	
SR7	Rainy	Moderate	08:53	15.9	Middle	8.0	0.3	306	18.8	18.8	7.7	7.7	33.6	33.6	90.9	90.9	6.9	11	4 9.0	6	7		j -	823636	823765	-	ı -	-	-
					Bottom	14.9 14.9	0.3	257 278	18.8 18.8	18.8	7.7	7.7	33.5 33.5	33.5	90.5	90.3	6.9	.9 7.		7	1	-				-	ı		
					Surface	1.0	-	-	18.8	18.8	7.9	7.9	32.9	32.9	94.1	94.2	7.2	7.		11							П	\equiv	\dashv
						1.0	-	-	18.8	10.0	7.9	1.5	32.9	32.3	94.3	34.2	7.2	.2 7.	_	12	1	-					ı		
SR8	Rainy	Moderate	10:05	5.2	Middle		-		-	-		-	Ė	-		-			8.7	-	12		j -	820380	811615	-	ı - H	-	-
					Bottom	4.2 4.2	-	-	18.8 18.8	18.8	7.9	7.9	32.9 32.9	32.9	95.7 95.8	95.8	7.3	.4 9.		12	1	-				-	ı [-	
					1	4.2			10.0		7.9	<u> </u>	32.9		3J.0		1.4	j 9.		1 12	<u> </u>			1					

15 February 20 during Mid-Ebb Tide

Water Qua	ity Monito	oring Resu	its on		15 February 20	during Mid-	Ebb Tide	9																					
Monitoring	Weather	Sea	Sampling	Water	Sampling D	epth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity(NTU)	Suspende (mg		Total Alkali (ppm)	. 00	oordinate HK Grid	Coordinate HK Grid	Chrom (µg/l		ickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Average		Average	Value	DA	Value	DA	Value	DA	Value D		Northing)	(Easting)			alue DA
					Surface	1.0	0.1	212 220	19.4 19.5	19.5	8.1	8.1	32.3	32.3	97.0 97.1	97.1	7.4		7.2 8.1	-	9 10		86 86				<0.2		0.8
C1	Cloudy	Moderate	17:36	8.5	Middle	4.3	0.1	222	19.5	19.5	8.1	8.1	32.6	32.7	97.5	97.5	7.4	7.4	10.1	9.8	10	11	88	8 8	815633	804223	<0.2	-0.2 0.	0.7
	,					4.3 7.5	0.1	242 235	19.5 19.4		8.1 8.1	.	32.7 32.7		97.4 97.3		7.4 7.4		10.7 11.3	ŀ	11 13		90				<0.2).7).7
					Bottom	7.5	0.1	242	19.4	19.4	8.1	8.1	32.7		97.3	97.3	7.4	7.4	11.3		15	•	90				<0.2	0.).7
					Surface	1.0	0.1	113 130	19.0 19.0	19.0	8.2	8.2	28.7	28.7	92.2 92.1	92.2	7.2		3.4	ŀ	5 5		85 85				<0.2		1.5
C2	Cloudy	Moderate	16:23	9.0	Middle	4.5	0.0	125	19.0	19.0	8.2	8.2	29.2	29.2	90.7	90.7	7.1	7.2	5.0	5.1	5	5	87	8 8	825663	806941	<0.2	-0.2	1.5
					Dettem	4.5 8.0	0.0	136 167	19.0 19.0	40.0	8.2 8.2	0.0	29.2 29.8	20.0	90.7	90.2	7.1 7.0	7.0	5.1 6.9	}	5 5		91				<0.2		1.5
					Bottom	8.0 1.0	0.1	169	19.0 19.0	19.0	8.2	8.2	29.8	29.8	90.2	90.2	7.0	7.0	6.9 4.8		6 7		92 83				<0.2		0.9
					Surface	1.0	0.3	156 162	19.0	19.0	8.2	8.2	31.7	31.7	89.2 89.2	89.2	6.9	6.9	4.8	ŀ	6		84				<0.2	0.).9
C3	Cloudy	Moderate	18:16	9.9	Middle	5.0 5.0	0.3	143 146	19.0 18.9	19.0	8.2	8.2	31.7 31.8	31.7	89.0 88.3	88.7	6.8	0.5	6.8	7.4	6 7	7	88 88	88 8	822116	817784	<0.2	<0.2	1.0
					Bottom	8.9	0.3	140	18.9	18.9	8.2	8.2	31.8	31.8	88.3	88.3	6.8	6.8	10.5	Ŀ	6		91				<0.2	1.	1.0
					1	8.9 1.0	0.2	155 114	18.9		8.2 8.1		31.8		88.3 96.7		6.8 7.3	0.0	10.5 5.6		7		91 86				<0.2		0.8
					Surface	1.0	0.0	122	19.8	19.8	8.1	8.1	32.8	32.8	96.7	96.7	7.3	7.3	5.5	t	8		88				<0.2	0.).7
IM1	Cloudy	Moderate	17:13	5.4	Middle	-	-	-	-	-	-	-	-	-	+	-	-		-	5.3	-	7	- 8	8 8	817948	807127	-		- 0.7
					Bottom	4.4	0.1	280	19.7	19.7	8.1	8.1	33.0	33.0	96.4	96.4	7.3	7.3	5.2	ļ	6		90				<0.2	0.).7
					1	1.0	0.1	287 122	19.7 19.7		8.1 8.1		33.0 32.4		96.3 96.7		7.2		5.1 9.7		7 12		90 86				<0.2).7).7
					Surface	1.0	0.2	131	19.7	19.7	8.1	8.1	32.4	32.4	96.6	96.7	7.3	7.3	10.4	ļ	12		86				<0.2	0.).6
IM2	Cloudy	Moderate	17:04	7.1	Middle	3.6	0.1	108 117	19.8 19.8	19.8	8.1	8.1	32.4 32.3	32.4	96.5 96.7	96.6	7.3		12.7 12.3	10.8	12 13	12	88 87	88 8	818148	806155	<0.2		0.7
					Bottom	6.1	0.1	174 178	20.0	20.0	8.1 8.1	8.1	32.4 32.4	32.4	97.5 97.5	97.5	7.3	7.3	10.1 9.9	F	12 11		90 91				<0.2		0.7
					Surface	1.0	0.1	200	19.5	19.5	8.1	8.1	31.9	31.9	96.6	96.6	7.4		8.7		9		86				<0.2	0.	0.6
						1.0 3.6	0.1	217 183	19.5 19.7		8.1 8.1		31.9 31.5		96.5 96.6		7.3 7.3	7.3	8.7 7.4	-	9		86 88				<0.2	0	0.6
IM3	Cloudy	Moderate	16:55	7.2	Middle	3.6	0.1	193	19.7	19.7	8.1	8.1	31.5	31.5	96.7	96.7	7.3		7.5	7.2	8	9	89	8 8	818764	805587	<0.2	<0.2	0.6
					Bottom	6.2	0.2	129 133	19.8 19.8	19.8	8.1 8.1	8.1	31.9	31.9	96.7 96.6	96.7	7.3	7.3	5.6 5.0	ŀ	8 9		90				<0.2		0.6
					Surface	1.0	0.1	276 294	19.4 19.5	19.5	8.1 8.1	8.1	31.9 31.9	31.9	96.6 96.6	96.6	7.4 7.4		9.0 9.5	į	10 10		85 87				<0.2 <0.2	1.	1.3
IM4	Cloudy	Moderate	16:44	7.6	Middle	3.8	0.0	18	19.5	19.5	8.1	8.1	31.9	31.9	96.8	96.8	7.4	7.4	7.9	8.4	11	11	88	8 8	819700	804622	<0.2	-0.2	1.2
	Cioday	Moderate	10.11	7.0		3.8 6.6	0.0	18 74	19.5 19.6		8.1 8.1		31.9 31.9		96.8 96.9		7.4 7.4		7.9 7.9		11 12		90		0.0.00	001022	<0.2	1.	1.2
					Bottom	6.6	0.0	76	19.6	19.6	8.1	8.1	32.0	32.0	97.0	97.0	7.4	7.4	8.3		12	•	90				<0.2	1.	1.2
					Surface	1.0	0.2	350 350	19.5 19.6	19.6	8.1	8.1	31.2	31.2	96.2 96.3	96.3	7.3		10.7 10.5	-	11		86 86				<0.2		1.2
IM5	Cloudy	Moderate	16:35	7.4	Middle	3.7	0.2	355	19.5	19.5	8.1	8.1	31.4	31.4	96.5	96.5	7.4	7.4	9.0	8.9	11	12	87	8 8	820722	804846	<0.2	-0.2 1.	1.3
					Bottom	3.7 6.4	0.2	327 26	19.4 19.3	19.3	8.1 8.1	8.1	31.4 31.5	31.5	96.5 96.5	96.5	7.4 7.4	7.4	9.2 7.3	-	12 13		90				<0.2		1.2
						6.4 1.0	0.1	26 281	19.3 19.3		8.1 8.0		31.6 31.0		96.5 95.9		7.4	7.4	6.9 6.1		13 7		90 87	-			<0.2		1.2
					Surface	1.0	0.1	289	19.3	19.3	8.0	8.0	31.0	31.0	95.9	95.9	7.4	7.4	6.0	ŀ	7		85				<0.2	1.	1.2
IM6	Cloudy	Moderate	16:27	7.6	Middle	3.8	0.1	269 279	19.4 19.4	19.4	8.0	8.0	30.9	30.9	95.5 95.5	95.5	7.3		11.3 11.3	8.2	7	8	88 87	88 8	821070	805844	<0.2	<0.2	1.2
					Bottom	6.6	0.1	274	19.3	19.3	8.0	8.0	31.2	31.2	95.8	95.9	7.3	7.4	7.1	Į	11		90				<0.2	1.	1.2
			 		1	6.6 1.0	0.1	279 253	19.3 19.3		8.0		31.2		95.9 95.0		7.4		7.1 5.3		10 6		91 86	-			<0.2		1.1
					Surface	1.0	0.1	268	19.3	19.3	8.0	8.0	31.1	31.1	94.9	95.0	7.3	7.3	5.7	ļ	6		86				<0.2	1.	1.2
IM7	Cloudy	Moderate	16:21	8.1	Middle	4.1	0.0	264 270	19.5 19.5	19.5	8.0	8.0	31.1	31.1	95.1 95.1	95.1	7.3 7.3		5.6 5.6	5.6	7	7	87	88 8	821333	806811	<0.2	<0.2	1.1
					Bottom	7.1 7.1	0.0	345 317	19.4 19.4	19.4	8.0	8.0	31.1	31.1	95.0 95.0	95.0	7.3 7.3	7.3	5.6 5.6	ļ	7		90 90				<0.2	1.	1.1
					Surface	1.0	0.0	68	19.1	19.1	8.2	8.2	29.6	29.6	92.8	92.8	7.2		4.2		5		85				<0.2	1.	1.1
						1.0 3.9	0.1	69 52	19.1 19.1		8.2 8.2		29.7 30.1		92.8 92.6		7.2 7.2	7.2	4.3	F	6		85 87				<0.2	- 1	1.2
IM8	Cloudy	Moderate	16:45	7.7	Middle	3.9	0.1	55	19.1	19.1	8.2	8.2	30.0	30.0	92.7	92.7	7.2		4.0	6.8	5	6	87	88 8	821849	808135	<0.2	<0.2	1.2
					Bottom	6.7	0.1	56 56	19.1 19.1	19.1	8.2	8.2	30.3	30.3	92.6 92.7	92.7	7.2	7.2	12.1 12.0	-	6 5		91 91				<0.2		1.1
DA: Denth-Ave	·							- 55	,				, 00.0		, 02.7				,		<u> </u>								

15 February 20 during Mid-Ebb Tide

Water Qual	ity Monit	oring Resu	lts on		15 February 20	during Mid-	Ebb Tid	е																			
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salinity (ppt)	DO S	Saturation (%)	Dissolved Oxygen	Turbidi	y(NTU)	Suspende (mg	ed Solids /L)	Total Al		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l		ckel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Value	Average	Value DA		DA	Value	DA	Value	DA	(Northing)	(Easting)		DA Valu	
					Surface	1.0	0.2	136 148	19.1 19.1	19.1	8.2 8.2	8.2	30.6	92.2	92.2	7.1 7.1 7.1	7.8 7.6	-	5 4		85 85	1			<0.2	1.1	
IM9	Cloudy	Moderate	16:51	7.8	Middle	3.9	0.2	142 156	19.1 19.1	19.1	8.2 8.2	8.2	30.6 30.6	92.2	92.2	7.1 7.1	6.5 6.6	7.5	6 5	5	88 88	88	822084	808787	<0.2	<0.2	
					Bottom	6.8 6.8	0.3	105 110	19.1 19.1	19.1	8.2 8.2	8.2	30.6 30.6	92.8 93.4		7.2 7.2	7.9 8.5	1	6		91 92	1			<0.2	1.2	.2
					Surface	1.0	0.3	145 148	19.0	19.0	8.2 8.2	8.2	30.5 30.5 30.5	92.4	02.4	7.2	6.1		6		83 85				<0.2	1.2	.2
IM10	Cloudy	Moderate	16:59	8.8	Middle	4.4	0.3	112 117	19.0	19.0	8.2	8.2	30.5 30.5 30.5	92.1		7.1	8.3 8.2	8.6	5	5	87 88	88	822361	809805	<0.2	<0.2	.1
					Bottom	7.8	0.2	110	19.0	19.0	8.2	8.2	30.6	92.7	92.8	7.2	11.7	1	3		92				<0.2	1.0	.0
					Surface	7.8 1.0	0.2	119 76	19.0 19.0	19.0	8.2 8.2	8.2	30.6	92.8 93.0		7.2	9.5	1	6		92 84				<0.2	1.0	.0
IM11	Cloudy	Moderate	17:14	7.3	Middle	1.0 3.7	0.4	81 82	19.0 19.0	19.0	8.2 8.2		30.7 30.7	93.0 93.0	93.0	7.2 7.2	9.6	11 1	7 8	8	85 87	88	822055	811469	<0.2	<0.2	
IIVIII	Cloudy	Moderate	17.14	7.3		3.7 6.3	0.5	87 84	19.0 19.0		8.2 8.2	8.2	30.7	93.0 93.4		7.2 7.2	10.4 13.2] '' [.] '	9	°	88 91	00	622055	611469	<0.2	1.0	.0
					Bottom	6.3	0.4	91	19.0	19.0	8.2	8.2	30.7	93.5	93.5	7.2 7.2 7.0	13.4	1	9		91				<0.2	1.0	.0
					Surface	1.0	0.4	69	19.1	19.1	8.2	8.2	31.2	91.6	91.6	7.0	10.2	1	10		85	1			<0.2	0.9	.9
IM12	Cloudy	Moderate	17:22	9.0	Middle	4.5 4.5	0.5	52 57	19.1 19.1	19.1	8.2 8.2	8.2	31.2 31.2 31.2	91.7 91.7	91.7	7.1	11.6 11.6	9.9	10	10	87 88	88	821445	812057	<0.2	<0.2	.0
					Bottom	8.0	0.4	43 43	19.1 19.1	19.1	8.2 8.2	8.2	31.2 31.2 31.2	92.3 92.4	92.4	7.1 7.1	7.9 7.9		10 10		91 92				<0.2 <0.2	1.0	
					Surface	1.0	-	-	19.3 19.3	19.3	8.2	8.2	31.1 31.1 31.1	90.8	90.8	7.0 7.0 7.0	5.1 5.2	+	9		-	1			-	-	_
SR1A	Cloudy	Moderate	17:39	4.3	Middle	2.2	-	-	-	-	-	-		-	-	- '.0	-	5.5	-	9		-	819974	812661	-		
					Bottom	3.3	-	-	19.2 19.2	19.2	8.2 8.2	8.2	31.2 31.2 31.2	90.6	90.7	7.0 7.0	5.9 5.9		10 8		-				-	-	=
					Surface	1.0	0.4	88	19.0	19.0	8.2	8.2	31.1 31.1 31.1	91.5 91.5	91.5	7.1	9.6		9		83				<0.2	1.0	
SR2	Cloudy	Moderate	17:52	4.1	Middle	1.0	0.4	- 88	19.0		8.2	-	31.1	91.5		7.1 7.	-	9.5	10	9	84	86	821463	814189	<0.2	<0.2	- 10
	,				Bottom	3.1	0.3	65	19.0	19.0	8.2	8.2	31.1 31.1	91.4	91.4	7.0 7.0	9.4	1	9		- 88	1			<0.2	1.0	.0
					Surface	3.1 1.0	0.3	67 108	19.0 19.0	19.0	8.2 8.2	8.2	29.4	91.4 92.2	92.2	7.0	4.4		8		88			l	<0.2	0.9	9
SR3	Cloudy	Moderate	16:40	7.1	Middle	1.0 3.6	0.3	113 134	19.0 19.0	19.0	8.2 8.2	8.2	29.4 29.6	92.2 92.2	92.2	7.2 7.2	4.4	4.9	- 4 - 5	4	-	1	822147	807573	-	-	-
SKS	Cloudy	Woderate	10.40	7.1		3.6 6.1	0.3	136 122	19.0 19.1		8.2 8.2		29.6	92.2		7.2	4.6 5.8	4.5	5 4	-	-		022147	807373	-	· -	
					Bottom	6.1 1.0	0.3	122 79	19.1 19.9	19.1	8.2 8.1	8.2	30.1	93.3 96.1	93.3	7.2 7.2 7.2	5.8 9.7	1	4 10		-				-	#	4
					Surface	1.0	0.3	79 85	20.0	20.0	8.1	8.1	32.3	96.3	96.2	7.2 7.3	9.7	1	10		-	1			-	=	∄
SR4A	Cloudy	Moderate	17:55	8.7	Middle	4.4	0.2	89	20.2	20.2	8.1	8.1	32.5	97.4	97.4	7.3	7.5	8.0	11	10	-	-	817204	807796	-	- =	_
					Bottom	7.7	0.2	51 56	22.1	22.1	8.1	8.1	32.7 32.7 32.7	100.6	100.6	7.3 7.3	6.6	1	9		-					=	
					Surface	1.0	0.1	13 13	19.8 19.8	19.8	8.1 8.1	8.1	32.3 32.2 32.3	95.8 95.8	95.8	7.2 7.3 7.3	10.3	1	14 13		-				-	-	
SR5A	Cloudy	Moderate	18:12	4.6	Middle	-	-	-	-	-	-	-	-	-	-	-	-	10.3	-	14	-	-	816603	810711	-		
					Bottom	3.6 3.6	0.1	19 19	19.8 19.8	19.8	8.1 8.1	8.1	32.5 32.5	96.0 96.0	96.0	7.2 7.2	10.2	+	14 14		-	1			-	 -	-
					Surface	1.0	0.0	19 19	20.9	20.9	8.1 8.1	8.1	32.0 32.0 32.0	95.5 95.4	95.5	7.1 7.1	7.4 7.5	-	9 10		-				-	-	=
SR6A	Cloudy	Moderate	18:40	4.4	Middle	-	-	-	-	-	-	-		-		7.1	-	8.3	-	10	-	-	817974	814744	-	. =	Ξ .
					Bottom	3.4	0.0	43	21.4	21.4	8.1 8.1	8.1	32.4 32.4 32.4	97.9 97.9	97.9	7.2 7.2	9.2	1	10 11		-	1			-	-	_
					Surface	1.0	0.0	43 34	19.0	19.0	8.2	8.2	31.9	88.0	00.0	6.8	9.2 3.9	 	5						-		
SR7	Cloudy	Moderate	18:52	17.5	Middle	1.0 8.8	0.4	35 46	19.0 19.0	19.0	8.2 8.2	8.2	31.9	88.0 87.7	87.7	6.8	4.4	5.3	3	4	-	1.	823613	823751	-	. =	_
	/				Bottom	8.8 16.5	0.4	48 39	19.0 19.0	19.0	8.2 8.2	8.2	31.9	87.7 88.0	88.0	6.7	4.5 7.4	1	4		-	1			-	E	=
						16.5 1.0	0.3	42	19.0 19.1		8.2 8.2		32.1	88.0 93.5		6.8 6.6 7.2	7.4	+	7		-					+	+
95.					Surface	1.0	-	-	19.1	19.1	8.2	8.2	30.8	93.5	93.5	7.2	7.3	7	8 -		-]			-	=	=
SR8	Cloudy	Moderate	17:31	4.4	Middle	3.4	-	-	19.1	-	8.2	-	30.9	94.4	-	7.3	9.7	8.5	- 8	8	-	•	820375	811599	-		
					Bottom	3.4		-	19.1	19.1	8.2	8.2	30.9	94.4	94.5	7.3 7.3	9.7	1	8		-	1					-

15 February 20 during Mid-Flood Tide

Water Qua	lity Monit	oring Resu	lts on		15 February 20	during Mid-	Flood Ti	de																					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	mperature (°C)		рН	Sal	nity (ppt)		aturation (%)	Disso Oxy		Turbidity(NTU)	Suspende (mg/		Total Al		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/L		l (μg/L)
Station	Condition	Condition	Time	Depth (m)	, , ,		(m/s)	Direction	Value	Average	Value	Avera		Average		Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)		DA Value	DA
					Surface	1.0	0.6	323 348	19.5 19.5	19.5	8.1	8.1	32.6	32.6	95.8 95.8	95.8	7.3	7.3	9.0 8.9	-	13 12		86 86				<0.2	0.7	1
C1	Cloudy	Moderate	11:02	8.3	Middle	4.2 4.2	0.5 0.5	325 339	19.5 19.5	19.5	8.1	8.1	32.6 32.6	32.6	95.6 95.6	95.6	7.2	7.0	9.2 9.3	9.9	12 12	13	88 87	88	815608	804255	<0.2	<0.2 0.6	0.7
					Bottom	7.3 7.3	0.4	324 346	19.9 19.9	19.9	8.1	8.1	32.6 32.6	32.6	96.4 96.4	96.4	7.3 7.3	7.3	11.6 11.7	-	15 16		90				<0.2	0.7	<u> </u>
					Surface	1.0	0.1	50 50	19.0 19.0	19.0	8.2 8.2		28.7 28.7	28.7	92.8 92.8	92.8	7.3	7.0	4.1 4.1		4 5		85 85				<0.2	1.4	
C2	Cloudy	Rough	12:45	7.8	Middle	3.9 3.9	0.1 0.1	32 34	19.0 19.0	19.0	8.2 8.2		29.3 29.3	29.3	92.3 92.3	92.3	7.2 7.2	7.3	5.6 5.6	5.3	5 4	4	88 87	88	825675	806942	<0.2	<0.2 1.6	1.5
					Bottom	6.8 6.8	0.3	42 43	19.0 19.0	19.0	8.2	0.2	29.6 29.6	29.6	93.4 93.5	93.5	7.3 7.3	7.3	6.0 6.1	-	3		91 91				<0.2	1.5 1.6	ĺ
					Surface	1.0	0.4	187 196	18.9	18.9	8.3	0.2	21.0	31.0	91.7	91.7	7.1		6.0	İ	4 5		83				<0.2	1.0	
C3	Cloudy	Rough	10:25	9.8	Middle	4.9 4.9	0.3	210 226	18.9 18.9	18.9	8.3	0.2	24.4	31.1	91.6 91.6	91.6	7.1	7.1	6.8	6.3	4	4	87 88	87	822123	817795	-O 2	<0.2	1.0
					Bottom	8.8 8.8	0.2	234 244	18.9	18.9	8.3 8.3	83	24.2	31.2	91.7	91.7	7.1	7.1	6.0	ļ	5 4		91 92				<0.2	0.9	ļ
					Surface	1.0	0.6	352 324	19.4	19.4	8.1 8.1	8.1	32.6	22.6	96.3 96.3	96.3	7.3		5.2	ļ	10		86 87				<0.2	0.8	Π
IM1	Cloudy	Moderate	11:17	5.2	Middle	-	-	-	-	-	-	-	-	-	-		-	7.3	-	5.7	-	9	-	88	817969	807130		<0.2	0.8
					Bottom	4.2 4.2	0.3	327 342	19.6 19.6	19.6	8.1 8.1	8.1	32.7 32.7	32.7	96.6 96.7	96.7	7.3	7.3	6.1		8 7		90				<0.2	0.8	1
					Surface	1.0	0.3	330 352	19.7	19.7	8.1	8.1	22.4	22.4	97.2 97.2	97.2	7.4 7.4		7.8		11 11		87 88				<0.2 <0.2	0.9	_
IM2	Cloudy	Moderate	11:23	6.9	Middle	3.5	0.3	331	19.5	19.5	8.1	8.1	22.4	32.1	97.3 97.3	97.3	7.4	7.4	8.6	8.2	12	12	89 88	89	818166	806165	<0.2	<0.2	0.8
					Bottom	3.5 5.9	0.4	332 335	19.5 19.5	19.6	8.1	8.1	32.0		97.0	97.1	7.4	7.4	8.6 8.0	ļ	12 12		90				<0.2	0.8	1
					Surface	5.9 1.0	0.3	349 23	19.6 19.5	19.5	8.1	8.1	32.0 32.1	22.4	97.1	96.9	7.4		7.8		12		90 86				<0.2	0.8	
IM3	Cloudy	Moderate	11:29	7.3	Middle	1.0 3.7	0.2	23 26	19.5 19.5	19.5	8.1	8.1	32.2	32.0	96.9 96.9	96.9	7.4	7.4	7.7 8.1	8.3	11	11	86 87	88	818779	805608	<0.2	<0.2	0.9
	,				Bottom	3.7 6.3	0.1	26 21	19.5 19.5	19.5	8.1 8.1		32.0 32.2		96.9 96.8	96.8	7.4 7.4	7.4	8.4 8.8	L	11 10		88 90				<0.2 <0.2	0.9	1
					Surface	6.3 1.0	0.1	22 35	19.4 19.5	19.5	8.0	0.1	31.9	21.0	96.7 96.4	96.4	7.4		8.8 6.3		12 9		90 86				<0.2	0.9 1.0	
IM4	Cloudy	Moderate	11:35	7.4	Middle	1.0 3.7	0.5 0.5	37 36	19.5 19.4	19.4	8.1 8.1	0.1	31.9 31.9	24.0	96.4 96.4	96.4	7.3 7.3	7.3	6.3 6.5	6.8	8	. 8	86 87	88	819718	804585	<0.2 <0.2	<0.2	1.0
	Oloddy	modorato	11.00		Bottom	3.7 6.4	0.5 0.5	36 32	19.4 19.4	19.4	8.1 8.1	0.1	31.9	32.1	96.4 96.4	96.5	7.3 7.3	7.3	6.5 7.6	0.0	7 8		88 90		010110	001000	<0.2	1.0	1
					Surface	6.4 1.0	0.5 0.0	34 79	19.4 19.4	19.4	8.1 8.0		32.1	21.5	96.5 96.2	96.2	7.3 7.4	7.0	7.6 6.9		8 10		90 86				<0.2 <0.2	1.0	\vdash
IM5	Cloudy	Moderate	11:42	7.7	Middle	1.0 3.9	0.0	85 67	19.4 19.6	19.6	8.0 8.1	8.1	31.4		96.2 96.1	96.1	7.3 7.3	7.3	6.9 8.1	7.7	9 11	. 11	86 88	88	820737	804853	<0.2 <0.2	<0.2	1.0
IIVIS	Oloddy	Woderate	11.42	7.7	Bottom	3.9 6.7	0.1	72 82	19.6 19.5	19.5	8.1 8.1	0.1	31.9		96.1 96.0	96.1	7.3 7.3	7.3	8.1 8.2	··· [10 11		87 90	00	020131	004033	<0.2	1.0	1.0
					Surface	6.7 1.0	0.1	88 267	19.5 19.5	19.5	8.1	8.0	31.8		96.1 95.7	95.7	7.3 7.3	7.5	8.2 7.3		12 10		91 86				<0.2	1.0	
IM6	Cloudy	Moderate	11:49	7.5	Middle	1.0 3.8	0.2	285 276	19.5 19.5	19.5	8.0		31.4		95.7 95.8	95.8	7.3 7.3	7.3	7.3 7.4	7.9	9 11	11	86 88	88	821048	805811	<0.2	<0.2	1.0
IIVIO	Cloudy	Moderate	11.49	7.5	Bottom	3.8 6.5	0.1	298 280	19.5 19.5		8.1 8.1	+	31.4		95.8 95.9	95.0	7.3 7.3	7.3	7.4 9.1	7.9	10 12	. ''	89 90	00	021040	003011	<0.2	0.9	1.0
						6.5 1.0	0.1	285 93	19.5 19.4	19.5	8.1 8.0	† 	31.5		95.9 95.2		7.3	1.3	8.9 4.7		12 7		90 85				<0.2	1.0	H
	Olavest.	Madaga	44.50	7.0	Surface	1.0 3.9	0.0	93 144	19.4 19.5	19.4	8.0	8.0	30.9	30.9	95.3 95.5	95.3	7.3 7.3	7.3	4.7 5.4		7		86 88		201001	000000	<0.2	1.1	<u>.</u>
IM7	Cloudy	Moderate	11:59	7.8	Middle	3.9 6.8	0.0	144 152	19.5	19.5	8.0	8.0	31.1	31.1	95.5 95.5	95.5	7.3		5.5	5.4	7 8	. 8	87 89	88	821361	806836	<0.2	<0.2	1.1
					Bottom	6.8	0.0	156 99	19.5	19.5	8.0	8.0	31.1	31.1	95.6 92.2	95.6	7.3	7.3	6.1	-	8	•	90				<0.2	1.1	_
					Surface	1.0	0.1	107 44	19.0	19.0	8.2	8.2	30.3	30.3	92.2	92.2	7.2	7.2	4.5 4.4	ļ	7		84 88				<0.2	1.6	-
IM8	Cloudy	Rough	12:04	7.0	Middle	3.5 6.0	0.0	46 12	19.0	19.0	8.2	8.2	30.3		92.1	92.1	7.1 7.1		4.4	5.1	6	6	89 91	88	821827	808117	<0.2	<0.2	1.6
DA: Depth-Ave					Bottom	6.0	0.0	12	19.0	19.0	8.2		30.6		91.9	91.9	7.1	7.1	6.6		6		92				<0.2	1.5	

15 February 20 during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	its on		15 February 20	during Mid	-Flood II	de																				
Monitoring	Weather	Sea	Sampling	Water	Sampling D	onth (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Sali	nity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspended (mg/l			Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nicke	ıl (µç
Station	Condition	Condition	Time	Depth (m)	Gamping D	opui (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	Value	9 0
					Surface	1.0	0.6	306 315	19.0 19.0	19.0	8.2	8.2	30.2 30.2	30.2	92.6 92.7	92.7	7.2	5.7 5.7		8		83 83				<0.2	1.4	
IM9	Cloudy	Rough	11:59	7.8	Middle	3.9	0.6	304	19.0	19.0	8.2	8.2	30.3	30.3	92.8	92.9	7.2	5.4	6.2	11	10	87	87	822095	808808	<0.2	1.5	7
	,				Bottom	3.9 6.8	0.6 0.5	333 311	19.0 19.0	19.0	8.2 8.2	8.2	30.3 30.5	30.5	92.9 93.7	93.8	7.2 7.3 7.3	5.4 7.3	1	10 10	-	88 91	+			<0.2	1.4	
						6.8 1.0	0.5	311 316	19.0 19.0		8.2 8.2		30.5 29.7		93.8 92.8		7.3	7.5 10.2		11 9		92 83	<u> </u>			<0.2 <0.2	1.4	
					Surface	1.0	0.7	320	19.0	19.0	8.2	8.2	29.7	29.7	92.8	92.8	7.2	10.2	1	9		83	1			<0.2	1.3	I
IM10	Cloudy	Rough	11:53	6.8	Middle	3.4	0.6	316 334	19.0 19.0	19.0	8.2 8.2	8.2	30.5 30.5	30.5	91.8 91.8	91.8	7.1	5.4 5.4	7.0	9 8	9	88 89	88	822388	809775	<0.2 <0.2	1.4]
					Bottom	5.8	0.5	316 326	19.0 19.0	19.0	8.2	8.2	30.5	30.5	92.5 92.6	92.6	7.2 7.2	5.4 5.5		8		91 92	1			<0.2	1.4	
					Surface	1.0	0.6	285 294	19.0	19.0	8.2	8.2	30.5	30.5	92.6 92.5	92.6	7.2	4.9 5.0		4 5		84 85				<0.2	1.4	Ī
IM11	Cloudy	Rough	11:43	7.5	Middle	3.8	0.6	284	19.0	19.0	8.2	8.2	30.6	30.6	92.5	92.5	7.2	9.5	8.4	5	5	87	87	822053	811477	<0.2	1.4	1
	Cloudy	rtougii	11.45	7.5		3.8 6.5	0.6	309 279	19.0 19.0		8.2 8.2		30.6 30.6		92.5 93.1		7.2	9.6 10.7	0.4	6	Ĭ	85 91	- "	022033	011477	<0.2	1.2	
					Bottom	6.5	0.5	279	19.0	19.0	8.2	8.2	30.6		93.1	93.1	7.2	10.6		6		91				<0.2	1.3	1
					Surface	1.0	0.3	283 283	19.0 19.0	19.0	8.2 8.2	8.2	30.5 30.5		93.3	93.3	7.2 7.2 7.3	8.5 8.6		13 13		83 84	1			<0.2 <0.2	1.3]
IM12	Cloudy	Rough	11:38	8.2	Middle	4.1	0.3	290 293	19.0 19.0	19.0	8.2	8.2	30.6	30.6	93.7	93.7	7.3	10.3	9.6	12 13	12	87 88	88	821439	812047	<0.2	1.2	+
					Bottom	7.2 7.2	0.3	297 310	19.0 19.0	19.0	8.2	8.2	30.6	30.6	94.4	94.5	7.3 7.3	9.7 9.8	1	12 10		91 92	1			<0.2	1.3	
					Surface	1.0	-	-	18.9	18.9	8.2	8.2	30.8	30.8	92.1	92.1	7.1	7.8		7		-	1			-	-	İ
SR1A	Cloudy	Rough	11:00	4.7	Middle	1.0	-	-	18.9		8.2		30.8		92.1		7.1 7.1	8.0	8.6	-	7	-	1	819981	812659	-	-	+
SKIA	Cloudy	Kougii	11.00	4.7		2.4 3.7	-	-	18.9		8.3		30.8		92.3		7.1	9.3	0.0	7	· (-	1	019901	812039	-	-	Ŧ
					Bottom	3.7	- 0.4	-	18.9	18.9	8.3	8.3	30.8	30.8	92.4	92.4	7.1	9.4		6		-				-	-	‡
					Surface	1.0	0.5	244 258	18.9 18.9	18.9	8.3 8.3	8.3	30.8	30.8	92.8 92.8	92.8	7.2 7.2 7.2	8.3 8.4		10 9		83 84	1			<0.2 <0.2	1.3	1
SR2	Cloudy	Rough	10:44	3.8	Middle	-	-	-	-	-	-	-	-	-	-	-	- '	-	8.9	-	9	-	88	821452	814161	- <0.2	! -	+
					Bottom	2.8 2.8	0.4	264 278	19.0 19.0	19.0	8.3 8.3	8.3	30.8	30.8	93.4 93.4	93.4	7.2 7.2	9.4 9.4	1	9		92 92	1			<0.2 <0.2	1.3	
					Surface	1.0	0.5	272	19.1	19.1	8.2	8.2	29.8	29.8	92.7	92.7	7.2	3.8		5		-				-	-	İ
SR3	Cloudy	Rough	12:11	8.1	Middle	1.0 4.1	0.6 0.5	297 277	19.1 19.0	19.0	8.2 8.2	8.2	29.8 30.2	30.2	92.6 91.6	91.6	7.2 7.1 7.2	3.9 5.8	5.6	6	6	-	1	822152	807568	-	-	+
SKS	Cloudy	Kougii	12.11	0.1		4.1 7.1	0.5	297 275	19.0 19.0		8.2 8.2		30.2 30.6		91.6 92.0		7.1	5.8 7.2	3.0	6 5	ů	-] .	022132	807308	-	-	Ŧ
					Bottom	7.1	0.4	284 313	19.0	19.0	8.2	8.2	30.6	30.6	92.1	92.1	7.1 7.1	7.4		6		-				-	-	1
					Surface	1.0	0.5	316	19.6	19.6	8.0	8.0	32.4	32.4	95.2	95.2	7.2	12.2		17			1			-		İ
SR4A	Cloudy	Moderate	10:39	8.8	Middle	4.4	0.4	311 338	19.8 19.8	19.8	8.1 8.1	8.1	32.6 32.5	32.5	95.6 95.6	95.6	7.2	12.0 12.0	12.1	19 17	18	-	-	817171	807813		-	+
					Bottom	7.8 7.8	0.3 0.4	323 353	19.9 19.9	19.9	8.1 8.1	8.1	32.7 32.7	32.7	95.9 96.0	96.0	7.2 7.2	12.2 12.2	1	17 19		-	1			-	-	1
					Surface	1.0	0.5	275	19.7	19.7	8.1	8.1	32.3	32.3	95.4	95.5	7.2	11.0		17							Ė	‡
SR5A	Cloudy	Moderate	10:25	4.8	Middle	1.0	0.5	278	19.7		8.1		32.3		95.5		7.2	10.9	10.8	16 -	16	-	1.	816574	810717		-	ł
SKJA	Cloudy	Woderate	10.25	4.0		3.8	0.3	284	19.7		8.1		32.4		95.8		7.2	10.6	10.6	- 15	'0	-	1	810374	810/1/		-	ł
					Bottom	3.8	0.3	299 248	19.7 19.2	19.7	8.1	8.1	32.4	32.4	95.8	95.8	7.2	10.7 6.7		17 5		-	<u> </u>				-	1
					Surface	1.0	0.6	259	19.2	19.2	8.1 8.1	8.1	32.4 32.4	32.4	89.1 89.2	89.2	6.8	6.9		6			1				-	1
SR6A	Cloudy	Moderate	10:00	4.3	Middle	-	-	-	-	-	-	-	-	-	-	-		-	6.7	-	6	-	-	817956	814731	-	-	+
					Bottom	3.3	0.4	262 287	19.1 19.1	19.1	8.1 8.1	8.1	32.4 32.4	32.4	90.0	90.5	6.9 6.9	6.9		6		-	1					1
					Surface	1.0	0.3	195	18.9	18.9	8.2	8.2	31.5	31.5	90.5	90.5	7.0	3.0		5			1			-	-	İ
SR7	Cloudy	Rough	09:58	14.3	Middle	1.0 7.2	0.3	203 179	18.9 18.9	18.9	8.2 8.2	8.2	31.5 31.6	31.6	90.5 90.2	90.2	7.0 6.9 7.0	3.0	3.1	4 5	_	-	1 .	823652	823746		-	f
JIV.	Cibuuy	Rougii	05.56	14.3		7.2 13.3	0.4	190 205	18.9 18.9		8.2 8.1		31.6 31.7		90.1 89.7		6.9	3.1 3.1	3.1	4	5	-	1	023032	023740		-	Ŧ
					Bottom	13.3	0.1	218	18.9	18.9	8.1	8.1	31.7	31.7	89.7	89.7	6.9	3.1		5		-	<u> </u>			-	ൎ	‡
					Surface	1.0	-	-	18.9 18.9	18.9	8.2 8.2	8.2	30.8	30.8	92.0 92.0	92.0	7.1 7.1 7.1	7.6 7.7	1	10 9	ŀ		1			-	-	t
SR8	Cloudy	Rough	11:29	4.9	Middle	-	-	-		-	-	-	-		-	-	- '.'	-	8.1	-	9	-	-	820398	811606		-	+
					Bottom	3.9 3.9	-	-	18.9 18.9	18.9	8.2	8.2	30.8	30.8	92.0	92.0	7.1 7.1	8.5 8.6		8		-	1			-	_	1
					1	3.9	-		18.9		8.2	L	30.8	1	91.9		7.1	შ.ნ		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

