MOTT MACDONALD

Intermodal Transfer Terminal – Bonded Vehicular Bridge and Associated Roads

Monthly EM&A Report for April 2021

May 2021

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Airport Authority Hong Kong

Intermodal Transfer Terminal – Bonded Vehicular Bridge and Associated Roads

Monthly EM&A Report for April 2021

May 2021

This Submission of Construction Phase Monthly Environmental Monitoring and Audit (EM&A) Report for April 2021

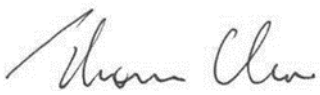
has been reviewed and certified by

the Environmental Team Leader (ETL) in accordance with

Condition 3.4 of Environmental Permit No. EP-560/2018 and

Section 10.3 of the EM&A Manual of the Project.

Certified by:



Ir Thomas Chan
Environmental Team Leader (ETL)
Mott MacDonald Hong Kong Limited

Date 13 May 2021

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By Email

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

Attn: Alan Chan (Manager, Civil)

13 May 2021

Dear Sir,

Contract C19C02 – Independent Environmental Checker Consultancy Services for Intermodal Transfer Terminal – Bonded Vehicular Bridge and Associated Roads
Monthly Environmental and Audit (EM&A) Report for April 2021

Reference is made to the Environmental Team's submission of Monthly EM&A Report for April 2021 in accordance with Condition 3.4 of the Environmental Permit (No: EP-560/2018) and Section 10.3 of the EM&A Manual of the Project certified by the ET Leader on 11 May 2021.

We would like to inform you that we have no adverse comment on the captioned submission. Therefore we write to verify the captioned submission in accordance with the requirement stipulated in Condition 1.9 of EP-560/2018.

Should you have any queries, please feel free to contact the undersigned at 3922 9366.

Yours faithfully,
AECOM Asia Co. Ltd.

Y W Fung
Independent Environmental Checker

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Executive summary

On 23 August 2018, the Environment Impact Assessment (EIA) Report (Register No.: AEIAR-216/2018) for the Project was approved and an Environmental Permit (EP) (Permit No.: EP-560/2018) was issued for the construction and operation of the Project.

In June 2019, Mott MacDonald Hong Kong Limited (MMHK) was commissioned by Airport Authority Hong Kong (AAHK) to provide Environmental Team (ET) consultancy services for implementation of an Environmental Monitoring and Audit (EM&A) programme of the "Intermodal Transfer Terminal – Bonded Vehicular Bridge and Associated Roads" (hereinafter referred to as "the Project") in accordance with the Environmental Permit (EP) requirements throughout the Pre-construction, Construction and Post-construction phases.

The project construction was commenced on 5 October 2020 and the construction phase EM&A programme started on 5 October 2020.

This is the 7th Monthly EM&A Report for the construction phase of the Project which summaries findings of the EM&A programme during the reporting period from 1 to 30 April 2021.

Key Construction Works in the Reporting Period

A summary of construction activities undertaken during the reporting period is presented below:

- Marine bored pilling works
- Land bored pilling works
- Plant and material mobilization for marine bored pile works
- Plant and material mobilization for land bored pile works
- Sediment treatment – Land-based sediment
- Ancillary buildings construction

Environmental Monitoring and Audit Progress

The monthly EM&A programme was undertaken by ET in accordance with the approved EM&A Manual. A summary of the monitoring activities during the reporting period is presented below:

Table I: Summary Table for EM&A Activities in the Reporting Period

EM&A Activities	Number of Sessions
Water quality monitoring	13
Weekly environmental site inspections	4

Breaches of Action and Limit Levels

Water Quality

There was no breach of Action or Limit Levels for water quality during the reporting month.

Complaint Log

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

Notifications of Summons and Successful Prosecutions

There were no notifications of summons or successful prosecutions received during this reporting period.

Reporting Changes

There was no reporting change during the reporting period.

Future Key Issues

The future key issues to be undertaken in the upcoming month are:

- Plant and material mobilization for land bored pile works
- Plant and material mobilization for marine bored pile works
- Marine bored pilling works
- Land bored pilling works
- Sediment treatment – Land-based sediment
- Ancillary buildings construction
- Abutment and ramp piling works

1 Introduction

1.1 Background

On 23 August 2018, the Environment Impact Assessment (EIA) Report (Register No.: AEIAR-216/2018) for the Project was approved and an Environmental Permit (EP) (Permit No.: EP-560/2018) was issued for the construction and operation of the Project.

The Project site is situated between the Hong Kong-Zhuhai-Macao Bridge Boundary Crossing Facilities (HKBCF) Island and the Hong Kong International Airport (HKIA), at the south of the existing SkyPier on the Airport Island. The Bonded Vehicular Bridge serves as a land connection between the HKBCF Island and Intermodal Transfer Terminal (ITT) building next to the SkyPier to be built by AAHK. Part of the bridge is located in the marine area (marine section) and part on the HKBCF Island (land section). The marine section of the site is situated in a marine area between HKIA and HKBCF Island.

The Bonded Vehicular Bridge serves as a dedicated direct vehicular access connecting the ITT of HKIA and HKBCF Island. The Project scale is anticipated to be small, the bridge's marine section is approximately 360 m in length, supported by bridge concrete piers. The Bridge's land section spans over the HKBCF Island with a total length of approximately 210 m.

In June 2019, Mott MacDonald Hong Kong Limited (MMHK) was commissioned by Airport Authority Hong Kong (AAHK) to provide Environmental Team (ET) consultancy services for implementation of an Environmental Monitoring and Audit (EM&A) programme in accordance with the EP requirements throughout the Pre-construction, Construction and Post-construction phases of the Project.

Baseline monitoring for the Project was carried out between August to October 2019, and the baseline monitoring report was submitted in April 2020 in accordance with the requirements set out in the EP and recommended in the EM&A Manual and received no further comment from the Environmental Protection Department (EPD).

For Construction phase of the Project, the construction has been commenced on 5 October 2020 and the construction phase EM&A programme was started on 5 October 2020.

This is the 7th Monthly EM&A report summarising the key findings of the construction phase EM&A programme from 1 to 30 April 2021 (the reporting period) and is submitted to fulfil requirements in Condition 3.4 of EP and Section 10.3 of EM&A Manual of the Project.

1.2 Project Organisation

The organisation chart and lines of communication with respect to the on-site environmental management structure of the key personnel are shown in **Appendix A**. The key personnel contact names and numbers are summarized in **Table 1.1.**

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Senior Project Engineer, Environment	Becky Yan	2183 2773
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Thomas Chan	2828 5967
	Deputy Environmental Team Leader	Gary Chow	2828 5874
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Y W Fung	3922 9366
	Deputy Independent Environmental Checker	Lemon Lam	3922 9381
Main Contractor (Gammon Construction Limited)	Senior Project Manager	Brian Ho	9041 7535
	Environmental Officer	Roy Leung	6468 7650

1.3 Construction Works Programme and Construction Works Area

The construction works commenced on 5 October 2020. The construction works programme and the construction works area of the Project are shown in **Appendix B** and **Appendix C** respectively.

1.4 Construction Works undertaken during the Reporting Period

A summary of construction activities undertaken during this reporting period is presented below:

- Marine bored pilling works
- Land bored pilling works
- Plant and material mobilization for marine bored pile works
- Plant and material mobilization for land bored pile works
- Sediment treatment – Land-based sediment
- Ancillary buildings construction

2 Water Quality Monitoring

2.1 Impact Water Quality Monitoring

The impact water quality monitoring was conducted three days per week at mid-flood and mid-ebb tides, at 5 water quality monitoring stations. Samples were taken at three depths, namely, 1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth station was omitted. For locations with water depth less than 3m, only the mid-depth station was monitored. Duplicate in-situ measurements and water samples were collected from each independent monitoring event for all parameters to ensure a robust statistically interpretable dataset.

2.2 Monitoring Methodology

2.2.1 Monitoring Parameters

For the 3 impact stations (M1 to M3) and 2 control stations (C1 and C2), monitoring of DO, DO%, pH, temperature, turbidity, salinity, SS and water depth were undertaken.

Other relevant data were also recorded, including monitoring location, time, tidal stages, weather conditions and any special phenomena or work during the monitoring.

2.2.2 Monitoring Locations

With reference to the Baseline Monitoring Report, the water quality monitoring were conducted at three locations in the sea channel between the HKIA and the HKBCF (M1, M2 and M3) and two control stations (C1 and C2), locations are shown in **Figure 2.1** and summarized in **Table 2.1**.

Table 2.1: Locations of Marine Water Quality Monitoring Stations

ID	Monitoring Station	Easting	Northing
M1	Impact Station	812423	819635
M2[(1)]	Impact Station	812629	819845
M3[(2)]	Impact Station	812586	820069
C1	Control Station - West	812419	820670
C2	Control Station - East	813072	820595

Notes:

1. As updated in the baseline monitoring report, the water quality monitoring at M2 station was shifted to bring it closer to the Project site and away from the SkyPier ferry movements for better representation.
2. As updated in the baseline monitoring report, the water quality monitoring at M3 station was shifted to the location near the seawater intake of HKBCF to better represent the potential water quality impacts at the nearby sensitive receiver

2.2.3 Monitoring Schedule for the Reporting Period

The schedule for water quality monitoring of the reporting period is presented in **Appendix D**.

2.2.4 Monitoring Equipment

Water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 21st ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including dissolved oxygen (DO), dissolved oxygen

saturation (DO%), pH, temperature, turbidity, salinity and water depth were collected using the equipment listed in **Table 2.2**.

Water samples for suspended solids (SS) analysis were stored in suitable containers provided by the HOKLAS laboratory with no preservative added, packed in ice (cooled to 4^{o}C without being frozen) and delivered to the HOKLAS laboratory as soon as possible after collection.

Table 2.2: Impact Water Quality Monitoring Equipment

Equipment	Brand and Model	Quantity
Water Sampler	Van Dorn Water Sampler	2
Monitoring Position Equipment (measurement of DGPS)	Garmin eTrex 20x	1
Water Depth Detector (measurement of water depth)	Garmin STRIKER^{TM} Series	1
Multifunctional Meter (measurement of DO, DO%, temperature, turbidity, salinity and pH)	YSI ProDSS (Multiparameter Sampling Instrument)	5

2.2.5 Maintenance and Calibration of In-situ Instruments

In-situ monitoring instruments for water quality parameters were checked, calibrated and certified by a laboratory accredited under HOKLAS before use. Responses of sensors and electrodes were checked with certified standard solutions before each use.

Wet bulb calibration for DO measurement was carried out before commencement of monitoring and after completion of all measurements each day. The turbidity meter was calibrated in order to establish the relationship between NTU units and the levels of suspended solids. 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. Standard buffer solutions of at least pH 7 and pH 10 was used for calibration of the pH instrument before and after use on each monitoring day.

Calibration certificates of the monitoring equipment used in the monitoring for water quality parameters are provided in **Appendix E**.

2.2.6 Laboratory Measurement / Analysis

Analysis of SS was out in a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at each of the control stations and impact stations for carrying out the laboratory SS determination.

The SS determination works started within 24 hours after collection of the water samples. The analysis followed the APHA 2540D analytical method with a detection limit of 1 mg/L.

2.3 Event and Action Plan

2.3.1 Action and Limit Levels

The Action and Limit Levels for the impact monitoring stations were extracted from Table 2.8 of the Baseline Monitoring Report. The derived Action and Limit Levels are summarized in **Table 2.3**.

Table 2.3: Derived Action and Limit Levels

Parameters	Action Level	Limit Level
Impact Stations M1 and M2		
DO in mg/L		
Surface & Middle	4.3	4.0
Bottom	3.8	3.0
SS in mg/L	14.2 *AND* 120% of upstream control station at the same tide of the same day	17.4 *AND* 130% of upstream control station at the same tide of the same day
Turbidity in NTU	11.0 *AND* 120% of upstream control station at the same tide of the same day	16.3 *AND* 130% of upstream control station at the same tide of the same day
Impact Station M3		
SS in mg/L	33	42

Notes:

1. For DO measurement, non-compliance occurs when the monitoring result is lower than the limits.
2. For parameters other than DO, non-compliance of water quality occurs when the monitoring result is higher than the limits.
3. Depth-averaged results are used unless specified otherwise.
4. Impact station M3 is represents the impact station SR1A of "*Expansion of Hong Kong International Airport into a Three-Runway System*". The AL levels for M3 in **Table 2.3** is referencing the agreed and adopted AL levels of SR1A from the Updated EM&A Manual for Expansion of Hong Kong International Airport into a Three-Runway System.

2.3.2 Event and Action Plan

In the event of water quality monitoring results at impact stations exceeding the Action and/or Limit levels for water quality as defined in **Table 2.3**, the actions in accordance with the Event and Action Plan presented in **Appendix F** shall be carried out.

2.4 Water Quality Monitoring Results

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

2.5 Conclusion

During the reporting period, all monitoring results were within their corresponding Action and Limit Levels. Hence, no Action and Limit Level exceedance of water quality level was recorded during the reporting period.

In the meantime, the Contractor was reminded to implement and maintain all mitigation measures during weekly site inspection and regular environmental management meetings. These include maintaining mitigation measures properly as recommended in the EM&A Manual.

3 Environmental Site Inspection and Audit

3.1 Environmental Site Inspection

Site inspections were carried out by ET on a weekly basis to monitor the implementation of proper environmental pollution control mitigation measures for the Project. Key observations were recorded in the site inspection checklist and passed to the Contractor together with the appropriate recommended mitigation measures where necessary. During the reporting period, site inspections were carried out on 7, 14, 21 and 28 April 2021. Joint IEC site inspection was carried out on 14 April 2021.

Monthly landscape and visual site audit was carried out on 14 April 2021.

Key observations and reminders during the site inspections and landscape and visual site audit are described in **Table 3.1**.

Table 3.1: Summary of Site Inspections and Recommendations

Inspection Date	Key Observations / Reminders	Recommendations / Actions	Close-Out Date
10 March 2021	Metal pipes and spoils were found on the surface drain along the site boundary in pier 8 area.	The Contractor should remove those metal pipes and spoils away from the surface drain and expedite the surface drain construction so that it could be ready to collect the surface runoff from the construction site during inclement weather.	On-going
24 March 2021	Excavated marine sediment and granular material were placed in close proximity in the marine sediment storage area in which measures for dust suppression and surface runoff control could not be found.	The Contractor should segregate the storage of the marine sediment and sand materials to avoid cross contamination. On the other hand, measures for dust suppression (e.g. covering the material with tarpaulin) and the provision of containment of surface runoff (e.g. sump pit) should be carried out.)	21 April 2021
7 April 2021	Dark smoke emission from an operating generator was observed.	The Contractor should arrange checking and maintenance to prevent dark smoke emission.	14 April 2021
7 April 2021	Prevent granular material from entering nearby water bodies at the edge of walking path. (Reminder)	The Contractor reminded to provide sandbag barriers to prevent granular material from entering nearby water bodies.	14 April 2021
14 April 2021	A water pipe was found out of site boundary. No wastewater discharge was observed during site inspection.	The Contractor should remove the water pipe and make sure all wastewater is properly treated before final discharge.	21 April 2021
14 April 2021	Dusty material and tyre trails were observed on the haul road.	The Contractor should clean up the dusty material and tyre trails on the haul road and apply enhancement measures (e.g. water spraying) for dust suppression.	21 April 2021

Inspection Date	Key Observations / Reminders	Recommendations / Actions	Close-Out Date
14 April 2021	The excavated marine sediment next to site office was not properly covered with tarpaulin.	The Contractor should cover the excavated marine sediment with tarpaulin to suppress the fugitive dust emission.	21 April 2021
14 April 2021	Idled stockpile was observed in area VG9.	The Contractor should implement proper dust mitigation measures (e.g. water spraying and covering with tarpaulin) to the idled stockpiles to suppress the fugitive dust emission.	21 April 2021
14 April 2021	The maintenance records of the wetsep were not yet complected. (Reminder)	The Contractor was reminded to complete the maintenance records properly.	21 April 2021
14 April 2021	The desludging tank should maintain properly. (Reminder)	The Contractor was reminded to pave the bottom part of the desludging tank properly and remove the metal spoils from the desludging tank.	21 April 2021
14 April 2021	Storm drain system should keep checking all the time. (Reminder)	The Contractor was reminded to check the status of storm drain (e.g. active or inactive) next to pier 8, and adequate protection measures should be implemented to the active storm drain system.	21 April 2021
14 April 2021	The tarpaulin was found fell off from the sides covering of marine sediment treatment area. (Reminder)	The contractor was reminded the sides covering should be maintained properly to prevent entry of rainwater into the treatment area.	21 April 2021
14 April 2021	Sufficient site drainage system should be provided along site boundary. (Reminder)	The Contractor was reminded to provide adequate site drainage system along site boundary to prevent surface runoff outside site area.	21 April 2021
21 April 2021	Chemical containers were observed on ground without measures for spillage prevention.	The contractor should provide drip tray for the temporary storage of chemical containers.	28 April 2021
21 April 2021	Sufficient mitigation measures should be provided at site exit.	The Contractor was reminded to provide surface drain and/or bundle for site exit to intercept potential surface runoff.	28 April 2021
28 April 2021	Discharge sampling point should be kept clear of materials. (Reminder)	The Contractor was reminded the concrete blocks should be removed away from the wastewater treatment facility to allow access to discharge sampling point.	5 May 2021
28 April 2021	Haul road should maintain clean and apply enhancement measures for dust suppression. (Reminder)	The Contractor was reminded to clean up the soil trails on the haul road and apply enhancement measures (e.g. water spraying) for dust suppression.	5 May 2021

Inspection Date	Key Observations / Reminders	Recommendations / Actions	Close-Out Date
28 April 2021	Sufficient mitigation measures should be provided at site boundary. (Reminder)	The Contractor was reminded to provide site drainage system along site boundary to prevent the potential surface runoff from seeping outside the site area.	5 May 2021

3.2 Advice on the Solid and Liquid Waste Management Status

The Contractor was registered as a chemical waste producer for the Project. Construction and demolition (C&D) material sorting was carried out on site. Sufficient numbers of receptacles were provided for general refuse collection and sorting. Excavated inert C&D materials were reused to minimise the disposal of C&D waste to public fill. The Contractor was reminded to maintain on site waste sorting and recording system and maximize reuse / recycling of C&D wastes, whenever these are generated.

The monthly summary of waste flow table is detailed in **Appendix H.**

The valid environmental licenses and permits for the Project during the reporting period are summarized in **Appendix I**.

3.3 Implementation Status of Environmental Mitigation Measures

In response to the site audit findings, the Contractor carried out corrective actions.

A summary of the environmental mitigation measures implementation status is presented in **Appendix J**. Necessary mitigation measures were implemented properly, observations and reminders were issued to the Contractor where actions were taken by the Contractor to rectify the identified issues.

3.4 Summary of Exceedance of the Environmental Quality Performance Limit

Water Quality

Water quality monitoring were conducted in the reporting period and with no Action and Limit Level exceedances of water quality level was recorded at M1, M2 and M3.

3.5 Summary of Complaints, Notifications of Summons and Successful Prosecutions

Complaint Log

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

Notifications of Summons or Status of Prosecution

There was no notification of summons or prosecutions received during the reporting period.

Cumulative Statistics

Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Table 3.2.**

Table 3.2: Statistics on Environmental Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period	Environmental Complaints	Notifications of Summons	Successful Prosecutions
This reporting period (April 2021)	0	0	0
From commencement date of construction to end of reporting period	0	0	0

4 Future Key Issues

4.1 Construction Programme for the Coming Month

As informed by the Contractor, the major construction activities for the next reporting period (May 2021) are summarized in **Table 4.1.**

Table 4.1: Construction Activities for the Next Reporting Period

Period	Description of Activities
May 2021	Plant and material mobilization for land bored pile works
	Plant and material mobilization for marine bored pile works
	Marine bored pilling works
	Land bored pilling works
	Sediment treatment – Land-based sediment
	Ancillary buildings construction
	Abutment and ramp piling works

4.2 Environmental Site Inspection and Monitoring Schedule for the Next Reporting Period

The tentative schedule for weekly site inspection and water quality monitoring for the next reporting period is provided in **Appendix D**.

5 Conclusions

General

The construction works for the Project commenced on 5 October 2020.The ET of the Project has undertaken environmental site inspections and water quality monitoring under the construction phase EM&A programme during the reporting period.

Water Quality Monitoring

No Action and Limit Level exceedances of water quality level was recorded at M1, M2 and M3 during the reporting period.

Environmental Site Inspections

Environmental site inspections were carried out four (4) times during the reporting period. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site inspections.