18 February 20 during Mid-Ebb Tide

	,	oning Kesu			16 February 20	auring wia-	_~~	•																			
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	mperature (°C)		Н	Salinity (ppt	D	O Saturati (%)		ssolved Oxygen	Turbidity	NTU)	Suspende (mg/		Total All		Coordinate	Coordinate	Chromi (µg/L	
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	oth (m)	(m/s)	Direction	Value	Average	Value	Average	Value Avera	ge Va	ue Aver		Ť	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)	- 1	DA Value DA
				,	Surface	1.0	0.1	59	17.7	17.7	8.1	8.1	33.8 33.8	97	.2 97.	7.	6	4.1		6		86		-	-	<0.2	0.4
						1.0 4.1	0.1	61 58	17.6 17.6		8.1 8.1		33.8	96	.7	7.		4.4 4.5		6		87 88				<0.2	0.4
C1	Cloudy	Moderate	09:39	8.1	Middle	4.1	0.1	60	17.6	17.6	8.1	8.1	33.8	96	.2	.2 7.	5	4.5	4.4	8	8	87	88	815623	804256	<0.2	0.4
					Bottom	7.1	0.1	34 34	17.6 17.6	17.6	8.1	8.1	33.8 33.8	95		.8 7.		4.6 4.5	•	9		90				<0.2	0.6
					Surface	1.0	0.1	178 195	18.2 18.2	18.2	7.8 7.8	7.8	32.9 32.9	93		.9 7.		1.9 1.9		5 6		85 86				<0.2 <0.2	0.8
C2	Sunny	Moderate	10:42	9.2	Middle	4.6	0.1	171	18.1	18.1	7.8	7.8	32.9	96	.2 96	2 7.	5 7.4	2.2	2.4	5	6	88	88	825703	806933	<0.2	0.8
02	Cumy	moderate	10.12	0.2		4.6 8.2	0.1	183 300	18.1 18.3		7.8		32.9	96	.2	7.		2.2 3.2		6 7		88 89		020,00	000000	<0.2	0.8
					Bottom	8.2	0.1	325	18.3	18.3	7.8	7.8	33.2 33.2	10		7.9	3 7.8	3.2		6		89				<0.2	0.8
					Surface	1.0	0.1	81 88	18.2 18.2	18.2	7.5 7.5	7.5	34.1 34.1	91		.0 7.		1.6 1.6		5 4		83				<0.2 <0.2	0.8
СЗ	Sunny	Moderate	08:59	11.8	Middle	5.9 5.9	0.1	72 75	18.2 18.2	18.2	7.5 7.5	7.5	34.1 34.1	90	.6 90.	.7)	1.1	1.4	4 5	5	87 87	87	822130	817802	<0.2	<0.2 0.8 0.8
					Bottom	10.8	0.1	78	18.2	18.2	7.5	7.5	34.1	91	.2 91	2 7.	7.0	1.6		6		91				<0.2	0.7
						10.8	0.1	79 55	18.2 17.6		7.5 8.1		34.1	91	.2	7.)	1.7 5.5		5 6		92 86				<0.2	0.8
					Surface	1.0	0.1	56	17.6	17.6	8.1	8.1	33.2 33.2	94	.7 94.	.8 7.	- 1.4	5.7		6		88				<0.2	0.6
IM1	Cloudy	Moderate	10:01	5.4	Middle	-	-	-	-	-	-	-	-		-	_		-	6.0	-	6	-	89	817972	807125	-	<0.2 - 0.6
					Bottom	4.4	0.1	68 74	17.6 17.6	17.6	8.1	8.1	33.3	94		.9 7.		6.6	.	7 6		90				<0.2	0.5
					Surface	1.0	0.0	345	17.7	17.7	8.1	8.1	33.3 33.3	96	.9 96.	7.	3	4.2		5		86				<0.2	0.5
IM2	Cloudy	Moderate	10:11	7.5	Middle	1.0 3.8	0.0	317 41	17.7	17.6	8.1	8.1	33.5	0.6	_	7.	7.6	4.2 4.8	6.0	6	6	86 88	88	818165	806157	<0.2 <0.2	<0.2 0.5 0.5
IIVIZ	Oloddy	Woderate	10.11	7.5		3.8 6.5	0.1	44 36	17.6 17.6		8.1 8.1		33.5	96	.6	7.	,	5.0 9.1	0.0	6		87 90		010103	000137	<0.2	0.5
					Bottom	6.5	0.1	38	17.5	17.6	8.1	8.1	33.7	96	.4	.5 7.	7.6	8.9		6		90				<0.2	0.6
					Surface	1.0	0.1	317 324	17.6 17.6	17.6	8.1 8.1	8.1	33.4 33.4	97		.3 7.		3.9 4.0		6		86 85				<0.2 <0.2	0.6
IM3	Cloudy	Moderate	10:19	6.8	Middle	3.4	0.1	28 30	17.6 17.6	17.6	8.1 8.1	8.1	33.5 33.5	96	.9 96.	.9 7.	3	4.5 4.6	4.4	5 6	6	88 87	88	818800	805576	<0.2	<0.2 0.6 0.6
					Bottom	5.8	0.1	18	17.6	17.6	8.1	8.1	33.6	96	.9 97	7.	3 76	4.6		6		90				<0.2	0.6
					Curton	5.8 1.0	0.1	19 342	17.6 17.7	17.7	8.1 8.1		33.6	97	.0	7.		4.6 3.5		6 5		90 86				<0.2	0.6
					Surface	1.0	0.1	347 12	17.7 17.7		8.1 8.1	8.1	33.3	97	.5	7.		3.6 4.6		6		86 89				<0.2 <0.2	0.6
IM4	Cloudy	Moderate	10:29	7.6	Middle	3.8	0.1	12	17.7	17.7	8.1	8.1	33.4	96	.4	.5 7.	5	4.7	4.6	6	6	88	88	819703	804624	<0.2	0.5
					Bottom	6.6	0.1	19 19	17.6 17.6	17.6	8.1	8.1	33.5	96		.3 7.		5.7 5.7	-	5 5		90				<0.2	0.6
					Surface	1.0	0.1	336 344	17.7 17.7	17.7	8.1 8.1	8.1	33.2 33.2	96	.7 96.	.7		4.7 4.9		5		86 86				<0.2 <0.2	0.5 0.5
IM5	Cloudy	Moderate	10:39	7.0	Middle	3.5	0.2	12	17.5	17.5	8.1	8.1	33.4	96	.1 96	1 7.	7.5	5.6	5.7	6	6	88	88	820756	804876	<0.2	-0.2 0.5
	Cloudy	moderate	10.00	7.0		3.5 6.0	0.2	12 26	17.5 17.5		8.1 8.1		33.4	96	.1	7.		5.8 6.9		5 7		87 90		020700	001070	<0.2	0.5
					Bottom	6.0	0.1	26	17.5	17.5	8.1	8.1	33.4	96	.2 96.	.2 7.	7.5	6.5		6		90				<0.2	0.5
					Surface	1.0	0.2	24 24	17.7 17.7	17.7	8.1	8.1	33.0 33.0	96		.5 7.		4.3 4.3		6		86 85				<0.2 <0.2	0.6
IM6	Cloudy	Moderate	10:48	7.4	Middle	3.7	0.1	24 24	17.6 17.6	17.6	8.1 8.1	8.1	33.2 33.2	96		.4 7.	5	4.8 4.8	4.7	6	6	88 88	88	821044	805842	<0.2	<0.2 0.5 0.6
					Bottom	6.4	0.1	78	17.6	17.6	8.1	8.1	33.2	97	.1 07	2 7.	3 76	5.0		7		90				<0.2	0.6
					Curton	1.0	0.1	80 45	17.6 18.1	40.4	8.1 8.1		33.2	, 95	0	7.		5.0 3.6		6		90 86				<0.2	0.5
					Surface	1.0	0.0	48	18.0 17.6	18.1	8.1	8.1	32.7	95	.9 95.	.9 7.	7.5	3.7 5.0		5 4		85				<0.2	0.5
IM7	Cloudy	Moderate	10:57	7.3	Middle	3.7	0.1	56 59	17.6	17.6	8.1 8.1	8.1	33.2 33.2	98	.6	7.3	5	5.0	4.5	4	5	88 87	88	821328	806838	<0.2	<0.2 0.5 0.6
					Bottom	6.3	0.1	87 92	17.6 17.6	17.6	8.1	8.1	33.1	96		.1 7.		4.8 4.7		4 5		90				<0.2	0.6
					Surface	1.0	0.1	194	17.8	17.8	7.8	7.8	33.1	95	.9 95	o 7.	5	3.0		5		85				<0.2	0.5
IM8	Sunny	Moderate	10:18	8.2	Middle	1.0 4.1	0.1	196 303	17.8 17.6	17.6	7.8 7.8	7.8	33.1 33.3 33.3	0	.8 97.	7.	7.6	3.0 5.2	4.1	6 4	5	85 88	88	821809	808140	<0.2 <0.2	<0.2 0.6 0.6
livio	Suriny	Moderate	10.16	0.2		4.1 7.2	0.0	303 37	17.6 17.6		7.8 7.8		33.3	97	.0	7.	1	5.2 4.1	4.1	5 6	5	89 90	00	32 1003	300140	<0.2 <0.2	0.6
DA: Depth-Aver					Bottom	7.2	0.1	39	17.6	17.6	7.8	7.8	33.4 33.4		1.3	1.2 7.		4.0		6		90	•			<0.2	0.6

18 February 20 during Mid-Ebb Tide

Water Qua	ity Monit	oring Resu	lts on		18 February 20	during Mid-	Ebb Tide)																				
Monitoring Station	Weather	Sea	Sampling	Water	Sampling D	epth (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salir	nity (ppt)	DO Sa	aturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspender (mg/			(lkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel	(µg/L)
Station	Condition	Condition	Time	Depth (m)	, ,		(m/s)	Direction	Value	Average	Value	Average		Average	Value	Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA		DA
					Surface	1.0	0.1	94 100	17.8 17.8	17.8	7.8	7.8	33.1 33.1	33.1	96.9 96.9	96.9	7.6	4.6 4.7		6 5		85 86	1			<0.2 <0.2	0.6	i I
IM9	Sunny	Moderate	10:14	7.6	Middle	3.8	0.2	66 69	17.8 17.8	17.8	7.8 7.8	7.8	33.2 33.2	33.2	98.2 98.4	98.3	7.7	6.5 6.6	5.3	7 6	6	89 89	88	822079	808798	<0.2	0.6	0.6
					Bottom	6.6	0.1	71	17.8	17.8	7.8	7.8	33.2	33.2	102.6	102.8	8.0	4.8		6		90	1			<0.2	0.7	.
					Surface	6.6 1.0	0.1	72 94	17.8 17.9	17.9	7.8	7.7	33.2 32.8	32.8	102.9 93.1	93.1	8.0 8.0 7.3	4.8 3.1		6		90 86				<0.2 <0.2	0.6	
						1.0	0.2	101 76	17.9 18.0		7.7		32.8 32.9		93.1 93.2		7.3 7.2	3.1		5 5		86 88				<0.2	0.7	ſ
IM10	Sunny	Moderate	10:06	8.1	Middle	4.1	0.2	80	18.0	18.0	7.7	7.7	32.9	32.9	93.2	93.2	7.3	3.6	3.6	6	6	89	88	822364	809788	<0.2	0.7	0.7
					Bottom	7.1 7.1	0.1	96 99	18.0 18.0	18.0	7.7	7.7	33.1 33.1	33.1	95.8 96.0	95.9	7.4 7.5	4.1 4.1		6 7		90 91	1			<0.2 <0.2	0.8	i l
					Surface	1.0	0.1	82 89	18.2 18.2	18.2	7.7	7.7	33.4 33.4	33.4	92.3 92.3	92.3	7.1 7.1	2.4 2.5		6		85 85				<0.2 <0.2	0.7	
IM11	Sunny	Moderate	09:55	8.7	Middle	4.4	0.2	98	18.2	18.2	7.7	7.7	33.4	33.4	92.8	92.8	7.2	2.7	2.7	5	5	90	89	822057	811478	<0.2	0.7	0.7
	,					4.4 7.7	0.2	99 108	18.2 18.2		7.7		33.4 33.4		92.8 98.6		7.2	2.7		5 4		90	1			<0.2	0.7	i
					Bottom	7.7	0.1	109	18.2	18.2	7.7	7.7	33.4	33.4	98.8	98.7	7.6	2.8		5		91				<0.2	0.7	
					Surface	1.0	0.1 0.1	72 72	18.2 18.2	18.2	7.7	7.7	33.4 33.4	33.4	90.7 90.7	90.7	7.0	2.3		6 5		85 86	1			<0.2 <0.2	0.6	ı
IM12	Sunny	Moderate	09:49	9.5	Middle	4.8	0.1	93	18.2 18.2	18.2	7.8	7.8	33.4	33.4	90.8	90.9	7.0	3.0	3.0	5 5	6	89 89	88	821441	812056	<0.2	0.7	0.6
					Bottom	8.5	0.1	129	18.1 18.1	18.1	7.8 7.8	7.8	33.4 33.4	33.4	94.5 94.8	94.7	7.3 7.3	3.7		7		90	1			<0.2 <0.2	0.7	,
					Surface	8.5 1.0	0.1	132	17.9	17.9	7.7	7.7	32.8	32.8	96.2	96.3	7.5	1.8		4		-				-	0.6	
	_					1.0 2.0	-	-	17.9		7.7	• • • •	32.8	02.0	96.4	00.0	7.5	1.8		4		-	-			-	-	í
SR1A	Sunny	Moderate	09:34	4.0	Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	5	-	1 -	819973	812654		-	-
					Bottom	3.0	-	-	17.9 17.9	17.9	7.7	7.7	32.9 32.9	32.9	103.6 103.9	103.8	8.1 8.1	2.1		7		-				-	-	i
					Surface	1.0	0.1	23 25	18.2 18.2	18.2	7.7	7.7	33.2 33.2	33.2	96.0 96.3	96.2	7.4	2.6		7 8		83 84	-			<0.2	0.8	ſ
SR2	Sunny	Moderate	09:23	4.1	Middle	-	-	-	-	-	-	-	-	-	-	-	7.4	-	3.0	-	6	-	86	821447	814154	- <0.2	. 🖃	0.8
					Bottom	3.1	0.1	336	18.1	18.1	7.7	7.7	33.3	33.3	104.9	105.0	8.1 8.1	3.3		5		- 88	1			<0.2	0.8	i
						3.1 1.0	0.1	354 157	18.1 18.0		7.7		33.3 32.8		105.1 93.8		8.1 6.1 7.3	3.4 2.6		5		88				<0.2	0.8	
					Surface	1.0	0.1	164	18.0	18.0	7.8	7.8	32.8	32.8	93.9	93.9	7.3	2.6		6		-	1			-	-	ŀ
SR3	Sunny	Moderate	10:24	8.5	Middle	4.3	0.1	161 174	17.9 17.9	17.9	7.8	7.8	33.0 33.0	33.0	94.9 95.0	95.0	7.4	2.9	3.8	6 5	6	-	-	822135	807574	-	-	I
					Bottom	7.5 7.5	0.1	305 328	17.5 17.5	17.5	7.8 7.8	7.8	33.5 33.5	33.5	99.0 99.1	99.1	7.8 7.8	5.8 5.8		7		-	-			-	-	ſ
					Surface	1.0	0.1	84	17.6	17.6	8.1	8.1	33.3	33.3	96.4 96.4	96.4	7.5	5.3		8		-				-	-	-
SR4A	Cloudy	Moderate	09:17	8.7	Middle	1.0 4.4	0.1	92 71	17.6 17.6	17.6	8.1 8.1	8.1	33.3 33.3	33.3	96.4 96.1	96.1	7.5 7.5	5.3 5.8	5.6	8	8	-	1	817171	807800	-	-	i
JK4A	Cidudy	Woderate	09.17	0.7		4.4 7.7	0.1	72 72	17.6 17.6		8.1 8.1		33.3		96.1 95.9		7.5 7.5	5.8 5.7	5.0	8	0	-]	017171	807800	- '	-	.
					Bottom	7.7	0.1	73	17.6	17.6	8.1	8.1	33.3	33.3	95.8	95.9	7.5	5.7		7		-						
					Surface	1.0	0.1	126 137	17.6 17.6	17.6	8.1	8.1	32.3 32.3	32.3	95.1 95.2	95.2	7.5 7.5 7.5	8.2 8.5		12 7		-	1			-	-	i
SR5A	Cloudy	Moderate	08:59	4.4	Middle	-	-	-	-	-	-	-	-	-	-		- 7.5	-	9.1	-	9	-	-	816573	810704		-	r -
					Bottom	3.4	0.1	111 116	17.6 17.6	17.6	8.1 8.1	8.1	32.3 32.3	32.3	97.1 97.3	97.2	7.6 7.7	9.9 9.7		7 10		-				-	-	ı
					Surface	1.0	0.0	146	17.6	17.7	8.2	8.2	32.4	32.4	91.0	91.0	7.1	3.8		9						-	-	=
						1.0	0.0	160	17.7		8.2	0.2	32.4	32.4	90.9	31.0	7.1	3.8		10		-	-			-	-	í
SR6A	Cloudy	Moderate	08:30	4.1	Middle	- 24	-	-	- 17.0	-	-	-	- 22.7	-	-		- 7.4	-	4.9	-	10	-	1 -	817939	814755		-	-
					Bottom	3.1 3.1	0.0	159 162	17.9 17.9	17.9	8.2	8.2	32.7 32.7	32.7	90.5 90.5	90.5	7.1 7.1	6.0		10 11		-				-		
					Surface	1.0	0.2	27 28	18.1 18.1	18.1	7.5 7.5	7.5	34.1	34.1	91.1 91.0	91.1	7.0	1.8		5 4		-	1			-	-	i l
SR7	Sunny	Moderate	08:29	17.6	Middle	8.8	0.2	22	18.2	18.2	7.5	7.5	34.1	34.1	90.9	90.9	7.0	1.0	1.5	4	4		-	823613	823760		-	, -
					Bottom	8.8 16.6	0.2	23 11	18.2 18.2	18.2	7.4	7.4	34.2	34.2	90.9	91.0	7.0 7.0 7.0	1.7		5 3		-	1			-		,
						16.6	0.3	11	18.2 18.1		7.4		34.2 33.0		91.0 95.7		7.0	1.7 3.0		6		-		<u> </u>		-	-	=
					Surface	1.0	-	-	18.1	18.1	7.7	7.7	33.0	33.0	95.7	95.7	7.4	3.0		5		-	1			-	-	,]
SR8	Sunny	Moderate	09:42	4.5	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	5	-	-	820384	811638		-	
					Bottom	3.5 3.5	-	-	18.1 18.1	18.1	7.7	7.7	33.3	33.3	101.3	101.3	7.8 7.8	3.2		4 5		-	-			-	-	í I

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

Water Quality Monitoring Results on 18 February 20 during Mid-Flood Tide

Marting Mart	Water Qua	ity wonite	oring Resu	its on		18 February 20	during Mid-	riooa ii	ae																			
Martin		Weather	Sea	Sampling	Water	Sampling D	enth (m)			Water Te	emperature (°C)		pН	Sali	nity (ppt)					Turbidity(NTU)							
Marchan Marc	Station	Condition	Condition	Time	Depth (m)	Camping D	opui (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value DA			Value	DA Value D
Came						Surface					17.7		8.1		33.7		97.0											
Martin M	C1	Cloudy	Moderate	14:08	8.5	Middle	4.3	0.1	187	17.7	17.7	8.1	8.1	33.8	33.8	97.8	97.8	7.6	7.6	5.0	5.5	8	8	89	815596	804245	<0.2	0.6
Care Front		Oloudy	Modorato	11.00	0.0																0.0			87	0.0000	001210		0.6
March Marc						Bottom	7.5	0.1	195	17.8	17.8	8.1	8.1	33.7	33.7	96.3	96.4	7.5	7.5	6.4		9		91			<0.2	0.6
Color Sort						Surface					18.2		7.8		32.8		92.3		7.2		ŀ							
Martin M	C2	Sunny	Rough	12:45	9.4	Middle					18.1		7.8	32.9	32.9		92.7	7.2	1.2		2.5		6		825669	806967		<0.2
County Rough Note						Bottom	8.4	0.4	70	18.3	18.3	7.8	7.8	33.3	33.3	94.1	94.2	7.3	7.3	3.0	Ī	5		89			<0.2	0.4
Martin M						Curtons											02.4											
Column C																			7.1		F			0.7				0.6
M. Clusty Moderate 13.47 5.6 Moderate 13.47 5.6 Moderate 13.47 5.6 Moderate 13.47 5.6 Moderate 13.47 5.6 Moderate 13.48 Moderate 13.48 Moderate 13.48 Moderate 13.48 Moderate	C3	Sunny	Rough	14:47	11.3	Middle	5.7	0.1	254	18.4	18.4	7.9	7.9	34.0	34.0	92.0	92.1	7.1		2.9	3.0	3	4	88	822104	817811	<0.2	0.6
Mile Cloudy Moderate 13.47 5.6 M						Bottom					18.2		7.9		34.0		92.0		7.1		ŀ							
Mary Moderate 13-27 Both Moderate 13-28 Both Moderate 13-29 Robert						Surface					17.9		8.1		33.4		99.3				-							
Bottom A6	IM1	Cloudy	Moderate	13:47	5.6	Middle	-	-	-	-			-	-	-	-			7.7	-	3.7	-	5	- 88	817954	807126	-	-02 - 0
M2 Cloudy Moderate 13.99 7.0 Moderate 13.90 7.0 Mod		,				Detter				_	10.1	8.1	0.4		22.2	_	00.6	7.6	7.6									
Moderate Moderate																			7.6							<u> </u>		
Moderate 13.90 Moderate						Surface	1.0	0.2	350	17.7	17.7	8.1	8.1	33.5	33.5	97.6	97.7	7.6	7.6	4.6	ļ	4		86			<0.2	0.6
Moderate 13.29 6.9 Middle 13.29 Middle 13.29 6.9 Middle 13.29 6.9 Middle 13.29 6.9 Middle 13.29 Middle 13.29 6.9 Middle 13.29 6.9 Middle 13.29 6.9 Middle 13.29 Mid	IM2	Cloudy	Moderate	13:39	7.0	Middle					17.6		8.1		33.7		97.3				4.8		5	88	818164	806147		0.7
Suffice 10 0.2 3.55 17.9 17.9 8.1 8.1 33.3 33.3 99.4 99.4 77.7 77						Bottom					17.8		8.1		33.5		97.3		7.6		F							
Moderate 13.29 Moderate 13.29 Moderate 13.29 Moderate 13.29 Moderate 13.29 Moderate 13.29 Moderate 13.29 Moderate 13.29 Moderate 13.20 Moderate						Surface	1.0	0.2	335	17.9	17.9	8.1	8.1	33.3	33.3	99.4	99.4	7.7		3.4		4		86			<0.2	0.6
Moderate 13.07 Surface	IM3	Cloudy	Moderate	13:20	6.0	Middle				17.7	17.7		8.1	33.6	33.6	99.0	99.0	7.7	7.7	4.7	16		5	87 88	818765	805604	<0.2	.0.2 0.6
Moderate South S	IIVIO	Cloudy	Woderate	13.23	0.5																7.0			89	010703	003004		0.6
Surface 10 0 0 31 178						Bottom	5.9	0.0	264	17.6	17.6	8.1	8.1	33.7	33.7	99.3	99.3	7.7	7.7	5.7		5		90			<0.2	0.7
Marcon M						Surface	1.0	0.0	31	17.8	17.8	8.1	8.1	33.2	33.2	99.1	99.1	7.7	77	3.9	E	4		85			<0.2	0.7
Bottom Bottom Bottom Bottom Bottom Bottom G.6 0.1 3.28 1.77 1.77 8.1 8.1 8.1 8.1 8.35 3.5 8.6 8.6 9.7 7.7 7.7 4.3 7.7 4.3 7.7 7.7 4.3 7.7 7.7 4.3 7.7 7.7 4.3 7.7 7.7 4.3 7.7	IM4	Cloudy	Moderate	13:19	7.6	Middle					17.7		8.1		33.4		98.1				4.0		4		819747	804603		
Moderate 13:07 6.9 Surface 1.0 0.2 2.268 17.7 17.7 8.1 8.1 3.3 3.3 97.0 97.0 7.6 7.6 7.6 5.1						Bottom	6.6	0.1	328	17.7	17.7	8.1	8.1	33.5	33.5	98.6	98.7	7.7	7.7	4.3	ļ	5		90			<0.2	0.7
Mide 13.07 Mide						Surface	1.0	0.2	268	17.7	17.7	8.1	8.1	33.3	33.3	97.0	97.0	7.6		4.9		4		85			<0.2	0.7
Mode Mode																			7.6		}			88				0.7
Moderate South S	IM5	Cloudy	Moderate	13:07	6.9	Middle									33.4		96.7	7.6			5.8		5	87	820748	804887	<0.2	<0.2
Moderate 13:00 6.8 Middle 10:0 0.2 257 17.7 17.7 8.1 0.1 215 17.6 17.6 8.1 8.1 33.3 33.2 97.0 97.1 7.6 6.5						Bottom	5.9	0.1	36	17.5	17.5	8.1	8.1	33.4	33.4	96.9	96.9	7.6	7.6	6.2	-	5		90			<0.2	0.8
Middle M						Surface					17.7		8.1		33.1		97.5				-							
Bottom 5.8 0.1 100 17.6 17.6 8.1 8.1 33.3 33.3 97.1 97.2 97.2 7.6 7.6 6.9 6.9 6 90	IM6	Cloudy	Moderate	13:00	6.8	Middle	3.4	0.1	215	17.6	17.6	8.1	8.1	33.2	33.2	97.1	97.1	7.6	7.6	6.5	6.2	6	5	87 88	821045	805826	<0.2	-0.3
Moderate 12-48 7.8 Surface 1.0 0.1 282 17.9 17.6 17.6 17.6 17.6 17.6 17.6 17.8 17.						Rottom	5.8	0.1	100	17.6	17.6	8.1	8.1	33.3	33.3	97.1	97.2	7.6	76	6.9	Ŀ	5		90			<0.2	0.7
Moderate 12.48 7.8 Middle 3.9 0.1 142 17.6 17.6 8.1 8.1 33.1 33.1 33.1 35.1																			7.0									
Middle 13:19 7.5 Middle 14:10 14						Surface	1.0	0.1	288	17.8	17.9	8.1	8.1	32.9	32.9	95.3	95.4	7.4	7.4	4.4	ļ	4		85			<0.2	0.8
Mathematical Property of Mathematical Proper	IM7	Cloudy	Moderate	12:48	7.8	Middle	3.9	0.1	146	17.6	17.6	8.1	8.1	33.1	33.1	95.0	95.1	7.4		5.1	4.6	4	4	88	821366	806824	<0.2	<0.2
Math Rough						Bottom					17.8	8.1 8.1	8.1	33.0	33.0	94.6	94.7	7.4	7.4		F						<0.2	
M8 Sunny Rough 13:19 7.5 Middle 3.8 0.4 85 17.7 17.7 7.8 7.8 3.2 3.2 95.0 94.9 7.4 7.4 3.0 3.0 3.4 4 4 88 88 82182 808116 0.8 0.8 0.4 92 17.7 17.5 7.8 7.8 3.2 3.2 95.0 94.9 7.4 7.4 3.0 3.0 3.4 4 4 88 88 82182 808116 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8						Surface	1.0	0.4	94	18.0	18.0	7.8	7.8	33.1	33.1	95.8	95.9	7.4		2.2		3		86			<0.2	0.8
Bottom 6.5 0.1 62 17.5 17.5 7.8 13.2 94.8 7.4 3.0 4 88 4.02 0.8 6.5 0.1 66 17.5 17.5 7.8 7.8 33.4 33.4 95.2 95.3 7.5 7.5 1.1 4 90 4.02 0.7	IM8	Sunny	Rough	13:19	7.5	Middle	3.8	0.4	85	17.7		7.8		33.2	33.2	95.0		7.4	7.4	3.0	3.4	4	4	88 00	821822	808116	<0.2	-0.2 0.8
6.5 0.1 66 17.5 17.3 7.8 1.0 33.4 95.2 93.3 7.5 1.3 5.1 4 90 < 0.2 0.7	IIVIO	Guilly	rtougii	13.13	7.5														7.5		3.4		. 7	88	021022	000110		0.8
	DA: Donth Arra	raged				Bottom					17.5		7.8		33.4		95.3		7.5									

18 February 20 during Mid-Flood Tide

Water Qua	ity monit	ogoou			10 I ebidary 20	during wild-					_		_										T=					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity((NTU)	Suspende (mg		Total Alka (ppm)			Coordinate HK Grid	Chrom (µg/L	
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ui (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA (Norti		(Easting)	Value	DA Value DA
					Surface	1.0	0.3	89 97	18.1 18.1	18.1	7.8	7.8	33.0 33.0	33.0	96.0	96.0	7.4		2.1 2.1		4		86 87				<0.2	0.6
IM9	Sunny	Rough	13:24	7.7	Middle	3.9	0.3 0.4	77	17.9	17.9	7.8 7.8	7.8	33.0	33.0	96.0 96.0	96.0	7.5 7.5	7.5	2.9	3.3	5 4	4	88	88 822	115	808810	<0.2	0.7
1110	ou,	rtougn	10.21			3.9 6.7	0.4	82 90	17.9 17.6		7.8 7.8		33.0 33.3		95.9 96.0		7.5 7.5		2.9 4.8	0.0	4		90	00 022		000010	<0.2	0.6
					Bottom	6.7 1.0	0.2	94 71	17.6 18.2	17.6	7.8 7.8	7.8	33.3 32.8	33.3	95.9	96.0	7.5 7.4	7.5	4.8 2.5		4		90 86				<0.2	0.7
					Surface	1.0	0.5	75	18.2	18.2	7.8	7.8	32.8	32.8	95.2 95.5	95.4	7.4	7.4	2.5		4		86				<0.2	0.7
IM10	Sunny	Rough	13:30	8.6	Middle	4.3 4.3	0.3	99 99	18.0 18.0	18.0	7.8	7.8	33.0 33.0	33.0	95.0 95.1	95.1	7.4		3.3	3.2	3 4	4	89 89	88 822	394	809817	<0.2	<0.2 0.7 0.8
					Bottom	7.6 7.6	0.6	74 80	17.9 17.9	17.9	7.8 7.8	7.8	33.0 33.0	33.0	98.0 98.1	98.1	7.6 7.6	7.6	3.8		4		90				<0.2	0.7
					Surface	1.0	0.1	104	18.3	18.3	7.8	7.8	33.3	33.3	91.3	91.4	7.0		1.9		2		85				<0.2	0.7
IM11	Sunny	Rough	13:40	7.7	Middle	1.0 3.9	0.1 0.1	109 142	18.3 18.1	18.1	7.8 7.8	7.8	33.3 33.3	33.3	91.5 91.8	91.7	7.1 7.1	7.1	2.0	2.4	2	3	86 88	88 822	nen	811448	<0.2	<0.2 0.8 0.7
	Cumy	rtougn	10.10			3.9 6.7	0.2	148 178	18.1 18.1		7.8 7.8		33.3 33.3		91.6 93.3		7.1 7.2		2.7 2.6		3 4		88 89	022		011110	<0.2	0.7
					Bottom	6.7	0.2	182 240	18.1 18.5	18.1	7.8 7.8	7.8	33.3 33.3	33.3	93.3	93.3	7.2 7.1	7.2	2.6 1.2		3		90				<0.2	0.7
					Surface	1.0	0.1	241	18.5	18.5	7.8	7.8	33.3	33.3	92.2 92.4	92.3	7.1	7.1	1.2		<2		85 86				<0.2	0.7
IM12	Sunny	Rough	13:45	8.8	Middle	4.4	0.1	254 258	18.4 18.4	18.4	7.8	7.8	33.3	33.3	92.8	92.9	7.1		1.4	1.4	<2 2	2	89 89	88 821	459	812038	<0.2	<0.2 0.7 0.7
					Bottom	7.8 7.8	0.2	158 161	18.3 18.3	18.3	7.8 7.8	7.8	33.4		96.2 96.3	96.3	7.4	7.4	1.6 1.6		<2 3		90				<0.2	0.8
					Surface	1.0	-	-	18.4	18.4	7.8	7.8	33.3	33.3	91.7 91.8		7.1		1.4		3		-				-	-
SR1A	Sunny	Rough	14:13	4.1	Middle	1.0 2.1	-	-	18.4	-	7.8		-		91.8		7.1	7.1	1.4	1.5	2	3	-	- 819	981	812655		
Oi (ii)	Cumy	rtougn				2.1 3.1	-	-	18.3		7.8		33.3		91.5		7.1		1.6		4		-	0.0		012000	-	-
					Bottom	3.1 1.0	0.2	322	18.3 18.4	18.3	7.8	7.8	33.3 33.1	33.3	91.4	91.5	7.1 7.3	7.1	1.6 1.5		3		- 83				<0.2	0.7
					Surface	1.0	0.2	352	18.4	18.4	7.8	7.8	33.1	33.1	94.8	94.8	7.3	7.3	1.5		3		83				<0.2	0.8
SR2	Sunny	Rough	14:25	4.7	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	1.9	-	4	-	86 821	457	814186	-	<0.2 - 0.8
					Bottom	3.7	0.1	14 14	18.2 18.2	18.2	7.7	7.7	33.2	33.2	100.8	100.9	7.8 7.8	7.8	2.2		3		88 88				<0.2	0.8
					Surface	1.0	0.4	75 78	18.0	18.0	7.8	7.8	32.8 32.8	32.8	95.6 95.6	95.6	7.4		2.6		3		-				-	-
SR3	Sunny	Rough	13:14	8.5	Middle	4.3	0.3	76	17.9	17.9	7.8	7.8	32.9	32.9	96.2	96.3	7.5	7.5	3.3	4.2	5	5	-	- 822	142	807552	-	-
	,	9			Bottom	4.3 7.5	0.4	74 62	17.9 17.7	17.7	7.8 7.8	7.8	32.9 33.3	33.3	96.3 97.4	97.4	7.5 7.6	7.6	3.4 6.5		5 5	-	-				-	
						7.5 1.0	0.3	64 233	17.7		7.8 8.1		33.3		97.4 97.3		7.6 7.6	7.0	6.6 6.4		5 6		-		_			-
					Surface	1.0	0.1	203	17.8	17.8	8.1	8.1	33.2	33.2	97.2	97.3	7.6	7.6	6.5		7		-				-	-
SR4A	Cloudy	Moderate	14:32	8.7	Middle	4.4	0.2	198 201	17.7 17.7	17.7	8.1 8.1	8.1	33.4 33.4	33.4	96.7 96.7	96.7	7.5 7.5		7.6 7.7	7.6	8 7	7	-	- 817	202	807786	-	
					Bottom	7.7	0.3	272 274	17.7 17.7	17.7	8.1	8.1	33.4 33.4	33.4	96.8 96.8	96.8	7.6 7.6	7.6	8.6 8.6		6 5		-				-	-
					Surface	1.0	0.2	286 275	18.0 18.0	18.0	8.1 8.1	8.1	32.4 32.4	32.4	95.3 95.3	95.3	7.4		6.7 6.7		6 5							-
SR5A	Cloudy	Moderate	14:51	4.7	Middle	-	-	-	-	-	-		-	-	-		-	7.4	-	6.8	-	6	-	- 816	599	810705	_	
					Bottom	3.7	0.1	296	18.0	18.1	8.1	8.1	32.3	32.3	95.6	95.7	7.5	7.5	6.9		6		-					-
					0	3.7 1.0	0.1	293 252	18.1		8.1		32.3 32.7		95.7 93.8		7.5 7.3		7.0 9.3		5 6						-	-
					Surface	1.0	0.1	244	18.2	18.2	8.0	8.0	32.7	32.7	93.8	93.8	7.3	7.3	9.5		7		-					-
SR6A	Cloudy	Moderate	15:23	4.3	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	10.0	-	6	-	- 8179	974	814721	-	
					Bottom	3.3	0.1	284 278	18.2 18.2	18.2	8.0	8.0	32.7 32.7	32.7	94.2	94.3	7.3 7.3	7.3	10.4 10.8		5 6		-				-	-
					Surface	1.0	0.1 0.1	278 290	18.2 18.2	18.2	7.7	7.7	34.0 34.0	34.0	92.9 93.0	93.0	7.1 7.2		1.6 1.6		3		-				-	-
SR7	Sunny	Rough	15:22	17.2	Middle	8.6	0.1	245	18.2	18.2	7.7	7.7	34.0	34.0	92.6 92.6	92.6	7.1	7.1	2.3	2.4	2	3	-	- 823	616	823733	-	
					Bottom	8.6 16.2	0.1	247 191	18.2 18.2	18.2	7.7	7.7	34.0	34.0	95.7	95.8	7.4	7.4	3.2		3		-					-
						16.2	0.1	195	18.2 18.4		7.7		34.0		95.8 91.9		7.4 7.1		3.2 1.4		4		-				+-+	-
_		_			Surface	1.0	-	-	18.4	18.4	7.8	7.8	33.3	33.3	91.8	91.9	7.1	7.1	1.4		3		-					-
SR8	Sunny	Rough	13:59	4.0	Middle	3.0	-	-	- 10.4	-	- 7.0	<u> </u>	-	-	- 04.7	-	- 74		1.7	1.6	3	3	-	- 820-	404	811644		
					Bottom	3.0	-	-	18.4 18.4	18.4	7.8	7.8	33.3 33.3	33.3	91.7 91.5	91.6	7.1	7.1	1.7		3							-
DA D III A																												

20 February 20 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	lts on		20 February 20	during Mid-	Ebb Tid	е																			
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salinity (ppt)	DO:	Saturation (%)	Dissolved Oxygen	Turbidit	(NTU)	Suspende (mg		Total All (ppr		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l		Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)		F (···)	(m/s)	Direction	Value	Average	Value	Average	Value Average	Value	Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA V	/alue DA
					Surface	1.0	0.1	72 79	18.1 18.1	18.1	7.9	7.9	31.4 31.4 31.4	102.4	102.4	8.0 7.9	2.2	1	5		86 86				<0.2		1.0
C1	Cloudy	Moderate	12:18	8.1	Middle	4.1 4.1	0.0	213 234	17.8 17.8	17.8	7.9	7.9	32.2 32.2 32.2	99.7 99.7	99.7	7.8 7.8	3.5 3.4	4.0	4	4	88 88	88	815622	804264	<0.2		1.0 0.9
					Bottom	7.1	0.1	263 286	17.9	17.9	8.0	8.0	33.1 33.1 33.1	100.2		7.8 7.8	6.4	1	3		91 90				<0.2		1.1
					Surface	1.0	0.3	76	18.4	18.4	8.0	8.0	30.2	94.6	946	7.4	3.5		6		86				<0.2		1.8
C2	Cloudy	Moderate	12:12	11.7	Middle	1.0 5.9	0.3	77 77	18.4 17.9	18.0	8.0 8.1	8.1	30.2 32.3 32.3 32.3	94.6 92.7	92.5	7.4 7.3	3.6 8.8	7.4	7	6	86 89	88	825704	806941	<0.2 <0.2	-0.2	1.5
	,				Bottom	5.9 10.7	0.3	83 89	18.0 18.2	18.2	8.1 8.1	8.1	33.2	92.2 92.3	92.4	7.2 7.1 7.1	9.1 9.6	1	7		88 90				<0.2		1.5
					Surface	10.7	0.2	90 71	18.2 18.1	18.1	8.1 7.9	7.9	33.2 33.9	92.4	90.0	7.1 7.1 6.9	9.5 2.4		5		90 86				<0.2		0.9
						1.0 5.5	0.1	76 95	18.1 18.1		7.9 7.9		33.9	90.0		6.9 7.0	2.4 3.4		6	_	87 88				<0.2		0.8
C3	Cloudy	Moderate	10:24	10.9	Middle	5.5 9.9	0.1	102 45	18.1	18.1	7.9	7.9	33.9	90.3	90.3	7.0	3.4	2.8	6	5	87 90	88	822118	817820	<0.2	<0.2	0.8 0.8
					Bottom	9.9	0.2	45 59	18.1	18.1	7.8	7.8	33.9	91.2	91.2	7.0 7.0 7.0	2.6		4		90				<0.2		0.8
					Surface	1.0	0.1	60	17.9	17.9	7.9	7.9	33.0 33.0 33.0	102.3		8.0	2.7	1	4		87				<0.2		1.0
IM1	Cloudy	Moderate	11:56	4.7	Middle	-	-	-	-	-	-	-		-		-	-	3.0	-	4	-	88	817955	807147	-	<0.2	1.0
					Bottom	3.7	0.1	238 260	17.9 17.9	17.9	8.0	8.0	33.2 33.2	101.8		7.9 7.9	3.3		5 4		90 89				<0.2 <0.2		1.0
					Surface	1.0	0.1	82 89	18.0 18.0	18.0	7.9 7.9	7.9	32.1 32.1 32.1	101.2	101.2	7.9 7.9	2.7		4 5		86 85				<0.2		1.6
IM2	Cloudy	Moderate	11:48	6.7	Middle	3.4	0.1	29 29	17.9 17.9	17.9	7.9	7.9	32.8 32.8	98.6 98.5		7.7	3.3	4.0	4	5	88 88	88	818184	806164	<0.2		1.6 1.6
					Bottom	5.7 5.7	0.1	249 259	17.8 17.8	17.8	8.0	8.0	33.2 33.2 33.2	100.9		7.9 7.9	6.0]	5		90				<0.2		1.6
					Surface	1.0	0.0	193 205	18.0	18.0	7.9 7.9	7.9	32.0 32.0 32.0	101.9	101.0	8.0	2.8		6		86 86				<0.2		1.6
IM3	Cloudy	Moderate	11:40	6.8	Middle	3.4	0.1	199	17.9 17.9	17.9	7.9 7.9	7.9	32.9 32.9 32.9	100.3	100.4	7.8 7.8	4.6	4.6	4	5	88	88	818777	805590	<0.2	-0.2	1.6 1.5
					Bottom	5.8	0.1	194	17.7	17.7	8.0	8.0	33.1	100.6		7.9	6.4		5 4		90				<0.2		1.4
					Surface	5.8 1.0	0.1	204 92	17.7 18.0	18.0	7.8	7.8	33.1 33.1 32.2 32.2	100.5	100 0	7.8	6.4 3.1		5		90 85				<0.2 <0.2		1.6
IM4	Cloudy	Moderate	11:30	7.3	Middle	1.0 3.7	0.0	93 105	18.0 17.9	17.9	7.8 7.8	7.8	32.2	100.9 99.0		7.9 7.7	3.8	3.9	4 5	1	86 88	88	819703	804618	<0.2 <0.2	-0.2	1.6
1101-4	Cioddy	Woderate	11.50	7.5	Bottom	3.7 6.3	0.1	114 197	17.9 17.8	17.8	7.8 7.8		32.9 33.1 33.1	98.8 97.0		7.6	3.8	3.3	4	-	89 90	00	013703	004010	<0.2		1.6
						6.3 1.0	0.1	206 68	17.8 18.1		7.8 7.8	7.8	33.1	97.0 100.4		7.6 7.9	4.6 3.9		4		90 85				<0.2		1.5
					Surface	1.0 3.5	0.4	68 60	18.1 17.8	18.1	7.8	7.8	30.5	100.3 97.8	100.4	7.9 7.6	4.0	1	4 5		86 88				<0.2		1.7
IM5	Cloudy	Moderate	11:20	6.9	Middle	3.5 5.9	0.3	64 78	17.8	17.8	7.8	7.8	32.9	97.8 97.4	97.8	7.6 7.6	4.5	4.6	5	5	88 90	88	820750	804890	<0.2	<0.2	1.7 1.4
					Bottom	5.9	0.2	84	17.8	17.8	7.9	7.9	33.0	97.5		7.6	5.4		5		90				<0.2		1.6
					Surface	1.0	0.1	97 102	18.3 18.3	18.3	7.8	7.8	29.4 29.4	98.6 98.7	98.7	7.8 7.8 7.7	3.0	1	5 5		85 86				<0.2		1.7
IM6	Cloudy	Moderate	11:10	7.1	Middle	3.6 3.6	0.1	110 117	17.9 17.9	17.9	7.8 7.8	7.8	32.2 32.2	96.4 96.5		7.6 7.6	4.6 4.6	4.7	5 4	5	88 88	88	821074	805829	<0.2	<0.2	1.7 1.5
					Bottom	6.1 6.1	0.1	125 133	17.8 17.8	17.8	7.9	7.9	33.0 33.0	96.5 96.6		7.5 7.5	6.4		6 5		90 89				<0.2		1.7
					Surface	1.0	0.0	107 114	18.3 18.3	18.3	7.8 7.8	7.8	29.2 29.3 29.2	97.9 97.8	97.9	7.7	3.1		7 6		85 85				<0.2		1.3
IM7	Cloudy	Moderate	11:02	8.0	Middle	4.0	0.0	95 98	17.9 17.9	17.9	7.8	7.8	32.2 32.2 32.2	95.1 95.1	95.1	7.4	4.7	5.2	6	6	88	88	821365	806857	×0.2	-0.2	1.3
					Bottom	7.0	0.0	96 98	17.8	17.8	7.8	7.8	32.9 32.9 32.9	95.0 94.9		7.4 7.4	7.8		6		90				<0.2		1.2
					Surface	1.0	0.1	81	18.5	18.5	8.1	8.1	29.8	94.8	0/10	7.4	2.7		5		86				<0.2		1.5
IM8	Cloudy	Moderate	11:47	7.7	Middle	1.0 3.9	0.1	88 64	18.5 18.2	18.2	8.1 8.1	8.1	30.9	94.9 95.7	95.9	7.5 7.5	4.1	4.0	6 5	6	87 88	91	821847	808124	<0.2	-0.2	1.4 1.6 1.5
	/			***	Bottom	3.9 6.7	0.1 0.1	64 66	18.2 17.9	17.9	8.1 8.1	8.1	30.9	96.0 96.3	96.3	7.5 7.5 7.5	4.2 5.2		5 7	_	101 90	-			<0.2	L	1.4
DA: Depth-Ave					DOLLOTT	6.7	0.1	68	17.9	17.9	8.1	0.1	32.9	96.3	90.3	7.5	5.1		8		91				<0.2		1.4