Complaint Log

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

Reporting Changes

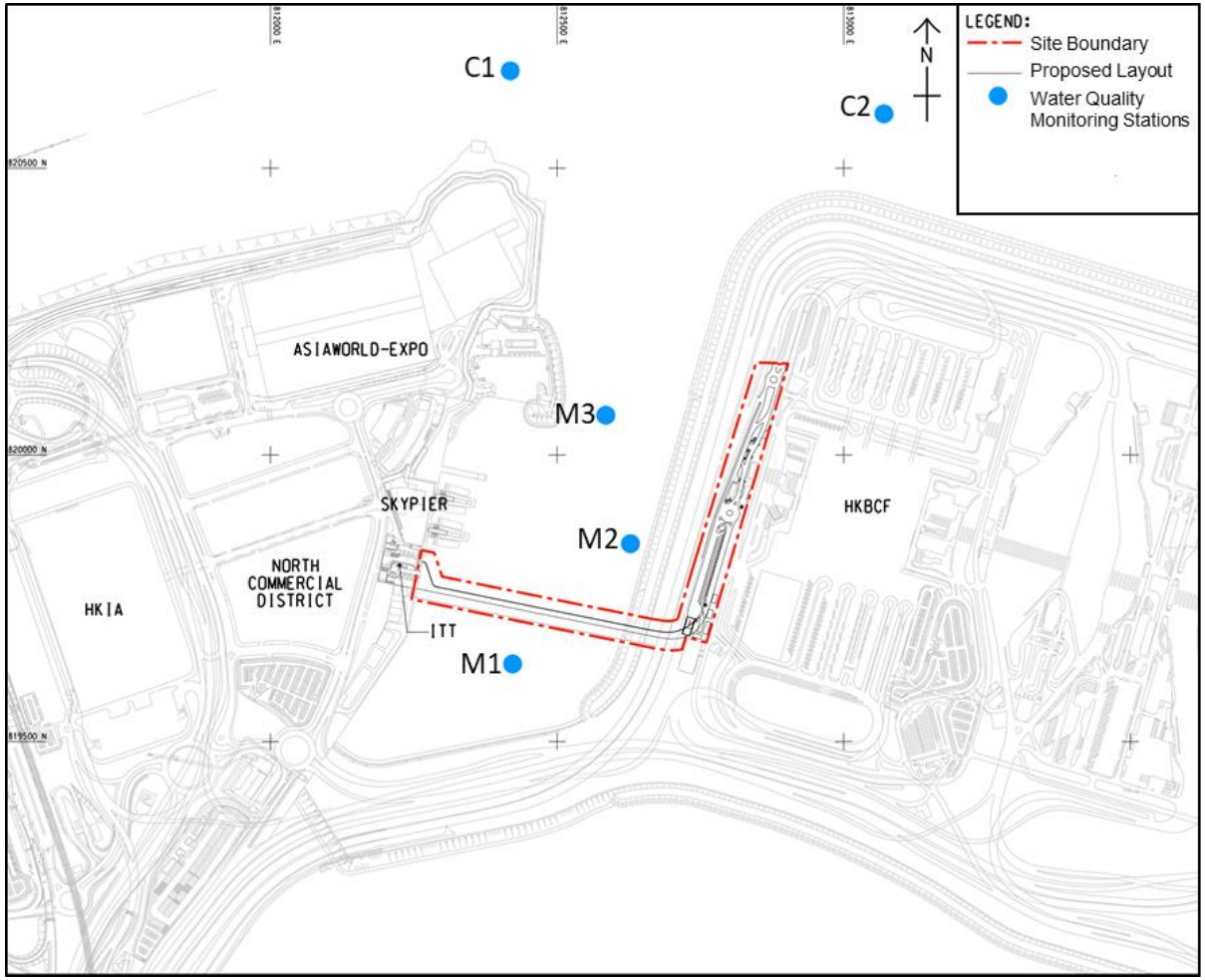
There was no reporting change during the reporting period.

Notifications of Summons and Successful Prosecutions

There was no notification of summons or successful prosecutions received during the reporting period.

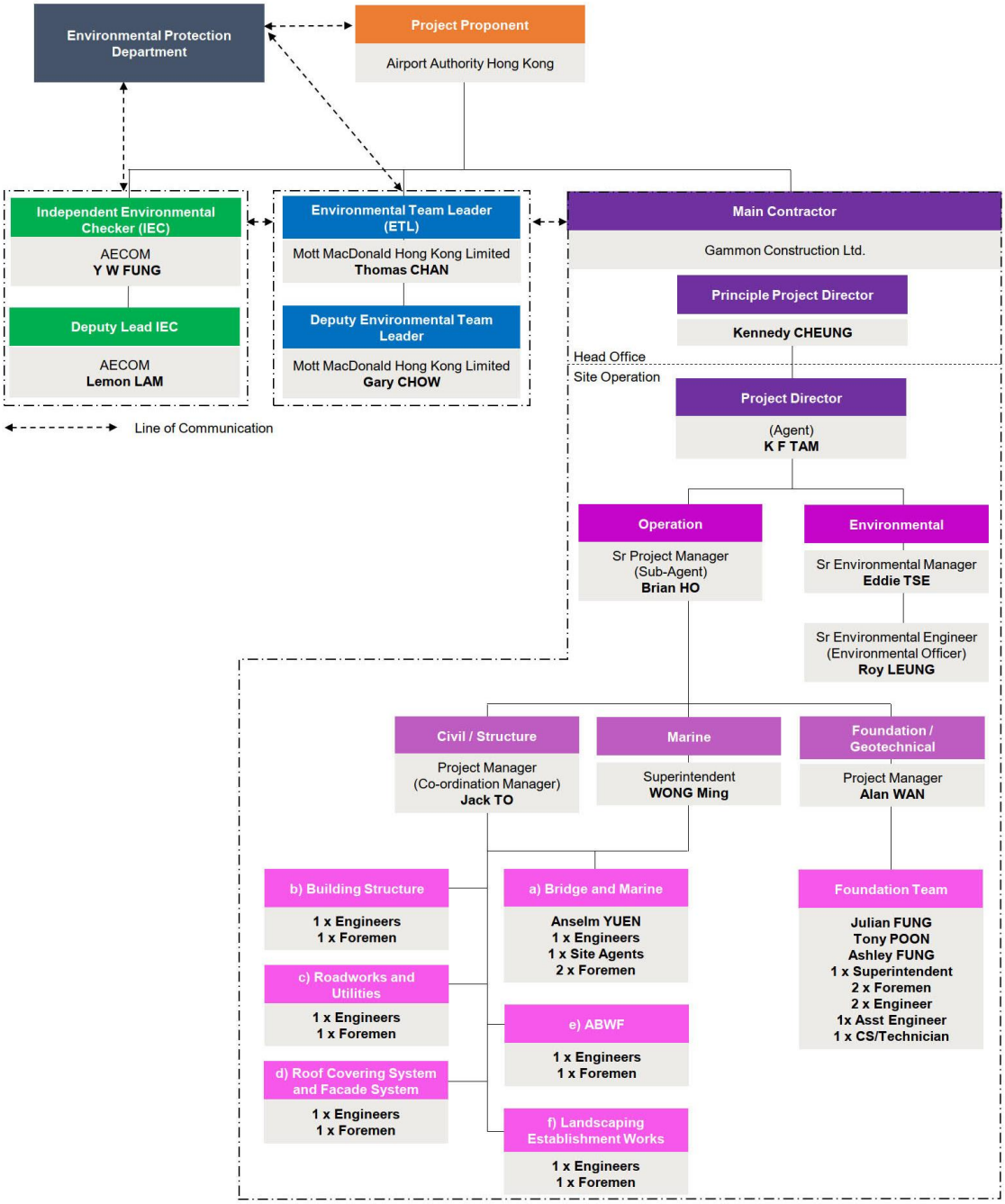
Figure

Figure 2.1 Water Quality Monitoring Locations



Appendices

Appendix A. Project Organisation


Environmental Protection Department
Project Proponent
Airport Authority Hong Kong
Independent Environmental Checker (IEC)
AECOM
Y W FUNG
Deputy Lead IEC
AECOM
Lemon LAM
Environmental Team Leader (ETL)
Mott MacDonald Hong Kong Limited
Thomas CHAN
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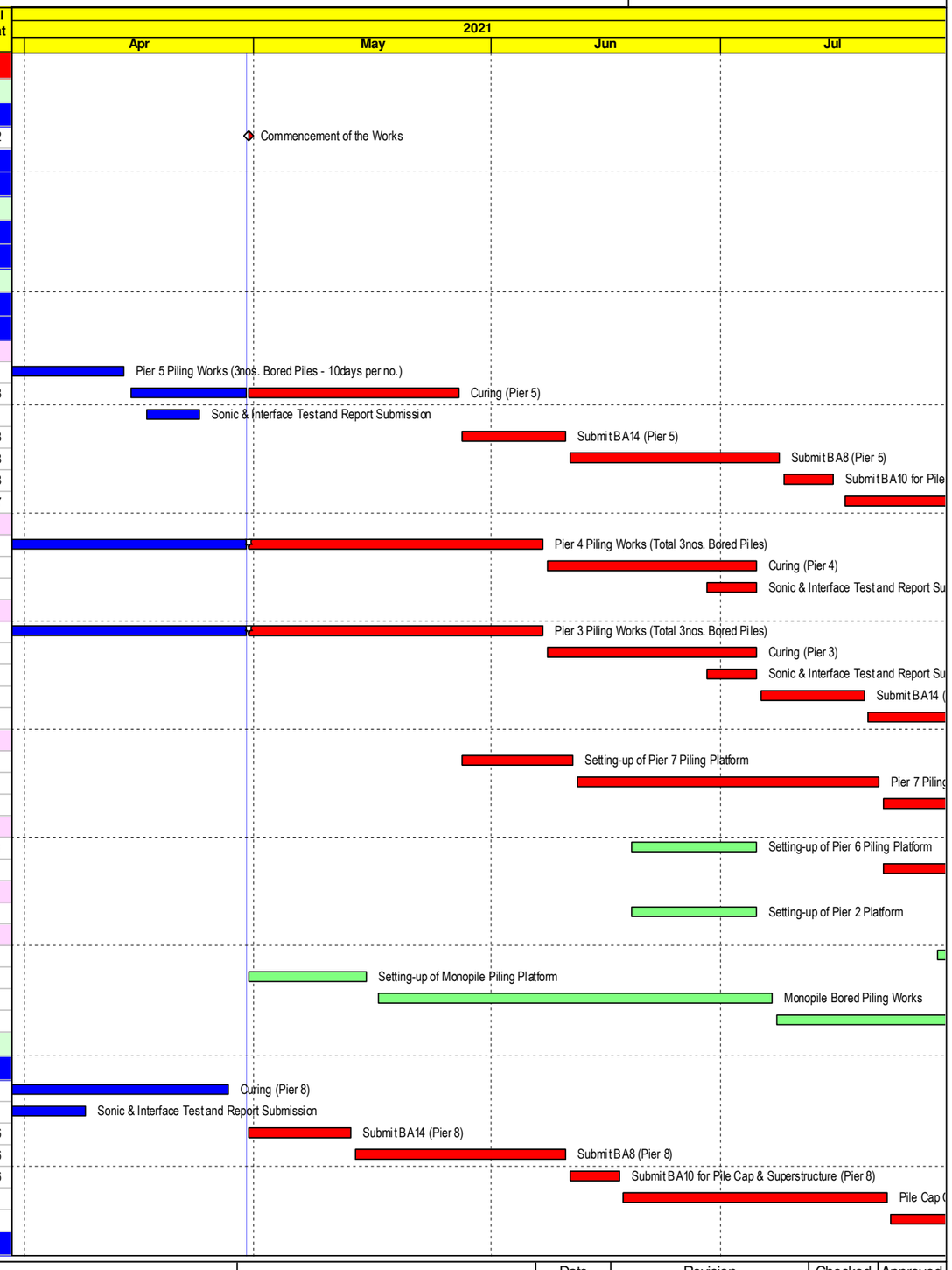
Line of Communication
Main Contractor
Gammon Construction Ltd.
Principle Project Director
Kennedy CHEUNG
Head Office
Site Operation
Project Director
(Agent)
K F TAM
Operation
Sr Project Manager
(Sub-Agent)
Brian HO
Environmental
Sr Environmental Manager
Eddie TSE
Sr Environmental Engineer
(Environmental Officer)
Roy LEUNG
Civil / Structure
Project Manager
(Co-ordination Manager)
Jack TO
Marine
Superintendent
WONG Ming
Foundation / Geotechnical
Project Manager
Alan WAN
b) Building Structure
1 x Engineers
1 x Foremen
c) Roadworks and Utilities
1 x Engineers
1 x Foremen
d) Roof Covering System and Facade System
1 x Engineers
1 x Foremen
a) Bridge and Marine
Anselm YUEN
1 x Engineers
1 x Site Agents
2 x Foremen
e) ABWF
1 x Engineers
1 x Foremen
f) Landscaping Establishment Works
1 x Engineers
1 x Foremen
Foundation Team
Julian FUNG
Tony POON
Ashley FUNG
1 x Superintendent
2 x Foremen
2 x Engineer
1x Asst Engineer
1 x CS/Technician

Appendix B. Construction Works Programme

C19W10 ITTB AD2 Monthly Programme Updated as 30 Apr 2021

Activity ID	Activity Name	BL Project Start	BL Project Finish	Current Start	Current Finish	Orig Dur	Pct Com	Total Float
C19W10 ITTB AD2 Monthly Programme Updated as 30 Apr 2021								
Contract Dates								
Commencement of the Works (PS Appendix C1)								
19W10.A.C0W	Commencement of the Works	02-Jul-20		30-Apr-21		0	0%	-302
Site Access and Vacate Dates (PS Appendix C2)								
Anticipated BD Approval Dates (PS Appendix C4)								
Cost Centre 1 - Preliminaries and General Requirements								
Design & Procurement								
On-Site Mock-up for AAHK Kiosk 2								
Cost Centre 3 - Bonded Vehicular Bridge - Marine Portion from Chainage CH0.000 to CH439.827								
Statutory Submission								
Marine Piling and Substructure Works								
Pier 5								
19W10.C.31030	Pier 5 Piling Works (3nos. Bored Piles - 10days per no.)	09-Nov-20	12-Dec-20	06-Jan-21 A	14-Apr-21 A	30	100%	
19W10.C.31060	Curing (Pier 5)	13-Dec-20	09-Jan-21	15-Apr-21 A	27-May-21	28	0%	-138
19W10.C.31065	Sonic & Interface Test and Report Submission	03-Jan-21	09-Jan-21	17-Apr-21 A	24-Apr-21 A	7	100%	
19W10.C.31130	Submit BA14 (Pier 5)	10-Jan-21	23-Jan-21	28-May-21	10-Jun-21	14	0%	-138
19W10.C.31135	Submit BA8 (Pier 5)	24-Jan-21	20-Feb-21	11-Jun-21	08-Jul-21	28	0%	-138
19W10.C.31170	Submit BA10 for Pile Cap & Superstructure (Pier 5)	21-Feb-21	27-Feb-21	09-Jul-21	15-Jul-21	7	0%	-138
19W10.C.32830	Cofferdam installation and pile cap construction (Pier 5)	01-Mar-21	07-Apr-21	17-Jul-21	21-Aug-21	29	0%	-107
Pier 4								
19W10.C.31100	Pier 4 Piling Works (Total 3nos. Bored Piles)	14-Dec-20	20-Jan-21	06-Jan-21 A	07-Jun-21	30	0%	-75
19W10.C.31105	Curing (Pier 4)	21-Jan-21	17-Feb-21	08-Jun-21	05-Jul-21	28	0%	-53
19W10.C.31108	Sonic & Interface Test and Report Submission	11-Feb-21	17-Feb-21	29-Jun-21	05-Jul-21	7	0%	-53
Pier 3								
19W10.C.31090	Pier 3 Piling Works (Total 3nos. Bored Piles)	21-Jan-21	27-Feb-21	20-Feb-21 A	07-Jun-21	30	0%	-75
19W10.C.31150	Curing (Pier 3)	28-Feb-21	27-Mar-21	08-Jun-21	05-Jul-21	28	0%	-53
19W10.C.31155	Sonic & Interface Test and Report Submission	21-Mar-21	27-Mar-21	29-Jun-21	05-Jul-21	7	0%	-53
19W10.C.31180	Submit BA14 (Pier 3 & 4)	28-Mar-21	10-Apr-21	06-Jul-21	19-Jul-21	14	0%	-53
19W10.C.31185	Submit BA8 (Pier 3 & 4)	11-Apr-21	08-May-21	20-Jul-21	16-Aug-21	28	0%	-53
Pier 7								
19W10.C.31070	Setting-up of Pier 7 Piling Platform	11-Jan-21	23-Jan-21	28-May-21	11-Jun-21	12	0%	-78
19W10.C.31140	Pier 7 Piling Works (Total 3nos. Bored Piles)	01-Mar-21	08-Apr-21	12-Jun-21	21-Jul-21	30	0%	-78
19W10.C.31145	Curing (Pier 7)	09-Apr-21	06-May-21	22-Jul-21	18-Aug-21	28	0%	-69
Pier 6								
19W10.C.31120	Setting-up of Pier 6 Piling Platform	01-Feb-21	17-Feb-21	19-Jun-21	05-Jul-21	12	0%	683
19W10.C.31190	Pier 6 Piling Works (Total 3nos. Bored Piles)	09-Apr-21	15-May-21	22-Jul-21	28-Aug-21	30	0%	-78
Pier 2								
19W10.C.31320	Setting-up of Pier 2 Platform	15-Mar-21	27-Mar-21	19-Jun-21	05-Jul-21	12	0%	34
Monopile								
19W10.C.31235	Sonic & Interface Test and Report Submission	17-Nov-21	23-Nov-21	29-Jul-21	04-Aug-21	7	0%	111
19W10.C.81200	Setting-up of Monopile Piling Platform	31-Jul-21	14-Aug-21	30-Apr-21	15-May-21	12	0%	85
19W10.C.81215	Monopile Bored Piling Works	03-Sep-21	26-Oct-21	17-May-21	07-Jul-21	40	0%	85
19W10.C.81230	Curing (Monopile)	27-Oct-21	23-Nov-21	08-Jul-21	04-Aug-21	28	0%	111
Cost Centre 4 - Bonded Vehicular Bridge - Land Portion from Chainage CH439.827 to CH685.000								
Pier 8								
19W10.C.41020	Curing (Pier 8)	17-Dec-20	13-Jan-21	30-Mar-21 A	27-Apr-21 A	28	100%	
19W10.C.41025	Sonic & Interface Test and Report Submission	07-Jan-21	13-Jan-21	30-Mar-21 A	09-Apr-21 A	7	100%	
19W10.C.41070	Submit BA14 (Pier 8)	14-Jan-21	27-Jan-21	30-Apr-21	13-May-21	14	0%	-106
19W10.C.41075	Submit BA8 (Pier 8)	28-Jan-21	24-Feb-21	14-May-21	10-Jun-21	28	0%	-106
19W10.C.41090	Submit BA10 for Pile Cap & Superstructure (Pier 8)	25-Feb-21	03-Mar-21	11-Jun-21	17-Jun-21	7	0%	-106
19W10.C.41120	Pile Cap Construction (Pier 8)	04-Mar-21	08-Apr-21	18-Jun-21	22-Jul-21	27	0%	-82
19W10.C.41140	Pier Erection (Pier 8)	09-Apr-21	11-May-21	23-Jul-21	26-Aug-21	27	0%	-82
Pier 9								