20 February 20 during Mid-Fbb Tide

Water Qual	ity Monite	oring Resu	lts on		20 February 20	during Mid-	Ebb Tide	•																				
Monitoring	Weather	Sea	Sampling	Water	Sampling De	epth (m)	Current Speed	Current	Water Te	mperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Dissolved Oxygen	Turbidit	y(NTU)	Suspende (mg/			dkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel	(µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value D	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	Value	DA
					Surface	1.0	0.1	133 143	18.4 18.4	18.4	8.0	8.0	29.0 29.0	29.0	94.7 94.5	94.6	7.5 7.5	2.8		4 5		86 87				<0.2 <0.2	1.2	
IM9	Cloudy	Moderate	11:40	6.9	Middle	3.5	0.2	150	18.4	18.4	8.0	8.0	30.6	30.6	94.0	94.0	7.4	3.9	4.1	7	7	88	88	822078	808826	<0.2	1.4	1.3
	,					3.5 5.9	0.2	164 141	18.4 18.0		8.0 8.1		30.5 32.3		94.0 94.4		7.4	4.1		6 11		87 90				<0.2	1.3	1
					Bottom	5.9	0.2	142	18.0	18.0	8.1	8.1	32.3	32.3	94.5	94.5	7.4	5.4		10		90				<0.2	1.4	ĹЩ
					Surface	1.0	0.1	125 130	18.3 18.3	18.3	8.1	8.1	28.6	28.6	96.5 96.3	96.4	7.7	2.6	+	5	. }	85 87	1			<0.2	1.2	t
IM10	Cloudy	Moderate	11:32	7.4	Middle	3.7	0.1	122	17.9	17.9	8.1	8.1	31.1	31.1	95.6	95.6	7.5 7.5	2.0	2.6	4	5	88 87	88	822362	809805	<0.2	1.3	
	-				Bottom	3.7 6.4	0.1	131 157	17.9 17.9	17.9	8.1 8.1	8.1	31.1 33.2	33.2	95.6 95.8	95.9	7.5	2.1	+	5 3	.	90	1			<0.2	1.2	
					1	6.4 1.0	0.1	164 85	17.9 18.0		8.1 8.1		33.2 33.2		95.9 94.5		7.5	3.3	1	4 5		91 86				<0.2	1.4	\vdash
					Surface	1.0	0.3	85	18.0	18.0	8.1	8.1	33.2	33.2	94.4	94.5	7.3	3.0	1	4		85	1			<0.2	1.6	1
IM11	Cloudy	Moderate	11:21	7.2	Middle	3.6	0.2	73 76	18.0 18.0	18.0	8.1	8.1	33.2	33.2	93.7	93.7	7.3	3.6	3.5	5	- 5	88 87	88	822036	811469	<0.2	1.7	1.6
					Bottom	6.2	0.1	101	18.0	18.0	8.1	8.1	33.2	33.2	94.3	94.4	7.3	3.9		5		90				<0.2	1.7	i l
						6.2 1.0	0.1	103 87	18.0 18.0		8.1		33.2 33.2		94.4 94.3		7.3	3.9	1	4		91 86				<0.2	1.5 0.9	=
					Surface	1.0	0.2	89	18.0	18.0	8.1	8.1	33.2	33.2	94.1	94.2	7.3	3.6	1	3		87				<0.2	0.9	į l
IM12	Cloudy	Moderate	11:12	8.2	Middle	4.1	0.2	94 101	18.0 18.0	18.0	8.1 8.1	8.1	33.3	33.3	93.3 93.3	93.3	7.2	3.9	3.7	3	4	88	88	821480	812067	<0.2	0.9	0.9
					Bottom	7.2	0.2	96	18.0 18.0	18.0	8.1 8.1	8.1	33.3 33.3	33.3	93.4 93.7	93.6	7.3 7.3	3.7	1	4		90 90				<0.2 <0.2	0.9	₊
					Surface	7.2 1.0	0.2	104	18.1	18.0	8.0	8.0	33.4	33.4	92.1	92.2	7.1	3.7		5 4		-				-	-	
						1.0 2.7	-	-	18.0	10.0	8.0	0.0	33.4	33.4	92.3	32.2	7.2 7.	3.9	-	- 4	.	-	1			-	-	_†
SR1A	Cloudy	Moderate	10:52	5.3	Middle	2.7	-		-	-	-	-		-	-	-	-	-	3.4	-	4		-	819979	812662	-		1 - 1
					Bottom	4.3	-	•	18.1 18.1	18.1	8.0	8.0	33.4	33.4	92.2	92.2	7.1 7.	3.0	+	5 4		-	1			-	-	ı l
					Surface	1.0	0.1	81	18.0	18.0	8.0	8.0	33.4	33.4	93.1	93.2	7.2	3.7		4		86				<0.2	0.8	\Box
						1.0	0.2	83	18.0		8.0		33.4		93.3		7.2 7.	3.7	+	5		88				<0.2	0.8	† ∥
SR2	Cloudy	Moderate	10:42	4.6	Middle	-	-	-	-	-	-	-	-	-	-		-		4.5	-	5	-	89	821481	814182	<0.2	-	8.0
					Bottom	3.6	0.2	56 57	18.0 18.0	18.0	8.0	8.0	33.4	33.4	94.1	94.1	7.3 7.3	5.2	+	4 5		90 90	1			<0.2 <0.2	0.9	ı I
					Surface	1.0	0.1 0.1	81 88	18.4 18.4	18.4	8.1 8.1	8.1	28.5 28.5	28.5	94.6 95.0	94.8	7.5 7.5	3.2		4 5		-				-	-	\Box
SR3	Cloudy	Moderate	11:53	8.5	Middle	4.3	0.1	78	18.3	18.3	8.1	8.1	30.3	30.3	95.4	95.4	7.5	5.7	5.9	5		-	1 .	822169	807571		-	1 . 1
ONS	Oloddy	Woderate	11.55	0.0		4.3 7.5	0.2	82 85	18.3 17.8		8.1 8.2		30.3 33.1		95.3 95.0		7.5 7.4	5.9	- 3.3	5 8	. "	-	1	022103	00/3/1	-	-	ı .
					Bottom	7.5	0.2	91	17.8	17.8	8.2	8.2	33.1	33.1	95.1	95.1	7.4	8.4		7		-				-	-	ш
					Surface	1.0	0.1	346 354	18.0 18.0	18.0	7.9 7.9	7.9	32.2	32.2	102.9 102.9	102.9	8.0	2.7	1	4	.	-	1			-	-	
SR4A	Cloudy	Calm	12:41	8.8	Middle	4.4	0.1	16	17.9	17.9	7.9	7.9	32.8	32.8	100.9	101.0	7.9 8.	4.2	4.0	5	4	-	1 .	817182	807825	<u> </u>	-	4 - I
	-				Bottom	4.4 7.8	0.1 0.1	16 12	17.9 17.9	17.9	7.9 8.0	8.0	32.8 33.0	33.0	101.0 101.2	101.2	7.9 7.9 7.	4.2	1	4		-	1			-	-	ıl
					Bottom	7.8 1.0	0.1	12 251	17.9 18.2		8.0 7.9		33.0 32.8		101.2		7.9 ^{7.}	5.1 3.4	1	4 5		-				-	-	\vdash
					Surface	1.0	0.1	271	18.2	18.2	7.9	7.9	32.8	32.8	100.1	100.1	7.8 7.	2.4		4		-	1			-	-	į Į
SR5A	Cloudy	Calm	12:59	3.6	Middle	-	-	-	-	-	-	-	-	-	-	-		-	4.1	-	- 5	-	-	816589	810696	-	-	-
					Bottom	2.6	0.1	94	18.0	18.0	8.0	8.0	32.9 32.9	32.9	100.7 100.8	100.8	7.8 7.	4.8		5		-	1			-	-	_i
					Surface	2.6 1.0	0.2	98 174	18.0 18.3	18.3	7.9	7.9	32.8	32.8	97.5	97.5	7.5	2.5	1	6 4						-	-	\vdash
						1.0	0.1	187	18.3	10.3	7.9	7.9	32.8	32.0	97.5	57.5	7.5 7.	2.5	4	4	.	-	-			-	-	,
SR6A	Cloudy	Calm	13:26	4.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	-	- 5	-	1 -	817969	814717	-	-	į -
					Bottom	3.2	0.2	109 110	18.0 18.0	18.0	8.0	8.0	32.8 32.8	32.8	97.5 97.6	97.6	7.6 7.	3.9	4	5	. [-	1			-	\vdash	
					Surface	1.0	0.2	83	18.1	18.1	7.9	7.9	33.8	33.8	90.4	90.4	7.0	1.1	1	4		-				-	-	П
007	01	Madami	40.00	40.4		1.0 8.2	0.2	87 66	18.1 18.1		7.9 7.9		33.8 33.9		90.4 89.7		7.0 6.9	1.1	1	3		-	1	200055	000705	-	-	ı l
SR7	Cloudy	Moderate	10:06	16.4	Middle	8.2 15.4	0.3	66	18.1	18.1	7.9	7.9	33.9	33.9	89.7	89.7	6.9	1.7	1.6	4	4	-	1	823650	823723	-	-	, ·
					Bottom	15.4 15.4	0.2	20 20	18.1 18.1	18.1	7.8	7.8	33.9 33.9	33.9	90.1	90.2	7.0 7.	1.8	1	3	·	-				-		
					Surface	1.0	-	-	18.0 18.0	18.0	8.0	8.0	33.4 33.4	33.4	92.4 92.5	92.5	7.2	2.9	_	3 2	. 7						-	t T
SR8	Cloudy	Moderate	11:00	5.5	Middle	-	-	-	-	_	-	_	-		-	_	7.2	2.0	3.4	-	3	-	1 .	820395	811599	-	-	i . I
	,			2.0		4.5	-	-	18.1	46.1	7.9		33.4		92.2		7.1	3.9	1	- 4		-	1			-	-	
					Bottom	4.5	-		18.1	18.1	7.9	7.9	33.4	33.4	92.0	92.1	7.1 7.	3.9	1	4		-	1				-	į .

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

20 February 20 during Mid-Flood Tide

Water Qua	lity Monite	oring Resu	lts on		20 February 20	during Mid-	Flood Ti	de																				
Monitoring	Weather	Sea	Sampling	Water	Sampling D	enth (m)	Current Speed	Current	Water To	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity(NTU)	Suspende (mg		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chror (µg.		µg/L)
Station	Condition	Condition	Time	Depth (m)	Oamping D		(m/s)	Direction	Value	Average	Value	Average		Average		Average	Value	DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value		DA
					Surface	1.0	0.1	43 46	17.8 17.8	17.8	7.8	7.8	31.9	31.9	100.2	100.2	7.9 7.9		2.8		6 5	ļ	87 87			<0.2	1.1	
C1	Cloudy	Moderate	15:55	7.7	Middle	3.9	0.1	88	17.9	17.9	7.8	7.8	32.8	32.8	99.4	99.4	7.8	7.9	4.1	4.2	5	5	89	815638	804255	<0.2	1.1	1.2
	Cloudy	Woderate	15.55	1.1	Wilddie	3.9	0.1	89	17.9	17.5	7.8	7.0	32.8	32.0	99.4	33.4	7.8		4.1	4.2	6	3	89	813030	004233	<0.2	1.2	1.2
					Bottom	6.7	0.1	69 72	17.8 17.8	17.8	7.8	7.8	33.3	33.3	99.1	99.1	7.7	7.7	5.7 5.6		4 5	ŀ	91			<0.2	1.3	
					Surface	1.0	0.1	282	18.3	18.3	7.9	7.9	29.9	29.9	96.7	96.8	7.6		2.5		4		86			<0.2	1.8	
						1.0 5.9	0.2	274 229	18.3 17.9		7.9		29.9 32.2		96.9 95.3		7.6 7.5	7.6	2.8 7.1		3 6	ļ	85 88			<0.2	1.7	
C2	Cloudy	Moderate	14:51	11.7	Middle	5.9	0.2	240	17.9	17.9	7.9	7.9	32.2	32.2	95.2	95.3	7.5		7.2	7.2	6	6	87	825668	806952	<0.2	<0.2	1.7
					Bottom	10.7	0.4	267 274	18.1 18.1	18.1	7.9	7.9	32.9	32.9	93.4 93.6	93.5	7.3 7.3	7.3	11.8 11.9		7		90			<0.2	1.6	
					Surface	1.0	0.1	225	18.3	18.3	8.0		33.8	33.8	91.2	91.2	7.0		0.1		6		86			<0.2	0.8	
					Surface	1.0	0.1	244	18.3 18.1	10.3	8.0	8.0	33.8 33.8	33.0	91.2	91.2	7.0	7.0	0.1		6		86			<0.2	0.8	
C3	Cloudy	Moderate	16:45	11.5	Middle	5.8 5.8	0.1	231 242	18.1	18.1	8.0	8.0	33.8	33.8	90.3	90.3	7.0		0.7	0.6	5	5	88 88	822097	817783	<0.2	<0.2	8.0
					Bottom	10.5	0.2	256	18.1	18.1	8.0	8.0	33.8	33.8	92.2	92.2	7.1	7.1	1.1		4	ļ	90			<0.2	0.7	
			1			10.5	0.2	280 179	18.1		8.0 7.8	<u> </u>	33.8		92.2		7.1		1.1 3.6		5 8		90 87			<0.2	0.7 1.2	
					Surface	1.0	0.1	189	17.8	17.8	7.8	7.8	33.3	33.3	99.3	99.3	7.7	7.7	3.7		6	İ	88			<0.2	1.1	
IM1	Cloudy	Moderate	16:07	4.9	Middle	-	-	-	-	-	-	-	-	-	-	-	-			3.8	-	7	- 89	817959	807113	-	<0.2	1.2
					Bottom	3.9	0.1	168	17.8	17.8	7.8	7.8	33.3	33.3	99.5	99.5	7.7	7.7	4.0		7		90			<0.2	1.1	
			1			3.9 1.0	0.1	177 344	17.8		7.8		33.3 32.5		99.5 100.6		7.7 7.9	7.7	4.0 2.8		6		90			<0.2	1.2	
					Surface	1.0	0.2	316	17.8	17.8	7.8	7.8	32.5	32.5	100.6	100.6	7.9	7.9	2.8		5		87			< 0.2	1.4	
IM2	Cloudy	Moderate	16:16	7.0	Middle	3.5	0.1	321 334	17.9 17.9	17.9	7.8	7.8	32.9 32.9	32.9	99.7 99.7	99.7	7.8 7.8	1.5	3.7 3.6	4.4	6	6	89 88	818183	806178	<0.2	<0.2	1.3
					D	3.5 6.0	0.1	288	17.9	47.0	7.9	7.0	33.2	00.0	99.6	99.6	7.8	7.8	6.6		6	ł	91			<0.2	1.2	
					Bottom	6.0	0.1	316	17.8	17.8	7.9	7.9	33.2	33.2	99.5	99.6	7.8	7.8	6.7		7	<u> </u>	90			<0.2	1.3	
					Surface	1.0	0.2	332 305	17.9 17.9	17.9	7.8	7.8	32.0	32.0	100.9	100.9	7.9 7.9		2.8		8	1	87 87			<0.2	1.1	
IM3	Cloudy	Moderate	16:26	7.1	Middle	3.6	0.1	310	17.8	17.8	7.8	7.8	32.9	32.9	99.8	99.8	7.8	7.9	4.3	4.7	7	7	88 00	818788	805602	< 0.2	.0.0 1.1	1.0
	,				_	3.6 6.1	0.1	314 238	17.8 17.7		7.8		32.9 33.2		99.8 99.6		7.8 7.8		4.4 7.0		6		88 91			<0.2	1.0	
					Bottom	6.1	0.0	253	17.7	17.7	7.8	7.8	33.2	33.2	99.6	99.6	7.8	7.8	7.0		5		90			<0.2	1.0	
					Surface	1.0	0.0	33 33	17.9 17.9	17.9	7.8	7.8	32.1 32.1	32.1	101.0	101.0	7.9 7.9		2.8		6 7		87 86			<0.2	0.9	
IM4	Cloudy	Moderate	16:36	7.6	Middle	3.8	0.1	21	17.8	17.8	7.8	7.8	33.0	33.0	99.3	99.3	7.8	7.9	4.9	4.4	7	6	89	819721	804610	<0.2	0.9	0.9
IIVI-	Cioddy	Woderate	10.50	7.0	Wildule	3.8 6.6	0.1	22 324	17.8 17.7		7.8		33.0 33.1		99.3 99.6		7.8 7.8		4.9 5.5	4.4	7 5	Ů	90	013721	004010	<0.2	<0.2 1.0 0.9	0.5
					Bottom	6.6	0.1	326	17.7	17.7	7.8	7.8	33.1	33.1	99.6	99.6	7.8	7.8	5.5		5		90			<0.2	1.0	
					Surface	1.0	0.2	254 269	17.8 17.8	17.8	7.8	7.8	33.0	33.0	99.6 99.5	99.6	7.8 7.8		6.2 6.1		6		87 86			<0.2	1.0	
IM5	Cloudy	Moderate	16:47	7.0	Middle	3.5	0.2	286	17.8	17.8	7.8	7.8	33.0	33.0	97.5	97.5	7.6	7.7	6.2	6.3	7	7	88 89	820723	804884	<0.2	1.0	1.0
CIVII	Cloudy	Woderate	10.47	7.0	Middle	3.5	0.2	310	17.8	17.0	7.8	7.0	33.0	33.0	97.4	97.5	7.6		6.1	6.3	6	′	89	020723	004004	<0.2	0.9	1.0
					Bottom	6.0	0.1	37 37	17.8 17.8	17.8	7.8	7.8	33.0	33.0	97.6 97.6	97.6	7.6 7.6	7.6	6.7 6.7		8		90			<0.2	1.0	
					Surface	1.0	0.2	236	18.3	18.3	7.8	7.8	29.0	29.1	98.3	98.3	7.8		3.1		6		86			<0.2	1.2	
						1.0 3.6	0.2	236 214	18.3 17.9		7.8		29.1 31.7		98.2 96.4		7.8 7.6	7.7	3.1 4.6		<u>6</u> 5		86			<0.2	1.2	
IM6	Cloudy	Moderate	16:58	7.2	Middle	3.6	0.1	214	17.9	17.9	7.8	7.8	31.7	31.7	96.4	96.4	7.6		4.6	4.7	6	6	88	821055	805819	<0.2	<0.2	1.2
					Bottom	6.2	0.1	108 113	17.8 17.8	17.8	7.9	7.9	33.0	33.0	96.4 96.5	96.5	7.5 7.5	7.5	6.5 6.5		6 5	ł	90			<0.2	1.2	
					Surface	1.0	0.1	279	18.4	18.4	7.8	7.8	29.2	29.2	98.3	98.3	7.8		2.9		6		86	İ		<0.2	1.2	_
						1.0 4.1	0.1	297 143	18.4 17.9		7.8 7.8		29.2 32.2		98.3 95.6		7.8 7.5	7.7	2.9 4.2		7 6	1	86 88	1		<0.2	1.3	
IM7	Cloudy	Moderate	17:10	8.1	Middle	4.1	0.1	151	17.9	17.9	7.8	7.8	32.2	32.2	95.6	95.6	7.5		4.2	5.1	6	6	88	821361	806832	<0.2	1.3	1.3
					Bottom	7.1 7.1	0.1	162	17.8 17.8	17.8	7.9 7.9	7.9	32.9 32.9	32.9	96.0 96.1	96.1	7.5 7.5	7.5	8.3		5 5		90			<0.2	1.2	
—					0	1.0	0.2	163 198	17.8	40.0	7.9	1	32.9	00.4	96.1	07.0	7.6		8.2 2.9		5		90			<0.2	1.6	
					Surface	1.0	0.4	204	18.3	18.3	7.9	7.9	30.4	30.4	96.9	97.0	7.6	7.6	3.2		6	Ī	85			<0.2	1.5	
IM8	Cloudy	Moderate	15:19	8.3	Middle	4.2	0.4	286 290	18.0 18.0	18.0	7.9	7.9	31.8	31.8	96.3 96.3	96.3	7.5 7.5		4.3 4.5	4.2	6	7	88 87 88	821852	808126	<0.2	<0.2	1.6
					Bottom	7.3	0.1	264	17.9	17.9	7.9	7.9	33.1	33.1	96.3	96.5	7.5	7.5	5.2		8	1	89			<0.2	1.6	
DA: Depth-Aver						7.3	0.1	267	17.9		7.9		33.1		96.6		7.5		5.2		8	<u> </u>	90			<0.2	1.5	

20 February 20 during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	lts on		20 February 20	during Mid		ide																		
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salinity (ppt)	DO S	Saturation (%)	Dissolve Oxygen	Turbi	lity(NTU)	Suspende (mg	ed Solids /L)	Total Al		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l	
Station	Condition	Condition	Time	Depth (m)	3		(m/s)	Direction	Value	Average	Value	Average		Value	Average	Value D		DA	Value	DA	Value	DA	(Northing)	(Easting)		DA Value DA
					Surface	1.0	0.3	217 218	18.2 18.2	18.2	7.9	7.9	31.4 31.5 31.4	95.5 95.4	95.5	7.5 7.5 7	4.7 5.0		5 6	1	86 86	1			<0.2 <0.2	1.7
IM9	Cloudy	Moderate	15:26	7.0	Middle	3.5 3.5	0.4	272 274	18.0 18.0	18.0	8.0	8.0	32.2 32.1 32.2	95.6 95.9	95.8	7.5	7.1		7 8	7	88 87	88	822075	808793	<0.2	<0.2 1.7 1.6
					Bottom	6.0	0.2	299 276	18.0 18.0	18.0	8.0	8.0	32.4 32.5 32.4	95.4 95.4	95.4	7.4 7.4	4 9.5 9.5		8	1	89 90				<0.2 <0.2	1.6
					Surface	1.0	0.5	270 276	18.2 18.2	18.2	7.9 7.9	7.9	31.3 31.3	94.4 94.4	94.4	7.4	3.3		6 7		86 86				<0.2 <0.2	1.5
IM10	Cloudy	Moderate	15:34	7.4	Middle	3.7	0.3	294 302	17.9	17.9	7.9	7.9	33.0 33.0 33.0	93.7	93.7	7.3	4.2	- 6	8	8	87 88	88	822389	809795	۲O 2	<0.2 1.6 1.6
					Bottom	6.4	0.6	276	17.9 17.9	17.9	7.9 7.9	7.9	33.1 33.1 33.1	94.1	94.1	7.3 7.3	0.4		9		90	1			<0.2	1.6
					Surface	1.0	0.6	257 247	18.0	18.0	8.0	8.0	33.2	94.8	94.8	7.4	2.8		8		86				<0.2	0.9
IM11	Cloudy	Moderate	15:45	7.2	Middle	3.6	0.1	238 241	18.0 18.0	18.0	8.0	8.0	33.2	94.8 94.9	94.9	7.4 7.4	3.0	3 1	9	9	86 88	88	822073	811441	<0.2 <0.2	<0.2 1.0 0.9
	,				Bottom	3.6 6.2	0.2	250 277	18.0 18.0	18.0	8.0 8.0	8.0	33.2	94.9 95.7	95.7	7.4 7.4 7	3.0 4 3.5		10 9		87 90				<0.2 <0.2	0.9
					Surface	6.2 1.0	0.2	293 235	18.0 18.0	18.0	8.0	8.0	33.2	95.7 95.2	95.2	7.4	1.8		10 9		91 86				<0.2 <0.2	1.0
IM12	Claudu	Moderate	15.51	8.6	Middle	1.0 4.3	0.1	235 257	18.0 18.0	18.0	8.0	8.0	33.2 33.2 33.2 33.2	95.2 94.2	94.2	7.4 7.3	1.8		9	q	86 88	88	821457	812045	<0.2	<0.2 0.9 1.0
IIVI12	Cloudy	Moderate	15:51	0.0		4.3 7.6	0.1	265 159	18.0 17.9		8.0		33.2	94.2 95.3		7.3 7.4	2.0		9	9	87 90	00	621457	612045	<0.2 <0.2	1.0
					Bottom	7.6	0.2	159	17.9 18.0	17.9	8.0	8.0	33.2	95.3 95.3	95.3	7.4 7.	4 2.4 1.6		10 5		91				<0.2	0.9
					Surface	1.0	-	-	18.0	18.0	8.0	8.0	32.8 32.8	95.3	95.3	7.4	1.6	_	6	•	-	1			-	-
SR1A	Cloudy	Moderate	16:09	5.7	Middle	2.9	-	-	17.9	-	8.0	-	33.1	- 07.7	-	7.6	2.5	2.1	- 8	7	-	-	819978	812661	-	
					Bottom	4.7	-	-	17.9	17.9	8.0	8.0	33.1	97.7	97.7	7.6	2.5		7		-				-	-
					Surface	1.0	0.3	320 333	18.1 18.1	18.1	8.0	8.0	33.3 33.3	97.0 97.0	97.0	7.5 7.5	1.7		8		88 86				<0.2 <0.2	0.9
SR2	Cloudy	Moderate	16:24	4.5	Middle	-	-	-	-	-	-	-	-	-	-	-		1.9	-	8	-	89	821440	814175	-	<0.2 - 0.9
					Bottom	3.5 3.5	0.1	227 218	18.1 18.1	18.1	8.0	8.0	33.3 33.3	100.5	100.5	7.8 7.8	2.0		8 9		90 90				<0.2 <0.2	0.9
					Surface	1.0	0.4	222 230	18.5 18.5	18.5	7.9 7.9	7.9	30.0 30.0	95.1 95.1	95.1	7.5 7.5	3.4		7 6		-				-	-
SR3	Cloudy	Moderate	15:12	9.0	Middle	4.5 4.5	0.3	209 211	18.0 18.0	18.0	7.9	7.9	32.1 32.1 32.1	95.8 95.9	95.9	7.5	6.4		6	- 6	-	-	822134	807588	-	
					Bottom	8.0	0.3	214 228	17.9 17.9	17.9	7.9 7.9	7.9	33.2 33.2 33.2	94.7 94.6	94.7	7.4 7.4	10.8		6 7						-	-
					Surface	1.0	0.1	238 241	17.9 17.9	17.9	7.7	7.7	33.3 33.3	99.1 99.1	99.1	7.7 7.7	4.2		7 8		-				-	-
SR4A	Cloudy	Calm	15:42	9.3	Middle	4.7 4.7	0.2	290 298	17.9 17.9	17.9	7.7	7.7	33.3 33.3	99.2 99.1	99.2	7.7	4.8		8 9	8	-	-	817199	807808	-	
					Bottom	8.3 8.3	0.3	278 279	17.9 17.9	17.9	7.7	7.7	33.3 33.3	99.4 99.4	99.4	7.7 7.	E 1		9		-				-	-
					Surface	1.0	0.2	283 285	17.9 17.9	17.9	7.7	7.7	32.8 32.8 32.8	97.2 97.3	97.3	7.6	4.2		7		-				-	-
SR5A	Cloudy	Calm	15:22	3.8	Middle	-	-	-	-	-	-	-		-	-	7.0 7.	-	4.1	-	7	-		816610	810718	-	. 🗀 .
					Bottom	2.8	0.1	248 243	17.9 17.9	17.9	7.7	7.7	32.8 32.8	98.8 98.8	98.8	7.7 7.	7 4.0		7	•	-				-	-
					Surface	1.0	0.1	254 260	17.9 17.9	17.9	7.8	7.8	32.9 32.9 32.9	91.7 91.8	91.8	7.1	3.1		8 9	ļ	-					-
SR6A	Cloudy	Calm	14:54	4.0	Middle	-	0.1	-	-		-	-		-	-	- 7	2 3.2	3.7	-	9	-		817985	814753	-	
					Bottom	3.0	0.1	278	18.0	18.0	7.7	7.7	33.0	91.9	92.0	7.1 7	2 4.3		9		-				-	-
					Surface	3.0 1.0	0.1	270 271	18.0 18.2	18.2	7.7 8.0	8.0	33.8	92.0 90.3	90.3	7.0	0.6		10		-				-	-
SR7	Cloudy	Moderate	17:18	16.5	Middle	1.0 8.3	0.1	279 184	18.2 18.1	18.1	8.0	8.0	33.8	90.3 90.2	90.2	7.0 7.0	0.8	0.7	5 4	5	-	.	823658	823755	-	
	/				Bottom	8.3 15.5	0.1	189 193	18.1 18.1	18.1	8.0	8.0	33.8	90.2	90.9	7.0 7.0 7.0	0.8	= "	4 5	1	-				-	-
					Surface	15.5 1.0	0.1	199	18.1 18.0	18.0	8.0	8.0	33.8 33.6 32.9 32.9	90.9	94.9	7.0	3.0		6 8						-	
CD0	Claudi	Madazat -	45.50	4.0		1.0	-	-	18.0	10.0	8.0	0.0	32.9	94.9	94.9	7.4 7	4 3.0		8 -		-		020207	044624	-	-
SR8	Cloudy	Moderate	15:58	4.9	Middle	3.9	-	-	- 17.9	-	8.0	-	33.2	95.4		7.4	. 3.0	3.0	9	8	-		820387	811634	-	-
					Bottom	3.9	-	-	17.9	17.9	8.0	8.0	33.2 33.2	95.4	95.4	7.4 7.	3.0		8		-				-	-

22 February 20 during Mid-Ebb Tide

Water Qual	ity Monite	oring Resu	lts on		22 February 20	during Mid-	Ebb Tid	е																			
Monitoring	Weather	Sea	Sampling	Water	Sampling De	epth (m)	Current Speed	Current	Water Te	emperature (°C)	pН	Salinity (ppt)	DO S	Saturation (%)	Dissolved Oxygen	Turbidit	(NTU)	Suspende (mg		Total All (ppr		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l		lickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value Average	Value	Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA Va	'alue DA
					Surface	1.0	0.1	132 144	20.0	20.0	7.8	7.8	30.9 30.9	95.4 95.3	95.4	7.2	2.4	-	7 6		83				<0.2		1.0
C1	Cloudy	Rough	12:28	7.1	Middle	3.6	0.1	189 198	20.0	20.0	7.8	7.8	31.0 31.0 31.0	95.3 95.2	95.3	7.2 7.2 7.2	3.0	3.5	6	7	87 87	87	815600	804252	<0.2	-0.2	1.2
					Bottom	6.1	0.1	190	20.0	20.0	7.8	7.8	31.0	95.0	95.0	7.2	4.9	1	7		91				<0.2	1	1.1
					Surface	1.0	0.1	198 154	20.0 18.9	18.9	7.8 8.0	8.0	31.0 31.0 28.0 28.0	95.0 100.4		7.2	5.0		6		91 84				<0.2		1.1
						1.0 4.8	0.4	159 166	18.9 18.5		8.0 8.0		28.0	100.7 98.3		7.9 7.7	4.5	1	6		85 88				<0.2	-1	1.4
C2	Cloudy	Rough	13:57	9.6	Middle	4.8	0.2	173	18.5	18.5	8.0	8.0	29.8	98.1	98.2	7.7	13.3	10.9	7	8	90	89	825683	806938	<0.2	<0.2	1.2
					Bottom	8.6 8.6	0.2	179 185	18.4 18.4	18.4	8.0	8.0	31.3 31.3	97.7 97.6		7.6 7.6	15.1		12		92				<0.2	1	1.2
					Surface	1.0	0.1	132 132	18.3 18.3	18.3	7.8	7.8	32.2 32.2	95.3 95.5	95.4	7.4 7.4 7.3	2.7		6		84 84				<0.2		1.1
С3	Cloudy	Rough	11:59	12.0	Middle	6.0	0.2	159 170	18.3 18.3	18.3	7.8	7.8	32.9 32.9	93.7 93.6	93.7	7.3	3.5 3.6	4.0	8	7	87 87	87	822109	817789	<0.2		1.1 1.2
					Bottom	11.0 11.0	0.2	96 102	18.3	18.3	7.8	7.8	32.9 32.9	94.0	94.1	7.3 7.3	6.0	1	7		91				<0.2	1	1.1
					Surface	1.0	0.1	159	19.9	19.9	7.8	7.8	30.7	98.9	99.0	7.5	2.7		4		83				<0.2	1	1.3
IM1	Cloudy	Rough	12:56	4.6	Middle	1.0	0.1	161	19.9		7.8		30.7	99.0		7.5	2.7	3.5	5	5	84	88	817944	807114	<0.2		1.3
IIVI	Cloudy	Kougii	12.30	4.0		3.6	0.1	166	19.9		7.8		30.7	99.5		7.6	4.2	3.5	- 5	,	91	00	017544	007114	<0.2		1.0
					Bottom	3.6	0.1	170 142	19.9	19.9	7.8	7.8	30.7	99.4	99.5	7.6 7.6 7.5	4.2		4		92				<0.2	0	0.9
					Surface	1.0	0.0	149	19.9	19.9	7.8	7.8	30.5	98.3	98.3	7.5	5.7	1	4		83				<0.2	1	1.2
IM2	Cloudy	Rough	13:01	6.5	Middle	3.3	0.1	148 149	19.8 19.8	19.8	7.7	7.7	30.6 30.6	97.6 97.6	97.6	7.4	9.3 9.4	8.5	3	4	88 88	88	818140	806185	<0.2	<0.2	1.2 1.3
					Bottom	5.5 5.5	0.1	137 133	19.8 19.8	19.8	7.7	7.7	30.6	97.3 97.2	97.3	7.4 7.4	10.2	1	5 6		92 93				<0.2		1.3
					Surface	1.0	0.1	132 133	19.9 19.9	19.9	7.8 7.8	7.8	30.5 30.5	98.4 98.3	98.4	7.5 7.5	6.4		4 5		83 84				<0.2	1	1.2
IM3	Cloudy	Rough	13:05	6.8	Middle	3.4	0.1	135 136	19.8	19.8	7.8	7.8	30.6 30.6	97.6 97.6	97.6	7.4 7.5	8.1	7.7	4	4	88	88	818781	805595	<0.2	-0.2	1.1
					Bottom	5.8	0.1	121	19.8	19.8	7.8	7.8	30.6	97.8	97.8	7.5	8.6	1	5		91				<0.2	1	1.2
					Surface	5.8 1.0	0.1	122 218	19.8 19.9	19.9	7.8 7.8	7.8	30.6	97.7 98.3	98.2	7.4	8.6 4.5		4 5		91 86				<0.2	1	1.2
IM4	011	Decemb	13:12	7.5	Middle	1.0 3.8	0.1	220 214	19.9 19.8	19.8	7.8	7.8	30.5	98.1 97.8	97.8	7.5 7.5	6.4	8.4	4 5		86 89	89	819726	804595	<0.2		1.3
IIVI4	Cloudy	Rough	13.12	7.5		3.8 6.5	0.1	215 227	19.8 19.8		7.8 7.8		30.5	97.7 97.5		7.5 7.4	6.4	0.4	4	-	90 91	69	019720	604595	<0.2	1	1.2
					Bottom	6.5	0.1	229	19.8	19.8	7.8	7.8	30.6	97.5	97.5	7.4	14.4		4		91				<0.2	1	1.7
					Surface	1.0	0.1	203 200	20.0	20.0	7.8	7.8	30.6 30.6	99.4 99.4	99.4	7.6 7.6 7.6	2.5	1	5		85 86				<0.2	1	1.7
IM5	Cloudy	Rough	13:26	7.7	Middle	3.9	0.1	196 198	19.9 19.9	19.9	7.8	7.8	30.6 30.6	99.0 98.8	98.9	7.5 7.5	3.5	4.1	4	5	89 89	89	820714	804861	<0.2	<0.2	1.6 1.6
					Bottom	6.7	0.1	217 214	19.9 19.9	19.9	7.8	7.8	30.6	98.8 98.9	98.9	7.5 7.5	6.3	-	4 5		91 92				<0.2		1.6
					Surface	1.0	0.2	202	20.0	20.0	7.8	7.8	30.5 30.6 30.5	99.0	99.1	7.5	1.7		4		86 85				<0.2	1	1.6
IM6	Cloudy	Rough	13:32	7.6	Middle	3.8	0.1	185	19.9	19.9	7.8	7.8	30.5	98.8	98.8	7.5	2.5	2.5	5	4	87	89	821082	805832	<0.2	-0.2	1.6
					Bottom	3.8 6.6	0.1	186 171	19.9 19.9	19.9	7.8 7.8	7.8	30.5 30.6 30.6 30.6	98.7 98.7	98.7	7.5 7.5 7.5	2.6	1	4		89 91				<0.2 <0.2	1	1.6
					Surface	6.6 1.0	0.1	180 194	19.9	20.3	7.8	7.8	30.6	98.7 99.8	99.9	7.5	1.5		6		93 83				<0.2	1	1.5
						1.0 4.2	0.0	196 185	20.3 20.0		7.8 7.8		30.6	100.0 99.0		7.6 7.5	1.5	1	5 6		84 88				<0.2	1	1.6
IM7	Cloudy	Rough	13:38	8.3	Middle	4.2 7.3	0.1	198 194	20.0	20.0	7.8	7.8	30.6	98.8 98.8	98.9	7.5	1.3	1.7	4 5	5	89 92	88	821346	806839	<0.2	1	1.5 1.6
					Bottom	7.3	0.1	199	20.0	20.0	7.8	7.8	30.7	98.7	98.8	7.5	2.3		4		93				<0.2	1	1.6
					Surface	1.0	0.4	144 156	18.7 18.7	18.7	7.9	7.9	28.3 28.3	98.7 98.7	98.7	7.8 7.8 7.8	4.4	1	4	l	84 84				<0.2	1	1.2
IM8	Cloudy	Rough	13:30	8.3	Middle	4.2 4.2	0.3	174 187	18.4 18.4	18.4	8.0 8.0	8.0	30.8 30.7 30.8	98.5 98.5	98.5	7.7	7.6 7.6	7.3	4 5	5	88 88	88	821845	808160	-0.2	-0.2	1.3 1.1
					Bottom	7.3	0.4	205 207	18.3	18.3	8.0	8.0	31.3 31.3 31.3	97.9 98.1	98.0	7.6 7.7	10.0	1	6	 	91				<0.2	1	1.5
DA: Denth-Aver					L	1.3	U.4	207	18.3		8.0		31.3	98.1		1./	10.1				92			l	<0.2		1.3

22 February 20 during Mid-Ebb Tide

water Qua	ity wonin	orning ixeau	113 011		22 February 20	auring wia-	LDD IIU	9																				
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)		рН	Salir	ity (ppt)		aturation (%)	Disso Oxyg	lved	Turbidity(NTU)	Suspende mg)		Total All		Coordinate	Coordinate	Chrom (µg/l	
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	h (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)	-	
	Condition	Condition	Tille	Depui (III)		1.0	0.3	101	18.9	Avelage	7.9	Average	27.6		98.3	Avelage		DA	3.0	DA	3	DA	84	DA	(reoraning)	(Lasting)		1.1
					Surface	1.0	0.3	104	18.9	18.9	7.9	7.9	27.6	27.6	98.2	98.3	7.8 7.8	7.7	3.0	H	4	ŀ	85				<0.2	1.2
IM9	Cloudy	Rough	13:24	7.9	Middle	4.0	0.2	91	18.6	18.6	7.9	7.9	29.4	29.4	96.7	96.8	7.6	1.1	11.2	7.3	3	5	87	88	822102	808792	< 0.2	.0.0 1.1 4.0
	,				_	4.0 6.9	0.2	91 134	18.6 18.4		7.9 7.9	-	29.4 31.0		96.8 96.5		7.6 7.5		11.0 7.6	-	4 6		89 91				<0.2	1.2
					Bottom	6.9	0.1	138	18.4	18.4	7.9	7.9	31.0	31.0	96.7	96.6	7.5	7.5	7.7		7		92				<0.2	1.4
					Surface	1.0	0.4	115 115	18.6 18.6	18.6	7.9	7.9	29.8	29.8	98.9 98.9	98.9	7.7		2.2	F	5 5		84 84				<0.2	1.2
IM10	Claudii	Davish	13:14	6.7	Middle	3.4	0.3	105	18.5	18.5	7.9	7.9	31.0	31.0	97.7	97.7	7.6	7.7	2.8	3.1	6	7	87	88	822397	809784	<0.2	.0.0 1.1 4.0
IIVITO	Cloudy	Rough	13.14	0.7	Wildle	3.4	0.2	111	18.5 18.4	10.5	7.9	7.5	31.0	31.0	97.7	51.1	7.6		2.9	3.1	6	, '	87	00	022391	009704	<0.2	1.2
					Bottom	5.7 5.7	0.2	116 124	18.4	18.4	7.9	7.8	31.8	31.8	96.8 96.7	96.8	7.5 7.5	7.5	4.3 4.3	-	9	ŀ	92 93				<0.2	1.1
					Surface	1.0	0.4	93	18.4	18.4	8.0	8.0	31.7	31.7	96.6	96.6	7.5		5.1		7		83				<0.2	1.1
						1.0 4.1	0.5	97 90	18.4 18.4		8.0	-	31.7 31.8		96.5 96.3		7.5 7.5	7.5	5.1 6.8	F	7	•	84 88				<0.2	1.0
IM11	Cloudy	Rough	13:03	8.2	Middle	4.1	0.5	91	18.4	18.4	8.0	8.0	31.8	31.8	96.3	96.3	7.5		6.8	6.9	7	7	88	88	822069	811451	<0.2	<0.2 1.1 1.1
					Bottom	7.2 7.2	0.3	108 118	18.3	18.3	8.0	8.0	32.0 32.0	32.0	96.7 96.7	96.7	7.5 7.5	7.5	8.7		6		91 91				<0.2	1.0
					Surface	1.0	0.3	82	18.3 18.4	40.4	8.0		31.9	04.0	96.7	07.4	7.6		8.6 4.2		6		84				<0.2	1.0 0.9
					Surface	1.0	0.3	83	18.4	18.4	8.0	8.0	31.9	31.9	97.4	97.4	7.6	7.6	4.1		6	İ	84				<0.2	1.1
IM12	Cloudy	Rough	12:55	8.5	Middle	4.3 4.3	0.4	78 84	18.3 18.3	18.3	8.0	8.0	32.0 32.0	32.0	96.4 96.5	96.5	7.5 7.5		6.1 6.1	5.7	6 7	7	87 88	88	821471	812038	<0.2	<0.2 1.1 1.0
					Bottom	7.5	0.3	63	18.3	18.3	8.0	8.0	32.2	32.2	96.2	96.2	7.5	7.5	6.9	Ė	7		92				<0.2	0.8
						7.5 1.0	0.3	- 66	18.3 18.4		8.0 7.9	-	32.2		96.1 96.7		7.5 7.5	7.5	6.9 4.8	+	5		92	-			<0.2	0.9
					Surface	1.0	-	-	18.4	18.4	7.9	7.9	31.9	31.9	96.7	96.7	7.5	7.5	4.8	H	5	ŀ					-	-
SR1A	Cloudy	Rough	12:35	4.0	Middle	2.0	-	-	-	-	-	-	-	-		-	-	7.5	-	5.5	-	5	-	-	819970	812654	-	
	,					2.0 3.0	-	-	18.3		7.9		32.1		96.0		7.5		6.3	-	5		-				-	-
					Bottom	3.0	-	-	18.3	18.3	7.9	7.9	32.1	32.1	95.8	95.9	7.4	7.5	6.1		6		-				-	-
					Surface	1.0	0.3	89 95	18.4 18.4	18.4	7.9	7.9	31.9	31.9	96.5 96.3	96.4	7.5 7.5		5.2 5.2	-	6 5		83 84				<0.2	1.1
SR2	Cloudy	Davish	12:22	4.2	Middle	-	-	-	-		-		-		-		-	7.5	-	6.3	-	6	-	86	821453	814180		<0.2 - 1.0
SR2	Cloudy	Rough	12.22	4.2	ivilidate	-	-	-	-	-	-	_	-	-	-	-	-		-	0.3	-	٥	-	00	021403	014100	-	
					Bottom	3.2	0.2	50 52	18.3 18.3	18.3	7.9	7.9	32.2	32.2	97.5 97.4	97.5	7.6 7.6	7.6	7.4 7.5	F	6		89 89				<0.2	1.1 0.9
					Surface	1.0	0.3	70	18.8	18.8	7.9	7.9	27.0	27.0	100.0	100.1	7.9		2.5		5		-				-	-
						1.0 3.9	0.3	71 82	18.8 18.6		7.9 8.0		27.0 28.1		100.1 98.7		7.9 7.8	7.9	2.5 6.6	H	5 6	_					-	-
SR3	Cloudy	Rough	13:36	7.8	Middle	3.9	0.2	88	18.6	18.6	8.0	8.0	28.1	28.1	98.6	98.7	7.8		6.7	6.2	5	7	-	-	822125	807584	-	
					Bottom	6.8	0.2	83 87	18.3 18.3	18.3	8.0	8.0	31.3	31.3	98.2 98.4	98.3	7.7	7.7	9.3 9.3	F	10 8	1	-				-	-
					Surface	1.0	0.1	89	20.0	20.0	7.7	7.7	30.8	30.8	97.0	97.0	7.4		1.4		7		-				-	-
					Ganado	1.0 5.4	0.1	90 76	20.0	20.0	7.7	1	30.8	00.0	96.9 96.0	07.0	7.4 7.3	7.4	1.5 1.9	-	7		-				-	-
SR4A	Cloudy	Moderate	11:59	10.8	Middle	5.4	0.1	76	20.0	20.0	7.8	7.8	30.8	30.8	96.1	96.1	7.3		1.9	2.3	6	7	-	-	817192	807788	-	
					Bottom	9.8	0.1	67	20.0	20.0	7.8	7.8	30.8	30.8	96.5	96.7	7.3 7.3	7.3	3.4		7		-				-	-
						9.8	0.1	73 123	20.0		7.8	-	30.8		96.8 94.3		7.1		3.5 3.2		6		- 1				-	-
					Surface	1.0	0.1	125	19.9	19.9	7.8	7.8	31.7	31.7	94.4	94.4	7.1	7.1	3.2	F	7	Ī	-				-	-
SR5A	Cloudy	Moderate	11:46	4.5	Middle	-	-	-	-	-	-	-	-	-		-	-		-	3.7	-	7	-	-	816587	810684	-	
					Bottom	3.5	0.1	0	20.0	20.0	7.8	7.8	31.8	31.8	94.1	94.2	7.1	7.1	4.1		7	İ	-				-	-
						3.5 1.0	0.1	0 142	20.0		7.8	-	31.8		94.2 94.5		7.1 7.1		4.2 3.8		6 7		-				-	
					Surface	1.0	0.0	152	19.8	19.8	7.7	7.7	32.3	32.3	94.6	94.6	7.1	7.1	3.9	F	8		-				-	-
SR6A	Cloudy	Moderate	11:19	4.2	Middle	-	-	-	-	-	-	-	-			-	-	7.1	-	6.2	-	7	-	-	817981	814722	-	
					D.W.	3.2	0.0	153	19.8	10.0	7.7		32.3	00.0	94.1	04.4	7.1	7.4	8.5	F	7	1	-				-	-
					Bottom	3.2	0.0	158	19.8	19.8	7.7	7.7	32.3	32.3	94.1	94.1	7.1	7.1	8.6		6		-				-	-
					Surface	1.0	0.2	50 54	18.3 18.3	18.3	7.7	7.7	32.8	32.8	91.6 91.5	91.6	7.1 7.1		2.6	F	5 4	1					-	-
SR7	Cloudy	Rough	11:23	15.1	Middle	7.6	0.4	64	18.3	18.3	7.7	7.7	33.0	33.0	90.9	90.9	7.0	7.1	2.8	3.0	4	5			823634	823723	-	
31(7	Cicucy	ugii	20	.5.1		7.6 14.1	0.4	67 88	18.3 18.3		7.7 7.6	<u> </u>	33.0 33.3		90.9		7.0 7.0		2.8 3.4	5.5	5 5	,	-		32300 4	023,23	-	-
					Bottom	14.1	0.1	90	18.3	18.3	7.6	7.6	33.3	33.3	90.9	90.9	7.0	7.0	3.4		6	<u></u>	Ė			L		
					Surface	1.0	-	-	18.4	18.4	7.9	7.9	31.9	31.9	96.6	96.8	7.5		4.8	T	7		$-\Box$				-	-
SR8	Olavari.	Barret	40.46		Middle	1.0	-	-	18.4		7.9	1	31.9		96.9		7.5	7.5	4.8	7.7	8		\vdash		000005	04404=	-	-
SK8	Cloudy	Rough	12:46	4.1	Middle	-	-	-	-	-	-	1 -	-	-	-	-	-		-	′.′	-	8	-	-	820399	811617	-	-
					Bottom	3.1 3.1	1	-	18.3 18.3	18.3	7.9	7.9	32.1	32.1	96.0 96.0	96.0	7.5 7.5	7.5	10.5	-	8 7	+	-				-	-
DA: Denth-Aver					1	1 0							, UE.1		55.5													

22 February 20 during Mid-Flood Tide

Water Qua	lity Monito	oring Resu	lts on		22 February 20	during Mid-	Flood Ti	de																				
Monitoring	Weather	Sea	Sampling	Water	Sampling De	anth (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salir	ity (ppt)		aturation (%)	Disso Oxy		Turbidity(NTU)	Suspende (mg	ed Solids /L)	Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chror (µg.		ckel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Jamping Di		(m/s)	Direction	Value	Average	Value	Average		Ů		Average	Value	DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value	DA Valu	
					Surface	1.0	0.1	61 66	20.2	20.2	7.9	7.9	31.2	31.2	96.2 96.2	96.2	7.3		5.7 5.8		6	ŀ	83			<0.2	1.0	
C1	Fine	Rough	18:00	7.2	Middle	3.6	0.1	55	20.2	20.2	7.9	7.9	31.4	31.4	95.8	95.8	7.2	7.3	12.1	8.9	6	6	88	815611	804227	<0.2	-0.2 1.1	.1
		9				3.6 6.2	0.1	56 37	20.2		7.9 7.9		31.4 31.4		95.8 96.1		7.2 7.2		12.2 8.8		7		88 91			<0.2	0.9	.9
					Bottom	6.2	0.2	39	20.2	20.2	7.9	7.9	31.4	31.4	96.2	96.2	7.3	7.3	8.9		5		92			<0.2	1.0	.0
					Surface	1.0	0.2	75 78	18.7 18.7	18.7	7.8	7.8	29.4	29.4	99.1 99.2	99.2	7.8 7.8	7.8	7.1 7.1		5 6		84			<0.2	1.7	7
C2	Fine	Rough	16:51	7.6	Middle	3.8	0.2	71 71	18.5 18.5	18.5	7.8	7.8	30.9	30.9	98.7 98.7	98.7	7.7	7.8	9.8 9.9	9.4	9 10	8	89 89	825659	806930	<0.2 <0.2	<0.2	6 15
					Bottom	6.6	0.4	78	18.5	18.5	7.7	7.7	31.1	31.1	98.4	98.3	7.7	7.7	11.1		9	İ	91			<0.2	1.3	.3
						6.6 1.0	0.4	78 214	18.5 18.8		7.7 8.1		31.1		98.1 96.0		7.6 7.4		11.1 1.4		10 6		92 83	1		<0.2	1.3	
					Surface	1.0	0.1	223	18.8	18.8	8.1	8.1	32.3	32.3	95.9	96.0	7.4	7.3	1.4		5		84			<0.2	1.0	.0
С3	Fine	Rough	18:37	8.8	Middle	4.4	0.1	247 256	18.4 18.4	18.4	8.1	8.1	32.9 32.9	32.9	92.7 92.8	92.8	7.2		3.3	2.5	6 5	7	88 89	822128	817820	<0.2	<0.2	0 1.1
					Bottom	7.8	0.1	262	18.3	18.3	8.0	8.0	33.1	33.1	93.3	93.4	7.2	7.2	2.9		9	İ	91			<0.2	1.1	.1
					Surface	7.8 1.0	0.2	277 17	18.3 20.2	20.2	8.0 7.9	7.9	33.1	30.9	93.4 98.2	98.1	7.2 7.4		2.9 3.7		3		91 83	1		<0.2 <0.2	1.1	.1
						1.0	0.1	18	20.2		7.9	7.5	30.9	30.5	98.0	30.1	7.4	7.4	3.8		4		84			<0.2	1.2	
IM1	Fine	Rough	17:32	7.8	Middle	-	-	-	-	-		-	-	-	-	-	-		-	4.3	-	4	- 88	817961	807139	-	<0.2	. 1.2
					Bottom	6.8	0.1	18 19	20.1	20.1	7.9	7.9	31.1	31.1	96.1 96.0	96.1	7.3	7.3	4.7		5 4		92 92			<0.2 <0.2	1.1	
					Surface	1.0	0.2	134	20.1	20.1	7.8 7.8	7.8	30.8	30.8	97.9 97.8	97.9	7.4 7.4		2.5		4		84			<0.2	1.1	
IM2	Fine	Dauah	17:18	7.5	Middle	1.0 3.8	0.2	134 135	20.1	20.1	7.8	7.8	30.8	30.8	96.8	96.8	7.3	7.4	2.5 3.6	3.8	4	4	86 88 89	818144	806182	<0.2	<0.2	2 44
IIVIZ	rine	Rough	17.10	7.5	Middle	3.8 6.5	0.1	149 184	20.1	20.1	7.8 7.9	1	30.8	30.0	96.8 97.2		7.3 7.4		3.6 5.2	3.0	3 5	-	90 92	010144	000102	<0.2	1.1	.1
					Bottom	6.5	0.1	204	20.0	20.0	7.9	7.9	30.8	30.8	97.3	97.3	7.4	7.4	5.3		4		93			<0.2	1.1	.1
					Surface	1.0	0.2	38 39	20.1	20.1	7.9	7.9	30.6	30.6	101.1	101.1	7.7		2.6		3	1	85 86			<0.2	1.2	2
IM3	Fine	Rough	17:08	7.8	Middle	3.9	0.1	31	20.0	20.0	7.9	7.9	30.6	30.6	100.2	100.2	7.6	7.7	3.6	4.2	4	4	88 00	818784	805611	<0.2	.0.0 1.1	1 44
					D. H	3.9 6.8	0.1	32 23	20.0		7.9 7.9	1	30.6 30.6		100.2 99.9		7.6 7.6	7.0	3.7 6.2		3	ŀ	90			<0.2	1.2	1
					Bottom	6.8	0.0	24 34	20.0	20.0	7.9 7.8	7.9	30.6 30.6	30.6	99.9	99.9	7.6 7.6	7.6	6.1 4.5		3		93 84			<0.2 <0.2	1.1	
					Surface	1.0	0.0	36	19.9	19.9	7.8	7.8	30.6	30.6	99.8	99.9	7.6	7.6	4.5		4	l	86			<0.2	1.1	.1
IM4	Fine	Rough	17:01	8.0	Middle	4.0	0.1	21 22	19.9 19.9	19.9	7.8	7.8	30.6	30.6	99.7 99.7	99.7	7.6 7.6	7.0	3.7 3.4	4.1	4 5	5	90 89	819740	804609	<0.2	<0.2	2 1.2
					Bottom	7.0	0.1	338	19.9	19.9	7.8	7.8	30.6	30.6	98.8	98.9	7.5	7.5	4.3		5	İ	92			< 0.2	1.1	.1
						7.0	0.1	311 25	19.9 20.0		7.8		30.6 30.6		98.9 101.3		7.5 7.7		4.4 3.2		6 3		93 84			<0.2 <0.2	1.1	
					Surface	1.0	0.2	27	20.0	20.0	7.9	7.9	30.6	30.6	101.4	101.4	7.7	7.7	3.1		4	Ī	86			<0.2	1.2	2
IM5	Fine	Rough	16:53	7.1	Middle	3.6 3.6	0.1	28 29	19.9 19.9	19.9	7.9	7.9	30.6	30.6	100.0 99.9	100.0	7.6 7.6		4.8 4.9	4.6	4	4	90 89	820721	804862	<0.2	<0.2	.1
					Bottom	6.1 6.1	0.1	46 46	20.0	20.0	8.0	8.0	30.7	30.7	99.4 99.2	99.3	7.6 7.5	7.6	5.8 5.8		3		91 92			<0.2	1.3	3
					Surface	1.0	0.2	23	20.5	20.5	7.8	7.8	30.1	30.1	98.2	98.3	7.4		3.6		3		84			<0.2	1.2	2
	_					1.0 3.9	0.2	25 21	20.5		7.8	1	30.1 30.6		98.3 97.2		7.4	7.4	3.8 4.7		4		85 87			<0.2	1.1	1
IM6	Fine	Rough	16:33	7.7	Middle	3.9	0.1	22	20.2	20.2	7.8	7.8	30.6	30.6	97.2	97.2	7.4		4.8	5.0	2	3	89 89	821055	805838	<0.2	<0.2	.1 1.1
					Bottom	6.7 6.7	0.1	12 13	20.2	20.2	7.8	7.8	31.0	31.0	97.3 97.5	97.4	7.3 7.4	7.4	6.4 6.5		3		93 94			<0.2	1.2	1
					Surface	1.0	0.1	28 26	20.5 20.5	20.5	7.8	7.8	30.1	30.1	98.9 98.8	98.9	7.5 7.5		2.8 2.9		4		83 84			<0.2	1.1	
IM7	Fine	Rough	16:21	8.4	Middle	4.2	0.1	14	20.2	20.2	7.8	7.8	30.6	30.6	97.8	97.8	7.4	7.5	3.5	36	4	3	87 00	821357	806845	<0.2	.0 2 1.2	2 44
11417	1 1110	rtougii	10.21	0.4		4.2 7.4	0.1	14 16	20.2		7.8		30.6 31.0		97.8 96.4		7.4 7.3		3.6 4.3	5.0	3	,	92	021007	000045	<0.2	1.1	.1
					Bottom	7.4	0.2	18	20.2	20.2	7.8	7.8	31.0	31.0	96.4	96.4	7.3	7.3	4.3		3		93			< 0.2	1.2	.2
					Surface	1.0	0.4	346 327	18.9 18.9	18.9	7.9 7.9	7.9	27.6 27.6	27.6	100.6 100.7	100.7	7.9 7.9	7.0	3.7		4	1	84			<0.2	1.6	<i>6</i>
IM8	Fine	Rough	17:16	8.1	Middle	4.1	0.4	331 318	18.6	18.6	7.9	7.9	29.9	29.9	99.5	99.5	7.8	7.9	6.5	6.0	5	6	87 00	821821	808149	<0.2	<0.2	.6
		-			Bottom	7.1	0.1	354	18.4	18.4	7.9	7.9	31.2	31.2	98.2	98.2	7.7	7.7	7.7		7	l	92			<0.2	1.6	.6
DA: Depth-Aver					Bottom	7.1	0.1	355	18.4	10.4	7.9	7.5	31.2	31.2	98.1	30.2	7.7	1.1	7.7		8		93	<u> </u>		<0.2	1.6	<u>8 </u>

22 February 20 during Mid-Flood Tide

Water Qual	ity Monite	oring Resu	lts on		22 February 20	during Mid		ide																		
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salinity (ppt)	DO:	Saturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg/	d Solids /L)	Total Alk (ppn		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	_	Value	Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)		DA Value DA
					Surface	1.0	0.3	281 282	19.2 19.2	19.2	8.0	8.0	30.6 30.6	101.8	101.8	8.0 8.0 7.9	4.3 4.4	1	5 5		84 85				<0.2 <0.2	1.9
IM9	Fine	Rough	17:23	7.8	Middle	3.9	0.4	274 274	18.4 18.4	18.4	8.0	8.0	30.6 30.6	98.8	98.8	7.7	10.4	7.6	6 5	5	87 88	88	822073	808792	<0.2 <0.2	<0.2 1.8 1.7
					Bottom	6.8	0.2	287 295	18.4 18.4	18.4	8.0	8.0	31.1 31.1	98.7 98.7	98.7	7.7 7.7	8.2 8.1		5 4		92 92				<0.2	1.5
					Surface	1.0	0.5	272 276	18.8 18.8	18.8	8.0	8.0	28.3 28.3	99.2 99.2	99.2	7.8 7.8	3.4		5 5		84 85				<0.2 <0.2	1.7
IM10	Fine	Rough	17:32	8.4	Middle	4.2 4.2	0.3	282 278	18.4 18.4	18.4	8.0	8.0	30.8 30.7 30.8	97.1 96.7	96.9	7.6 7.6	4.6	4.4	5	5	87 87	88	822393	809770	۲O 2	<0.2 1.6 1.5
					Bottom	7.4	0.7	271 273	18.4 18.4	18.4	8.0	8.0	31.7 31.7	97.0 97.0	97.0	7.5 7.5	6.0		6		91				<0.2	1.4
					Surface	1.0	0.1	252 255	19.1	19.1	8.0 8.0	8.0	28.9 28.9 28.9	99.7 99.9	99.8	7.8 7.8	2.9		7 8		84 85				<0.2	1.7
IM11	Fine	Rough	17:42	7.4	Middle	3.7	0.2	243	18.6	18.6	8.1 8.1	8.1	31.4 31.4 31.4	97.8 97.8	97.8	7.6 7.6	3.5	3.0	8	8	88	88	822064	811443	<0.2	<0.2 1.7 1.7
					Bottom	6.4	0.2	249 284	18.5	18.5	8.0	8.0	32.0	97.7	97.8	7.6	2.5		10		89 92				<0.2	1.5
					Surface	6.4 1.0	0.2	292 244	18.5 18.9	18.9	8.0	8.0	30.1 30.1	97.8 98.5	08.5	7.6	3.3		9		92 84				<0.2	1.5 1.6
IM12	Fine	Rough	17:49	7.1	Middle	1.0 3.6	0.1	257 231	18.9 18.4	18.4	8.0	8.0	32.0	98.5 96.8	96.8	7.7 7.5	3.3 4.1	3.9	5 5	7	84 89	89	821469	812043	<0.2 <0.2	<0.2 1.5 1.4
	1 110	rtougn	11.10	***	Bottom	3.6 6.1	0.1	234 267	18.4 18.4	18.4	8.0 8.0	8.0	32.0	96.7 97.1	97.1	7.5 7.5 7.5	4.1 4.4	0.0	6 12		89 92		021100	012010	<0.2	1.5
					Surface	6.1 1.0	0.2	283	18.4 19.1	19.1	8.0 8.1	8.1	31.5	97.0	99.0	7.6	4.4 2.3		11 9		93				<0.2	1.2
SR1A	Fine	Rough	18:06	4.2	Middle	1.0	-	-	19.1	19.1	8.1	0.1	31.5	98.9	99.0	7.6	2.3	3.0	8	9	-		819976	812660	-	-
SKIA	rille	Rougii	16.00	4.2		2.1 3.2	-	-	18.5		8.1	- 0.4	32.0	97.2	07.0	7.5	3.6	3.0	- 10	9	-	-	019970	812000	-	-
					Bottom	3.2 1.0	0.2	214	18.5 19.3	18.5	8.1 8.1	8.1	32.0	97.3		7.5 7.5 7.8	3.6 2.6		9		- 79				- <0.2	1.7
					Surface	1.0	0.2	237	19.3	19.3	8.1	8.1	28.7	100.5	100.7	7.8	2.6		6		83				<0.2	1.7
SR2	Fine	Rough	18:19	3.8	Middle	2.8	0.1	- 226	18.7	-	8.1	-	31.1	99.1	-	7.7	3.2	2.9	- 8	8	- 88	85	821486	814165	- <0.2	<0.2 - 1.6
					Bottom	2.8	0.1	218 12	18.7	18.7	8.1 7.8	8.1	31.2	99.0	99.1	7.7 7.7 7.9	3.3		10		88				<0.2	1.5
					Surface	1.0	0.4	12	19.0	19.0	7.8	7.8	26.9	99.5	99.6	7.9 7.5 7.7	3.2		3						-	-
SR3	Fine	Rough	17:10	9.1	Middle	4.6	0.4	12	18.7	18.7	7.8	7.8	29.6	96.1	96.1	7.5	8.2 13.0	8.1	4	4	-	-	822139	807584	-	
					Bottom	8.1 8.1	0.3	12	18.4	18.4	7.7	7.7	31.1 31.1	97.2 97.1	97.2	7.6 7.6 7.6	13.0		7						-	-
					Surface	1.0	0.1	235 236	20.0	20.0	7.9	7.9	32.8 32.8	95.0 95.1	95.1	7.1 7.1 7.1	3.4		6 7						-	-
SR4A	Fine	Rough	18:25	10.9	Middle	5.5 5.5	0.2	286 287	19.9 19.9	19.9	7.9	7.9	32.8 32.8	94.2 94.1	94.2	7.1	1.2	2.0	6 7	7	-	-	817209	807827	-	
					Bottom	9.9	0.3	270 273	19.9 19.9	19.9	7.9 7.9	7.9	32.8 32.8	94.2	94.2	7.1 7.1	1.3		7 6		-				-	-
					Surface	1.0	0.2	288 277	20.2	20.2	7.9 7.9	7.9	31.2 31.2 31.2	98.0 98.0	98.0	7.4 7.4 7.4	1.9		6 7						-	-
SR5A	Fine	Rough	18:34	3.4	Middle	-	-	-	-	-	-	-		-	-	-	-	2.0	-	6	-	-	816594	810711	-	
					Bottom	2.4	0.1	296 299	20.2	20.2	7.9 7.9	7.9	31.2 31.2 31.2	98.0 97.9	98.0	7.4 7.4 7.4	2.1		5 6		-				-	-
					Surface	1.0	0.1	243 246	20.3	20.3	7.8	7.8	31.4 31.4 31.4	98.3 98.3	98.3	7.4 7.4 7.4	1.7		4 5		-				-	-
SR6A	Fine	Rough	18:47	3.8	Middle	-	-	-	-	-	-	-		-	-	- /.4	-	3.3	-	5	-	-	817959	814760	-	
					Bottom	2.8	0.1	287 274	20.3	20.3	7.8 7.8	7.8	31.5 31.5	98.1 98.1	98.1	7.4 7.4 7.4	4.7		4 5		-				-	-
					Surface	1.0	0.1	266 282	18.5 18.5	18.5	7.9 7.9	7.9	32.9 32.9	93.4 93.5	93.5	7.2	1.1		5 5		-	İ			-	-
SR7	Fine	Rough	19:04	17.4	Middle	8.7 8.7	0.1	243 244	18.4	18.4	8.0	8.0	33.1 33.1 33.1	91.9	91.9	7.1	1.5	1.6	4	6	-	-	823648	823761	-	
					Bottom	16.4 16.4	0.1	290 297	18.4	18.4	8.0	8.0	33.2 33.2 33.2	92.0	92.0	7.1 7.1 7.1	2.1	1	6 7		=				-	-
					Surface	1.0	-	-	19.0	19.0	8.1 8.1	8.1	30.6 30.6 30.6	99.3 99.3	99.3	7.7	5.1 5.1		9						-	
SR8	Fine	Rough	17:58	4.1	Middle	-	Ė	-	-	-	-	-		-	-	7.7	-	4.7	-	9	-	-	820383	811634	-	
					Bottom	3.1	-	-	18.5	18.5	8.1	8.1	31.7	98.8	98.8	7.7 7.7	4.3		10						-	-
L					* ***	3.1	-	-	18.5		8.1		31.7	98.8		7.7	4.4		10						-	

25 February 20 during Mid-Ebb Tide

Water Qua	lity Moni	toring Res	ults on		25 February 20	during Mid-	Ebb Tid	е																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)	DOS	aturation (%)	Dissolver Oxygen		oidity(NT		nded Solid mg/L)		Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chromiun (µg/L)	m Nickel (μg/L)
Station	Condition	Condition	Time	Depth (m)		,	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value D	A Va	ue D	A Valu	DA DA	Value	DA	(Northing)	(Easting)	Value D	DA Value DA
					Surface	1.0	0.1 0.1	260 269	18.9 18.9	18.9	8.1 8.1	8.1	30.9	30.9	97.4 97.4	97.4	7.5 7.5	. 8	6	15 17		83 84	1			<0.2	1.5
C1	Cloudy	Moderate	14:01	7.3	Middle	3.7 3.7	0.0	279 281	18.8 18.8	18.8	8.1 8.1	8.1	30.9	30.9	97.0 96.9	97.0	7.5 7.5	9	9 9	B 17	16	88 88	88	815608	804262	<0.2 <0	0.2 1.6 1.5
					Bottom	6.3	0.0	54 55	18.8	18.8	8.1	8.1	31.0	31.0	96.8 96.8	96.8	7.5 7.5	_ 10	.9	14		92	1			<0.2	1.5
					Surface	1.0	0.5	165 170	19.3	19.3	8.0	8.0	26.2	26.2	93.8	93.8	7.4	4	8	5 4		86 86	•			<0.2	1.6
C2	Cloudy	Moderate	12:39	11.7	Middle	5.9	0.4	154	19.1	19.1	8.0	8.0	27.3 27.3	27.3	92.2	92.2	7.3 7.3	4 8	6 8	1 5	5	87 88	88	825684	806945	<0.2	0.2 1.6 1.6
					Bottom	5.9 10.7	0.4	155 117	19.1	18.9	8.0	8.0	29.4	29.4	92.2	91.6	7.1	1 10	.9	6		89	1			<0.2	1.5
					Surface	10.7	0.3	120 170	18.9 18.8	18.8	8.0	8.2	29.4 30.9	30.9	91.6 92.1	92.1	7.1	2	7	5 4		90 86				<0.2	1.6 0.9
СЗ	Cloudy	Moderate	14:42	11.0	Middle	1.0 5.5	0.1	185 121	18.8 18.7	18.7	8.2 8.2	8.2	30.9	31.1	92.1 92.3	92.4	7.1 7.2		9 5 4	3	3	87 87	88	822099	817791	<0.2	1.0 1.0 0.2 0.9
03	Oloddy	Woderate	14.42	11.0		5.5 10.0	0.1	132 143	18.7 18.7		8.2 8.2		31.1 31.0		92.5 93.1	93.2	7.2	- 4	7	3	- "	89 90	- 00	022033	017731	<0.2	0.9
					Bottom	10.0	0.2	147 201	18.7 19.3	18.7	8.2 8.1	8.2	31.0 30.6	31.0	93.2 98.6		7.2 7. 7.6	4	7	12		91 83	1			<0.2	0.9 1.5
					Surface	1.0	0.0	205	19.3	19.3	8.1	8.1	30.6	30.6	98.4	98.5	7.6	6 7	3	10		84	1			<0.2	1.5
IM1	Cloudy	Moderate	13:27	4.2	Middle	3.2	- 0.0	- 211	18.9	-	- 8.1	-	30.8	-	97.0	-	7.5 _		4 8	9	10	- 88	86	817949	807151	- <0.2	0.2 - 1.5
					Bottom	3.2	0.0	220	18.9	18.9	8.1	8.1	30.8	30.8	97.0	97.0	7.5	5 9	4	10		89				<0.2	1.5
					Surface	1.0	0.1 0.1	322 326	19.1 19.0	19.1	8.2 8.2	8.2	30.7	30.8	97.5 97.3	97.4	7.5 7.5 7.	₅ 8	6 9	10 9		83 83	1			<0.2	1.5
IM2	Cloudy	Moderate	13:17	7.7	Middle	3.9 3.9	0.0	143 145	18.9 18.9	18.9	8.2	8.2	30.8	30.8	96.8 96.8	96.8	7.5	1(9 .0	10	10	88	87	818176	806144	<0.2	0.2 1.4 1.5
					Bottom	6.7 6.7	0.0	146 144	18.9 18.9	18.9	8.2	8.2	30.9	30.9	96.6 96.6	96.6	7.5 7.5	1	.3	10 10		91 91				<0.2	1.5
					Surface	1.0	0.1	171 186	19.2 19.2	19.2	8.2	8.2	30.0	30.0	98.5 98.5	98.5	7.6 7.6 7.	7	2	8		83 83				<0.2	0.9
IM3	Cloudy	Moderate	13:12	7.0	Middle	3.5 3.5	0.1	219 223	18.9 18.9	18.9	8.2	8.2	30.8	30.8	96.7 96.7	96.7	7.5 7.5	8	5 5	9 9	9	88 88	87	818784	805574	<0.2 <0	0.2 0.8 0.9
					Bottom	6.0 6.0	0.1 0.1	217 237	18.9 18.9	18.9	8.2 8.2	8.2	30.8	30.8	96.6 96.6	96.6	7.5 7.5		.1	9		91 91	1			<0.2	0.9
					Surface	1.0	0.1	132 141	18.9 18.9	18.9	8.2 8.2	8.2	30.8	30.8	96.5 96.4	96.5	7.5 7.5	-	3	9		83 84				<0.2	0.9 1.0
IM4	Cloudy	Moderate	13:05	7.8	Middle	3.9	0.1	216 225	18.9	18.9	8.2	8.2	30.9	30.9	96.3 96.3	96.3	7.5 7.5 7.5	12	2	.5 11	12	87	87	819730	804611	<0.2	0.2 0.9 1.0
					Bottom	6.8	0.2	209 214	18.9	18.9	8.2	8.2	31.0 31.0	31.0	96.2 96.2	96.2	7.4 7.4 7.4	4 1:	.1	14		91				<0.2	1.0
					Surface	1.0	0.3	176 182	19.0	19.0	8.1 8.1	8.1	30.6 30.6	30.6	97.0 97.0	97.0	7.5	10	.6	6		83 84	1			<0.2	0.9
IM5	Cloudy	Moderate	12:59	7.1	Middle	3.6	0.3	190	18.9	18.9	8.2	8.2	30.8	30.8	96.6	96.7	7.5	12	.3	2 5	5	88	88	820739	804863	<0.2	0.9 0.9 0.9
					Bottom	3.6 6.1	0.3	193 178	18.9 18.9	18.9	8.2 8.2	8.2	30.8	30.9	96.7 96.8	96.8	7.5 7.5 7.	5 13	.7	5		88 91	1			<0.2	0.9
					Surface	6.1 1.0	0.3	179 188	18.9 19.3	19.3	8.2 8.1	8.1	30.9 29.0	29.0	96.8 96.2	96.2	7.5	1;		6		92 83				<0.2	0.9
IM6	Cloudy	Moderate	12:52	7.6	Middle	1.0 3.8	0.1 0.1	183 200	19.3 19.1	19.1	8.1 8.1	8.1	29.0 30.0	30.0	96.2 96.2	96.2	7.5 7.5	5	0 5	5	- 6	83 88	87	821073	805820	<0.2	0.9
	oloddy	Wodorato	12.02	7.0	Bottom	3.8 6.6	0.1	204 162	19.1 19.0	19.0	8.1 8.1	8.1	29.9 30.5	30.5	96.2 96.8	96.8	7.5 7.5 7.		9	6	_ ~	88 91	- "	021010	000020	<0.2	0.9
						6.6 1.0	0.1	167 184	19.0 19.3		8.1 8.1		30.5 28.1		96.8 95.1		7.5	6	8	5		91 83				<0.2	0.9
					Surface	1.0	0.1	175 132	19.3	19.3	8.1	8.1	28.1	28.1	95.1 96.3	95.1	7.4 7.5	_ 3	8	5		83	1			<0.2	1.0
IM7	Cloudy	Moderate	12:45	8.1	Middle	4.1 4.1 7.1	0.1	134 155	19.0	19.0	8.1	8.1	30.1	30.1	96.4	96.4	7.5	6	8 8	5 7	6	88 91	87	821372	806820	<0.2 <0.2 <0.2	0.2 0.9 0.9 0.8
					Bottom	7.1	0.1	156	19.0	19.0	8.1	8.1	30.5	30.5	96.4 96.5	96.5	7.5 7.5	5 8	7	6		91				<0.2	0.9
					Surface	1.0	0.2	192 192	19.1 19.1	19.1	8.1 8.1	8.1	27.3 27.4	27.4	94.3	94.3	7.4	, 6	5 7	5	_	87 87	1			<0.2	1.5
IM8	Cloudy	Moderate	13:13	7.5	Middle	3.8 3.8	0.2	206 210	19.0 19.0	19.0	8.1 8.1	8.1	28.3 28.4	28.3	94.6 94.7	94.7	7.4	7	2 4	5	- 5	88 87	88	821824	808158	<0.2	0.2 1.5 1.6
					Bottom	6.5 6.5	0.2	187 190	19.0 19.0	19.0	8.1	8.1	28.8	28.8	94.7 94.7	94.7	7.4 7.4		.1	5	_	89 90				<0.2	1.5