Actual LOE | Remaining LOE | Actual Work | Remaining Work

Critical Remaining Work | Milestone | Crit Milestone | Actual Milestone

Start Constraint | Finish Constraint | No Predecessors | No Successors

Project ID: C19W10-DWPG-B-AD-M10

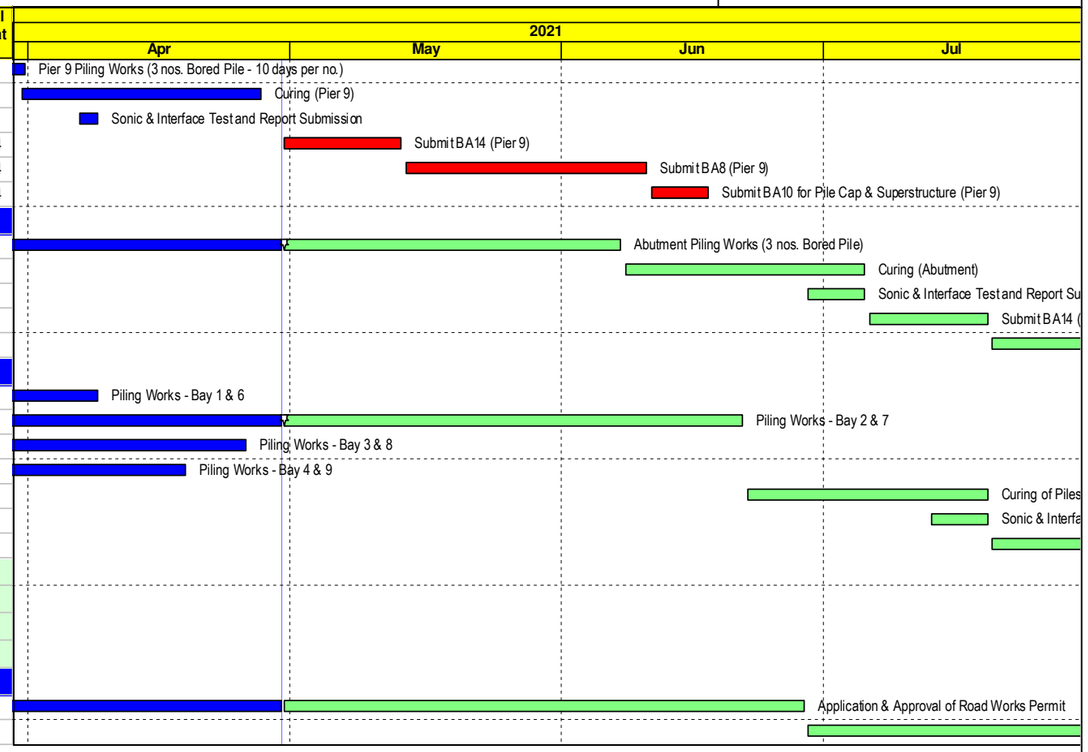
3-Month Rolling Programme (As of 30 Apr 2021)

Data Date: 30-Apr-21
Printed: 07-May-21 17:00
Layout: C19W10 ITT 3MRP - M10
TASK filters: 3-Month Rolling (MPU), Not Level of Effort.

Date	Revision	Checked	Approved
3-May-21	3MRP Apr 2021	DW	BH

C19W10 ITTB AD2 Monthly Programme Updated as 30 Apr 2021

Activity ID	Activity Name	BL Project Start	BL Project Finish	Current Start	Current Finish	Orig Dur	Pct Com	Total Float
19W10.C.41010	Pier 9 Piling Works (3 nos. Bored Pile - 10 days per no.)	24-Oct-20	28-Nov-20	19-Nov-20 A	31-Mar-21 A	30	100%	
19W10.C.41030	Curing (Pier 9)	29-Nov-20	26-Dec-20	31-Mar-21 A	27-Apr-21 A	28	100%	
19W10.C.41033	Sonic & Interface Test and Report Submission	20-Dec-20	26-Dec-20	07-Apr-21 A	09-Apr-21 A	7	100%	
19W10.C.41080	Submit BA14 (Pier 9)	27-Dec-20	09-Jan-21	30-Apr-21	13-May-21	14	0%	-124
19W10.C.41085	Submit BA8 (Pier 9)	10-Jan-21	06-Feb-21	14-May-21	10-Jun-21	28	0%	-124
19W10.C.41100	Submit BA10 for Pile Cap & Superstructure (Pier 9)	07-Feb-21	13-Feb-21	11-Jun-21	17-Jun-21	7	0%	-124
Abutment								
19W10.C.41040	Abutment Piling Works (3 nos. Bored Pile)	30-Nov-20	06-Jan-21	15-Dec-20 A	07-Jun-21	30	0%	80
19W10.C.41060	Curing (Abutment)	07-Jan-21	03-Feb-21	08-Jun-21	05-Jul-21	28	0%	104
19W10.C.41065	Sonic & Interface Test and Report Submission	28-Jan-21	03-Feb-21	29-Jun-21	05-Jul-21	7	0%	118
19W10.C.41110	Submit BA14 (Abutment)	04-Feb-21	17-Feb-21	06-Jul-21	19-Jul-21	14	0%	104
19W10.C.41115	Submit BA8 (Abutment)	18-Feb-21	17-Mar-21	20-Jul-21	16-Aug-21	28	0%	104
Upramp Structure								
19W10.C.41050	Piling Works - Bay 1 & 6	17-Dec-20	04-Feb-21	23-Oct-20 A	09-Apr-21 A	40	100%	
19W10.C.41230	Piling Works - Bay 2 & 7	01-Feb-21	22-Mar-21	31-Oct-20 A	21-Jun-21	40	0%	39
19W10.C.41320	Piling Works - Bay 3 & 8	18-Mar-21	08-May-21	05-Oct-20 A	26-Apr-21 A	40	100%	
19W10.C.41360	Piling Works - Bay 4 & 9	05-May-21	25-Jun-21	20-Oct-20 A	19-Apr-21 A	40	100%	
19W10.C.41450	Curing of Piles	11-Aug-21	07-Sep-21	22-Jun-21	19-Jul-21	28	0%	50
19W10.C.41455	Sonic & Interface Test and Report Submission	01-Sep-21	07-Sep-21	13-Jul-21	19-Jul-21	7	0%	64
19W10.C.41460	Submit BA14	08-Sep-21	21-Sep-21	20-Jul-21	02-Aug-21	14	0%	50
Cost Centre 5 - Ancillary Buildings								
Cost Centre 7 - External Works								
Cost Centre 8 - Project Site Office at Chun Yue Road								
OPTION WORKS								
Option C19W10/A - Installation of Optical Fibre Cable Connection								
19W10.C.A1010	Application & Approval of Road Works Permit	27-Jan-21	27-Mar-21	02-Feb-21 A	28-Jun-21	60	0%	52
19W10.C.A1020	Application & Approval of TTA	28-Mar-21	26-May-21	29-Jun-21	27-Aug-21	60	0%	52



Actual LOE
Remaining LOE
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Crit Milestone
Actual Milestone
Start Constraint
Finish Constraint
No Predecessors
No Successors

Project ID: C19W10-DWPG-B-AD-M10

3-Month Rolling Programme (As of 30 Apr 2021)

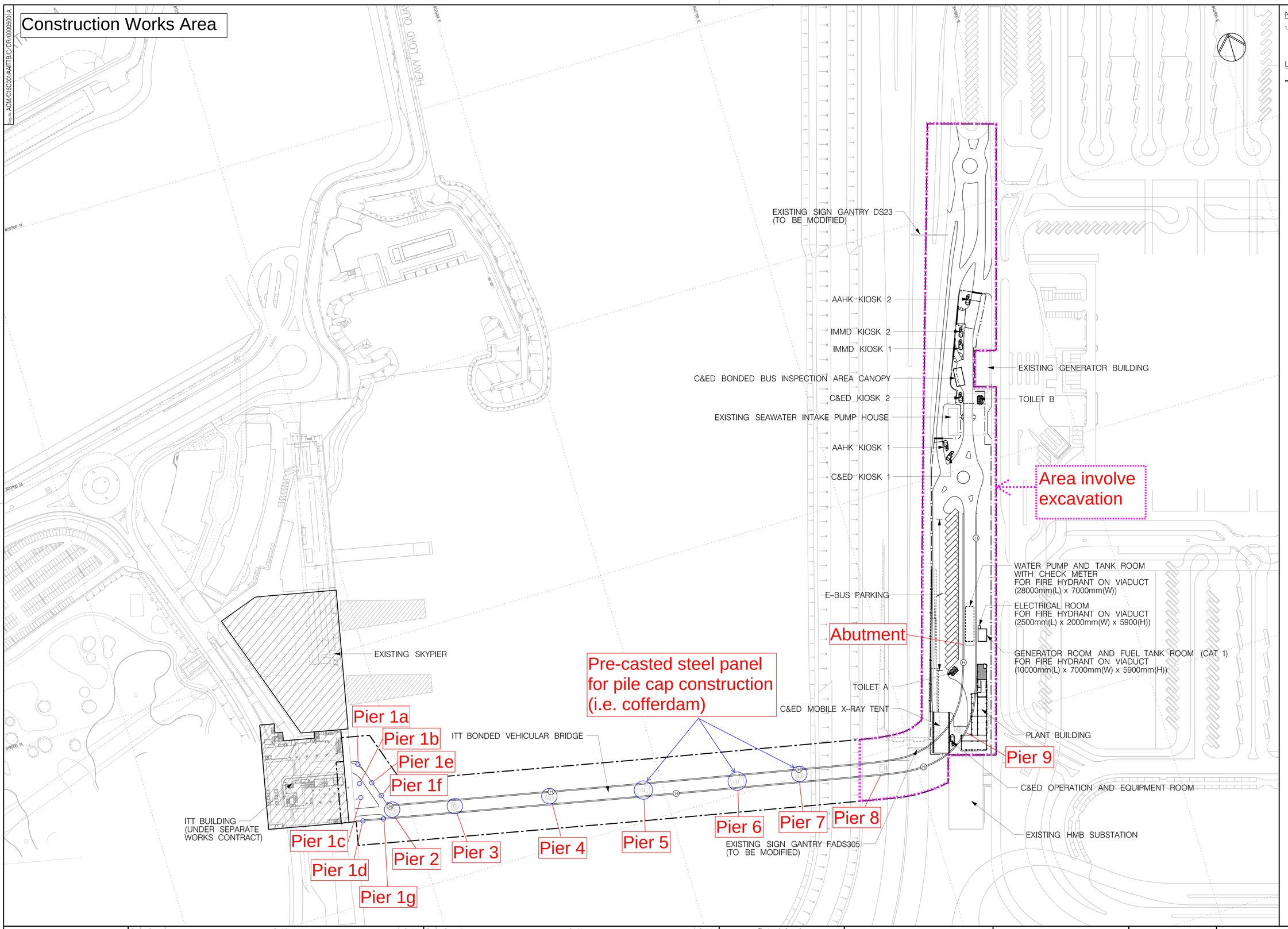
Data Date: 30-Apr-21
Printed: 07-May-21 17:00
Layout: C19W10 ITT 3MRP - M10
TASK filters: 3-Month Rolling (MPU), Not Level of Effort.