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

water Qua	lity Monit	toring Res	ults on		25 February 20	during Mid	l-Ebb Tid	e																					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	ı	рH	Salin	ity (ppt)		aturation (%)	Diss Oxy	olved vgen	Turbidity(NTU)	Suspende (mg/			dkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/		kel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Camping Dep	ur (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA Valu	ue DA
					Surface	1.0	0.2	143 147	19.1 19.1	19.1	8.0	8.0	27.8	27.8	94.8	94.8	7.4		7.0 7.1		7		86 86				<0.2	1.4	
IM9	Cloudy	Moderate	13:20	7.0	Middle	3.5 3.5	0.2	152 156	19.1 19.1	19.1	8.1 8.1	8.1	28.4 28.4	28.4	94.7 94.7	94.7	7.4	7.4	7.2 7.2	7.2	8	9	88 87	88	822096	808830	<0.2	<0.2	4 14
					Bottom	6.0	0.1	139	19.3	19.3	8.0	8.0	28.5	28.5	94.6	94.6	7.4	7.4	7.4		11		90				<0.2	1.4	4
						6.0 1.0	0.1	147 111	19.3 19.1		8.0 8.1		28.4		94.6		7.4		7.3 6.0		11 7		90 86				<0.2	1.4	
					Surface	1.0	0.3	117 124	19.1 19.0	19.1	8.1 8.1	8.1	28.4	28.4	94.9 94.5	94.9	7.4	7.4	6.1 6.5		8		87 88	1			<0.2	1.3	2
IM10	Cloudy	Moderate	13:23	7.2	Middle	3.6 6.2	0.2	131 154	19.0	19.0	8.1	8.1	29.3	29.3	94.5	94.5	7.4		6.6	6.4	9	8	87 90	88	822387	809815	<0.2	<0.2	4 1.3
					Bottom	6.2	0.2	165	19.2	19.2	8.0	8.0	29.2	29.3	94.5	94.5	7.4	7.4	6.6		8		90				<0.2	1.2	2
					Surface	1.0	0.3	76 82	18.9 18.9	18.9	8.1	8.1	29.4 29.4	29.4	94.4	94.4	7.4	7.4	7.8 8.0		8		87 86				<0.2	1.3	
IM11	Cloudy	Moderate	13:33	7.9	Middle	4.0	0.3	89 95	18.9 18.9	18.9	8.1	8.1	29.5 29.5	29.5	94.3	94.4	7.4	7.4	9.2	9.2	8	8	88 87	88	822074	811478	<0.2	<0.2	
					Bottom	6.9	0.2	90 94	18.9	18.9	8.1	8.1	29.6 29.6	29.6	94.8	94.9	7.4	7.4	10.3		8		90				<0.2	0.9	9
					Surface	1.0	0.3	79	19.0	19.0	8.1	8.1	29.4	29.4	94.7	94.7	7.4		5.2		7		86				<0.2	1.0	0
IM12	Claudi	Moderate	13:37	8.3	Middle	1.0 4.2	0.3	83 92	19.0 18.9	18.9	8.1 8.1	8.1	29.4 29.5	29.5	94.7 94.7	94.7	7.4	7.4	5.3 8.5	7.9	7	6	85 88	88	821472	812051	<0.2	<0.2	
IIVITZ	Cloudy	Moderate	13.37	6.5		4.2 7.3	0.3	96 88	18.9 18.9		8.1 8.0		29.5 29.5		94.7 95.4		7.4		8.6 10.0	1.5	6 5	0	87 90	- 00	021472	812031	<0.2	1.0	0
					Bottom	7.3 1.0	0.3	94	18.9 19.0	18.9	8.0 8.1	8.0	29.5 29.6	29.5	95.4 95.2	95.4	7.4	7.4	10.1 5.2		6		90				<0.2	0.9	
					Surface	1.0			19.0	19.0	8.1	8.1	29.7	29.6	95.1	95.2	7.4	7.4	5.9		3		-				-		
SR1A	Cloudy	Moderate	14:04	5.3	Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-	6.8	-	3	-	-	819973	812658	-		
					Bottom	4.3	-	-	18.9 18.9	18.9	8.1	8.1	29.8	29.8	95.6 95.7	95.7	7.4	7.4	8.2 7.8		2		-	1			-	-	
					Surface	1.0	0.2	102 108	19.0	19.0	8.1 8.1	8.1	29.6 29.6	29.6	94.5	94.5	7.4		5.9		4 3		88 87				<0.2	0.8	
SR2	Cloudy	Moderate	14:20	5.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.4	-	6.5	-	4	-	89	821480	814186	-	<0.2	0.9
					Bottom	4.2	0.1	98	19.0	19.0	8.1	8.1	29.7	29.7	94.7	94.8	7.4	7.4	7.0		4		90				<0.2	0.9	
						4.2 1.0	0.1	98 109	19.0 19.1		8.1 8.1		29.7		94.8		7.4	77	6.7		4		90				<0.2	0.9	3
					Surface	1.0 4.3	0.4	117 114	19.1 19.0	19.1	8.1 8.1	8.1	27.6 28.7	27.5	95.5 95.8	95.5	7.5 7.5	7.5	6.6 9.1		4		-	1				-	4
SR3	Cloudy	Moderate	13:06	8.5	Middle	4.3	0.4	121	19.0	19.0	8.1	8.1	28.8	28.8	95.8	95.8	7.5		9.6	9.5	5	4	-	-	822164	807563	-		⊒ ։
					Bottom	7.5 7.5	0.4	104 113	19.0 19.0	19.0	8.1	8.1	29.1 29.1	29.1	95.8 95.8	95.8	7.5 7.5	7.5	12.9 13.0		5 4		-				-		
					Surface	1.0	0.1	75 76	18.9 18.9	18.9	8.1	8.1	30.9	30.9	97.3 97.3	97.3	7.5 7.5	7.5	8.6 8.8		16 18		-	1			-	H	-
SR4A	Cloudy	Calm	14:32	9.6	Middle	4.8	0.1	72 75	18.8 18.8	18.8	8.1	8.1	31.0 31.0	31.0	96.9 96.9	96.9	7.5 7.5	7.5	10.5 10.7	10.2	17 18	17	-	- 1	817185	807803	-	. <u>-</u>	7 -
					Bottom	8.6 8.6	0.1	70 72	18.7 18.8	18.8	8.1 8.1	8.1	31.1	31.1	96.7 96.7	96.7	7.5 7.5	7.5	11.2 11.2		17 15		-				-	_	7
					Surface	1.0	0.1	76	19.2	19.2	8.1	8.1	30.9	30.9	95.9	95.9	7.4		8.5		18		-					E	
SR5A	Cloudy	Calm	14:47	4.0	Middle	1.0	0.2	82 -	19.2		8.1		30.9		95.9	_	7.4	7.4	8.6	7.4	18 -	18	-	1 . 1	816575	810714	-	. E	Ⅎ .
Citori	Cloudy	Guin		1.0	Bottom	3.0	0.1	134	19.2	19.2	8.2	8.2	30.9	30.9	95.6	95.6	7.4	7.4	6.3		17		-	1	0.0010	0.07.11	-	 -	-
						3.0 1.0	0.1	138 41	19.2 19.3		8.2 8.1		31.0 30.4		95.6 96.1		7.4	7.4	6.3		19 19		-				-	-	—
					Surface	1.0	0.1	46	19.3	19.3	8.1	8.1	30.4	30.4	96.1	96.1	7.4	7.4	3.0		17		-				-	=	
SR6A	Cloudy	Calm	15:40	4.7	Middle	-	-	-	-	-	-	-	-	-	-	-	-			5.6	-	17	-	-	817962	814721	-	· 🗀	_ ։
					Bottom	3.7	0.1	196 172	19.2 19.2	19.2	8.1	8.1	30.6 30.6	30.6	95.2 95.3	95.3	7.3	7.4	8.2 8.3		17 16		-				-	-	
					Surface	1.0	0.1 0.1	127 135	18.9 18.9	18.9	8.2	8.2	31.0 31.0	31.0	90.9	90.9	7.0		2.3		4		-				-		-
SR7	Cloudy	Moderate	15:10	16.2	Middle	8.1 8.1	0.1	134 136	18.7	18.7	8.2	8.2	31.2	31.2	90.5	90.5	7.0	7.0	3.0	2.8	4 5	5	-	-	823618	823719	\equiv	. 🖃	コ .
					Bottom	15.2	0.2	58	18.6	18.6	8.2	8.2	31.5	31.4	90.6	90.7	7.0	7.0	3.2		7								1
			1		Surface	15.2 1.0	0.2	62	18.6 18.9	18.9	8.2 8.1	8.1	31.4 29.5	29.5	90.7	94.3	7.4		7.9		9		-				-	一	士
CDO	Claudi	Madagat	42.52	5.0		1.0	-	-	18.9	10.5	8.1	0.1	29.5	23.0	94.2	J-1.J	7.4	7.4	8.0	7.4	8	7	-		020274	044634	-	 	\dashv
SR8	Cloudy	Moderate	13:52	5.2	Middle	4.2		-	19.0	-	8.1		29.4	-	94.5	-	7.4		7.0	1.4	- 6	′	-]	820374	811634	-	· -	_
DA: Depth-Aver					Bottom	4.2			19.0	19.0	8.1	8.1	29.4	29.4	94.5	94.5	7.4	7.4	6.7		5		-				旦		丄

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

Water Quality Monitoring
Water Quality Monitoring Results on

Water Qua	lity Monit	toring Res	ults on		25 February 20	during Mid-	Flood T	ide																					
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	ity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity(NTU)	Suspende (mg		Total All (ppr		Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel	el (µg/L)
Station	Condition	Condition	Time	Depth (m)	Oampling De	par (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	A Value	DA
					Surface	1.0	0.4	36 36	18.9 18.9	18.9	8.2 8.2	8.2	30.2	30.2	97.6 97.6	97.6	7.6		13.2 13.6		11 11		83				<0.2	0.8	-
C1	Cloudy	Moderate	08:27	6.9	Middle	3.5	0.5	36	18.8	18.8	8.2	8.2	31.0 31.1	31.1	97.4	97.4	7.6	7.6	11.8	13.1	12	11	88	87	815643	804228	<0.2	0.9	
					Bottom	5.9	0.3	36 36	18.7	18.7	8.2	8.2	31.4	31.4	97.4	97.4	7.5	7.5	14.2		11		91				<0.2	0.9	
						5.9 1.0	0.3	38 28	18.7 19.2		8.2		31.4 26.7		97.4 93.3		7.5 7.4	7.5	14.2 6.4		12 6		91 86				<0.2	0.9 1.5	
					Surface	1.0 5.6	0.4	29 30	19.2 19.0	19.2	8.0 8.0	8.0	26.8 28.0	26.7	93.1 91.9	93.2	7.3 7.2	7.3	6.8 9.7		6		87 88				<0.2	1.6]
C2	Cloudy	Moderate	10:04	11.2	Middle	5.6	0.4	30	19.0	19.0	8.0	8.0	28.2	28.1	91.8	91.9	7.2		9.9	8.5	7	7	87	88	825658	806943	<0.2	1.7	1.6
					Bottom	10.2 10.2	0.3	348 353	18.9 19.0	19.0	8.0	8.0	28.9 28.8	28.8	91.7 91.7	91.7	7.2	7.2	8.9 9.0		8 7		90				<0.2	1.7	
					Surface	1.0	0.6	271 293	18.9 18.9	18.9	8.0	8.0	29.7	29.7	93.3	93.3	7.3	7.3	3.3		6 5		86 87				<0.2	1.0	
С3	Cloudy	Moderate	08:30	10.3	Middle	5.2 5.2	0.7 0.7	275 297	18.8 18.8	18.8	8.0	8.0	30.3 30.3	30.3	92.1 92.0	92.1	7.2 7.2	1.3	8.9 9.3	7.3	5 6	6	88 88	88	822092	817784	<0.2	1.0	1.0
					Bottom	9.3 9.3	0.5 0.5	274 287	18.8 18.8	18.8	8.0	8.0	30.4 30.4	30.4	92.0 92.1	92.1	7.2 7.2	7.2	9.7 9.1		8		90 90				<0.2	1.0	
					Surface	1.0	0.0	358	18.9	18.9	8.1	8.1	30.9	30.9	96.9	96.9	7.5		9.5		10		84				<0.2	1.0	
IM1	Cloudy	Moderate	08:43	4.9	Middle	1.0	0.0	329	18.9	_	8.1		30.9		96.9		7.5	7.5	9.5	9.0	11	15	84	87	817929	807135	<0.2	0.9	1.0
	Cicacy	Wodorato	00.10	1.0	Bottom	3.9	0.1	309	18.9	18.9	8.1	8.1	31.1	31.1	96.6	96.6	7.5	7.5	8.4	0.0	18		89	0.	011020	007100	<0.2	0.9	
					Surface	3.9 1.0	0.1	321 19	18.9 18.9		8.1 8.2		31.1	30.9	96.6 97.2	97.2	7.5 7.5	7.5	8.5 10.1		20 13		89 83				<0.2 <0.2	1.0 0.9	\vdash
						1.0 3.8	0.3	19 8	18.9 18.9	18.9	8.2 8.2	8.2	30.9 30.9		97.2 96.8		7.5 7.5	7.5	10.1 11.0		15 11		84 88				<0.2	0.9	1
IM2	Cloudy	Moderate	08:51	7.5	Middle	3.8	0.3	8	18.9	18.9	8.2	8.2	30.9	30.9	96.8 96.8	96.8	7.5 7.5		11.1	12.0	12	12	88 91	88	818152	806161	<0.2 <0.2	0.9	0.9
					Bottom	6.5	0.2	13	18.8	18.8	8.2	8.2	30.9	30.9	96.8	96.8	7.5	7.5	14.8		12		92				<0.2	0.9	1
					Surface	1.0 1.0	0.3	2	18.9 18.9	18.9	8.2	8.2	30.7	30.7	97.1 97.1	97.1	7.5 7.5	7.5	8.2 8.2		12 13		84 84				<0.2	0.9	1
IM3	Cloudy	Moderate	08:58	7.1	Middle	3.6 3.6	0.2	1	18.9 18.9	18.9	8.2	8.2	30.7 30.7	30.7	96.9 96.8	96.9	7.5 7.5	1.0	6.2	8.9	13 12	12	88 88	88	818782	805606	<0.2	0.9	
					Bottom	6.1	0.2	351 323	18.9 18.9	18.9	8.2	8.2	30.7	30.7	96.7 96.7	96.7	7.5 7.5	7.5	12.2		12 11		91 91				<0.2	0.9	-
					Surface	1.0	0.4	355 327	18.9 18.9	18.9	8.2 8.2	8.2	30.6 30.6	30.6	97.0 97.0	97.0	7.5 7.5		15.4 15.4		11 12		83 83				<0.2	0.9	
IM4	Cloudy	Moderate	09:06	7.4	Middle	3.7	0.4	356 328	18.9	18.9	8.2	8.2	30.6 30.6	30.6	97.0 97.0	97.0	7.5	7.5	16.1	15.5	13	12	87 88	87	819742	804586	<0.2	0.0	ا ۵۵ ا
					Bottom	6.4	0.3	354	18.9	18.9	8.2	8.2	30.6	30.6	97.1	97.1	7.5	7.5	14.8		13		91				<0.2	1.0	
					Surface	6.4 1.0	0.3	326 21	18.9 18.9	18.9	8.2	8.2	30.6 30.6	30.6	97.1 96.4	96.4	7.5 7.5		14.9 15.1		12 11		91 84				<0.2	0.9 1.5	
IM5	Cloudy	Moderate	09:13	7.5	Middle	1.0 3.8	0.7 0.6	21 19	18.9 18.9	18.9	8.2 8.2	8.2	30.6 30.6	30.6	96.4 96.3	96.3	7.5 7.5	7.5	15.2 6.2	10.5	11 11	11	84 88	88	820731	804887	<0.2	1.4	4.5
livio	Cioddy	woderate	09.13	7.5		3.8 6.5	0.6	19 17	18.9 18.9		8.2 8.2		30.6 30.6		96.3 96.4		7.5 7.5		6.2 10.2	10.5	12 8		88 91	00	620731	804887	<0.2	1.5	
					Bottom	6.5	0.5	18 55	18.9	18.9	8.2	8.2	30.6	30.6	96.4 96.8	96.4	7.5 7.5	7.5	10.3 9.2		10		91 83				<0.2	1.6	
					Surface	1.0	0.5	55 56	19.0	19.0	8.2	8.2	30.7	30.7	96.8	96.8	7.5 7.5	7.5	9.2		11		83				<0.2	1.4	
IM6	Cloudy	Moderate	09:19	7.6	Middle	3.8	0.4	58	18.9 18.9	18.9	8.2 8.2	8.2	30.7	30.7	96.6 96.6	96.6	7.5		10.1	10.5	11 12	11	88	87	821052	805825	<0.2	1.4	1.5
					Bottom	6.6 6.6	0.4	58 61	19.0 19.0	19.0	8.2 8.2	8.2	30.7	30.7	96.6 96.5	96.6	7.5 7.5	7.5	12.2 12.3		12 11		91 91				<0.2	1.5 1.5	
					Surface	1.0	0.1	238 257	19.3 19.3	19.3	8.1 8.1	8.1	28.2	28.2	95.4 95.4	95.4	7.4	7.5	4.0		9		88 88				<0.2	1.5	
IM7	Cloudy	Moderate	09:26	8.4	Middle	4.2 4.2	0.1 0.1	91 96	19.0 19.0	19.0	8.2 8.2	8.2	30.0	30.0	96.2 96.2	96.2	7.5 7.5	7.5	6.2 6.3	6.4	8 12	10	89 89	89	821352	806829	<0.2	1.5	
					Bottom	7.4	0.1	102	19.0	19.0	8.2 8.2	8.2	30.5	30.5	96.2 96.2	96.2	7.4	7.4	9.1	}	11		91 91				<0.2	1.5	
					Surface	7.4 1.0	0.1	65	19.1	19.1	8.0	8.0	27.3	27.3	94.4	94.4	7.4		5.2		12 6		86				<0.2	1.5	
IM8	Cloudy	Moderate	09:42	7.6	Middle	1.0 3.8	0.2	68 57	19.1 19.1	19.1	8.0	8.0	27.3 27.8		94.4 94.5	94.5	7.4	7.4	5.5 7.9	7.7	8 14	8	86 88	88	821836	808146	<0.2	1.3	١١
livio	Cloudy	Moderate	09:42	7.0		3.8 6.6	0.2 0.1	62 84	19.1 19.1		8.0		27.9 28.2	27.8	94.5 94.7		7.4 7.4	_	8.2 9.7	1.1	8 7	٥	87 90	00	021030	000146	<0.2 <0.2	1.5	1.4
DA: Denth-Ave					Bottom	6.6	0.1	90	19.1	19.1	8.0	8.0	28.2	28.2	94.7	94.7	7.4	7.4	9.7		6		90				<0.2	1.4	

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

Water Qua			ults on		25 February 20	during Mid-	Flood T	ide																				
Monitorina	Weather	Sea	Sampling	Water			Current Speed	Current	Water T	emperature (°C)		рН	Salir	nity (ppt)		aturation (%)	Disso Oxyg	lved	Turbidity(NTU)	Suspende (mg		Total Al		Coordinate	Coordinate	Chromiu (µg/L)	
Station	Condition	Condition	Time	Depth (m)	Sampling De	epth (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)		DA Value DA
					Surface	1.0	0.4	43	19.1	19.1	8.0	8.0	27.3	27.3	94.7	94.7	7.5		6.3		6		85				<0.2	1.3
						1.0 3.8	0.4	45 35	19.1 19.1		8.0		27.3		94.7 94.6		7.4	7.4	6.5 8.3	.	7		86 87				<0.2	1.3
IM9	Cloudy	Moderate	09:36	7.5	Middle	3.8	0.3	37	19.1	19.1	8.0	8.0	27.8	27.8	94.6	94.6	7.4		8.6	8.4	8	7	88	88	822100	808812	<0.2	1.4
					Bottom	6.5 6.5	0.2	24 24	19.1 19.1	19.1	8.0	8.0	28.0	28.0	95.7 95.9	95.8	7.5 7.5	7.5	10.3 10.2		8 7		90				<0.2	1.4
					Surface	1.0	0.6	308 322	19.0 19.0	19.0	8.0	8.0	28.9	28.9	94.7 94.7	94.7	7.4		7.0 7.0	-	13 12		86 87				<0.2	1.1
IM10	Cloudy	Moderate	09:30	7.7	Middle	3.9	0.5	307	19.0	19.0	8.0	8.0	28.9	28.9	94.6	94.6	7.4	7.4	9.5	9.0	13	11	87	88	822362	809778	<0.2	1.1
	,				Bottom	3.9 6.7	0.5	316 323	19.0 19.0	19.0	8.0	8.0	28.9 28.9	28.9	94.6 95.0	95.1	7.4 7.4	7.4	9.6 10.5	F	12 11		89 90	ŀ			<0.2	1.1
						6.7 1.0	0.3	325 286	19.0 19.0		8.0		28.9		95.1 94.4		7.4	7.4	10.3 5.6		7		91 85				<0.2	1.1
					Surface	1.0	0.6	312	19.0	19.0	8.0	8.0	28.8	28.8	94.4	94.4	7.4	7.4	5.6	t	10		87				<0.2	1.0
IM11	Cloudy	Moderate	09:19	7.3	Middle	3.7	0.5 0.5	283 310	19.0 19.0	19.0	8.0	8.0	29.0	29.0	94.7 94.7	94.7	7.4		7.8 8.0	8.1	10 11	10	88 88	88	822061	811468	<0.2	0.2 1.0 1.1
					Bottom	6.3	0.5 0.5	284 284	19.0 19.0	19.0	8.0	8.0	29.3	29.3	95.0 95.0	95.0	7.4	7.4	10.8 10.7	F	12 10		90 90				<0.2	1.1
					Surface	1.0	0.5	269	18.9	18.9	8.1	8.1	29.5	29.5	94.1	94.1	7.3		11.9		18		86				<0.2	1.1
IM12	011		00.40			1.0 4.4	0.6	292 262	18.9 18.9		8.1 8.1		29.5 29.5		94.1 94.1		7.3 7.3	7.3	11.8 13.1		18 18	40	86 88		004475	040000	<0.2	1.1
IM12	Cloudy	Moderate	09:13	8.8	Middle	4.4 7.8	0.6 0.4	282 260	18.9 18.9	18.9	8.1 8.1	8.1	29.5 29.6	29.5	94.1 94.2	94.1	7.3 7.3		13.4 13.6	12.9	20 22	19	87 90	88	821475	812063	<0.2 <0.2	0.2 1.0 1.1
					Bottom	7.8	0.4	267	18.9	18.9	8.1	8.1	29.6	29.6	94.2	94.2	7.3	7.3	13.6		20		90				<0.2	1.1
					Surface	1.0	-	-	19.0 19.0	19.0	8.0	8.0	29.1	29.1	94.3	94.3	7.4		2.6	-	12 13	ł	-	ŀ			-	-
SR1A	Cloudy	Moderate	08:58	5.0	Middle	2.5 2.5	-	-	-	-	-	-	-	-	-	-	-	7.4	-	2.6	-	12	-		819971	812654	-	
					Bottom	4.0		-	19.0	19.0	8.0	8.0	29.4	29.3	94.8	94.9	7.4	7.4	2.7		13	İ	-				-	
						4.0 1.0	0.4	312	19.0 18.9		8.0		29.3		94.9		7.4		2.7 8.3		8		- 87				<0.2	1.0
					Surface	1.0	0.5	322	18.9	18.9	8.0	8.0	29.4	29.4	94.8	94.8	7.4	7.4	8.4		9		87				<0.2	1.1
SR2	Cloudy	Moderate	08:48	5.3	Middle	-		-	-	-	-	-		-	-	-			-	8.6	-	10	-	89	821452	814144	-	0.2 - 1.1
					Bottom	4.3	0.5	325 338	18.9 19.0	19.0	8.0	8.0	29.4	29.4	95.4 95.6	95.5	7.4	7.5	8.7 8.8	-	10 11		90 91	ŀ			<0.2	1.2
					Surface	1.0	0.1	60 65	19.2 19.2	19.2	8.0	8.0	27.0 27.0	27.0	94.2	94.2	7.4		4.7 4.9		5 4		-				-	
SR3	Cloudy	Moderate	09:47	8.7	Middle	4.4	0.1	30	19.1	19.1	8.0	8.0	27.3	27.3	94.1	94.1	7.4	7.4	7.5	6.7	5	6	-		822146	807583	-	. 🗀 .
	,				Bottom	7.7	0.1	32 59	19.1 19.1		8.0		27.3 27.3	27.3	94.1 95.1	95.3	7.4 7.5	7.5	7.6 8.0	-	6 8		-	ŀ			-	· 🔠 ·
						7.7 1.0	0.2	59 281	19.2 18.9	19.2	8.0	8.0	27.3 31.0		95.5 97.0		7.5 7.5	7.5	7.8 6.2		9 12		-				-	
					Surface	1.0	0.5	288	18.9	18.9	8.2	8.2	31.0	31.0	97.0	97.0	7.5	7.5	6.3	t	12		-				-	-
SR4A	Cloudy	Moderate	08:06	9.4	Middle	4.7	0.4	321 352	18.8 18.8	18.8	8.2	8.2	31.1	31.1	96.8 96.8	96.8	7.5 7.5		7.1 7.2	7.4	11 12	11	-	-	817167	807830	-	· - -
					Bottom	8.4 8.4	0.3 0.4	345 317	18.8 18.8	18.8	8.2 8.2	8.2	31.2 31.2	31.2	96.8 96.8	96.8	7.5 7.5	7.5	8.7 8.8	Ī	10 9	Ī	-				-	-
					Surface	1.0	0.1	223	19.1	19.1	8.1	8.1	30.8	30.8	95.4	95.4	7.4		6.9		13		-				-	
SR5A	Cloudy	Moderate	07:47	4.8	Middle	1.0	0.1	240	19.1	_	8.1		30.8		95.4		7.4	7.4	7.0	8.3	14	13	-		816570	810714	-	-
SKSA	Cloudy	woderate	07:47	4.0	iviidale	3.8	0.1	- 244	19.1		8.2	-	30.8	-	96.5		7.5		9.6	0.3	- 13	13	-	-	810570	810/14	-	. 🖃 .
					Bottom	3.8	0.1	250	19.1	19.1	8.2	8.2	30.8	30.8	96.7	96.6	7.5	7.5	9.6		12		-				-	-
					Surface	1.0	0.1	184 185	19.0 19.0	19.0	8.1	8.1	30.8	30.8	92.9 92.8	92.9	7.2	7.0	3.8	-	14 12	ł	-	ŀ			-	-
SR6A	Cloudy	Moderate	07:16	3.6	Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.2	-	3.8	-	13	-	-	817948	814718	-	. 🗀 .
					Bottom	2.6	0.0	139	19.0	19.0	8.1	8.1	30.9	30.9	92.8	92.8	7.2	7.2	3.8		12	İ	-	İ				
						2.6	0.0	146 318	19.0		8.1 7.9		30.9		92.8 93.0		7.2		3.8 2.7		13 7		-			<u> </u>	-	+
					Surface	1.0 8.2	0.3	330 349	18.8 18.8	18.8	7.9 7.9	7.9	29.9 30.0	29.9	93.0 92.8	93.0	7.2	7.2	2.7 2.9	ļ	6 7	1	-				-	-
SR7	Cloudy	Moderate	08:02	16.4	Middle	8.2	0.3	321	18.8	18.8	7.9	7.9	30.0	30.0	92.8	92.8	7.2		2.9	2.8	8	7	-	-	823647	823725	-	· 💾 ·
					Bottom	15.4 15.4	0.3	345 353	18.8 18.8	18.8	7.9 7.9	7.9	30.1	30.1	92.8 92.8	92.8	7.2	7.2	2.9	-	7 8	1	-				-	-
					Surface	1.0	-	•	19.0	19.0	8.1	8.1	29.0	29.0	94.7	94.7	7.4		9.3		8		-				-	
SR8	Cloudy	Moderate	09:06	5.4	Middle	1.0		-	19.0	_	8.1	l .	- 29.1	l .	94.7	-	7.4	7.4	9.6	12.1	8	7	-	.	820376	811603	-	. 🗀 .
5.10	Sicusy	···ouoiulo	00.00	0.1		4.4	-	-	19.0		8.1	l	29.3	-	94.7		7.4		14.7		- 6	· ·	-		3230.3	0	-	· 😑 ·
					Bottom	4.4	-	-	19.0	19.0	8.1	8.1	29.3	29.3	94.8	94.8	7.4	7.4	14.7	-	7		-	1			-	-

27 February 20 during Mid-Ebb Tide

Water Qua	lity Moni	toring Res	ults on		27 February 20	during Mid-	Ebb Tid	е																		
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)	DO S	aturation (%)	Dissolved Oxygen	Turbidi	y(NTU)	Suspende (mg		Total Alkalin (ppm)	Coordinate	Coordinate HK Grid	Chromium (µg/L)	n Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)		, ,	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA	Value	DA	Value D/	(Northing)	(Easting)	Value DA	A Value DA
					Surface	1.0	0.1	227 248	19.7 19.7	19.7	8.3	8.3	30.6	30.6	99.0 98.9	99.0	7.6 7.6 7.6	6.1		10 9		82 82			<0.2	1.2
C1	Fine	Moderate	15:10	7.7	Middle	3.9 3.9	0.1 0.1	219 225	19.0 19.0	19.0	8.3	8.3	32.1 32.1	32.1	97.2 97.2		7.5 7.5	7.1 7.4	7.5	9	9	82 82	815616	804253	<0.2	1.2
					Bottom	6.7 6.7	0.1 0.1	104 107	18.8 18.8	18.8	8.3 8.3	8.3	32.6 32.6	32.6	96.8 96.8	96.8	7.4 7.4	9.2 8.9	7	7		84 84			<0.2	1.1
					Surface	1.0	0.5 0.6	167 170	20.2	20.2	7.9 7.9	7.9	27.4 27.4	27.4	94.2	94.2	7.3	4.6 4.7		6 7		86 87			<0.2	1.9
C2	Cloudy	Moderate	14:18	11.5	Middle	5.8 5.8	0.4	151 154	19.9 19.9	19.9	7.9 7.9	7.9	28.1 28.1	28.1	92.6 92.6		7.2 7.2	8.0 8.0	7.0	7	7	88 87	825668	806940	<0.2	0.2 1.7 1.9
					Bottom	10.5 10.5	0.3	119 123	19.8 19.9	19.9	7.9 7.9	7.9	28.2	28.2	92.6 92.7	02.7	7.2 7.2	8.6	1	7		90			<0.2	2.0
					Surface	1.0	0.4	56 61	20.1	20.1	7.9 7.9	7.9	29.4 29.4	29.4	93.8 93.7		7.2	3.6 3.5		6 5		86 86			<0.2	1.2
СЗ	Cloudy	Moderate	16:23	11.6	Middle	5.8 5.8	0.4	108 116	19.4 19.3	19.4	8.0	8.0	30.5 30.6	30.6	90.8	90.8	7.0 7.0	4.2	4.2	5	6	88 88	822130	817818	<0.2	1.3
					Bottom	10.6 10.6	0.3	109	19.1	19.1	8.0	8.0	31.0	31.0	90.6		7.0 7.0	10	1	6		90			<0.2	1.6
					Surface	1.0	0.2	222 234	20.3	20.3	8.3	8.3	30.4	30.4	97.1 97.1		7.3	5.9		7 8		82 82			<0.2	1.3
IM1	Fine	Moderate	15:25	4.5	Middle	-	-	-	-	-	-	-	-	-		-	7.3		8.1	-	7	- 83	817952	807150	- <0.	
					Bottom	3.5 3.5	0.1	224 233	20.1	20.1	8.3 8.3	8.3	30.4	30.4	96.4 96.5		7.3 7.3	10.2	1	7		83 84			<0.2	1.2
					Surface	1.0	0.3	227 229	20.1	20.1	8.3 8.3	8.3	30.4	30.4	97.8 97.8	97.8	7.4	6.7		8		82 82			<0.2	1.2
IM2	Fine	Moderate	15:34	6.8	Middle	3.4 3.4	0.2	207 211	19.7 19.6	19.7	8.3 8.3	8.3	30.8	30.9	97.7 97.5		7.5 7.5 7.5	8.3 8.8	9.1	9	8	84 84	818176	806170	<0.2	1.4
					Bottom	5.8 5.8	0.1	140 144	19.0 19.0	19.0	8.3	8.3	31.9 31.8	31.9	95.8 95.9		7.4 7.4	12.2		9		84 85			<0.2	1.3
					Surface	1.0 1.0	0.1 0.1	208 211	19.8 19.8	19.8	8.3 8.3	8.3	30.4 30.4	30.4	97.4 97.5		7.4	7.8 7.8		9		81 82			<0.2	1.3
IM3	Fine	Moderate	15:42	6.9	Middle	3.5 3.5	0.1	160 165	19.5 19.5	19.5	8.3 8.3	8.3	30.8	30.9	97.1 97.0	07.1	7.4	8.4 8.6	9.3	9	9	83 83	818769	805614	<0.2	1.2
					Bottom	5.9 5.9	0.2	124 124	18.8 18.8	18.8	8.3 8.3	8.3	31.9 31.9	31.9	95.6 95.6		7.4 7.4	11.7	1	10 9		84 85			<0.2	1.2
					Surface	1.0	0.5 0.5	199 208	20.0	20.0	8.3 8.3	8.3	29.8 29.8	29.8	97.3 97.3		7.4	6.1 6.2		7		82 82			<0.2	1.5
IM4	Fine	Moderate	15:51	7.7	Middle	3.9 3.9	0.3	187 194	19.7 19.7	19.7	8.3 8.3	8.3	30.2	30.2	97.3 97.4		7.4 7.4	7.3 7.3	7.8	8	8	83 83	819714	804585	<0.2	1.6
					Bottom	6.7 6.7	0.2	149 155	19.2 19.2	19.2	8.3 8.3	8.3	31.3 31.2	31.2	96.4 96.5		7.4 7.4	10.1	7	8		83 84			<0.2	1.4
					Surface	1.0	0.3	213 208	20.2	20.2	8.3 8.3	8.3	29.4 29.4	29.4	97.8 97.8	97.8	7.5 7.5	6.2		8		83 83			<0.2 <0.2	1.4
IM5	Fine	Moderate	16:03	6.9	Middle	3.5 3.5	0.3	219 201	20.0	20.0	8.3 8.3	8.3	29.8 29.8	29.8	97.5 97.5	97.5	7.4 7.4	7.7	9.1	8	9	84 84	820755	804880	<0.2	1.5
					Bottom	5.9 5.9	0.2	237 221	19.6 19.7	19.7	8.3 8.3	8.3	30.4 30.4	30.4	97.1 97.1		7.4 7.4	13.6 13.5	1	9		85 85			<0.2	1.4
					Surface	1.0	0.6	240 258	20.3	20.3	8.3 8.3	8.3	28.7	28.7	97.1 97.1		7.4	5.1 5.1	-	4 5		82 82			<0.2	1.7
IM6	Fine	Moderate	16:14	6.7	Middle	3.4 3.4	0.5 0.5	234 246	20.0	20.0	8.3 8.3	8.3	29.3 29.4	29.3	97.0 97.0	97.0	7.4	8.6 8.5	9.0	7	6	83 83	821064	805825	<0.2 <0.2	0.2 1.6 1.6
					Bottom	5.7 5.7	0.3	216 235	19.8 19.8	19.8	8.3 8.3	8.3	30.0	30.0	96.9 97.0		7.4 7.4	13.2		7 8		84 85			<0.2	1.5
					Surface	1.0	0.4	243 259	20.1	20.1	8.3 8.3	8.3	28.5 28.5	28.5	94.9 95.0		7.3	5.4 5.4	-	8		82 82			<0.2	1.6
IM7	Fine	Moderate	16:24	8.1	Middle	4.1 4.1	0.3	227 235	19.8 19.8	19.8	8.3 8.3	8.3	29.7 29.7	29.7	96.0 96.2		7.4	8.8 8.9	8.0	7	7	82 82	821349	806829	<0.2	0.2 1.7 1.6
					Bottom	7.1 7.1	0.2	249 266	19.8 19.8	19.8	8.3 8.3	8.3	30.0	30.0	96.5 96.6	966	7.4 7.4	9.6 9.7	L	7 6		83 84			<0.2	1.7
					Surface	1.0	0.0	94 95	20.2	20.2	7.9 7.9	7.9	27.4 27.4	27.4	95.8 95.8	95.8	7.4	5.5 5.6		7		85 87			<0.2 <0.2	1.9
IM8	Cloudy	Moderate	14:51	7.3	Middle	3.7 3.7	0.2	129 133	19.9 19.9	19.9	7.9 7.9	7.9	28.5 28.5	28.5	95.8 95.8		7.4	9.5 9.9	9.1	8 7	8	88 89	821837	808158	<0.2	1.8
					Bottom	6.3 6.3	0.1	33 34	19.9 19.9	19.9	7.9 7.9	7.9	28.8 28.7	28.7	95.9 95.9		7.4 7.4	12.0 12.0		8		90 91			<0.2	1.8

Water Qua	ity Monit	oring Resu	ults on		27 February 20	during Mid-	Ebb Tid	е																						
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	h (m)	Current Speed	Current	Water Te	mperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Dissol Oxyg		Furbidity(I	NTU)	Suspende (mg/		Total A		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/		Nickel (μ	g/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA	Value [DA
					Surface	1.0	0.3	129 135	20.3	20.3	7.9	7.9	27.4	27.4	96.2 96.2	96.2	7.4		5.6 5.8	-	7		87 86				<0.2		1.9	
IM9	Cloudy	Moderate	14:57	7.2	Middle	3.6 3.6	0.3	128 140	19.9 19.9	19.9	8.0	8.0	28.6	28.6	96.8 97.0	96.9	7.5		10.5	9.4	7	7	88 87	88	822094	808800	<0.2	<0.2	1.8	1.9
					Bottom	6.2	0.2	85	19.9	19.9	8.0	8.0	28.7	28.7	97.5	97.6	7.5	7.5	11.9	L	7		90				<0.2		1.8	
						6.2 1.0	0.3	86 104	19.9 20.3		8.0 7.9		28.7		97.7 95.1		7.5 7.3		12.1 5.2	-	6		90 86				<0.2		1.9 2.0	-
					Surface	1.0 3.2	0.6 0.5	105 111	20.3 19.8	20.3	7.9 7.9	7.9	27.5 28.7	27.5	95.0 93.4	95.1	7.3 7.2	7.3	5.3 9.2	F	6 7		86 88				<0.2		2.0	
IM10	Cloudy	Moderate	15:04	6.4	Middle	3.2	0.5	112	19.8	19.8	7.9	7.9	28.7	28.7	93.5	93.5	7.2		9.4	9.1	7	7	88	88	822402	809789	<0.2	₹0.2	1.8	1.9
					Bottom	5.4 5.4	0.4	117 121	19.7 19.7	19.7	7.9	7.9	28.8	28.8	95.2 95.5	95.4	7.3	7.4	12.8 12.8		8 7		91 91				<0.2		1.8	
					Surface	1.0	0.4	79 85	20.2	20.2	7.9	7.9	27.7	27.7	94.3	94.3	7.3	[-	5.3 5.5	-	6 7		86 86				<0.2	-	1.9	
IM11	Cloudy	Moderate	15:14	7.8	Middle	3.9 3.9	0.3	85 90	19.8 19.8	19.8	7.9 7.9	7.9	28.7 28.7	28.7	92.6 92.5	92.6	7.1	7.2	8.5 8.6	7.7	7 6	7	88 88	88	822074	811482	<0.2		17	1.8
					Bottom	6.8	0.2	99	19.7	19.7	7.9	7.9	29.0	29.0	92.9	93.4	7.2	7.2	9.2	Ė	7		90				<0.2		1.9	
					Surface	6.8 1.0	0.2	100 115	19.7 20.0	20.0	7.9 7.9	7.9	29.0 28.4	28.4	93.9 93.2	93.2	7.2 7.2		9.0 7.9		7 8		92 86				<0.2		1.9	\dashv
						1.0 4.3	0.5 0.5	115 110	19.9 19.8		7.9 7.9		28.5 28.9		93.1 93.0		7.2 7.2	7.2	8.1 9.1	F	8		86 89				<0.2	_ F	2.0	
IM12	Cloudy	Moderate	15:21	8.5	Middle	4.3	0.5	112	19.8	19.8	7.9	7.9	28.9	28.9	93.2	93.1	7.2		9.2	9.3	10	9	88	88	821448	812023	<0.2	<0.2	1.9	1.9
					Bottom	7.5 7.5	0.3	102 104	19.7 19.7	19.7	7.9 7.9	7.9	29.0 29.0	29.0	93.9 94.0	94.0	7.2		10.7		10 9		90 91				<0.2		1.9	
					Surface	1.0	-	-	19.9 19.9	19.9	8.0	8.0	29.2 29.3	29.3	94.5 94.6	94.6	7.3		6.1 6.1	-	7		-				-	-	-	
SR1A	Cloudy	Moderate	15:47	5.0	Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	7.3	-	6.4	-	7	-		819970	812661	-	. [_	-
					Bottom	2.5 4.0		-	19.7	19.7	8.0	8.0	29.5	29.4	95.3	95.5	7.3	7.3	6.9	L	7		-				-	ŀ		
						4.0 1.0	0.4	95	19.7 20.1		8.0 7.9		29.4		95.6 94.2		7.3	7.0	6.5 5.1	-	7 8		- 87				<0.2	\longrightarrow	1.8	-
					Surface	1.0	0.5	102	20.1	20.1	7.9	7.9	29.0	29.0	94.3	94.3	72	7.2	5.2	E	8		89	1			<0.2		1.8	
SR2	Cloudy	Moderate	16:02	4.6	Middle			-	-	-	Ė	-		-	-	-			-	5.2	-	7	÷	90	821463	814174		<0.2	-	1.8
					Bottom	3.6 3.6	0.3	102 108	20.1	20.1	8.0	8.0	29.0 29.0	29.0	94.6 94.6	94.6	7.2	7.2	5.3 5.4	F	6 7		90 92				<0.2		1.6	
					Surface	1.0	0.2	217 229	20.0	20.0	7.8	7.8	27.4	27.4	94.1	94.1	7.3		4.3		8 7		- :				-	-	-	
SR3	Cloudy	Moderate	14:44	8.6	Middle	4.3 4.3	0.3	178 193	20.0	20.0	7.9 7.9	7.9	27.7	27.7	93.0	93.0	7.2	7.3	6.6	7.0	8	7	-		822140	807556	-		-	-
					Bottom	7.6	0.2	214	19.8	19.8	7.9	7.9	28.4	28.4	91.5	91.5	7.1	7.1	10.0	L	7						-	ŀ		
					0.1	7.6 1.0	0.2	222 105	19.8 20.0		7.9 8.3		28.4 30.0		91.5 96.7		7.1		10.0 8.6	-	7		-				-	\dashv	\div	-
					Surface	1.0 4.1	0.1 0.2	113 69	20.0 19.8	20.0	8.3 8.3	8.3	30.0 30.1	30.0	96.7 96.0	96.7	7.4 7.3	7.4	8.6 9.0	F	14 12		-	1			-	F	-	
SR4A	Fine	Moderate	14:44	8.1	Middle	4.1	0.2	75	19.8	19.8	8.3	8.3	30.1	30.1	96.0	96.0	7.3		9.2	9.5	12	13	-	-	817172	807822	-	-		-
					Bottom	7.1 7.1	0.2	49 51	19.7 19.7	19.7	8.3 8.3	8.3	30.1	30.1	95.6 95.6	95.6	7.3	1.3	10.8 10.8		12 12		-				-	<u></u>	-	
					Surface	1.0	0.1	71 85	20.0	20.0	8.2	8.2	30.0	30.0	96.9 96.9	96.9	7.4		8.7 8.6	-	12 12		-	1			-	ŀ	-	
SR5A	Fine	Calm	14:23	3.8	Middle	-	-	-	-	-	-	-	-	-	-		-	7.4	-	8.6	-	12			816571	810689	-	- [-
					Bottom	2.8	0.1	34	20.0	20.0	8.2	8.2	30.0	30.0	96.9	96.9	7.4		8.6 8.5		12						-	þ	-	
					Surface	2.8 1.0	0.1	38 40	20.0	20.0	8.2	8.2	30.0	30.0	97.2	97.2	7.4		8.6		12 12		-					=t	_	_
	_					1.0	0.1	45	20.0	20.0	8.2	0.2	30.0	30.0	97.1	31.2	7.4	7.4	8.7		13		-	-			-	ŀ	-	
SR6A	Fine	Moderate	14:02	3.6	Middle	2.6	0.1	- 86	20.0	-	8.2	•	30.0	-	97.0	•	7.4		- 8.9	8.8	- 12	12	-	-	817982	814720	-	- [_	-
					Bottom	2.6	0.1	86	20.0	20.0	8.2	8.2	30.0	30.0	97.0	97.0	7.4	7.4	8.9		12								亖	
					Surface	1.0	0.1	31 33	19.7 19.7	19.7	8.0	8.0	30.3	30.3	92.9 92.8	92.9	7.1		2.6	F	3		-				-	F	-	
SR7	Cloudy	Moderate	16:49	16.3	Middle	8.2 8.2	0.1	49 54	19.5 19.4	19.5	8.0	8.0	30.6 30.6	30.6	92.0 92.0	92.0	7.1	′.1 E	3.0	3.2	3 4	4	-	-	823629	823748	-	-	=	-
					Bottom	15.3	0.2	52	19.4	19.5	8.0	8.0	30.7	30.7	92.3	92.4	7.1	7.1	3.9	Ė	5		Ė	1			-	ļ	-	
					Surface	15.3 1.0	0.2	55 -	19.5 20.0	20.0	7.9	7.9	30.7 28.2	28.2	92.4 93.1	93.1	7.1		3.8 6.9		8		-				-	一	-	ᅱ
				4-		1.0	-	-	20.0	20.0	7.9	1.5	28.3	20.2	93.1	33.1	7.2	7.2	7.0	. F	8 -	_	-	-	000:=:	044	-	F	-	
SR8	Cloudy	Moderate	15:36	4.9	Middle	3.9	-	-	20.0	-	7.9	-	28.3	-	93.2	-	- 70		7.0	7.0	- 10	9	-		820471	811816	-	-	-	-
					Bottom	3.9			20.0	20.0	7.9	7.9	28.2	28.3	93.2	93.3	7.2	7.2	7.0		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

Note: Due to safety concern, the monitoring at SR8 was shifted to the closest safe and accessible location as a precautionary measure.

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

Water Quality Monitoring 27 February 20 during Mid-Flood Tide

Water Qua	lity Monit	toring Res	ults on		27 February 20	during Mid-	Flood T	ide																			
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water T	emperature (°C)		pН	Salin	ity (ppt)		aturation %)	Disso		Turbidity(NTU)	uspende (mg	d Solids /L)	Total Alkalini (ppm)	Coordinate		Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling De	ptn (m)	(m/s)	Direction	Value	Average	Value	Average	e Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value DA	HK Grid (Northing)	HK Grid (Easting)	Value DA	Value DA
					Surface	1.0	0.4	36	19.5	19.5	8.3	8.3	29.5 29.5	29.5	96.1 96.1	96.1	7.4 7.4		9.7		14		81			<0.2	1.4
C1	Rainy	Moderate	08:44	7.5	Middle	1.0 3.8	0.4	37 35	19.5 19.5	19.5	8.3	8.3	30.1	30.1	96.1	96.1	7.4	7.4	9.8 12.1	13.8	13	. 11	81 82 83	815607	804267	<0.2	1.4
Ci	Rally	Woderate	00.44	7.5		3.8 6.5	0.4	35 34	19.5 19.5		8.3		30.1 30.5		96.1 96.9		7.4 7.4		12.1 19.6	13.6	11 9		83 84	813007	004207	<0.2	1.4
					Bottom	6.5	0.4	36	19.5	19.5	8.3	8.3	30.4	30.4	97.1	97.0	7.5	7.5	19.6		9		84			<0.2	1.3
					Surface	1.0	0.3	7	19.8 19.8	19.8	7.9 7.9	7.9	26.7	26.7	92.5 92.5	92.5	7.2		6.2	-	8		86 87			<0.2	2.1
C2	Cloudy	Moderate	11:01	11.7	Middle	5.9 5.9	0.3	26 26	19.6 19.6	19.6	7.9 7.9	7.9	27.0 27.0	27.0	91.0 90.9	91.0	7.1 7.1	7.2	13.2 13.3	10.7	10 9	10	88 87	825651	806946	<0.2	2 1.7 1.8
					Bottom	10.7	0.3	329 335	19.6	19.6	7.9	7.9	27.8	27.8	89.9 89.9	89.9	7.0	7.0	12.7		11		90			<0.2	1.6
					Surface	1.0	0.5	281	19.8	19.8	7.9	7.9	28.6	28.6	92.4	92.4	7.1		4.8		6		86			<0.2	1.2
-00	011			44.0		1.0 5.7	0.5	294 271	19.8 19.4		7.9 7.9		28.6 29.7		92.4 90.9		7.1	7.1	4.9 6.2		6		86 88	200005	047000	<0.2	1.3
C3	Cloudy	Moderate	08:08	11.3	Middle	5.7 10.3	0.5 0.4	284 273	19.3 19.3	19.4	7.9 7.9	7.9	29.7 29.9	29.7	90.9 91.0	90.9	7.0 7.0		6.7 14.1	8.4	6	6	87 90	822095	817800	<0.2	2 1.2 1.2 1.1
					Bottom	10.3	0.4	279	19.3	19.3	7.9	7.9	29.9	29.9	91.1	91.1	7.0	7.0	13.8		7		90			<0.2	1.2
					Surface	1.0	0.2	25 26	20.0	20.0	8.3	8.3	30.2	30.2	96.1 96.2	96.2	7.3	7.3	9.4 9.5		13 13		81 82			<0.2	1.2
IM1	Rainy	Calm	09:05	4.4	Middle	-	-	-	-	-	-	-		-	-	-		7.3	-	9.6	-	14	- 83	817949	807154	- <0.2	2 - 1.2
					Bottom	3.4 3.4	0.2	36 37	19.9 19.9	19.9	8.3 8.3	8.3	30.3	30.3	98.6 99.1	98.9	7.5 7.6	7.6	9.7 9.8		14 15		83 84			<0.2	1.2
					Surface	1.0	0.4	11	19.7	19.7	8.3	8.3	29.8	29.8	95.6	95.6	7.3		10.2		14		81			<0.2	1.3
IM2	Deine	Madazata	09:13	6.4	Middle	1.0 3.2	0.5 0.3	11 12	19.7 19.6	19.6	8.3	8.3	29.9 30.0	30.0	95.6 95.5		7.3 7.3	7.3	10.5 12.2	12.9	15 15	14	81 82 82	818180	806163	<0.2	1.2
IIVIZ	Rainy	Moderate	09.13	6.4		3.2 5.4	0.3	13 19	19.6 19.6		8.3 8.3		30.0 30.2		95.6 96.2		7.3 7.4		12.3 15.9	12.9	14 13	14	82 84	010100	806163	<0.2 <0.2	1.4
					Bottom	5.4	0.2	19	19.6	19.6	8.3	8.3	30.2	30.2	96.6	96.4	7.4	7.4	16.3		12		84			<0.2	1.3
					Surface	1.0	0.4 0.5	348 320	19.8 19.8	19.8	8.3 8.3	8.3	29.3 29.3	29.3	95.6 95.6	95.6	7.3	7.3	10.4 10.4		14 14		81 82			<0.2	1.3
IM3	Cloudy	Moderate	09:22	6.5	Middle	3.3	0.4	344 316	19.7 19.7	19.7	8.3	8.3	29.7 29.6	29.7	95.5 95.6	95.6	7.3 7.3		10.6 10.5	12.8	15 14	14	83 83	818769	805580	<0.2	2 1.3 1.3
					Bottom	5.5 5.5	0.4	338 350	19.6 19.6	19.6	8.3 8.3	8.3	30.0	30.0	97.5 97.8	97.7	7.5 7.5	7.5	17.7 17.3		15 14		84 84			<0.2	1.4
					Surface	1.0	0.7	349 321	19.9	19.9	8.3 8.3	8.3	29.1	29.1	94.8 94.8	94.8	7.3 7.3		12.8		19 19		82 82			<0.2	1.4
IM4	Cloudy	Moderate	09:30	7.3	Middle	3.7	0.6	348	19.8	19.8	8.3	8.3	29.5	29.5	94.7	94.8	7.3	7.3	14.2	14.2	16	16	84 04	819712	804610	<0.2	1.4
	Cicacy	wodorato	00.00	7.0		3.7 6.3	0.6	320 346	19.8 19.8		8.3		29.5 29.6		94.8 95.4		7.3 7.3	7.0	14.4 15.5	-	15 14		85 85	0.07.12	001010	<0.2	1.5
					Bottom	6.3 1.0	0.5	350 23	19.8 20.0	19.8	8.3 8.3	8.3	29.6 30.0	29.6	95.7 96.2	95.6	7.3 7.3	7.3	15.4 11.6		14 18		86 82			<0.2 <0.2	1.4
					Surface	1.0	1.0	24	20.0	20.0	8.3	8.3	30.0	30.0	96.2	96.2	7.3	7.3	11.8		19		82			<0.2	1.2
IM5	Cloudy	Moderate	09:38	6.9	Middle	3.5 3.5	0.8	20 21	20.0	20.0	8.3	8.3	30.0	30.0	96.3 96.3	96.3	7.3 7.3		13.1 13.2	12.9	17 16	17	84 84	820758	804886	<0.2	1.2
					Bottom	5.9 5.9	0.7	22 23	20.0	20.0	8.3	8.3	30.0	30.0	97.0 97.1	97.1	7.4	7.4	14.0 13.6		16 17		85 85			<0.2	1.2
					Surface	1.0	0.4	106 115	20.0	20.0	8.3	8.3	28.5	28.5	95.1 95.1	95.1	7.3 7.3		5.4 5.5	Ţ	7		81 81			<0.2	1.5
IM6	Cloudy	Moderate	09:45	7.0	Middle	3.5	0.5	97	20.0	20.0	8.3	8.3	29.0	29.0	95.5	95.6	7.3	7.3	8.3	9.0	8	. 8	82	821062	805826	<0.2	1.4
	,					3.5 6.0	0.5	102 0	20.0	20.0	8.3 8.3	8.3	29.1 29.9	29.9	95.6 96.2		7.3 7.3	7.0	8.8 13.0	-	7		82 84			<0.2	1.4
					Bottom	6.0 1.0	0.5	0 89	20.0	1	8.3 8.2		29.9		96.3 94.0	90.3	7.3 7.3	7.3	12.9		8 5		84 81		ļ	<0.2 <0.2	1.4
					Surface	1.0	0.0	97	20.0	20.0	8.2	8.2	27.1	27.1	94.0	94.0	7.3	7.3	3.2	þ	6		81			<0.2	1.7
IM7	Cloudy	Moderate	09:52	8.0	Middle	4.0 4.0	0.2	89 91	20.0	20.0	8.3 8.3	8.3	27.6 27.8	27.7	94.8 94.9	94.9	7.3 7.3		4.7 5.0	5.2	6 7	7	83 83	821350	806841	<0.2	1.9
					Bottom	7.0	0.3	73 78	20.0	20.0	8.3	8.3	28.7	28.7	95.4 95.4	95.4	7.3 7.3	7.3	7.5 7.6	F	7		84 85			<0.2	2.0
					Surface	1.0	0.2	76 76	19.9	19.9	7.9	7.9	26.6	26.7	93.2	93.2	7.3		4.6 4.8	F	5		86 86			<0.2	1.8
IM8	Cloudy	Moderate	10:22	7.7	Middle	3.9	0.2	89	19.9	19.9	7.9	7.9	27.0	27.1	93.3	93.4	7.2	7.3	6.3	6.2	5	6	89	821843	808140	<0.2	2.0
	,			-		3.9 6.7	0.3 0.1	95 102	19.9 20.0		7.9 7.9		27.1 27.5		93.4 93.9		7.3 7.3	72	6.3 7.5	-	6 7		90			<0.2	1.9
					Bottom	6.7	0.1	110	20.0	20.0	7.9	7.9	27.5	27.5	93.9	93.9	7.3	7.3	7.7		7	•	91			<0.2	1.8

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

Water Quality Monitoring
Water Quality Monitoring Results on

Water Qua	lity Monit	toring Res	ults on		27 February 20	during Mid-	Flood T	ide																				
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salir	ity (ppt)		aturation (%)	Dissolve Oxyge		Turbidity(I	NTU)	Suspende (mg		Total Al (pp		Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (μg/L)
Station	Condition	Condition	Time	Depth (m)		()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value [DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value D/	A Value DA
					Surface	1.0	0.5	256 259	20.0	20.0	7.9	7.9	27.8 27.8	27.8	93.6 93.6	93.6	7.2	- 1	13.9 12.8		19 18		86 87				<0.2	1.5
IM9	Cloudy	Moderate	09:22	7.0	Middle	3.5 3.5	0.4 0.5	258 270	20.0	20.0	7.9 7.9	7.9	27.8 27.8	27.8	93.7 93.7	93.7	7.2	7.2	17.3 16.0	14.9	19 19	19	88	89	822112	808802	<0.2	1.5
					Bottom	6.0	0.3	254	20.0	20.0	7.9	7.9	27.8	27.8	94.5	94.5	7.3	7.3	14.9		20		89 90				<0.2	1.5
						6.0 1.0	0.4	275 291	20.0		7.9		27.8		94.5		7.3 ⁴	1.3	14.8 8.9		20 12		91 86				<0.2	1.5
					Surface	1.0	0.6	305	20.0	20.0	7.9	7.9	27.8	27.8	93.7	93.7	7.2	7.2	9.1		11		86				<0.2	1.4
IM10	Cloudy	Moderate	09:15	7.6	Middle	3.8	0.6	292 295	20.0	20.0	7.9	7.9	27.8	27.8	93.7	93.7	7.2	ŀ	9.3 9.3	9.9	13 13	13	87 88	88	822389	809770	<0.2 <0.2	.2 1.5 1.5
					Bottom	6.6 6.6	0.6	298 300	20.0	20.0	7.9	7.9	27.8	27.8	94.0 94.1	94.1	7.3	7.3	11.9 11.0		14 14		90 90				<0.2	1.4
					Surface	1.0	0.8	290	19.9	19.9	7.9	7.9	27.8	27.8	93.6	93.6	7.3		8.3		8		86				<0.2	1.5
						1.0 3.7	0.8	299 295	19.9 19.8		7.9 7.9		27.8 27.9		93.6 93.4		7.2	7.2	8.6 12.0		9 12		87 88				<0.2	1.6
IM11	Cloudy	Moderate	09:03	7.3	Middle	3.7 6.3	0.8	314 306	19.8 19.8	19.8	7.9 7.9	7.9	27.9 28.0	27.9	93.4 93.8	93.4	7.2		12.3 13.8	11.4	12 15	12	87 90	88	822060	811470	<0.2 <0.2	.2 1.5 1.5
					Bottom	6.3	0.5	308	19.8	19.8	7.9	7.9	28.0	28.0	93.8	93.8	7.3	7.3	13.7		16		91				<0.2	1.4
					Surface	1.0	0.7	294 308	19.9 19.9	19.9	7.9	7.9	28.6 28.6	28.6	92.9 92.9	92.9	7.2	-	9.6 9.9		11 12		86 87				<0.2	1.4
IM12	Cloudy	Moderate	08:57	7.8	Middle	3.9	0.7	295	19.9	19.9	7.9	7.9	28.6	28.6	92.8	92.8	7.1	7.2	13.5	14.6	14	14	87	88	821473	812037	<0.2	2 1.4
	,				Bottom	3.9 6.8	0.8	308 294	19.9 19.9	19.9	7.9 7.9	7.9	28.6 28.6	28.6	92.8 93.0	93.0	7.1 7.2	7.2	13.7 20.9		13 18		88 91				<0.2	1.4
						6.8 1.0	0.5	297	19.9		7.9 7.9		28.6		93.0		7.2	1.2	20.1 4.5		18 6		91				<0.2	1.4
					Surface	1.0	-	-	20.0	20.0	7.9	7.9	28.4	28.4	91.7	91.8	7.1	7.1	4.7		5		-				-	-
SR1A	Cloudy	Moderate	08:41	4.9	Middle	2.5	-	-	-	-	-	-	-	-	-	-	- '	ŀ	-	6.2	-	8	-	-	819999	812661	-	-
					Bottom	3.9 3.9	-	-	20.0	20.0	7.9 7.9	7.9	28.5 28.5	28.5	91.5 91.6	91.6	7.0	7.0	7.3 8.1		10 9		-				-	-
					Surface	1.0	0.1	43	19.9	19.9	7.9	7.9	27.8	27.8	94.0	94.0	7.3		4.7		8		88				<0.2	1.6
000	011					1.0	0.1	43	19.9		7.9		27.8		94.0		7.3	7.3	4.8		7		87		204404	04.4474	<0.2	1.5
SR2	Cloudy	Moderate	08:29	4.1	Middle	3.1	0.1	355	19.8	-	7.9	-	28.1		94.2	-	7.3	[13.0	8.9	- 12	10	90	89	821464	814174	<0.2	.2 - 1.5
					Bottom	3.1	0.2	356	19.8	19.8	7.9	7.9	28.1	28.1	94.2	94.2	7.3	7.3	13.0		13		91				<0.2	1.4
					Surface	1.0	0.1	20 20	20.0	20.0	7.9	7.9	26.6	26.6	93.6	93.6	7.3		3.7		5		-				-	-
SR3	Cloudy	Moderate	10:37	8.7	Middle	4.4 4.4	0.1	77 81	19.9 19.9	19.9	7.9 7.9	7.9	26.8	26.8	92.8 92.9	92.9	7.2	7.3	4.7 4.8	5.9	5	6	-	-	822185	807607		
					Bottom	7.7	0.1	91	19.8	19.8	7.9	7.9	26.9	26.9	92.8	92.8	7.2	7.2	8.6		6		-				-	
						7.7	0.1	97 240	19.8		7.9 8.3		26.9		92.8		7.2		9.6 10.0		7 16		-				-	
					Surface	1.0 4.2	0.3 0.4	254 240	20.4 20.4	20.4	8.3	8.3	29.9 29.9	29.9	94.0 94.0	94.0	7.1	7.1	10.0 10.0		16 16		-				-	-
SR4A	Rainy	Moderate	08:22	8.4	Middle	4.2	0.4	251	20.4	20.4	8.3 8.3	8.3	29.9	29.9	94.1	94.1	7.1		10.0	10.1	17	17	-	-	817202	807791	-	
					Bottom	7.4	0.3	249 251	20.4	20.4	8.3	8.3	29.9	29.9	94.8	94.9	7.2	7.2	10.1 10.3	-	18 17		-				-	-
					Surface	1.0 1.0	0.3	298 325	20.3	20.3	8.3 8.3	8.3	30.0 30.0	30.0	94.0 94.0	94.0	7.1		12.1 12.3		16 17		-				-	
SR5A	Rainy	Moderate	08:06	3.7	Middle	-	-	-	20.3		-		-		-		7.1	7.1	-	12.7	-	16	-		816606	810698	<u> </u>	<u> </u>
Citori	rtuiry	Wodorato	00.00	0.7		2.7	0.3	297	20.3		8.3		30.0		94.3		7.1	-	13.3		16		-		010000	0.0000	-	
					Bottom	2.7	0.3	310 219	20.3	20.3	8.3	8.3	30.0	30.0	94.4	94.4	7.2	7.2	13.2		16 4		-				-	-
					Surface	1.0	0.0	219	20.3	20.3	8.2	8.2	29.6 29.6	29.6	93.1 93.1	93.1	7.1	7.1	3.9 3.9		5		-				-	-
SR6A	Rainy	Moderate	07:40	3.4	Middle	-	-	-	-	-	-	-	-	-	-	-		′.·	-	4.0	-	5	-	-	817942	814757	-	
					Bottom	2.4	0.0	219	20.3	20.3	8.1	8.1	29.6	29.6	94.0	94.0	7.1	7.2	4.0		4		-				-	-
					Surface	2.4 1.0	0.0	238 204	20.3	19.7	8.1 7.9	7.9	29.6 29.0	29.0	91.6	91.6	7.2		4.0 4.1		5 6		-				-	+
						1.0 8.4	0.2	209 201	19.7 19.5		7.9 7.9		29.0 29.5		91.6 90.7		7.1	7.1	4.1 4.6		5 7		-				-	
SR7	Rainy	Moderate	07:41	16.7	Middle	8.4	0.2	220	19.5	19.5	7.9	7.9	29.6	29.6	90.7	90.7	7.0		4.6	4.9	6	6	-	-	823635	823724	-	
					Bottom	15.7 15.7	0.1	199 201	19.4 19.4	19.4	7.9	7.9	29.7	29.7	91.0	91.1	7.0	7.0	6.2	}	7		-				-	-
					Surface	1.0	-	-	20.0	20.0	7.9 7.9	7.9	28.0 28.0	28.0	93.4 93.4	93.4	7.2 7.2	Ī	8.4 8.4		12 11		-				-	
SR8	Cloudy	Moderate	08:49	4.5	Middle	1.0		-	20.0	_			- 20.0	-	93.4		- '	7.2	-	9.1	-	12	-		820483	811808	-	
0.10	Cicacy	···ouoiulo	00.10			3.5	-	-	19.9		7.9	l	28.0		93.7		7.2		9.8	J	- 13		-		320.00		- '	
					Bottom	3.5	-	-	19.9	19.9	7.9	7.9	28.0	28.0	93.8	93.8	7.2	7.2	9.8		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

Note: Due to safety concern, the monitoring at SR8 was shifted to the closest safe and accessible location as a precautionary measure.

29 February 20 during Mid-Ebb Tide

Monitoring	Weather																											
	Weather	Sea	Sampling	Water	Sampling De	oth (m) Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)	DO Saturation (%)	Dissolve Oxyger		Turbidity(N	NTU)	Suspended (mg/l		Fotal Alk (ppm		Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		Nickel (μg/L)
Station	Condition	Condition	Time	Depth (m)		(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value Average	Value [)A	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA V	Value	DA
					Surface	1.0 0.1 1.0 0.1	260 280	20.2	20.2	8.3	8.3	30.5	30.5	97.8 97.8	7.4	<u>,</u>	7.0	-	4	-	82				<0.2		1.0	
C1	Fine	Moderate	15:59	8.1	Middle	4.1 0.0 4.1 0.0	283 310	20.2	20.2	8.3	8.3	30.5 30.5	30.5	97.6 97.6	7.4	<i>"</i> F	7.4	7.2	5	5	83 84	83	815603	804260	<0.2		0.9	0.9
					Bottom	7.1 0.0 7.1 0.0	59 61	20.2	20.2	8.3	8.3	30.6 30.6	30.6	97.2 97.2	7.4		7.3 7.4	F	5	F	84 85				<0.2		1.0	
					Surface	1.0 0.5 1.0 0.5	165 171	20.4	20.4	8.1	8.1	27.6 27.6	27.6	92.3 92.3	7.1	F	3.2		4 3		87 87				<0.2		1.6	
C2	Cloudy	Moderate	14:41	11.6	Middle	5.8 0.4 5.8 0.4	154 158	20.1	20.1	8.1	8.1	28.8	28.8	90.9	7.0	'.1 =	6.0	5.8	4	4	88	89	825677	806958	<0.2	-0.2	1.6	1.6
					Bottom	10.6 0.3 10.6 0.3	112 120	20.0	20.0	8.1	8.1	29.2	29.2	90.6 90.6 90.6	60	i.9	7.4	F	3 4	F	91 91				<0.2		1.6	
					Surface	1.0 0.1 1.0 0.1	162 177	20.2	20.2	8.1	8.1	31.1	31.1	91.3 91.3 91.3	6.9	Ė	2.0	1	2 2	_	86 86				<0.2		0.9	_
СЗ	Cloudy	Moderate	16:38	11.9	Middle	6.0 0.1	121	19.5	19.5	8.2	8.2	32.0	32.0	90.1	6.8	6.9	4.3	4.4	3 4	3	88	88	822102	817825	<0.2	-0.2	1.0	1.0
					Bottom	6.0 0.2 10.9 0.2	123 149	19.5 19.5	19.5	8.2	8.2	32.0 32.1	32.1	90.1 90.1	6.9	i.9	7.0	þ	4		91				<0.2		1.0	
					Surface	10.9 0.2 1.0 0.0	151 200	19.5	20.5	8.2	8.3	32.1	30.4	90.7 98.1	7.4		7.0 4.5		6		91 80				<0.2		0.9	_
IM1	Fine	Moderate	15:28	5.0	Middle	1.0 0.0	213	20.5	_	8.3	_	30.4	-	98.1	7.4	'.4	4.5	5.1	-	6	- 08	82	817965	807111	<0.2		0.9	0.9
					Bottom	4.0 0.0	219	20.2	20.2	8.3	8.3	30.9	30.9	96.2 96.3	7.3	.3	5.8		7		83				<0.2		0.9	
					Surface	4.0 0.0 1.0 0.1	239 321	20.2	20.3	8.3	8.3	30.8 29.9	29.9	96.4	7.3		5.6 4.5		6 5		84 80				<0.2 <0.2		1.1	_
IM2	Fine	Moderate	15:21	6.8	Middle	1.0 0.1 3.4 0.0	323 54	20.3 19.9	19.9	8.3 8.3	8.3	29.9 30.9	30.9	97.9 96.3 96.3	7.4	'.4	4.5 7.8	7.1	6	6	81 82	82	818185	806171	<0.2 <0.2	-02 E	1.1	1.1
					Bottom	3.4 0.0 5.8 0.0	58 37	19.9 19.9	19.9	8.3 8.3	8.3	31.0 31.1	31.1	96.3 96.5	7.3 7.3	.3	7.8 8.9		5 6		82 84				<0.2		1.1	
					Surface	5.8 0.0 1.0 0.1	39 174	19.9 20.0	20.0	8.3	8.3	31.1	30.3	96.5 96.8 96.7	7.3		8.9 6.5		6 4		85 80				<0.2 <0.2		1.1	
IM3	Fine	Moderate	15:15	7.0	Middle	1.0 0.1 3.5 0.1	189 219	20.0 19.8	19.8	8.3 8.3	8.3	30.4 30.8	30.8	96.6 95.8 95.8	7.3	'.3 <u> </u>	6.8 8.5	8.8	5	5	80 81	81	818780	805572	<0.2	-02	1.1	1.1
	1 1110	Modorato	10.10	7.0	Bottom	3.5 0.1 6.0 0.1	232 216	19.8 19.8	19.8	8.3	8.3	30.8	30.9	95.8 95.7 95.7	7.3 7.3		11.3	<u> </u>	5 5	Ľ	81 83	0.	0.0.00	000072	<0.2 <0.2		1.0	
					Surface	6.0 0.1 1.0 0.1	230 126	19.8 20.1	20.1	8.3 8.3	8.3	30.9	30.0	95.7 96.9 96.9 96.9	7.3 '		11.4 6.7		6 12		83 81				<0.2		1.1	
IM4	Fine	Moderate	15:06	7.8	Middle	1.0 0.1 3.9 0.2	136 211	20.1 19.8	19.8	8.3 8.3	8.3	30.0	30.7	96.9 95.5 95.6	7.4	.4	6.5 13.2	11.8	11 9	9	81 82	82	819742	804587	<0.2		1.0	1.0
11014	rine	Woderate	15.06	7.0	Bottom	3.9 0.2 6.8 0.2	222 218	19.8 19.8		8.3 8.3		30.7 30.8		95.6	7.3 7.3		12.9 16.0	11.0	8	9	82 83	02	019742	004307	<0.2		1.0	1.0
					1	6.8 0.2 1.0 0.3	231 207	19.8 19.9	19.8	8.3	8.3	30.8 30.6	30.8	95.7	7.3		15.7 11.5		6		84 81				<0.2		1.0 0.9	
	_				Surface	1.0 0.3 3.2 0.3	208 219	19.9 19.8	19.9	8.3	8.3	30.6 30.6	30.6	95.7	7.3	· 3 🗀	11.6		3		81 82				<0.2		0.9	
IM5	Fine	Moderate	14:56	6.3	Middle	3.2 0.3 5.3 0.2	200	19.8	19.8	8.3	8.3	30.6 30.6	30.6	95.6	7.3		12.6	12.5	2	3	82 85	83	820757	804850	<0.2	<0.2	1.0	1.0
					Bottom	5.3 0.3 1.0 0.1	184 234	19.9	19.9	8.3	8.3	30.6	30.6	95.9	7.3		13.5		2		85 81				<0.2		1.0	
					Surface	1.0 0.1 3.8 0.1	245 200	20.2	20.2	8.3 8.3	8.3	29.3	29.3	95.9	73	'.3 E	5.2		3 5		81				<0.2		1.2	
IM6	Fine	Moderate	14:49	7.5	Middle	3.8 0.1 6.5 0.1	202 227	20.1	20.1	8.3 8.3	8.3	29.9	29.9	95.9	7.3		6.4	6.6	4	5	82 84	83	821038	805837	<0.2	<0.2	1.3	1.2
					Bottom	6.5 0.1	229	20.1	20.1	8.3	8.3	30.4	30.4	95.8	7.3	'.3	8.4	-	6		85				<0.2		1.3	
					Surface	1.0 0.1	198 194	20.4	20.4	8.2	8.2	26.9	27.0	94.0 94.0	7.2	.2	3.4		7	þ	80				<0.2		1.7	
IM7	Fine	Moderate	14:40	8.2	Middle	4.1 0.1 4.1 0.1	193 184	20.2	20.2	8.3	8.3	28.0	28.0	94.3 94.4	7.2		4.3	5.4	11	10	81	82	821361	806858	<0.2	<0.2	1.8	1.9
					Bottom	7.2 0.1 7.2 0.1	153 154	19.9 19.9	19.9	8.3	8.3	30.3	30.2	94.0 93.9 94.0	7.2	.2	8.7		11		84				<0.2		1.9	
					Surface	1.0 0.2 1.0 0.2	174 179	20.4	20.4	8.1	8.1	27.0 27.0	27.0	94.1 94.1	7.2	.2	2.3		3	þ	86 87				<0.2		1.4	
IM8	Cloudy	Moderate	15:04	7.2	Middle	3.6 0.2 3.6 0.2	201 188	20.3	20.3	8.1 8.1	8.1	27.5 27.5	27.5	94.0 94.0	7.2		3.1	2.9	2	3	87 88	88	821828	808133	<0.2	<0.2	1.3	1.4
A: Denth-Averag					Bottom	6.2 0.2 6.2 0.3	187 167	20.3	20.3	8.1 8.1	8.1	28.4	28.4	95.6 95.6	7.3	.3	3.3		3		90 90				<0.2		1.4	

29 February 20 during Mid-Ebb Tide

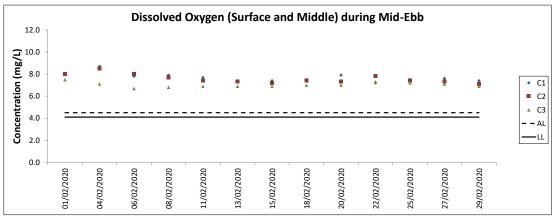
Water Qual	ity Monite	oring Resu	lts on		29 February 20	during Mid-Ebb Tid	е																				
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)	DO Saturation (%)	Dissolved Oxygen	Turbidit	y(NTU)	Suspende (mg.		Total All (ppr		Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		Nickel (µ	.g/L)
Station	Condition	Condition	Time	Depth (m)	5	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value			DA
					Surface	1.0 0.2 1.0 0.2	143 149	20.8	20.8	8.1 8.1	8.1	26.7 26.7	26.7	93.7 93.7	7.2	1.9		3		87 86				<0.2		1.3	
IM9	Cloudy	Moderate	15:10	6.8	Middle	3.4 0.2 3.4 0.2	142 152	20.5 20.5	20.5	8.1 8.1	8.1	27.7 27.7	27.7	93.0 93.0	7.1	3.5	4.7	3	3	88 89	88	822078	808806	<0.2		1.2	1.3
					Bottom	5.8 0.1 5.8 0.1	137 146	20.3	20.3	8.1 8.1	8.1	29.1 29.1	29.1	93.6 93.6	7.1 7.1	8.6 8.6	7	3		90 90				<0.2		1.3	
					Surface	1.0 0.2 1.0 0.3	104 110	20.2	20.2	8.1 8.1	8.1	29.6 29.6	29.6	92.5 92.5	7.0	9.2		9		86 87				<0.2		1.2	
IM10	Cloudy	Moderate	15:15	7.1	Middle	3.6 0.2 3.6 0.2	125 128	20.3	20.3	8.1 8.1	8.1	29.6 29.6	29.6	93.3 93.3	7.1 7.1	9.3	9.1	9	8	88 87	88	822369	809786	<0.2	-0.2	12	1.2
					Bottom	6.1 0.2 6.1 0.2	155 162	20.3	20.3	8.1 8.1	8.1	29.7 29.7	29.7	93.9 93.9 93.9	7.1 7.1	8.9 8.9	7	7 8		90				<0.2		1.3	
					Surface	1.0 0.3 1.0 0.4	76 79	20.3	20.3	8.1 8.1	8.1	30.0	30.0	92.5 92.5 92.5	7.0	8.2 8.2		9		87 86				<0.2		1.2	
IM11	Cloudy	Moderate	15:26	7.7	Middle	3.9 0.3	86 88	20.1	20.1	8.1 8.1	8.1	30.1 30.1	30.1	92.5 92.5 92.5	7.0 7.0 7.0	9.5	9.2	10	11	88 87	88	822043	811478	<0.2	-0.2	12	1.3
					Bottom	6.7 0.2	90	20.1	20.1	8.1	8.1	30.1 30.2 30.2	30.2	93.8	7.0 7.1 7.1 7.1	10.0	1	11 12		90				<0.2 <0.2		1.3	
					Surface	6.7 0.2 1.0 0.3	90 79	20.1	20.3	8.1	8.1	30.0	30.0	93.8 93.0 92.3 92.3	7.0	9.4		8		91 87				<0.2		1.3	=
IM12	Cloudy	Moderate	15:32	8.5	Middle	1.0 0.3 4.3 0.3	82 81	20.3	20.2	8.1 8.1	8.1	30.0	30.0	91.9	7.0 7.0	9.4 12.1	11.6	8 10	9	86 87	88	821482	812065	<0.2	.0.2	1.2	1.3
					Bottom	4.3 0.3 7.5 0.3	83 80	20.2	20.2	8.1 8.1	8.1	30.0 30.0	30.0	91.9	7.0 7.0 7.0	12.1 13.2		9 10		88 91				<0.2 <0.2		1.5	
					Surface	7.5 0.3 1.0 -	85	20.2	20.7	8.1 8.1	8.1	30.0 29.9	29.9	94.8 94.8	7.0	13.2 2.1		9		91				<0.2		1.2	=
SR1A	Cloudy	Moderate	15:57	5.1	Middle	1.0 - 2.6 -	-	20.7	20.7	8.1	0.1	29.9	20.0	94.8	7.1 7.1	2.1	2.5	-	4	-		819972	812661	-	ı E	-	
GICIA	Cioday	Woderate	15.57	3.1		2.6 - 4.1 -	-	20.5	20.5	8.1	0.4	30.0	20.0	96.1	7.3	2.9	2.5	4	7	-		013372	012001	-	,	-	
					Bottom	4.1 - 1.0 0.2	103	20.5		8.1 8.1	8.1	30.0 29.8	30.0	96.1 96.1 94.0	7.3 7.3 7.1	2.9		4 5		- 86				<0.2	\vdash	1.2	_
					Surface	1.0 0.2	110	20.8	20.8	8.1	8.1	29.8	29.8	94.0 94.0	7.1 7.1	1.7	1	4		88				<0.2		1.1	
SR2	Cloudy	Moderate	16:15	4.9	Middle	3.9 0.1	- 99	20.6	-	8.1	-	29.8	-	93.7	7.1 7.4	2.6	2.2	- 5	5	91	89	821446	814160	<0.2	<0.2	1.1	1.1
					Bottom	3.9 0.1 1.0 0.4	100	20.6	20.6	8.1	8.1	29.8	29.8	93.7	7.1 7.1 7.1	2.6		5		90				<0.2		1.1	_
					Surface	1.0 0.4 1.0 0.5 4.2 0.4	101	20.5	20.5	8.1 8.1	8.1	27.3	27.3	92.6 92.6 91.8	7.1 7.1	1.5		2		-				-	ı þ		
SR3	Cloudy	Moderate	15:00	8.3	Middle	4.2 0.4	124	20.2	20.2	8.1	8.1	28.2	28.2	91.8	7.0	2.5	3.1	2	3	-	-	822128	807575	-	-	-	-
					Bottom	7.3 0.4 7.3 0.4	108 117	20.2	20.2	8.1	8.1	28.6	28.6	92.2 92.2 92.2	7.1 7.1	5.3		3		-						-	
					Surface	1.0 0.1 1.0 0.1	77 79	20.2	20.2	8.3 8.3	8.3	30.5	30.5	97.6 97.5	7.4	7.1		9		-				-		-	
SR4A	Fine	Moderate	16:20	8.3	Middle	4.2 0.1 4.2 0.1	71 72	20.1	20.1	8.3 8.3	8.3	30.6 30.6	30.6	97.4 97.3 97.4	7.4	7.4 7.5	7.4	9	9	-	-	817197	807812	-	⊢	-	-
					Bottom	7.3 0.1 7.3 0.1	9	20.1	20.1	8.3	8.3	30.6	30.6	97.2 97.1 97.2	7.4 7.4	7.7		10 10		-				-	<u></u>	-	
					Surface	1.0 0.1 1.0 0.2	77 76	20.4	20.4	8.3	8.3	30.8	30.8	95.1 95.2 95.2	7.2	9.0 9.1		8		-				-		-	
SR5A	Fine	Calm	16:35	3.9	Middle		-	-	-	-	-	-	-	-	- '-	-	9.4	-	9	-	-	816573	810680	-	-	-	-
					Bottom	2.9 0.1 2.9 0.1	121 126	20.4	20.4	8.3	8.3	30.8	30.8	95.6 95.7 95.7	7.2 7.2	9.7		10 11		-				-	ı F	-	
					Surface	1.0 0.1 1.0 0.1	125 128	20.5 20.5	20.5	8.3	8.3	29.5 29.6	29.6	93.9 93.9	7.1	5.1 5.4	-	3		-				-	F	-	
SR6A	Fine	Calm	16:59	4.4	Middle		-	-	-	-	-	-	-		7.1	-	6.5	-	5	-	-	817958	814721	-	, - F	-	-
					Bottom	3.4 0.1 3.4 0.1	86 88	20.5 20.5	20.5	8.3 8.3	8.3	29.8 29.7	29.7	95.0 95.3 95.2	7.2 7.2	7.6 7.6	1	7		-				-		-	
					Surface	1.0 0.1 1.0 0.1	126 135	19.7	19.7	8.1 8.1	8.1	32.2	32.2	91.5 91.5 91.5	6.9	2.2		6		-					F	Ħ	
SR7	Cloudy	Moderate	17:06	16.5	Middle	8.3 0.1	144	19.7	19.7	8.2 8.2	8.2	32.2 32.2	32.2	90.7	6.9 6.9	2.4	2.5	7	6	-	-	823648	823760	-			-
					Bottom	8.3 0.1 15.5 0.2	158	19.7	19.6	8.2	8.2	32.4	32.4	90.7 89.2 89.2 89.2	6.8	2.4	†	6 6 7		-				-	,	-	
					Surface	15.5 0.2 1.0 -	163	19.6	20.3	8.2	8.1	32.4	30.0	91.5	6.8	8.2		18		-				ᆸ	\bot	-	=
SR8	Cloudy	Moderate	15:44	5.2	Middle	1.0 -	-	20.3	-	8.1	-	30.0	-	91.5	6.9	8.2	8.2	17	16	-	-	820375	811621	-	-		_
				-	Bottom	4.2	-	20.3	20.3	8.1	8.1	30.0	30.0	91.7 91.7	7.0 7.0	8.1	1	16		-				-	, E	-	
					Dottom	4.2 -	-	20.3	20.0	8.1	5.	30.0	50.0	91.7	7.0	8.1		14		- 7				- 7		- 1	