Date	Revision	Checked	Approved
3-May-21	3MRP Apr 2021	DW	BH

Appendix C. Construction Works Area

Ref No. ACM/C16C001/AAITTB/C/DR/0000500 A

Construction Works Area



NOTE :

1. FOR THE FIRE HYDRANT MAIN DETAILS ON VIADUCT, REFER TO DRAWING NO. ACM/C16C001/AAITTB/C/DR/9021200.

LEGEND :

SITE BOUNDARY

PROPOSED FIRE HYDRANT ON VIADUCT

0 10 20 30 40 50
METRES
1:1000

Notes :
1. Measurements are based on metric system.
2. All levels are in metres to Principal Datum (mPD) unless noted otherwise.
3. Do not scale drawing.
4. Figure dimensions are to be followed.
5. Do not use for construction unless expressly permitted.
6. The Contractor shall verify all conditions on the Site & notify the Employer's Representative of any variations from dimensions before construction.

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Rev.	Date	Description	Checked
A	17FEB20	TENDER ADDENDUM NO.3	MICHELLE LAM

Rev.	Date	Description	Checked

Signatures for Approval

Drawn: ERIC KWAN	Date: 17FEB20	Design: AARON POON	Date: 17FEB20
Checkers: TIM FUNG	Date: 17FEB20	Plot Date: 23-Mar-20	
Design Supervisor: MICHELLE LAM			Date: 17FEB20
Authorised Representative: HELEN LEUNG			Date: 17FEB20

Consultant
AECOM in association with Aedas
AECOM AEDAS OTHERS

香港國際機場 HONG KONG INTERNATIONAL AIRPORT
Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2188 7111 Fax : (852) 2824 0707

N

Scale	Location
1 : 1000 @ A0	

Hong Kong International Airport

Title: CONTRACT C19W10 INTERMODAL TRANSFER TERMINAL – BONDED VEHICULAR BRIDGE AND ASSOCIATED ROADS GENERAL ARRANGEMENT AND PROVISION OF FIRE HYDRANT ON VIADUCT

Originator	Design Ref.	Location	Discipline	Type	Number	Status	Revision
Drawing No. ACM/ C16C001/ AAITTB/	C	/DR/0000500				TENDER	A

File Name : P:\Projects\60515167\01_AECOM\02_DRAWINGS\CONTRACT\TENDER\04_CIV\ACM_C16C001_AAITTB_C_DR_0000500A.dgn

User Name : Kwanyme

Plot Date : 23-Mar-20

Appendix D. Environmental Site Inspection and Monitoring Schedule

ITT Environmental Monitoring and Site Inspection Schedule for April 2021

Apr-21

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Water Quality Monitoring mid- ebb: 15:33 mid- flood: 9:04	**2**	**3** Water Quality Monitoring mid- ebb: 17:19 mid- flood: 10:12
4	**5**	**6** Water Quality Monitoring mid- ebb: 21:26 mid- flood: 8:51	**7** Environmental Site Inspection	**8** Water Quality Monitoring mid- ebb: 11:37 mid- flood: 16:43	**9**	**10** Water Quality Monitoring mid- ebb: 12:38 mid- flood: 6:45
11	**12**	**13** Water Quality Monitoring mid- ebb: 13:55 mid- flood: 7:39	**14** Environmental Site Inspection	**15** Water Quality Monitoring mid- ebb: 14:53 mid- flood: 8:17	**16**	**17** Water Quality Monitoring mid- ebb: 16:00 mid- flood: 8:55
18	**19**	**20** Water Quality Monitoring mid- ebb: 18:41 mid- flood: 6:04	**21** Environmental Site Inspection	**22** Water Quality Monitoring mid- ebb: 9:59 mid- flood: 14:36	**23**	**24** Water Quality Monitoring mid- ebb: 11:18 mid- flood: 16:55
25	**26**	**27** Water Quality Monitoring mid- ebb: 13:06 mid- flood: 6:49	**28** Environmental Site Inspection	**29** Water Quality Monitoring mid- ebb: 14:32 mid- flood: 7:54	**30**	
		Notes:				

ITT Environmental Monitoring and Site Inspection Schedule for May 2021

May-21

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 Water Quality Monitoring mid- ebb: 16:10 mid- flood: 9:05
2	**3**	**4** Water Quality Monitoring mid- ebb: 19:28 mid- flood: 6:51	**5** Environmental Site Inspection	**6** Water Quality Monitoring mid- ebb: 10:29 mid- flood: 15:26	**7**	**8** Water Quality Monitoring mid- ebb: 11:38 mid- flood: 17:17
9	**10**	**11** Water Quality Monitoring mid- ebb: 13:01 mid- flood: 6:30	**12** Environmental Site Inspection	**13** Water Quality Monitoring mid- ebb: 14:00 mid- flood: 7:12	**14**	**15** Water Quality Monitoring mid- ebb: 15:05 mid- flood: 7:58
16	**17**	**18** Environmental Site Inspection Water Quality Monitoring mid- ebb: 17:15 mid- flood: 4:47	**19**	**20** Water Quality Monitoring mid- ebb: 19:26 mid- flood: 6:57	**21**	**22** Water Quality Monitoring mid- ebb: 10:02 mid- flood: 15:33
23	**24**	**25** Water Quality Monitoring mid- ebb: 12:03 mid- flood: 18:43	**26** Environmental Site Inspection	**27** Water Quality Monitoring mid- ebb: 13:33 mid- flood: 6:45	**28**	**29** Water Quality Monitoring mid- ebb: 15:09 mid- flood: 8:03
30	**31**	**Notes:**				

Appendix E. Calibration Certificates

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA030005
Date of Issue : 01 March 2021

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104233
Date of Received	:	Feb 25, 2021
Date of Calibration	:	Feb 25, 2021
Date of Next Calibration[a]	:	May 24, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.03	0.03	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	9.90	-0.11	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
21	20.7	-0.3	Satisfactory
41	40.9	-0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

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QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA030005
Date of Issue : 01 March 2021

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.21	0.01	-0.20	Satisfactory
4.55	4.56	0.01	Satisfactory
6.42	6.21	-0.21	Satisfactory
8.78	8.49	-0.29	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	146.6	-0.20	Satisfactory
0.01	1412	1440	1.98	Satisfactory
0.1	12890	12717	-1.34	Satisfactory
0.5	58670	58394	-0.47	Satisfactory
1.0	111900	112033	0.12	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.91	-0.90	Satisfactory
20	19.63	-1.85	Satisfactory
30	30.20	0.67	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.16	--	Satisfactory
10	10.19	1.9	Satisfactory
20	20.36	1.8	Satisfactory
100	99.78	-0.2	Satisfactory
800	798.12	-0.2	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA010041
Date of Issue : 18 January 2021

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104234
Date of Received	:	Jan 18, 2021
Date of Calibration	:	Jan 18, 2021
Date of Next Calibration[a]	:	Apr 17, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.11	0.11	Satisfactory
7.42	7.42	0.00	Satisfactory
10.01	10.09	0.08	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15	15.0	0.0	Satisfactory
30	29.9	-0.1	Satisfactory
40	41.0	1.0	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA010041
Date of Issue : 18 January 2021

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
1.37	1.43	0.06	Satisfactory
4.90	4.93	0.03	Satisfactory
6.88	6.91	0.03	Satisfactory
8.58	8.77	0.19	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	148.7	1.23	Satisfactory
0.01	1412	1325	-6.16	Satisfactory
0.1	12890	12810	-0.62	Satisfactory
0.5	58670	59884	2.07	Satisfactory
1.0	111900	112830	0.83	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.05	0.50	Satisfactory
20	20.03	0.15	Satisfactory
30	31.13	3.77	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.04	--	Satisfactory
10	10.12	1.2	Satisfactory
20	20.89	4.5	Satisfactory
100	103.42	3.4	Satisfactory
800	798.71	-0.2	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA040092
Date of Issue : 22 April 2021

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104234
Date of Received	:	Apr 22, 2021
Date of Calibration	:	Apr 22, 2021
Date of Next Calibration[a]	:	Jul 21, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	3.98	-0.02	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	9.92	-0.09	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.02	0.02	Satisfactory
25	24.00	-1.00	Satisfactory
40	40.00	0.00	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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(c) *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*
(d) *"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.*
(e) *The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards..*

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA040092
Date of Issue : 22 April 2021

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.15	0.27	0.12	Satisfactory
1.88	1.92	0.04	Satisfactory
5.79	5.79	0.00	Satisfactory
8.49	8.42	-0.07	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	145.3	-1.09	Satisfactory
0.01	1412	1331	-5.74	Satisfactory
0.1	12890	12364	-4.08	Satisfactory
0.5	58670	56724	-3.32	Satisfactory
1.0	111900	109210	-2.40	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.18	1.80	Satisfactory
20	20.25	1.25	Satisfactory
30	30.04	0.13	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.00	--	Satisfactory
10	10.10	1.0	Satisfactory
20	20.14	0.7	Satisfactory
100	107.6	7.6	Satisfactory
800	790	-1.3	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA030095
Date of Issue : 26 March 2021

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Mar 25, 2021
Date of Calibration	:	Mar 25, 2021
Date of Next Calibration[a]	:	Jun 24, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	9.98	-0.03	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	9.9	-0.1	Satisfactory
20	20.2	0.2	Satisfactory
48	48.4	0.4	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA030095
Date of Issue : 26 March 2021

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.36	0.32	-0.04	Satisfactory
2.81	2.54	-0.27	Satisfactory
5.45	5.78	0.33	Satisfactory
8.40	8.78	0.38	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	135.8	-7.56	Satisfactory
0.01	1412	1326.4	-6.06	Satisfactory
0.1	12890	12224.6	-5.16	Satisfactory
0.5	58670	56572	-3.58	Satisfactory
1.0	111900	108792	-2.78	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.9	-1.00	Satisfactory
20	20.2	1.00	Satisfactory
30	30.3	1.00	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.02	--	Satisfactory
10	9.84	-1.6	Satisfactory
20	20.26	1.3	Satisfactory
100	108.2	8.2	Satisfactory
800	796	-0.5	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA020021
Date of Issue : 03 February 2021

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17H105557
Date of Received	:	Feb 03, 2021
Date of Calibration	:	Feb 03, 2021
Date of Next Calibration[a]	:	May 02, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	9.98	-0.03	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
20	20.1	0.1	Satisfactory
40	40.1	0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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(b) *The results relate only to the calibrated equipment as received*
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA020021
Date of Issue : 03 February 2021