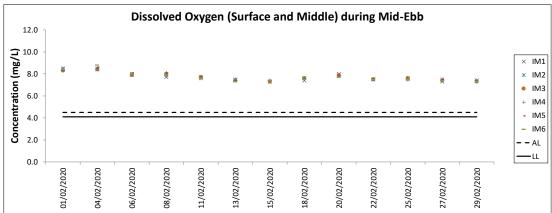
29 February 20 during Mid-Flood Tide

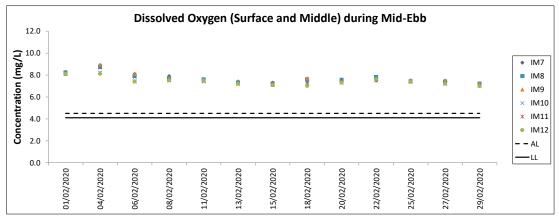
water Qua	iity woitiit	orning itesu	ito Uli		29 February 20	during wild-Flood	iue																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	Current Speed	Current	Water To	emperature (°C)		рН	Salin	ity (ppt)	DO Saturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg.		Total Alka (ppm)	' Coord	dinate (Coordinate HK Grid	Chrom (µg/l		ickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value Average	Value DA	Value	DA	Value	DA	Value		thing)	(Easting)	Value	DA Va	alue DA
					Surface	1.0 0.5 1.0 0.6	35 38	19.9 19.9	19.9	8.3 8.3	8.3	29.8 29.8	29.8	96.4 96.4	7.4	5.2 5.2	-	7		81 81				<0.2 <0.2	1.	.1
C1	Cloudy	Moderate	10:22	8.3	Middle	4.2 0.3	43 46	19.7	19.7	8.3 8.3	8.3	30.8	30.8	96.0 96.1 96.1	7.3	12.0	12.6	7	6	83	83 815	630	804235	×0.2	_0 2 1.	.2 1.1
					Bottom	7.3 0.4	35	19.6	19.6	8.3	8.3	31.9	31.9	95.9	7.3	12.5 20.5	1	6 4	1	85			ļ	<0.2	1.	.1
					Surface	7.3 0.4 1.0 0.3	35 348	19.6 20.2	20.2	8.3 8.1	8.1	31.9 27.6	27.7	95.8	7.3	20.2 3.4		5 3		85 86	+	+		<0.2 <0.2	1. 1.	.5
C2	Cloudy	Moderate	11:18	12.3	Middle	1.0 0.3 6.2 0.4	320 344	20.2	20.2	8.1 8.1	8.1	27.9 28.7	28.7	91.7 91.8 91.4 91.4	7.1 7.0	3.5	5.4	2	3	86 88	88 825	671	806940	<0.2		.6 .6
62	Cloudy	Moderate	11.10	12.3		6.2 0.4 11.3 0.4	359 353	20.2		8.1 8.1		28.7 29.0		91.4	7.0	3.7 8.7	5.4	4	3	87 90	00 025	D/ I	000940	<0.2	_ 1.	.6 .6
					Bottom	11.3 0.4 1.0 0.5	325 259	20.1	20.1	8.1 7.9	8.1	29.1 30.1	29.1	91.6 91.5 91.0	7.0 7.0	9.3 2.1		4		90 86	+	\rightarrow		<0.2 <0.2		.6
					Surface	1.0 0.5 5.9 0.6	260 262	20.1	20.1	7.9	7.9	30.1	30.1	91.0	6.9 6.9	2.1	1	4	<u> </u>	87 88			ļ	<0.2	1.	.3
C3	Cloudy	Moderate	09:42	11.8	Middle	5.9 0.7	279	19.9	19.9	7.8	7.8	30.7	30.7	90.4	6.9	3.0	4.8	4	4	87	88 822	119	817799	<0.2	<0.2	.3
					Bottom	10.8 0.3 10.8 0.4	271 271	19.6 19.6	19.6	7.8 7.8	7.8	31.6 31.6	31.6	90.4 90.4 90.4	6.9 6.9	9.2 9.2		4 5		90 90				<0.2 <0.2	1. 1.	.3
					Surface	1.0 0.1 1.0 0.1	2	20.2	20.2	8.3	8.3	30.8	30.8	95.5 95.6	7.2	6.2	1 1	9 10		80 81			ŀ	<0.2	1.	.0
IM1	Cloudy	Calm	10:41	4.8	Middle		-	-	-	-	-	-	-	-	- '.2	-	7.4	-	10	-	82 817	942	807114	-	<0.2	- 1.0
					Bottom	3.8 0.1 3.8 0.1	35 37	19.8 19.8	19.8	8.3 8.3	8.3	31.2 31.2	31.2	96.0 96.1 96.1	7.3 7.3	8.6 8.4	1	10 10	Ī	84 84			Ī	<0.2	1.	.0
					Surface	1.0 0.2 1.0 0.2	14 14	20.1	20.1	8.3 8.3	8.3	30.2	30.2	97.1 97.0 97.1	7.4	6.2		6	ŀ	82 82				<0.2	1.	.2
IM2	Cloudy	Moderate	10:51	7.0	Middle	3.5 0.1 3.5 0.1	5	19.8	19.8	8.3 8.3	8.3	30.8 30.8	30.8	96.4 96.4 96.4	7.3	8.6 8.9	8.4	7	7	0.4	84 818	149	806179	×0.2	-0.2 1.	
					Bottom	6.0 0.1	336	19.9	19.9	8.3	8.3	30.8	30.8	96.5	7.3 7.3	10.3	1	7		85			ļ	<0.2	1.	.2
					Surface	6.0 0.1 1.0 0.4 1.0 0.4	309 346	19.9 19.9 19.9	19.9	8.3	8.3	30.8	30.2	96.5 96.0 96.0 96.0	7.3	6.5		7	1	85 81	_	-		<0.2		.3
IM3	Cloudy	Moderate	10:59	6.9	Middle	3.5 0.3	318 334	19.8	19.8	8.3 8.3	8.3	30.2 30.8	30.8	95.5	7.3 7.3	6.5 10.9	9.7	6	6	82 84	84 818	793	805578	<0.2	-0.2	.1 1.2
					Bottom	3.5 0.3 5.9 0.3	353 321	19.8 19.8	19.8	8.3 8.3	8.3	30.8	30.8	95.5 95.8	7.3 7.3 7.3	10.9 11.6		6 5		84 85				<0.2	1.	.1
					Surface	5.9 0.3 1.0 0.6	346 357	19.8 19.8	19.8	8.3 8.3	8.3	30.8 30.6	30.6	95.9 95.7 95.7 95.7	7.3	9.8		9		86 80	$+\!-$	\rightarrow		<0.2	1.	
						1.0 0.6 4.0 0.5	328 353	19.8 19.7		8.3 8.3		30.6 30.7		95.7	7.3 7.3	9.8 13.8		8 10		81 82				<0.2 <0.2	1.	.0
IM4	Cloudy	Moderate	11:07	8.0	Middle	4.0 0.6 7.0 0.4	325 350	19.7 19.8	19.7	8.3 8.3	8.3	30.7 30.8	30.7	95.4	7.3	14.1 17.2	13.6	8	9	82 84	82 819	/2/	804595	<0.2	<0.2	.0 1.1
					Bottom	7.0 0.4 1.0 0.8	322 10	19.8	19.8	8.3 8.3	8.3	30.8 29.8	30.8	95.8	7.3 7.3 7.4	17.2		10		83	\rightarrow	\rightarrow		<0.2	1.	
					Surface	1.0 0.8 1.0 0.8 3.2 0.7	10	20.1	20.1	8.3 8.3	8.3	29.8	29.8	96.6	7.4 7.4 7.4	6.4 9.6	1	7		80			ļ	<0.2	1.	.2
IM5	Cloudy	Moderate	11:15	6.4	Middle	3.2 0.7	10	19.9	19.9	8.3	8.3	30.2	30.2	96.1 96.1	7.3	9.5	9.6	8	8	81	82 820	730	804847	<0.2	<0.2	.1
					Bottom	5.4 0.5 5.4 0.5	15 15	19.8 19.8	19.8	8.3 8.3	8.3	30.6	30.6	96.0 96.0	7.3 7.3 7.3	12.9 12.7		8 9	-	83 84		\perp		<0.2 <0.2	1.	
					Surface	1.0 0.3 1.0 0.3	16 16	20.3	20.3	8.3	8.3	27.7 27.7	27.7	95.5 95.5	7.3	5.1 5.4		5 5		81 81			}	<0.2		.5
IM6	Cloudy	Moderate	11:22	7.1	Middle	3.6 0.2 3.6 0.2	67 73	20.1	20.1	8.3	8.3	30.0	30.0	95.3 95.3	7.3 7.3	7.2	7.7	5 5	5	82 82	82 821	045	805842	<0.2		.5 .4
					Bottom	6.1 0.3 6.1 0.3	78 80	20.0	20.0	8.3	8.3	30.5 30.5	30.5	95.4 95.4	7.2 7.3	10.9 10.6	1	5 6	Ī	84 84			ļ	<0.2		.4
					Surface	1.0 0.0 1.0 0.0	90	20.4	20.4	8.2 8.3	8.2	26.8 26.9	26.8	94.0 94.1	7.3	3.2		3 4		81				<0.2	1.	.4
IM7	Cloudy	Moderate	11:30	8.4	Middle	4.2 0.2	95 102	20.1	20.1	8.3 8.3	8.3	28.1	28.1	95.1	7.3 7.3 7.3	6.3	5.9	4 4	4	82	83 821:	371	806819	-0.2	-0.2 1.	.4 1.4
					Bottom	7.4 0.1	90	20.1	20.0	8.3	8.3	30.2	30.2	95.1 94.8 94.8	7.2	6.8 8.0	†	4	ļ	83 84			}	<0.2	1.	.5
					Surface	7.4 0.1 1.0 0.1	92 61	20.0	20.4	8.3 8.1	8.1	30.2 27.1	27.1	93.7	7.2	7.9 3.2		5 2	1	85 86	+	\dashv	\dashv	<0.2	1.	.6
IM8	Cloudy	Moderate	10:54	7.8	Middle	1.0 0.1 3.9 0.1	64 77	20.4	20.4	8.1 8.1	8.1	27.1 28.5	28.5	93.7 93.8 93.8	7.2 7.2	3.2 4.9	4.6	2	2	86 89	88 821	020	808144	<0.2	-0.2 1.	.7
livio	Cioudy	woderate	10.54	7.0		3.9 0.1 6.8 0.1	79 203	20.3		8.1 8.1		28.5 29.0		93.8 94.4 94.4	7.2 7.2	4.9 5.6	4.0	2		87 90	00 621	000	000144	<0.2 <0.2	<0.2	.7
DA: Depth-Ave					Bottom	6.8 0.2	213	20.3	20.3	8.1	8.1	29.0	29.0	94.4	7.2 7.2	5.6		2		91				<0.2	1.	

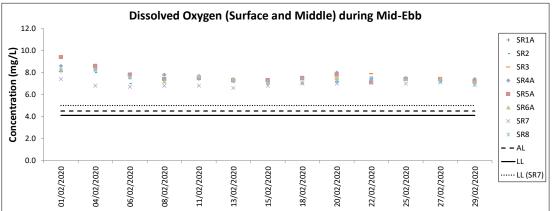
29 February 20 during Mid-Flood Tide

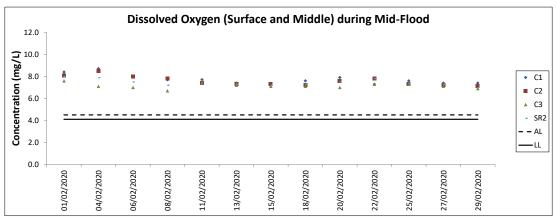
Water Qual	ity Monit	oring Resu	its on		29 February 20	during Mid-	Flood II	ae																										
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water To	emperature (°C)		рН	Salin	ity (ppt)	DO Saturati (%)		Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg	ed Solids /L)		Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chroi (µg	mium g/L)	Nickel	(μg/L					
Station	Condition	Condition	Time	Depth (m)	Campaing Do		(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value Aver	age Va	lue DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value	DA	Value	DA					
					Surface	1.0	0.2	251 274	20.4	20.4	8.1	8.1	28.8	28.8	93.2 93		.1 7.1	11.9 11.9		13 14		86 86	-			<0.2		1.8	ī					
IM9	Cloudy	Moderate	10:49	7.4	Middle	3.7	0.3	264 264	20.3	20.3	8.1 8.1	8.1	28.9	28.9	93.0 93.0		.1 /.1	16.8 16.8	15.9	12 12	12	88 87		822078	808812	<0.2	<0.2	1.7	1.7					
					Bottom	6.4	0.2	236 250	20.3	20.3	8.1	8.1	29.1	29.1	94.2 94.2	2 7	.2 7.2	18.9	1	11		90				<0.2		1.7	ı					
					Surface	1.0	0.5	303	20.2	20.2	8.1	8.1	29.4	29.4	93.2	2 7	.1	9.4		11		86				<0.2	M	1.6	Π					
IM10	Cloudy	Moderate	10:43	8.0	Middle	1.0 4.0	0.6 0.5	309 300	20.2	20.2	8.1 8.1	8.1	29.4 29.4	29.4	93.2	7 7	.1 7.1	9.4	9.9	11 11	12	85 87		822400	809784	<0.2	<0.2	1.6	1.6					
	,				Bottom	4.0 7.0	0.5 0.4	306 299	20.2	20.2	8.1 8.1	8.1	29.4 29.4	29.4	93.2	2 7	.1 7.1	10.1	-	12 12		88 91	1			<0.2]	1.6	1					
					Surface	7.0	0.4	328 290	20.2	20.1	8.1 8.1		29.4 29.6	29.6	93.2	7	.1 /.1	10.3 19.9		12 24		90 86				<0.2	$\vdash\vdash$	1.7	\vdash					
						1.0 4.0	0.5 0.5	305 284	20.1 20.1	-	8.1 8.1	8.1	29.6 29.7		92.5	- /	.1 7.1	19.9 20.5		24 25		87 87	₹			<0.2		1.5 1.5	l					
IM11	Cloudy	Moderate	10:33	7.9	Middle	4.0	0.5	300 291	20.1	20.1	8.1	8.1	29.7	29.7	92.7	./ 7	.1	20.5	20.2	26 26	<u>25</u>	89 90	88	822040	811479	<0.2	<0.2	1.5	1.					
					Bottom	6.9	0.3	314	20.1	20.1	8.1	8.1	29.7	29.7	94.2	.2 7	.2 7.2	20.3		26		91				<0.2	Ш	1.7	_					
					Surface	1.0	0.6	281 292	20.1	20.1	8.1 8.1	8.1	29.8 29.8	29.8	91.5 91.5	.5 7	.0	6.6 6.6	l	6		86 86				<0.2]	1.6	ı					
IM12	Cloudy	Moderate	10:28	8.9	Middle	4.5 4.5	0.5	285 298	20.1	20.1	8.1 8.1	8.1	29.9 29.9	29.9	91.8 91.8		.0 7.0	13.9 13.9	12.5	6	6	88 87	- 00	821450	812029	<0.2	<0.2	1.6 1.5	1.0					
					Bottom	7.9 7.9	0.4	294 314	20.1	20.1	8.1 8.1	8.1	30.0	30.0	92.7 92.7		.1 7.1	17.0 17.0		6		90 90	+			<0.2		1.8	l					
					Surface	1.0	-	-	20.3	20.3	8.0	8.0	29.4 29.4	29.4	92.7 92.7		.0	2.4		5 4		-				-		-	i					
SR1A	Cloudy	Moderate	10:12	5.8	Middle	2.9	-	-	-	-	-	-	-	-			7.0	-	2.9	-	4	-	-	819971	812663	-	-	- 1	-					
					Bottom	4.8		-	20.3	20.3	8.0	8.0	29.6 29.6	29.6	93.3 93.4		.1 7.1	3.3	1	4		-	‡						ı					
					Surface	1.0	0.5	335	20.1	20.1	7.9	7.9	29.8	29.8	92.2	2 7	.0	4.4		6		86				<0.2	М	1.4						
SR2	Cloudy	Moderate	10:01	4.5	4.5	4.5	4.5	4.5	4.5	Middle	1.0	0.5	335	20.1	_	7.9		29.8		92.2	. 7	7.0	4.4	4.7	7	7	87	88	821467	814176	<0.2	<0.2	1.4	1.
ONE	Cloudy	Woderate	10.01	4.5		3.5	0.4	335	20.1	20.1	7.8	7.8	29.8	29.8	92.8 92	. 7	.1 7.1	5.0	7.7	- 8	,	90	- 00	021407	014170	<0.2	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1.4	1					
					Bottom	3.5 1.0	0.4	335 0	20.1		7.8 8.1		29.8 26.8		92.8	- /	.1 (.1	5.0 2.3		8		90				<0.2	$\vdash\vdash$	1.5	\vdash					
					Surface	1.0 4.5	0.1	7	20.5	20.5	8.1 8.1	8.1	26.8 28.0	26.8	92.6	0 7	.1 7.1	2.3 3.2		2		-	1			-		-	ı					
SR3	Cloudy	Moderate	11:00	8.9	Middle	4.5 7.9	0.0	7 75	20.2	20.2	8.1	8.1	28.0	28.0	92.1	.1 7	.1	3.2	3.2	2	2	-	-	822136	807577	-	-	-	1					
					Bottom	7.9	0.1	79	20.2	20.2	8.1	8.1	28.5	28.5	92.6 92.6 92.6	0 7	.1 /.1	4.0		2		-		1		-	Ш	-	_					
					Surface	1.0	0.1 0.1	276 288	20.1	20.1	8.3 8.3	8.3	31.0 31.0	31.0	94.3 94.4	.4 7	.1 7.1	7.3 7.3		10 10		-				-]	-	1					
SR4A	Cloudy	Calm	09:59	8.5	Middle	4.3	0.0	321 341	20.1	20.1	8.3	8.3	31.0 31.0	31.0	94.4 94.4		.1	7.3 7.5	8.1	9 10	10	-	-	817203	807815	-	-	-	-					
					Bottom	7.5 7.5	0.1	343 359	20.0	20.0	8.3	8.3	31.0 31.0	31.0	94.9 94.9		.2 7.2	9.6 9.4	-	9		-	-			-		-	ı					
					Surface	1.0	0.1	282 292	20.2	20.2	8.3	8.3	30.5 30.5	30.5	93.2 93.3		.1	9.5 9.5		12 13		-	-			-		-	ī					
SR5A	Cloudy	Calm	09:41	3.8	Middle	-	-	-	-	-	-	-	-	-			7.1	-	10.0	-	14	-	-	816590	810689	-	-	-	-					
					Bottom	2.8	0.1	301 301	20.2	20.2	8.3	8.3	30.5	30.5	94.6 94.7	7 7	.2 7.2	10.5 10.5	İ	15 14		-	1			-		-	ı					
					Surface	1.0	0.0	247	20.2	20.2	8.2	8.2	30.0	30.0	89.4	_ ε	.8	7.1		3		-				-	М	Ħ						
SR6A	Cloudy	Calm	09:15	4.2	Middle	1.0	0.0	265	20.2	_	8.2	-	30.0	_			6.8	7.6	8.1	3	3	-	1 .	817942	814721	-] . [-						
	,				Bottom	3.2	0.0	259	20.2	20.2	8.2	8.2	30.1	30.1	89.1		.8 6.8	8.9		4		-	1			-		-	ı					
						3.2 1.0	0.0	269 315	20.2		8.2 7.9		30.1 30.5		89.1	- 6	.8	8.9 1.2		3		-				-	$\vdash\vdash$	-	\vdash					
					Surface	1.0	0.4	331 17	20.0	20.0	7.9	7.9	30.5 30.6	30.5	92.3	3 7	.0 7.0	1.2		4		-	1						ı					
SR7	Cloudy	Moderate	09:14	16.4	Middle	8.2 15.4	0.3	18	19.9	19.9	7.9	7.9	30.6 31.3	30.6	91.2	.2	.9	1.4	1.4	4 3	4	-] -	823615	823763		-	ᄅ	ı -					
					Bottom	15.4	0.4	4	19.7	19.7	7.9	7.9	31.3	31.3	90.9	.9 6	.9 6.9	1.5		3		-	1				ш	اقا	_					
					Surface	1.0	-	-	20.4	20.4	8.1 8.1	8.1	29.3 29.3	29.3	93.4 93.4	7	.1 7.1	7.3 7.3		7		-	1			-]	-	1					
SR8	Cloudy	Moderate	10:20	5.9	Middle	-	-	1 1	-	-	<u> </u>	-	-	-			:	-	8.2	-	7	-		820405	811616	-	j -	-	-					
					Bottom	4.9 4.9	-	-	20.2	20.2	8.0	8.0	29.4 29.4	29.4	93.8 93.8	.8 7	.1 7.1	9.0		6 7		-	+			-		H	ı					

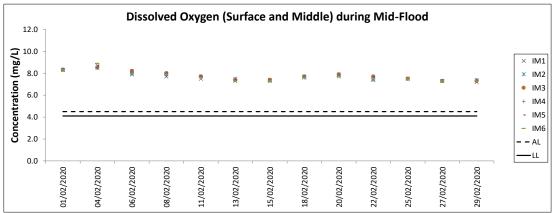


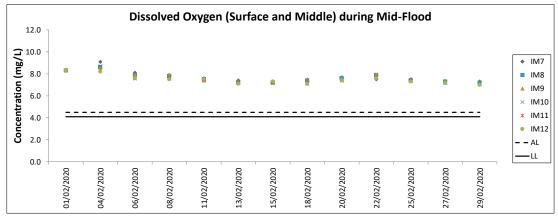


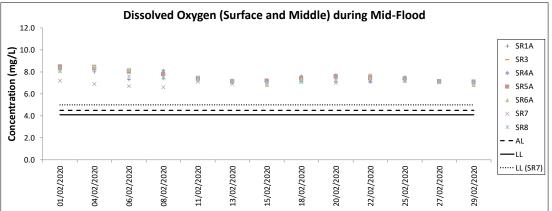


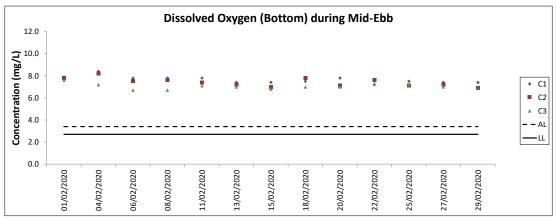


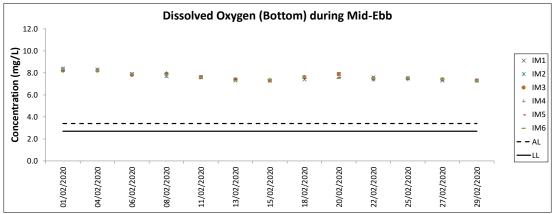


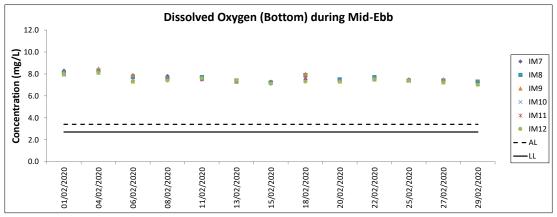


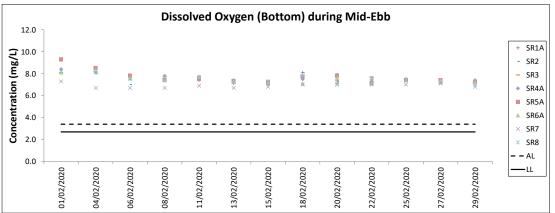


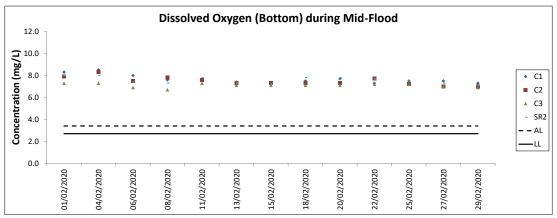


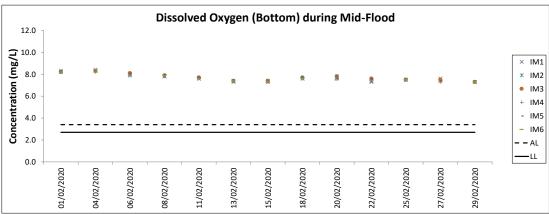


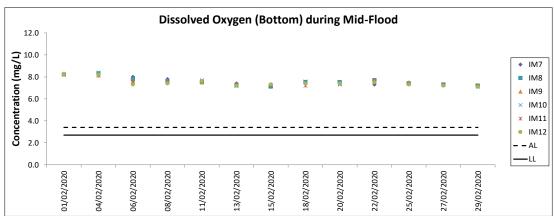


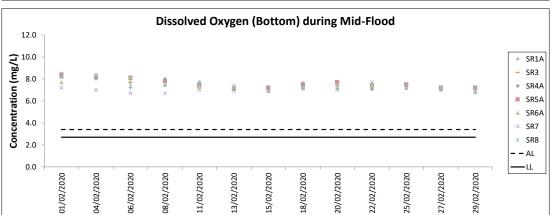


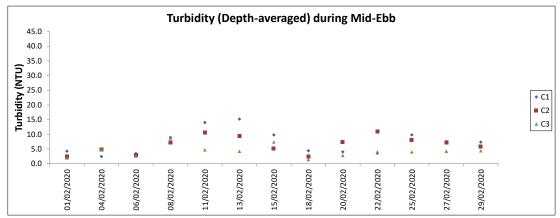


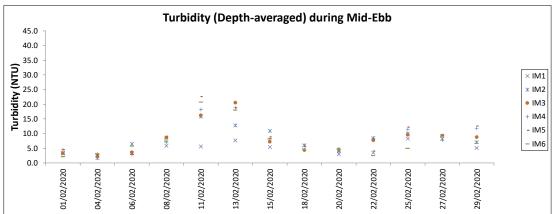


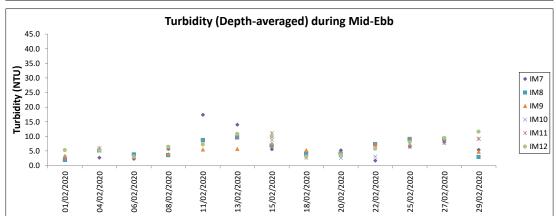


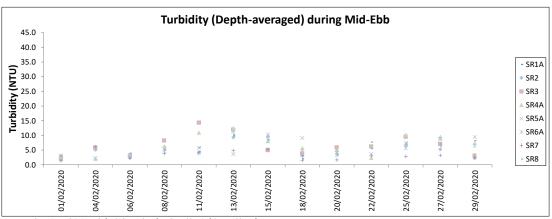




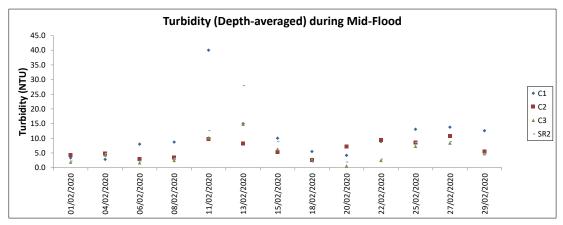


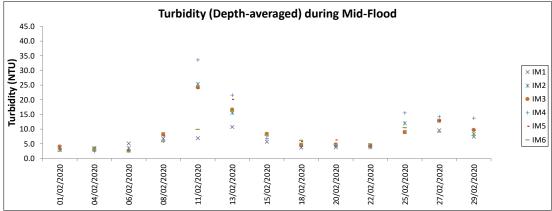


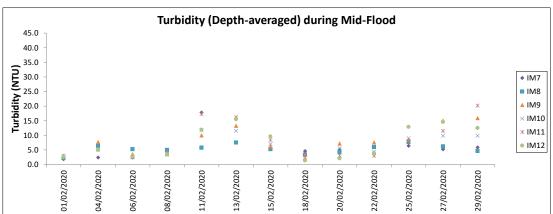


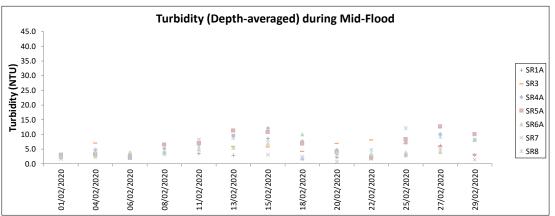


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report

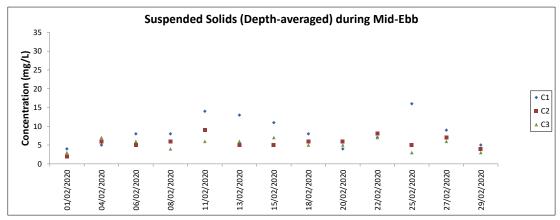


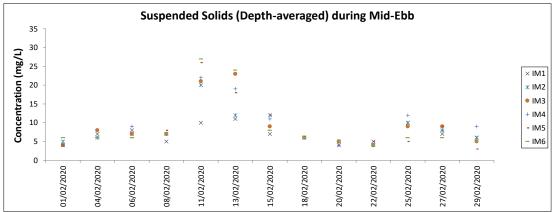


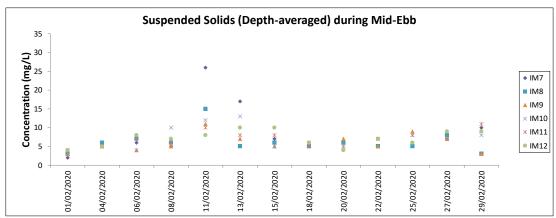


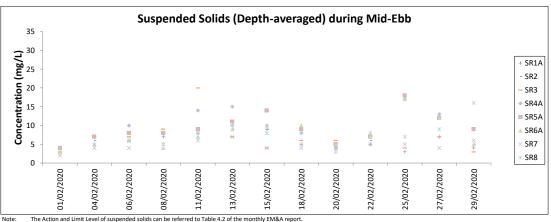


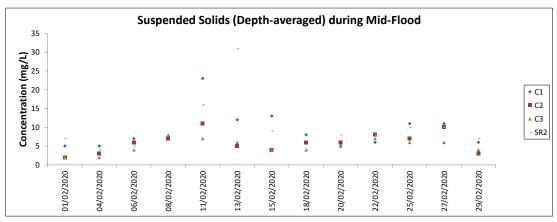
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

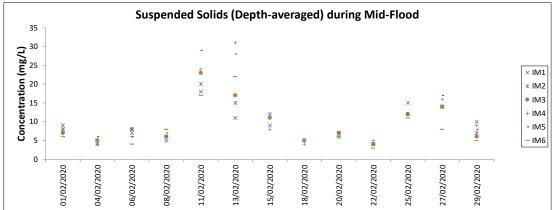


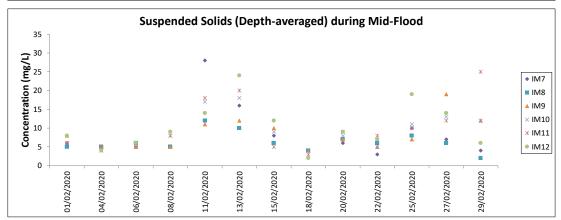


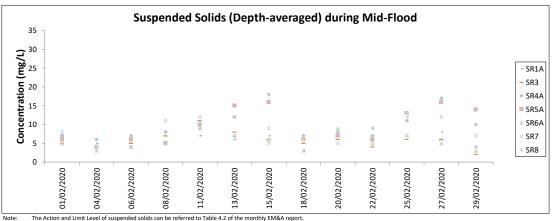


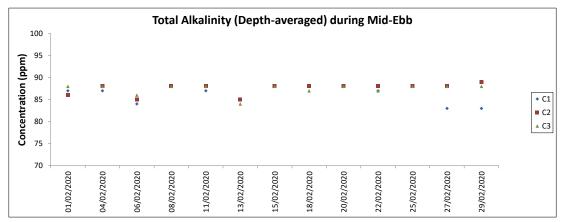


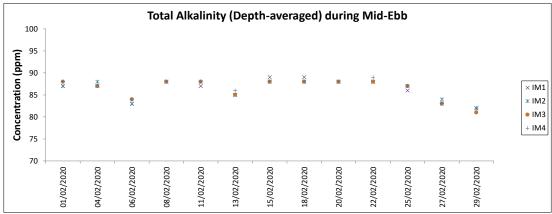


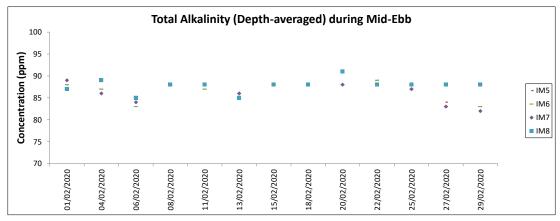


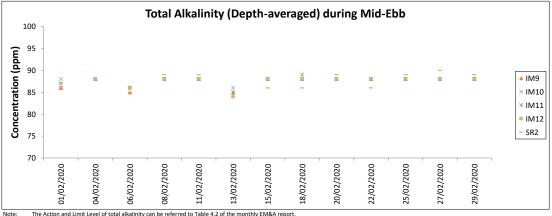


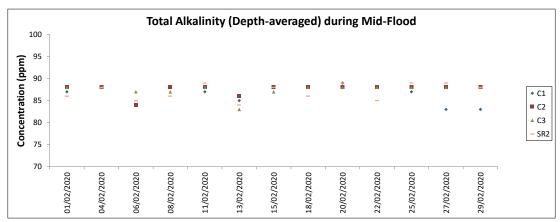


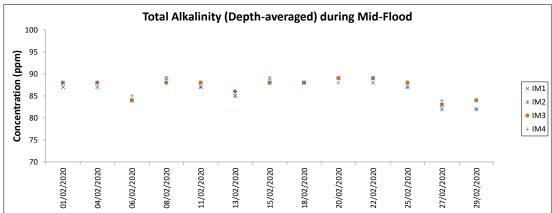


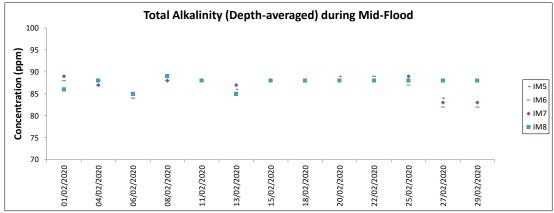


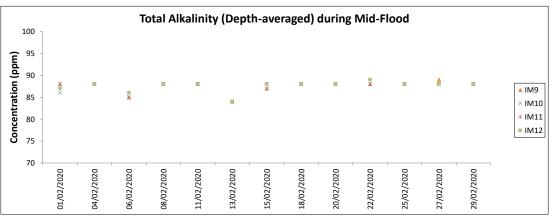




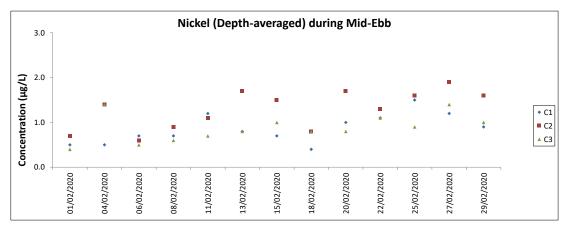


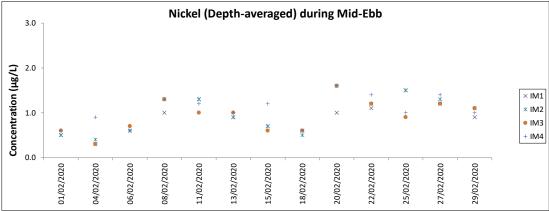


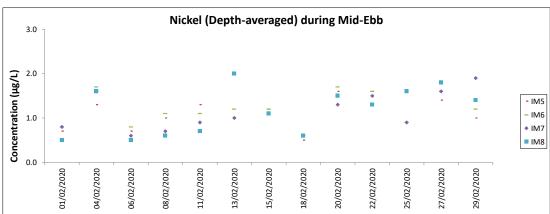


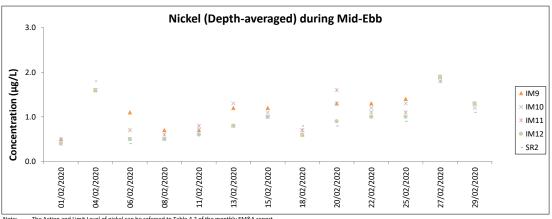


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.



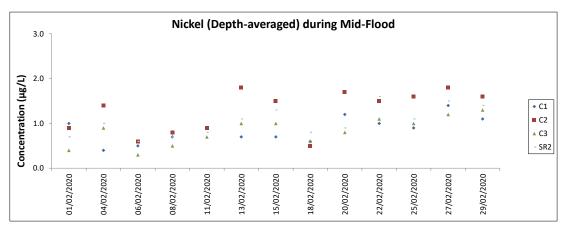


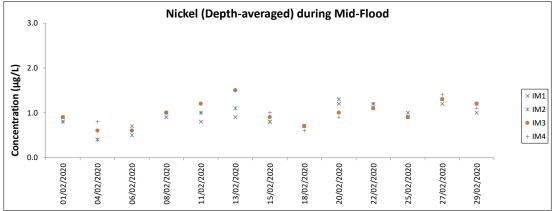


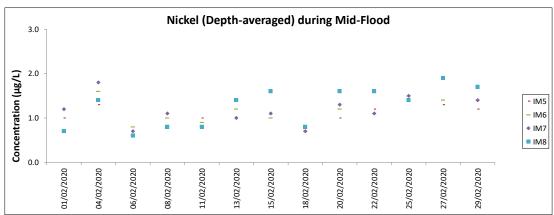


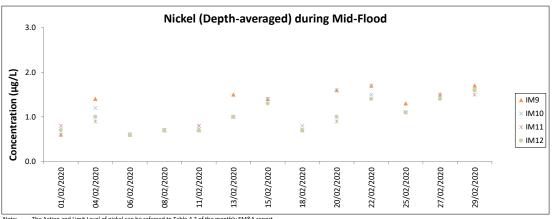
Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.

All chromium results in the reporting period was below the reporting limit 0.2 µg/L.









Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.

All chromium results in the reporting period was below the reporting limit 0.2 µg/L.

Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.

Weather conditions during monitoring are presented in the data tables above.