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.65	0.28	-0.37	Satisfactory
2.38	2.62	0.24	Satisfactory
4.04	4.10	0.06	Satisfactory
7.28	7.40	0.12	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	139.0	-5.38	Satisfactory
0.01	1412	1337	-5.31	Satisfactory
0.1	12890	12811	-0.61	Satisfactory
0.5	58670	57988	-1.16	Satisfactory
1.0	111900	111419	-0.43	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.92	-0.80	Satisfactory
20	20.13	0.65	Satisfactory
30	30.30	1.00	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.08	--	Satisfactory
10	9.92	-0.8	Satisfactory
20	19.81	-1.0	Satisfactory
100	99.2	-0.8	Satisfactory
800	796.3	-0.5	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA030006
Date of Issue : 01 March 2021

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	18A104824
Date of Received	:	Feb 25, 2021
Date of Calibration	:	Feb 25, 2021
Date of Next Calibration[a]	:	May 24, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	10.09	0.08	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
21	20.4	-0.6	Satisfactory
41	40.9	-0.1	Satisfactory

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

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Remark(s): -

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA030006
Date of Issue : 01 March 2021

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.21	0.01	-0.20	Satisfactory
4.55	6.21	1.66	Satisfactory
6.42	4.56	-1.86	Satisfactory
8.78	8.49	-0.29	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	146.7	-0.14	Satisfactory
0.01	1412	1436	1.70	Satisfactory
0.1	12890	12699	-1.48	Satisfactory
0.5	58670	58421	-0.42	Satisfactory
1.0	111900	111486	-0.37	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.88	-1.20	Satisfactory
20	19.84	-0.80	Satisfactory
30	30.52	1.73	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.11	--	Satisfactory
10	10.23	2.3	Satisfactory
20	20.45	2.3	Satisfactory
100	102.38	2.4	Satisfactory
800	798.46	-0.2	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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Appendix F. Event and Action Plan

Table F.1: Event and Action Plan for Marine Water Quality

	Action			
Event	**ET**	**IEC**	**AAHK / PM**	**Contractor**
Action level being exceeded by one sampling day	1. Repeat *in-situ* measurement to confirm findings; 2. Identify reasons for non-compliance and source(s) of impact; 3. Inform IEC and Contractor; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC and Contractor; 6. Repeat measurement on next day of exceedance.	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise AAHK / PM accordingly; 3. Assess the effectiveness of the implemented mitigation measures.	1. Discuss with IEC on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures.	1. Inform the AAHK / PM and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET and IEC and propose mitigation measures.
Action level being exceeded by two or more consecutive sampling days	1. Repeat *in-situ* measurement to confirm findings; 2. Identify reasons for non-compliance and source(s) of impact; 3. Inform IEC and Contractor; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC and Contractor; 6. Ensure mitigation measures are implemented; 7. Prepare to increase the monitoring frequency to daily; 8. Repeat measurement on next day of exceedance.	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the AAHK / PM accordingly; 3. Assess the effectiveness of the implemented mitigation measures.	1. Discuss with IEC on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 3. Assess the effectiveness of the implemented mitigation measures.	1. Inform the AAHK / PM and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment 4. Consider changes of working methods; 5. Discuss with ET and IEC and propose mitigation measures to IEC and AAHK / PM within 3 working days; 6. Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	1. Repeat *in-situ* measurement to confirm findings; 2. Identify reasons for non-compliance and source(s) of impact; 3. Inform IEC, Contractor and	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the AAHK /	1. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement	1. Inform the AAHK / PM and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and

	Action			
Event	**ET**	**IEC**	**AAHK / PM**	**Contractor**
	EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC, AAHK / PM and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of limit level.	PM accordingly; 3. Assess the effectiveness of the implemented mitigation measures.	on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures.	equipment; 4. Consider changes of working methods; 5. Discuss with ET, IEC and AAHK / PM and propose mitigation measures to IEC and AAHK / PM within three working days; 6. Implement the agreed mitigation measures.
Limit level being exceeded by two or more consecutive sampling days	1. Repeat *in-situ* measurement to confirm findings; 2. Identify reasons for non-compliance and source(s) of impact; 3. Inform IEC, Contractor and EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC, AAHK / PM and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the AAHK / PM accordingly; 3. Assess the effectiveness of implemented mitigation measures.	1. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures; 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the construction activities until no exceedance of Limit level.	1. Inform AAHK / PM and confirm notification of non-compliance in writing; 2. Rectify unacceptable practices; 3. Check all plant and equipment; 4. Consider changes of working method; 5. Discuss with ET, IEC and AAHK / PM and propose mitigation measures to IEC and AAHK / PM within 3 working days; 6. Implement the agreed mitigation measures; 7. As directed by the AAHK / PM, to slow down or to stop all or part of the construction activities.