QA/ QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Mott MacDonald Expansion of Hong Kong International Airport into a Three-Runway System	
Chinese White Dolphin Monitoring Results	

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA BEAU KM SEARCHED		SEASON	VESSEL	TYPE	P/S	
9-Dec-19	AW	3	4.860	WINTER	32166	3RS ET	Р
9-Dec-19	WL	3	21.298	WINTER	32166	3RS ET	Р
9-Dec-19	WL	4	2.800	WINTER	32166	3RS ET	Р
9-Dec-19	WL	3	9.102	WINTER	32166	3RS ET	S
9-Dec-19	WL	4	0.900	WINTER	32166	3RS ET	S
10-Dec-19	SWL	2	30.840	WINTER	32166	3RS ET	Р
10-Dec-19	SWL	3	23.200	WINTER	32166	3RS ET	Р
10-Dec-19	SWL	2	7.990	WINTER	32166	3RS ET	S
10-Dec-19	SWL	3	8.100	WINTER	32166	3RS ET	S
13-Dec-19	NEL	2	1.500	WINTER	32166	3RS ET	Р
13-Dec-19	NEL	3	35.350	WINTER	32166	3RS ET	Р
13-Dec-19	NEL	4	0.400	WINTER	32166	3RS ET	Р
13-Dec-19	NEL	3	10.350	WINTER	32166	3RS ET	S
16-Dec-19	NWL	2	37.711	WINTER	32166	3RS ET	Р
16-Dec-19	NWL	3	25.070	WINTER	32166	3RS ET	Р
16-Dec-19	NWL	2	8.660	WINTER	32166	3RS ET	S
16-Dec-19	NWL	3	2.860	WINTER	32166	3RS ET	S
17-Dec-19	SWL	2	46.934	WINTER	32166	3RS ET	Р
17-Dec-19	SWL	3	8.050	WINTER	32166	3RS ET	Р
17-Dec-19	SWL	2	12.746	WINTER	32166	3RS ET	S
17-Dec-19	SWL	3	3.170	WINTER	32166	3RS ET	S
18-Dec-19	AW	1	4.530	WINTER	32166	3RS ET	Р
18-Dec-19	WL	1	10.510	WINTER	32166	3RS ET	Р
18-Dec-19	WL	2	6.930	WINTER	32166	3RS ET	Р
18-Dec-19	WL	1	4.850	WINTER	32166	3RS ET	S
18-Dec-19	WL	2	4.940	WINTER	32166	3RS ET	S
19-Dec-19	NEL	1	2.700	WINTER	32166	3RS ET	Р
19-Dec-19	NEL	2	15.000	WINTER	32166	3RS ET	Р
19-Dec-19	NEL	3	18.090	WINTER	32166	3RS ET	Р
19-Dec-19	NEL	4	1.670	WINTER	32166	3RS ET	Р
19-Dec-19	NEL	1	1.300	WINTER	32166	3RS ET	S
19-Dec-19	NEL	2	2.700	WINTER	32166	3RS ET	S
19-Dec-19	NEL	3	6.240	WINTER	32166	3RS ET	S
23-Dec-19	NWL	2	1.830	WINTER	32166	3RS ET	Р
23-Dec-19	NWL	3	45.110	WINTER	32166	3RS ET	Р
23-Dec-19	NWL	4	17.460	WINTER	32166	3RS ET	Р
23-Dec-19	NWL	3	7.300	WINTER	32166	3RS ET	S
23-Dec-19	NWL	4	4.600	WINTER	32166	3RS ET	S
6-Jan-20	NEL	2	17.100	WINTER	32166	3RS ET	Р
6-Jan-20	NEL	3	20.610	WINTER	32166	3RS ET	Р
6-Jan-20	NEL	2	6.200	WINTER	32166	3RS ET	S
6-Jan-20	NEL	3	3.790	WINTER	32166	3RS ET	S
7-Jan-20	SWL	1	3.200	WINTER	32166	3RS ET	Р
7-Jan-20	SWL	2	49.770	WINTER	32166	3RS ET	Р
7-Jan-20	SWL	2	15.800	WINTER	32166	3RS ET	S
10-Jan-20	AW	3	4.860	WINTER	32166	3RS ET	Р
10-Jan-20	WL	2	10.760	WINTER	32166	3RS ET	Р

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
10-Jan-20	WL	3	5.190	WINTER	32166	3RS ET	Р
10-Jan-20	WL	4	5.890	WINTER	32166	3RS ET	Р
10-Jan-20	WL	2	4.910	WINTER	32166	3RS ET	S
10-Jan-20	WL	3	0.860	WINTER	32166	3RS ET	S
10-Jan-20	WL	4	2.340	WINTER	32166	3RS ET	S
13-Jan-20	NEL	2	15.540	WINTER	32166	3RS ET	Р
13-Jan-20	NEL	3	21.900	WINTER	32166	3RS ET	Р
13-Jan-20	NEL	2	4.160	WINTER	32166	3RS ET	S
13-Jan-20	NEL	3	6.200	WINTER	32166	3RS ET	S
15-Jan-20	AW	3	1.170	WINTER	32166	3RS ET	Р
15-Jan-20	AW	4	4.000	WINTER	32166	3RS ET	Р
15-Jan-20	WL	3	7.366	WINTER	32166	3RS ET	Р
15-Jan-20	WL	4	8.390	WINTER	32166	3RS ET	Р
15-Jan-20	WL	5	1.550	WINTER	32166	3RS ET	Р
15-Jan-20	WL	3	8.514	WINTER	32166	3RS ET	S
15-Jan-20	WL	4	2.110	WINTER	32166	3RS ET	S
16-Jan-20	NWL	2	25.710	WINTER	32166	3RS ET	Р
16-Jan-20	NWL	3	36.900	WINTER	32166	3RS ET	Р
16-Jan-20	NWL	4	0.300	WINTER	32166	3RS ET	Р
16-Jan-20	NWL	2	5.570	WINTER	32166	3RS ET	S
16-Jan-20	NWL	3	5.220	WINTER	32166	3RS ET	S
16-Jan-20	NWL	4	0.200	WINTER	32166	3RS ET	S
17-Jan-20	NWL	2	4.600	WINTER	32166	3RS ET	Р
17-Jan-20	NWL	3	49.000	WINTER	32166	3RS ET	Р
17-Jan-20	NWL	4	9.300	WINTER	32166	3RS ET	Р
17-Jan-20	NWL	2	1.000	WINTER	32166	3RS ET	S
17-Jan-20	NWL	3	9.500	WINTER	32166	3RS ET	S
17-Jan-20	NWL	4	2.100	WINTER	32166	3RS ET	S
22-Jan-20	SWL	1	2.200	WINTER	32166	3RS ET	Р
22-Jan-20	SWL	2	47.923	WINTER	32166	3RS ET	Р
22-Jan-20	SWL	3	4.200	WINTER	32166	3RS ET	Р
22-Jan-20	SWL	2	14.227	WINTER	32166	3RS ET	S
22-Jan-20	SWL	3	1.200	WINTER	32166	3RS ET	S
10-Feb-20	NWL	2	58.000	WINTER	32166	3RS ET	Р
10-Feb-20	NWL	3	5.360	WINTER	32166	3RS ET	Р
10-Feb-20	NWL	2	11.700	WINTER	32166	3RS ET	S
11-Feb-20	NWL	2	30.200	WINTER	32166	3RS ET	Р
11-Feb-20	NWL	3	33.800	WINTER	32166	3RS ET	Р
11-Feb-20	NWL	2	4.600	WINTER	32166	3RS ET	S
11-Feb-20	NWL	3	6.900	WINTER	32166	3RS ET	S
12-Feb-20	AW	2	4.552	WINTER	32166	3RS ET	Р
12-Feb-20	WL	2	18.710	WINTER	32166	3RS ET	Р
12-Feb-20	WL	3	0.959	WINTER	32166	3RS ET	Р
12-Feb-20	WL	2	8.676	WINTER	32166	3RS ET	S
12-Feb-20	WL	3	1.631	WINTER	32166	3RS ET	S
17-Feb-20	NEL	2	7.100	WINTER	32166	3RS ET	P
17-Feb-20	NEL	3	29.780	WINTER	32166	3RS ET	Р
17-Feb-20	NEL	2	3.900	WINTER	32166	3RS ET	S
17-Feb-20	NEL	3	6.420	WINTER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
18-Feb-20	NEL	2	15.530	WINTER	32166	3RS ET	Р
18-Feb-20	NEL	3	21.650	WINTER	32166	3RS ET	Р
18-Feb-20	NEL	2	5.120	WINTER	32166	3RS ET	S
18-Feb-20	NEL	3	5.000	WINTER	32166	3RS ET	S
20-Feb-20	AW	3	4.920	WINTER	32166	3RS ET	Р
20-Feb-20	WL	2	13.391	WINTER	32166	3RS ET	Р
20-Feb-20	WL	3	5.057	WINTER	32166	3RS ET	Р
20-Feb-20	WL	2	9.593	WINTER	32166	3RS ET	S
20-Feb-20	WL	4	1.013	WINTER	32166	3RS ET	S
21-Feb-20	SWL	3	26.930	WINTER	32166	3RS ET	Р
21-Feb-20	SWL	4	18.000	WINTER	32166	3RS ET	Р
21-Feb-20	SWL	5	9.200	WINTER	32166	3RS ET	Р
21-Feb-20	SWL	3	7.600	WINTER	32166	3RS ET	S
21-Feb-20	SWL	4	7.700	WINTER	32166	3RS ET	S
21-Feb-20	SWL	5	1.270	WINTER	32166	3RS ET	S
26-Feb-20	SWL	1	1.800	WINTER	32166	3RS ET	Р
26-Feb-20	SWL	2	49.708	WINTER	32166	3RS ET	Р
26-Feb-20	SWL	3	0.840	WINTER	32166	3RS ET	Р
26-Feb-20	SWL	2	13.918	WINTER	32166	3RS ET	S
26-Feb-20	SWL	3	1.970	WINTER	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
9-Dec-19	1	1101	CWD	2	WL	3	438	ON	3RS ET	22.2569	113.8371	WINTER	NONE	S
10-Dec-19	1	1114	FP	2	SWL	3	76	ON	3RS ET	22.1592	113.9281	WINTER	NONE	Р
10-Dec-19	2	1450	CWD	1	SWL	2	216	ON	3RS ET	22.1958	113.8589	WINTER	GILLNETTER	Р
10-Dec-19	3	1526	CWD	3	SWL	2	182	ON	3RS ET	22.1885	113.8492	WINTER	NONE	Р
16-Dec-19	1	1033	CWD	1	NWL	3	107	ON	3RS ET	22.3041	113.8700	WINTER	NONE	Р
16-Dec-19	2	1213	CWD	2	NWL	2	219	ON	3RS ET	22.3934	113.8876	WINTER	NONE	Р
16-Dec-19	3	1227	CWD	3	NWL	2	301	ON	3RS ET	22.3882	113.8871	WINTER	NONE	Р
17-Dec-19	1	1132	FP	1	SWL	2	187	ON	3RS ET	22.1704	113.8785	WINTER	NONE	Р
17-Dec-19	2	1336	FP	2	SWL	2	199	ON	3RS ET	22.1451	113.9083	WINTER	NONE	Р
17-Dec-19	3	1435	FP	2	SWL	2	472	ON	3RS ET	22.1677	113.9269	WINTER	NONE	Р
18-Dec-19	1	0954	CWD	2	WL	1	4	ON	3RS ET	22.3045	113.8613	WINTER	NONE	Р
18-Dec-19	2	1036	CWD	5	WL	2	107	ON	3RS ET	22.2605	113.8468	WINTER	NONE	Р
18-Dec-19	3	1104	CWD	8	WL	1	18	ON	3RS ET	22.2538	113.8347	WINTER	NONE	S
18-Dec-19	4	1153	CWD	1	WL	2	40	ON	3RS ET	22.2232	113.8349	WINTER	NONE	Р
18-Dec-19	5	1212	CWD	2	WL	2	5	ON	3RS ET	22.2182	113.8196	WINTER	NONE	S
7-Jan-20	1	1033	FP	1	SWL	2	N/A	OFF	3RS ET	22.2218	113.9359	WINTER	NONE	Р
7-Jan-20	2	1123	CWD	2	SWL	2	849	ON	3RS ET	22.1646	113.9274	WINTER	NONE	Р
7-Jan-20	3	1501	CWD	7	SWL	2	715	ON	3RS ET	22.1943	113.8589	WINTER	NONE	Р
7-Jan-20	4	1543	CWD	2	SWL	2	26	ON	3RS ET	22.1879	113.8490	WINTER	NONE	Р
10-Jan-20	1	1023	CWD	5	WL	2	16	ON	3RS ET	22.2756	113.8503	WINTER	NONE	S
10-Jan-20	2	1052	CWD	3	WL	2	140	ON	3RS ET	22.2643	113.8572	WINTER	NONE	S
10-Jan-20	3	1153	CWD	8	WL	2	579	ON	3RS ET	22.2347	113.8242	WINTER	NONE	S
15-Jan-20	1	1041	CWD	7	WL	3	304	ON	3RS ET	22.2688	113.8490	WINTER	NONE	Р
15-Jan-20	2	1109	CWD	5	WL	3	456	ON	3RS ET	22.2607	113.8495	WINTER	NONE	Р
15-Jan-20	3	1132	CWD	6	WL	4	12	ON	3RS ET	22.2503	113.8441	WINTER	NONE	Р
15-Jan-20	4	1209	CWD	3	WL	3	1864	ON	3RS ET	22.2257	113.8374	WINTER	NONE	S
16-Jan-20	1	1339	CWD	1	NWL	2	861	ON	3RS ET	22.3359	113.9111	WINTER	NONE	S
22-Jan-20	1	1101	FP	1	SWL	2	69	ON	3RS ET	22.1433	113.9273	WINTER	NONE	S
22-Jan-20	2	1115	FP	2	SWL	2	149	ON	3RS ET	22.1671	113.9278	WINTER	NONE	Р
22-Jan-20	3	1159	FP	6	SWL	2	39	ON	3RS ET	22.1591	113.9176	WINTER	NONE	Р
22-Jan-20	4	1319	FP	1	SWL	2	35	ON	3RS ET	22.1582	113.8978	WINTER	NONE	Р
22-Jan-20	5	1517	CWD	2	SWL	2	362	ON	3RS ET	22.1881	113.8492	WINTER	NONE	Р

DATE	STG#	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
22-Jan-20	6	1531	CWD	2	SWL	2	82	ON	3RS ET	22.1898	113.8490	WINTER	NONE	Р
10-Feb-20	1	0953	CWD	5	NWL	2	31	ON	3RS ET	22.3704	113.8700	WINTER	NONE	Р
12-Feb-20	1	0936	CWD	6	AW	2	11	ON	3RS ET	22.3032	113.8723	WINTER	NONE	Р
12-Feb-20	2	1103	CWD	2	WL	2	22	ON	3RS ET	22.2688	113.8576	WINTER	NONE	Р
12-Feb-20	3	1129	CWD	1	WL	2	365	ON	3RS ET	22.2554	113.8358	WINTER	NONE	S
12-Feb-20	4	1143	CWD	1	WL	2	80	ON	3RS ET	22.2502	113.8347	WINTER	NONE	Р
12-Feb-20	5	1231	CWD	1	WL	2	317	ON	3RS ET	22.2232	113.8359	WINTER	NONE	Р
12-Feb-20	6	1249	CWD	1	WL	2	38	ON	3RS ET	22.2229	113.8313	WINTER	NONE	Р
12-Feb-20	7	1304	CWD	3	WL	2	43	ON	3RS ET	22.2145	113.8270	WINTER	NONE	Р
20-Feb-20	1	1048	CWD	2	WL	2	45	ON	3RS ET	22.2599	113.8494	WINTER	NONE	Р
20-Feb-20	2	1054	CWD	2	WL	2	175	ON	3RS ET	22.2611	113.8428	WINTER	NONE	Р
20-Feb-20	3	1148	CWD	6	WL	2	305	ON	3RS ET	22.2235	113.8328	WINTER	NONE	Р
20-Feb-20	4	1238	CWD	3	WL	2	282	ON	3RS ET	22.2005	113.8254	WINTER	NONE	S
26-Feb-20	1	1049	FP	2	SWL	2	294	ON	3RS ET	22.1800	113.9361	WINTER	NONE	Р
26-Feb-20	2	1058	FP	1	SWL	2	69	ON	3RS ET	22.1669	113.9362	WINTER	NONE	Р
26-Feb-20	3	1102	FP	2	SWL	2	604	ON	3RS ET	22.1632	113.9361	WINTER	NONE	Р
26-Feb-20	4	1110	FP	2	SWL	2	1	ON	3RS ET	22.1489	113.9347	WINTER	NONE	S
26-Feb-20	5	1113	FP	2	SWL	2	11	ON	3RS ET	22.1473	113.9332	WINTER	NONE	S
26-Feb-20	6	1118	FP	1	SWL	2	246	ON	3RS ET	22.1437	113.9283	WINTER	NONE	S
26-Feb-20	7	1122	FP	3	SWL	2	89	ON	3RS ET	22.1484	113.9275	WINTER	NONE	S
26-Feb-20	8	1149	FP	2	SWL	2	179	ON	3RS ET	22.2012	113.9271	WINTER	NONE	Р
26-Feb-20	9	1222	FP	1	SWL	2	137	ON	3RS ET	22.1533	113.9178	WINTER	NONE	Р
26-Feb-20	10	1226	FP	1	SWL	2	124	ON	3RS ET	22.1489	113.9177	WINTER	NONE	Р
26-Feb-20	11	1229	FP	1	SWL	2	32	ON	3RS ET	22.1468	113.9181	WINTER	NONE	Р
26-Feb-20	12	1242	FP	1	SWL	3	293	ON	3RS ET	22.1493	113.9085	WINTER	NONE	Р
26-Feb-20	13	1249	FP	1	SWL	2	3	ON	3RS ET	22.1549	113.9062	WINTER	NONE	S
26-Feb-20	14	1352	FP	1	SWL	2	171	ON	3RS ET	22.1555	113.8976	WINTER	NONE	Р
26-Feb-20	15	1544	CWD	2	SWL	2	745	ON	3RS ET	22.1784	113.8498	WINTER	NONE	Р

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 415.315 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 13 on-effort sightings and total number of 35 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in February 2020 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in February 2020

$$STG = \frac{13}{415.315} \times 100 = 3.13$$

Encounter Rate by Number of Dolphins (ANI) in February 2020

$$ANI = \frac{35}{415.315} \times 100 = 8.43$$

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

A total of 1260.286 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 36 on-effort sightings and total number of 112 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)

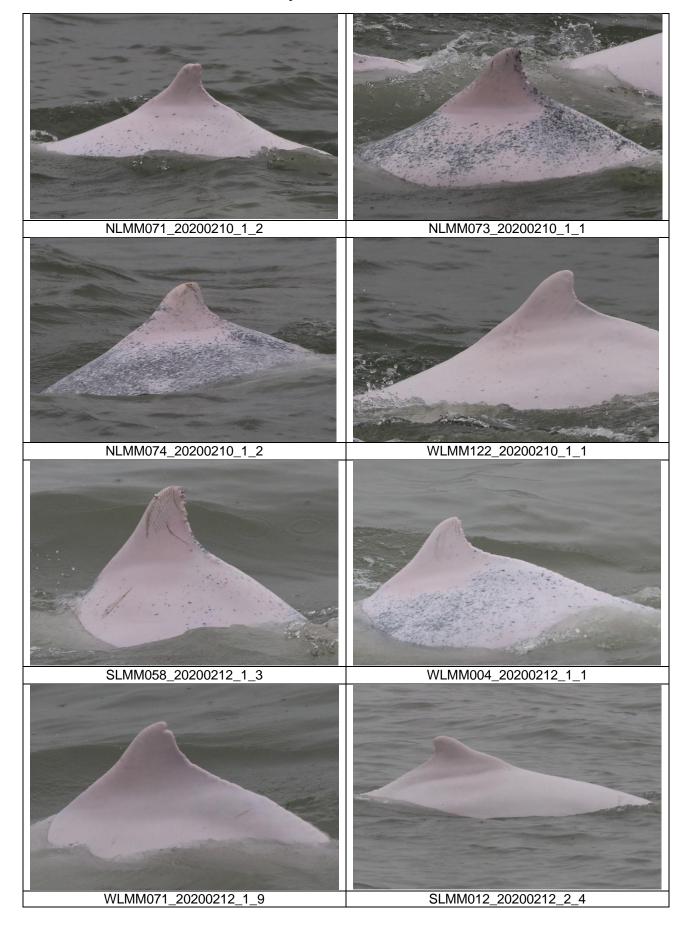
$$STG = \frac{36}{1260.286} \times 100 = 2.86$$

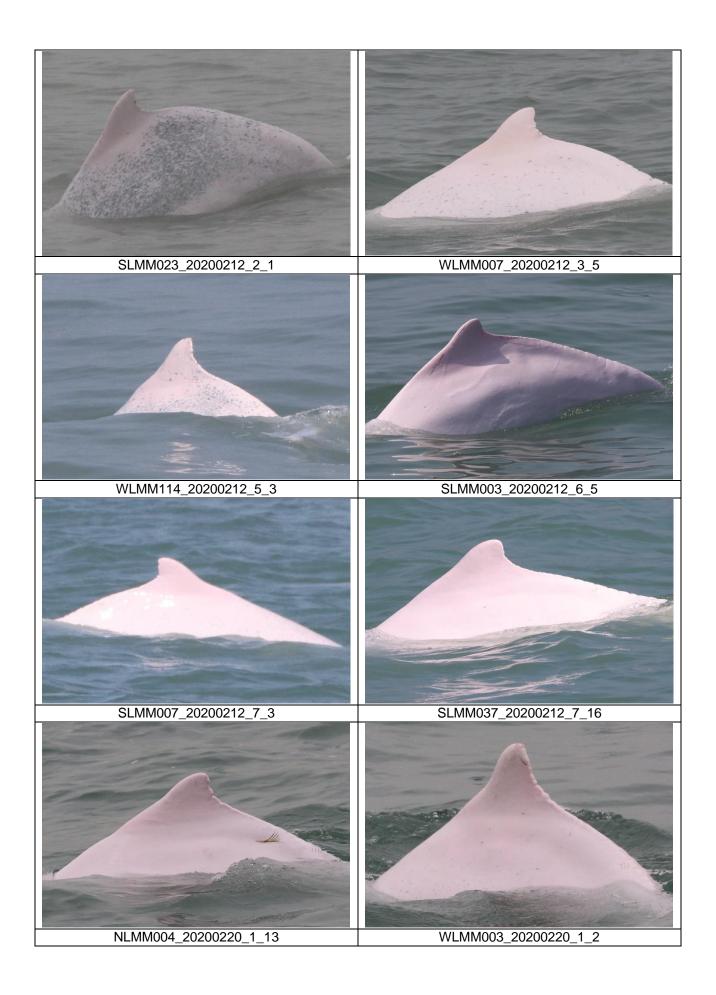
Running Quarterly Encounter Rate by Number of Dolphins (ANI)

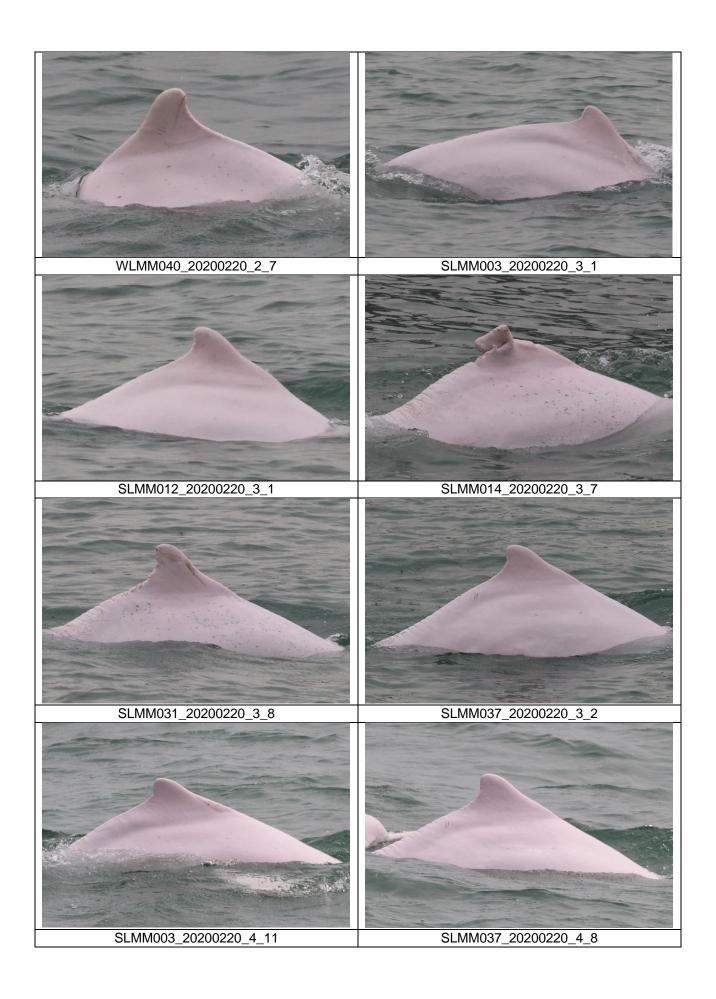
$$ANI = \frac{112}{1260.286} \times 100 = 8.89$$

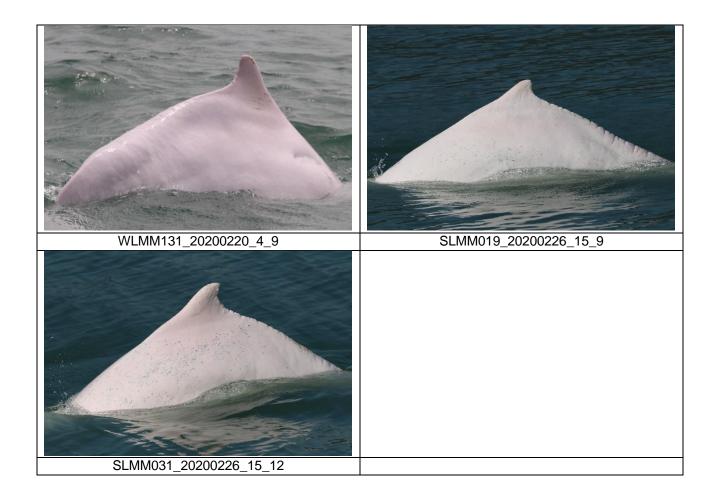
CWD Small Vessel Line-transect Survey

Photo Identification









CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Visibility No. of Focal Follow Dolphin Groups Tracked		Dolphin Group Size Range	
19/Feb/20	Lung Kwu Chau	9:03	15:03	6:00	2-3	2	4	1
20/Feb/20	Sha Chau	8:50	14:50	6:00	2	2	0	-

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

Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status	
P560 (R)	Notification of Construction Work	Site Office	397151	Receipt acknowledged by EPD on 15 Jan 2016	
	under APCO	Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016	
	Discharge License under WPCO	Stockpiling Area	WT00024250- 2016	Valid from 25 Apr 2016 to 30 Apr 2021	
	Registration as Chemical Waste Producer	Stockpiling Area	WPN 5213-951- L2902-02	Registration was updated on 3 Oct 2016	
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015	
3205	Notification of Construction Work under APCO	Works area of 3205	409041	Receipt acknowledged by EPD on 19 Oct 2016	
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951- B2502-01	Registration was updated on 25 Sep 2017	
		Works Area of 3205	WPN 5111-421- B2509-01	Registration was updated on 25 Sep 2017	
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS1094-19	Valid from 10 Dec 2019 to 9 Jun 2020	
	Discharge License under WPCO	Works area of 3205	WT00028370- 2017	Valid from 21 Jun 2017 to 30 Jun 2022	
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016	
3206	Notification of Construction Work	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016	
	under APCO	Works area of 3206 (Area 11)	447899	Receipt acknowledged by EPD on 8 Aug 2019	
	Registration as Chemical Waste	Site office of 3206	WPN 5213-951- Z4035-01	Completion of Registration on 18 Nov 2016	
	Producer	Works area of 3206	WPN 5213-951- Z4035-02	Completion of Registration on 18 Nov 2016	
		Works Area of 3206 (Area 11)	WPN 5213-951- Z4035-04	Completion of Registration on 4 Sep 2019	
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS1194-19	Valid from 7 Jan 2020 to 1 Jul 2020	
		Works Area of 3206 (Area 11)	GW-RS1170-19	Valid from 2 Jan 2020 to 24 Jun 2020	

Contract No.	Description	Location	Permit/ Reference No.	Status	
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016	
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017	
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951- F2718-02	Completion of Registration on 9 Jun 2017	
	Discharge License under WPCO	Works area of 3301	WT00029286- 2017	Valid from 20 Sep 2017 to 30 Sep 2022	
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017	
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-RS0858-19	Valid from 30 Sep 2019 to 24 Mar 2020	
		Works area of 3301	GW-RS0865-19	Valid until from 12 Oct 2019 to 11 Apr 2020	
3302	Notification of Construction Work under APCO	Construction Work 3302		Receipt acknowledged by EPD on 10 Dec 2018	
	under APCO	Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018	
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331- 01	Completion of Registration on 4 Jan 2019	
	Discharge License under WPCO	Staging 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-RS1162-19	Valid from 7 Jan 2020 to 6 Jul 2020	
	Construction Noise Permit (Percussive Piling)	Works area of 3302	PP-RS0011-19	Valid until 31 Jan 2020	
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019	
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174- 01	Completion of Registration on 17 Jun 2019	
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019	
	Construction Noise Permit (General	Works area of 3303 (Existing	GW-RS0764-19	Superseded by GW-RS0101-20	
	Works)	airport)	GW-RS0101-20	Valid from 28 Feb 2020 to 27 Aug 2020	
		Works area of 3303	GW-RS1083-19	Superseded by GW-RS0061-20	
		(Reclamation area)	GW-RS0061-20	Valid from 4 Feb 2020 to 3 Aug 2020	
3402	Notification of Construction Work	Works area of 3402	440808	Receipt acknowledged by EPD on 31 Dec 2018	
	under APCO	Stockpiling area of 3402	441960	Receipt acknowledged by EPD on 8 Feb 2019	
	Registration as Chemical Waste Producer	Works area of 3402	WPN 5213-951- W1172-05	Registration was updated on 25 Feb 2019	

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3402	WT00033685- 2019	Valid from 20 Jun 2019 to 30 Jun 2024
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General	Works area of 3402	GW-RS1210-19	Superseded by GW-RS0070-20
	Works)		GW-RS0070-20	Valid from 3 Feb 2020 to 1 Aug 2020
3403	Notification of Construction Work under APCO	Works area of 3403	448504	Receipt acknowledged by EPD on 28 Aug 2019
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951- S4218-01	Completion of Registration on 9 Jan 2020
	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-RS0078-20	Valid from 20 Feb 2020 to 19 Aug 2020
3501	Notification of Construction Work under APCO	Works area of 3501	434640	Receipt acknowledged by EPD on 13 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951- B2520-02	Completion of Registration on 25 Jul 2017
	Discharge License under WPCO	Works area of 3501	WT00031400- 2018	Valid from 30 Aug 2018 to 31 Aug 2023
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0796-19	Valid from 5 Sep 2019 to 2 Mar 2020
3503	Notification of Construction Work	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
	under APCO	Stockpiling area of 3503	439777	Receipt acknowledged by EPD on 26 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951- L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258- 2018	Valid from 7 Jun 2018 to 30 Jun 2023
		Stockpiling area of 3503	WT00031826- 2018	Valid from 18 Sep 2018 to 30 Sep 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General	Works area of 3503	GW-RS1191-19	Valid from 8 Jan 2020 to 30 Jun 2020
	Works)	Stockpiling area of 3503	GW-RS1012-19	Valid from 14 Nov 2019 to 13 May 2020
		Stockpiling area of 3503	GW-RS1180-19	Valid from 4 Jan 2020 to 30 Jun 2020
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017

Contract No.	Description	Location	Permit/ Reference No.	Status		
	Registration as Chemical Waste	Works area of 3602	WPN 5296-951- N2673-01	Completion of Registration on 9 Oct 2017		
	Producer	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-RS0888-19	Valid from 8 Oct 2019 to 31 Mar 2020		
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	Works area of 3603	WPN 5296-951- S4069-01	Completion of Registration on 22 Jan 2018		
	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-RS0909-19	Valid from 25 Oct 2019 to 23 Apr 2020		
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 705234	Approval granted from EPD on 25 Sep 2019		
3722	Notification of Construction Work	Works area of 3722A	453195	Receipt acknowledged by EPD on 11 Feb 2020		
	under APCO	Works area of 3722B	453671	Receipt acknowledged by EPD on 25 Feb 2020		
		Works area of 3722C	453673	Receipt acknowledged by EPD on 25 Feb 2020		
		Works area of 3722D		Receipt acknowledged by EPD on 25 Feb 2020		
3801	Notification of Construction Work	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017		
	under APCO		430372	Receipt acknowledged by EPD on 2 Feb 2018		
			435652	Receipt acknowledged by EPD on 16 Jul 2018		
			450940	Receipt acknowledged by EPD on 13 Nov 2019		
	Registration as Works area of Chemical Waste 3801 Producer		WPN 5296-951- C1169-53	Completion of Registration on 14 Aug 2018		
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535- 2017	Valid from 24 Nov 2017 to 30 Nov 2022		
	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 and stockpiling area of 3801	GW-RS1212-19	Valid from 9 Jan 2020 to 8 Jul 2020		

Contract No.	Description	Location	Permit/ Reference No.	Status	
		Works area of	GW-RS1126-19	Valid from 27 Dec 2019 to 26 Mar 2020	
		3801	GW-RS0065-20	Valid from 6 Feb 2020 to 2 Mar 2020	

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	0
	Limit	0	0
CWD	Action	0	0
	Limit	0	0

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

Statistics for Complaints, Notifications of Summons and Prosecutions

Reporting Period	Cumulative Statistics					
	Complaints	Notifications of Summons	Prosecutions			
This reporting period	0	0	0			
From 28 December 2015 to end of the reporting period	17	1	1			

Appendix G. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 29 February 2020)

<u>Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 29 February 2020)</u>

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
1-Feb	8:20	3A061	YFT	Arrival	12.4	-	-
1-Feb	10:00	3A081	ZUI	Arrival	12.1	-	-
1-Feb	10:04	8S212	XZM	Arrival	12.3	-	-
1-Feb	10:17	3A181	ZUI	Departure	13	-	-
1-Feb	12:37	8S215	XZM	Arrival	11.7	-	-
1-Feb	13:56	3A082	ZUI	Arrival	12.4	-	-
1-Feb	14:13	3A182	ZUI	Departure	13.4	-	-
1-Feb	14:56	3A065	YFT	Arrival	12	-	-
1-Feb	16:13	3A167	YFT	Departure	13.2	-	-
1-Feb	16:57	3A067	YFT	Arrival	11.3	-	-
1-Feb	17:03	3A083	ZUI	Arrival	12.9	-	-
1-Feb	17:54	3A183	ZUI	Departure	12.8	-	-
1-Feb	20:50	8S2113	XZM	Arrival	12	-	-
2-Feb	8:26	3A061	YFT	Arrival	12.1	-	-
2-Feb	10:00	8S212	XZM	Arrival	12.4	-	-
2-Feb	10:14	3A081	ZUI	Arrival	12.6	<= 5	< 1min
2-Feb	10:32	3A181	ZUI	Departure	12.4	-	-
2-Feb	12:30	8S215	XZM	Arrival	11.6	-	-
2-Feb	13:59	3A082	ZUI	Arrival	12.3	-	-
2-Feb	14:18	3A182	ZUI	Departure	12.6	-	-
2-Feb	15:01	3A065	YFT	Arrival	11.3	-	-
2-Feb	16:18	3A167	YFT	Departure	11.9	-	-
2-Feb	16:51	3A067	YFT	Arrival	12.2	-	-
2-Feb	17:06	3A083	ZUI	Arrival	13.2	-	-
2-Feb	17:39	3A183	ZUI	Departure	13.5	-	-
2-Feb	20:53	8S2113	XZM	Arrival	11.8	-	-
3-Feb	8:29	3A061	YFT	Arrival	11.6	-	-
3-Feb	9:59	3A081	ZUI	Arrival	12.7	-	-
3-Feb	10:00	8S212	XZM	Arrival	13.2	-	-
3-Feb	10:14	3A181	ZUI	Departure	12.7	-	-
3-Feb	12:34	8S215	XZM	Arrival	11.9	-	-
3-Feb	13:58	3A082	ZUI	Arrival	12.2	-	-
3-Feb	14:14	3A182	ZUI	Departure	12.1	-	-
3-Feb	14:57	3A065	YFT	Arrival	11.8	-	-
3-Feb	17:09	3A083	ZUI	Arrival	12.7	-	-
3-Feb	17:22	3A183	ZUI	Departure	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
3-Feb	20:46	8S2113	XZM	Arrival	12.8	-	-
4-Feb	10:03	3A081	ZUI	Arrival	12.3	1	-
4-Feb	10:46	3A181	ZUI	Departure	13.2	-	-
4-Feb	14:01	3A082	ZUI	Arrival	12	-	-
4-Feb	14:13	3A182	ZUI	Departure	13.1	-	-
4-Feb	16:56	3A083	ZUI	Arrival	12.5	-	-
4-Feb	17:29	3A183	ZUI	Departure	12.5	-	-
5-Feb	10:02	3A081	ZUI	Arrival	12.7	-	-
5-Feb	10:40	3A181	ZUI	Departure	12.3	-	-
5-Feb	13:56	3A082	ZUI	Arrival	12.2	-	-
5-Feb	14:12	3A182	ZUI	Departure	12.6	-	-
5-Feb	17:09	3A083	ZUI	Arrival	11	-	-
5-Feb	17:40	3A183	ZUI	Departure	13.1	-	-
6-Feb	9:55	3A081	ZUI	Arrival	11.5	-	-
6-Feb	10:11	3A181	ZUI	Departure	12.9	-	-
6-Feb	13:53	3A082	ZUI	Arrival	12.4	-	-
6-Feb	14:09	3A182	ZUI	Departure	12.4	-	-
6-Feb	16:50	3A083	ZUI	Arrival	12.4	-	-
6-Feb	17:18	3A183	ZUI	Departure	12.2	-	-
7-Feb	9:55	3A081	ZUI	Arrival	12.2	-	-
7-Feb	10:14	3A181	ZUI	Departure	12.8	-	-
7-Feb	14:04	3A082	ZUI	Arrival	12.9	-	-
7-Feb	14:18	3A182	ZUI	Departure	12.2	-	-
7-Feb	17:01	3A083	ZUI	Arrival	12	-	-
7-Feb	17:18	3A183	ZUI	Departure	13.5	-	-
8-Feb	13:59	3A082	ZUI	Arrival	13.1	-	-
8-Feb	14:15	3A182	ZUI	Departure	11.5	-	-
8-Feb	16:56	3A083	ZUI	Arrival	12.3	-	-
8-Feb	17:22	3A183	ZUI	Departure	13.2	-	-
9-Feb	13:53	3A082	ZUI	Arrival	12.4	-	-
9-Feb	14:30	3A182	ZUI	Departure	13.6	-	-
9-Feb	17:09	3A083	ZUI	Arrival	12.4	-	-
9-Feb	17:40	3A183	ZUI	Departure	13.5	-	-
10-Feb	14:06	3A082	ZUI	Arrival	13	-	-
10-Feb	14:37	3A182	ZUI	Departure	11.3	-	-
10-Feb	17:03	3A083	ZUI	Arrival	12	-	-
10-Feb	17:22	3A183	ZUI	Departure	13.1	-	-
11-Feb	14:09	3A082	ZUI	Arrival	13.1	-	-
11-Feb	14:26	3A182	ZUI	Departure	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
11-Feb	18:10	3A083	ZUI	Arrival	12.6	-	-
11-Feb	18:25	3A183	ZUI	Departure	12.5	-	-
12-Feb	14:00	3A082	ZUI	Arrival	12.7	-	-
12-Feb	14:14	3A182	ZUI	Departure	12.8	-	-
12-Feb	17:22	3A083	ZUI	Arrival	13.4	<= 5	< 2mins
12-Feb	17:39	3A183	ZUI	Departure	12.8	-	-
13-Feb	14:04	3A082	ZUI	Arrival	13	-	-
13-Feb	14:34	3A182	ZUI	Departure	12.8	<= 5	< 1min
13-Feb	17:29	3A083	ZUI	Arrival	12.9	-	-
13-Feb	17:45	3A183	ZUI	Departure	12.6	-	-
14-Feb	13:54	3A082	ZUI	Arrival	12.3	-	-
14-Feb	14:16	3A182	ZUI	Departure	13.3	-	-
14-Feb	17:00	3A083	ZUI	Arrival	13.2	-	-
14-Feb	17:39	3A183	ZUI	Departure	11.4	-	-
15-Feb	13:56	3A082	ZUI	Arrival	12.5	-	-
15-Feb	14:08	3A182	ZUI	Departure	12.4	-	-
15-Feb	16:56	3A083	ZUI	Arrival	13	-	-
15-Feb	17:21	3A183	ZUI	Departure	12.5	-	-
16-Feb	13:52	3A082	ZUI	Arrival	12.1	-	-
16-Feb	14:12	3A182	ZUI	Departure	13.2	-	-
16-Feb	16:52	3A083	ZUI	Arrival	13.2	-	-
16-Feb	17:21	3A183	ZUI	Departure	13.1	-	-
17-Feb	14:04	3A082	ZUI	Arrival	12	-	-
17-Feb	14:18	3A182	ZUI	Departure	12.8	-	-
17-Feb	17:05	3A083	ZUI	Arrival	12.5	-	-
17-Feb	17:39	3A183	ZUI	Departure	12.4	-	-
18-Feb	14:02	3A082	ZUI	Arrival	12.2	-	-
18-Feb	14:17	3A182	ZUI	Departure	13	-	-
18-Feb	17:02	3A083	ZUI	Arrival	12.4	-	-
18-Feb	17:17	3A183	ZUI	Departure	12.9	-	-
19-Feb	13:57	3A082	ZUI	Arrival	12.4	-	-
19-Feb	14:10	3A182	ZUI	Departure	12.2	-	-
19-Feb	16:58	3A083	ZUI	Arrival	12.1	-	-
19-Feb	17:26	3A183	ZUI	Departure	13.2	-	-
20-Feb	13:53	3A082	ZUI	Arrival	10.9	-	-
20-Feb	14:17	3A182	ZUI	Departure	13.5	-	-
20-Feb	16:55	3A083	ZUI	Arrival	11	-	-
20-Feb	17:18	3A183	ZUI	Departure	13	-	-
21-Feb	13:52	3A082	ZUI	Arrival	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
21-Feb	14:14	3A182	ZUI	Departure	13.5	-	-
21-Feb	16:52	3A083	ZUI	Arrival	11.8	-	-
21-Feb	17:15	3A183	ZUI	Departure	13	-	-
22-Feb	13:55	3A082	ZUI	Arrival	12.9	-	-
22-Feb	14:13	3A182	ZUI	Departure	11.5	-	-
22-Feb	17:00	3A083	ZUI	Arrival	12.9	-	-
22-Feb	17:17	3A183	ZUI	Departure	13.1	-	-
23-Feb	13:54	3A082	ZUI	Arrival	13.3	-	-
23-Feb	14:17	3A182	ZUI	Departure	12.3	-	-
23-Feb	17:13	3A083	ZUI	Arrival	12.9	-	-
23-Feb	17:45	3A183	ZUI	Departure	13.2	-	-
24-Feb	13:54	3A082	ZUI	Arrival	13.2	-	-
24-Feb	14:10	3A182	ZUI	Departure	12.4	-	-
24-Feb	17:38	3A083	ZUI	Arrival	12.4	-	-
24-Feb	17:57	3A183	ZUI	Departure	13.1	-	-
25-Feb	13:54	3A082	ZUI	Arrival	12.1	-	-
25-Feb	14:25	3A182	ZUI	Departure	12.9	-	-
25-Feb	17:00	3A083	ZUI	Arrival	12.5	-	-
25-Feb	17:21	3A183	ZUI	Departure	12.8	-	-
26-Feb	13:53	3A082	ZUI	Arrival	13.1	-	-
26-Feb	14:11	3A182	ZUI	Departure	12.1	-	-
26-Feb	16:58	3A083	ZUI	Arrival	12.7	-	-
26-Feb	17:30	3A183	ZUI	Departure	11.9	-	-
27-Feb	14:00	3A082	ZUI	Arrival	12.1	-	-
27-Feb	14:22	3A182	ZUI	Departure	12.4	-	-
27-Feb	17:13	3A083	ZUI	Arrival	12.6	-	-
27-Feb	17:26	3A183	ZUI	Departure	12	-	-
28-Feb	13:58	3A082	ZUI	Arrival	12.4	-	-
28-Feb	14:13	3A182	ZUI	Departure	12.2	-	-
28-Feb	17:09	3A083	ZUI	Arrival	13.2	-	-
28-Feb	17:50	3A183	ZUI	Departure	11.8	-	-
29-Feb	14:17	3A082	ZUI	Arrival	13.6	-	-
29-Feb	14:34	3A182	ZUI	Departure	12.5	-	-
29-Feb	18:16	3A083	ZUI	Arrival	12.9	-	-
29-Feb	18:51	3A183	ZUI	Departure	11.4	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in February 2020, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 3 HSF movements of which the durations of two instantaneous speeding cases were less than 1 minute, and one instantaneous speeding case was less

than 2 minutes. The AIS data and ferry operators' responses showed the cases were due to local strong water. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.