Appendix G. Monitoring Data and Graphical Plots

Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 01 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Sunny	Moderate	14:50	9.8	Surface	1.0	24.4	24.4	8.0	8.0	30.2	30.3	103.1	103.1	7.3	7.3	4.9	6.1	7.0	7.1
						1.0	24.4		8.0		30.3		103.1		7.3		5.0		7.3	
					Middle	4.9	24.3	24.3	8.0	8.0	30.3	30.3	102.0	102.4	7.2		6.2		7.5	
						4.9	24.3		8.0		30.3		102.7		7.2		6.4		7.8	
					Bottom	8.8	24.3	24.4	8.0	8.0	30.3	30.3	101.5	102.2	7.1	7.2	6.9		6.2	
						8.8	24.4		8.0		30.3		102.9		7.2		6.9		6.9	
C2	Sunny	Moderate	15:11	10.0	Surface	1.0	24.4	24.4	8.0	8.0	30.2	30.3	102.6	102.5	7.2	7.2	5.7	6.2	2.6	3.1
						1.0	24.4		8.0		30.3		102.4		7.2		5.8		3.1	
					Middle	5.0	24.4	24.4	8.0	8.0	30.3	30.3	102.0	102.0	7.2		5.9		2.8	
						5.0	24.4		8.0		30.3		102.0		7.2		5.7		3.0	
					Bottom	9.0	24.4	24.4	8.0	8.0	30.3	30.3	101.2	101.8	7.1	7.2	7.0		3.7	
						9.0	24.4		8.0		30.3		102.3		7.2		6.9		3.6	
M1	Sunny	Calm	15:01	5.4	Surface	1.0	24.5	24.5	8.0	8.0	30.7	30.7	100.5	100.5	7.0	7.0	3.5	3.5	2.9	2.5
						1.0	24.4		8.0		30.7		100.4		7.0		3.5		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.4	24.5	24.5	8.0	8.0	30.8	30.8	99.5	100.0	7.0	7.0	3.5		2.2	
						4.4	24.4		8.0		30.7		100.5		7.0		3.5		2.7	
M2	Sunny	Calm	15:04	4.9	Surface	1.0	24.4	24.4	8.0	8.0	30.6	30.6	100.2	100.4	7.0	7.1	3.8	3.9	2.3	4.4
						1.0	24.4		8.0		30.6		100.6		7.1		3.8		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	3.9	24.3	24.3	8.0	8.0	30.7	30.7	98.4	99.1	6.9	7.0	4.1		7.0	
						3.9	24.3		8.0		30.7		99.8		7.0		3.9		6.6	
M3	Sunny	Moderate	14:55	7.0	Surface	1.0	24.4	24.4	8.0	8.0	30.5	30.5	100.4	100.2	7.1	7.0	4.3	4.8	5	4
						1.0	24.4		8.0		30.5		99.9		7.0		4.4		5	
					Middle	3.5	24.3	24.3	8.0	8.0	30.6	30.7	99.3	99.2	7.0		4.6		4	
						3.5	24.3		8.0		30.7		99.0		7.0		5.0		4	
					Bottom	6.0	24.3	24.3	8.0	8.0	30.8	30.8	97.9	98.5	6.9	7.0	5.1		4	
						6.0	24.3		8.0		30.7		99.1		7.0		5.1		4	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 01 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	09:05	10.0	Surface	1.0	24.1	24.1	8.0	8.0	30.5	30.5	100.3	100.4	7.1	7.1	5.5	6.3	3.2	3.2
						1.0	24.1		8.0		30.5		100.4		7.1		5.8		3.6	
					Middle	5.0	24.1	24.1	8.0	8.0	30.6	30.6	99.7	99.8	7.0		5.8		3.6	
						5.0	24.1		8.0		30.6		99.9		7.1		5.7		3.7	
					Bottom	9.0	24.1	24.1	8.0	8.0	30.6	30.6	99.1	99.5	7.0	7.0	7.8		3.0	
						9.0	24.1		8.0		30.6		99.8		7.0		7.4		2.0	
C2	Fine	Calm	08:42	10.2	Surface	1.0	24.1	24.1	8.0	8.0	30.6	30.6	100.3	100.3	7.1	7.1	7.1	7.9	6.4	3.6
						1.0	24.1		8.0		30.6		100.2		7.1		7.3		6.4	
					Middle	5.1	24.1	24.1	8.0	8.0	30.7	30.7	100.0	100.0	7.1		8.3		2.5	
						5.1	24.1		8.0		30.7		100.0		7.1		8.0		2.2	
					Bottom	9.2	24.1	24.1	8.0	8.0	30.7	30.7	99.7	99.9	7.0	7.1	8.6		2.0	
						9.2	24.1		8.0		30.7		100.0		7.1		8.2		2.0	
M1	Fine	Calm	08:55	5.6	Surface	1.0	24.2	24.2	8.0	8.0	31.0	31.0	95.6	95.7	6.7	6.7	3.0	3.4	2.0	2.6
						1.0	24.2		8.0		31.0		95.8		6.7		3.1		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	24.2	24.2	8.0	8.0	31.0	31.0	94.9	95.3	6.7	6.7	3.9		2.8	
						4.6	24.2		8.0		31.0		95.7		6.7		3.6		2.4	
M2	Fine	Calm	08:50	5.0	Surface	1.0	24.1	24.1	8.0	8.0	30.6	30.6	95.9	96.7	6.8	6.9	2.6	3.1	5.8	6.7
						1.0	24.1		8.0		30.5		97.4		6.9		2.7		6.2	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	24.1	24.1	8.0	8.0	30.7	30.7	94.5	95.6	6.7	6.8	3.4		7.0	
						4.0	24.1		8.0		30.6		96.6		6.8		3.5		7.7	
M3	Fine	Calm	09:00	7.2	Surface	1.0	24.1	24.1	8.0	8.0	30.5	30.5	100.7	100.3	7.1	7.0	2.5	3.1	3	3
						1.0	24.1		8.0		30.5		99.8		7.0		2.7		2	
					Middle	3.6	24.1	24.1	8.0	8.0	30.5	30.6	98.7	98.1	7.0		3.1		3	
						3.6	24.1		8.0		30.6		97.4		6.9		3.1		2	
					Bottom	6.2	24.1	24.1	8.0	8.0	30.7	30.8	97.7	96.8	6.9	6.9	3.5		5	
						6.2	24.1		8.0		30.8		95.9		6.8		3.4		5	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 03 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	16:38	10.7	Surface	1.0	25.1	25.1	8.0	8.0	29.5	29.5	102.0	102.0	7.1	7.1	3.0	3.6	4.0	3.9
						1.0	25.1		8.0		29.4		101.9		7.1		2.9		4.5	
					Middle	5.4	25.1	25.1	8.0	8.0	29.6	29.6	102.3	102.6	7.1		3.6		3.7	
						5.4	25.1		8.0		29.6		102.9		7.2		3.6		4.3	
					Bottom	9.7	25.0	25.0	8.0	8.0	29.8	29.8	101.5	102.2	7.1	7.2	4.2		3.0	
						9.7	25.0		8.0		29.8		102.8		7.2		4.1		3.6	
C2	Fine	Moderate	17:02	10.6	Surface	1.0	25.1	25.1	8.0	8.0	29.4	29.4	105.8	105.8	7.4	7.3	3.2	4.5	3.4	4.3
						1.0	25.1		8.0		29.4		105.7		7.4		3.2		3.0	
					Middle	5.3	25.0	25.0	8.0	8.0	29.7	29.7	103.2	103.8	7.2		4.4		3.9	
						5.3	25.0		8.0		29.6		104.4		7.3		4.1		4.8	
					Bottom	9.6	25.0	25.0	8.0	8.0	29.7	29.7	101.9	103.0	7.1	7.2	6.0		4.8	
						9.6	25.0		8.0		29.7		104.0		7.3		6.0		5.8	
M1	Fine	Moderate	16:49	5.7	Surface	1.0	25.4	25.2	8.0	8.0	29.4	29.6	106.5	104.9	7.4	7.3	2.8	3.2	2.4	2.9
						1.0	25.0		8.0		29.7		103.3		7.2		2.9		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.7	24.8	24.8	8.0	8.0	30.0	30.0	95.5	95.6	6.7	6.7	3.2		4.0	
						4.7	24.8		8.0		29.9		95.6		6.7		3.9		3.2	
M2	Fine	Moderate	16:54	5.3	Surface	1.0	25.1	25.1	8.0	8.0	29.5	29.5	100.7	101.5	7.0	7.1	3.1	3.1	2.4	3.6
						1.0	25.1		8.0		29.4		102.2		7.1		3.0		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.3	25.0	25.1	8.0	8.0	29.7	29.7	98.3	99.9	6.9	7.0	3.1		4.4	
						4.3	25.1		8.0		29.6		101.5		7.1		3.1		4.4	
M3	Fine	Moderate	16:44	7.0	Surface	1.0	25.1	25.1	8.0	8.0	29.4	29.4	103.1	103.1	7.2	7.1	3.1	3.2	4	4
						1.0	25.1		8.0		29.4		103.0		7.2		3.1		4	
					Middle	3.5	24.9	24.9	8.0	8.0	29.2	29.2	100.0	100.3	7.0		3.2		4	
						3.5	24.9		8.0		29.2		100.6		7.1		3.1		3	
					Bottom	6.0	25.1	25.1	8.0	8.0	29.5	29.5	100.6	101.4	7.0	7.1	3.3		3	
						6.0	25.1		8.0		29.5		102.2		7.1		3.2		4	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 03 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	11:03	10.9	Surface	1.0	24.9	24.9	8.0	8.0	29.5	29.7	99.8	99.3	7.0	6.9	3.3	4.8	3.6	4.4
						1.0	24.8		8.0		29.8		98.8		6.9		3.8		4.3	
					Middle	5.5	24.8	24.8	8.0	8.0	29.8	29.9	97.8	97.8	6.9		4.7		4.3	
						5.5	24.7		8.0		29.9		97.7		6.8		4.8		3.8	
					Bottom	9.9	24.7	24.7	8.0	8.0	30.0	30.0	96.3	96.4	6.7	6.8	6.0		5.1	
						9.9	24.7		8.0		30.0		96.5		6.8		6.0		5.5	
C2	Fine	Moderate	10:35	10.7	Surface	1.0	25.0	25.0	8.0	8.0	29.1	29.2	101.6	101.6	7.1	7.0	2.7	3.9	3.0	4.2
						1.0	24.9		8.0		29.2		101.6		7.1		2.8		2.4	
					Middle	5.4	24.8	24.8	8.0	8.0	29.8	29.8	98.2	98.8	6.9		3.3		4.2	
						5.4	24.8		8.0		29.8		99.3		7.0		4.0		3.2	
					Bottom	9.7	24.8	24.8	7.9	8.0	29.9	29.9	97.3	97.7	6.8	6.9	5.3		6.2	
						9.7	24.7		8.0		29.9		98.1		6.9		5.4		6.4	
M1	Fine	Moderate	10:51	5.8	Surface	1.0	25.1	25.1	8.0	8.0	29.4	29.4	98.8	99.2	6.9	7.0	2.3	3.2	2.5	2.7
						1.0	25.1		8.0		29.3		99.6		7.0		2.3		2.7	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	24.8	24.9	8.0	8.0	30.0	30.0	93.7	94.9	6.6	6.7	4.4		2.5	
						4.8	24.9		8.0		29.9		96.1		6.7		3.6		3.1	
M2	Fine	Moderate	10:45	5.5	Surface	1.0	25.0	25.0	8.0	8.0	28.7	28.9	99.4	99.2	7.0	7.0	2.3	2.8	1.5	3.2
						1.0	25.0		8.0		29.1		98.9		6.9		2.4		2.7	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.5	24.9	24.9	8.0	8.0	29.6	29.6	96.3	96.2	6.7	6.7	2.9		3.7	
						4.5	24.9		8.0		29.6		96.1		6.7		3.5		4.7	
M3	Fine	Moderate	10:56	7.2	Surface	1.0	25.0	25.0	8.0	8.0	28.7	28.7	100.9	101.1	7.1	7.1	2.4	3.1	4	3
						1.0	25.0		8.0		28.7		101.2		7.1		2.4		3	
					Middle	3.6	24.9	24.9	8.0	8.0	29.2	29.2	100.0	100.3	7.0		3.2		3	
						3.6	24.9		8.0		29.2		100.6		7.1		3.2		3	
					Bottom	6.2	24.9	24.9	8.0	8.0	30.0	30.0	93.3	94.7	6.5	6.6	3.6		2	
						6.2	24.9		8.0		29.9		96.1		6.7		3.5		2	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 06 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	21:20	10.6	Surface	1.0	25.2	25.2	8.0	8.0	29.9	29.9	96.5	96.5	6.7	6.6	2.0	2.1	2.4	2.1
						1.0	25.2		8.0		29.9		96.5		6.7		2.0		2.2	
					Middle	5.3	24.8	24.8	8.0	8.0	30.3	30.3	93.9	93.9	6.6		2.1		2.2	
						5.3	24.8		8.0		30.3		93.8		6.5		2.1		2.3	
					Bottom	9.6	24.7	24.7	8.0	8.0	30.7	30.7	92.0	92.0	6.4	6.4	2.1		1.8	
						9.6	24.7		8.0		30.7		91.9		6.4		2.1		1.9	
C2	Fine	Moderate	20:57	10.4	Surface	1.0	24.9	24.9	8.0	8.0	30.1	30.1	94.5	94.6	6.6	6.5	2.1	2.4	1.6	1.8
						1.0	24.9		8.0		30.1		94.6		6.6		2.1		2.1	
					Middle	5.2	24.7	24.7	8.0	8.0	30.8	30.8	91.3	91.4	6.4		2.4		1.4	
						5.2	24.7		8.0		30.8		91.4		6.4		2.4		2.1	
					Bottom	9.4	24.8	24.8	8.0	8.0	30.9	30.9	91.7	91.8	6.4	6.4	2.7		2.0	
						9.4	24.8		8.0		30.9		91.8		6.4		2.8		1.4	
M1	Fine	Moderate	21:07	5.8	Surface	1.0	24.9	24.9	8.0	8.0	30.8	30.8	91.5	91.6	6.4	6.4	1.8	2.0	2.2	2.3
						1.0	24.9		8.0		30.8		91.6		6.4		1.8		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	24.6	24.6	7.9	7.9	31.1	31.1	89.6	89.6	6.3	6.3	2.1		2.8	
						4.8	24.6		7.9		31.1		89.5		6.2		2.1		2.0	
M2	Fine	Moderate	21:11	5.6	Surface	1.0	24.9	24.9	8.0	8.0	30.6	30.6	92.4	92.5	6.4	6.4	2.2	3.4	1.9	1.7
						1.0	24.9		8.0		30.6		92.5		6.4		2.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	24.9	24.9	7.9	7.9	30.7	30.7	91.8	91.9	6.4	6.4	4.7		1.6	
						4.6	24.9		7.9		30.7		91.9		6.4		4.6		1.8	
M3	Fine	Moderate	21:02	6.8	Surface	1.0	25.1	25.1	8.0	8.0	30.3	30.3	94.1	94.1	6.5	6.5	2.0	2.1	2	3
						1.0	25.1		8.0		30.3		94.1		6.5		2.0		2	
					Middle	3.4	24.9	24.9	8.0	8.0	30.6	30.6	92.0	92.0	6.4		2.0		3	
						3.4	24.9		8.0		30.6		92.0		6.4		2.0		3	
					Bottom	5.8	24.6	24.6	7.9	7.9	31.2	31.2	89.2	89.2	6.2	6.2	2.4		3	
						5.8	24.6		7.9		31.2		89.2		6.2		2.4		3	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 06 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Sunny	Moderate	08:58	10.8	Surface	1.0	24.5	24.5	8.0	8.0	31.2	31.2	91.9	91.9	6.4	6.3	1.9	2.6	1.4	1.6
						1.0	24.5		8.0		31.2		91.8		6.4		1.9		1.9	
					Middle	5.4	24.5	24.5	8.0	8.0	31.4	31.4	89.3	89.4	6.2		2.4		2.0	
						5.4	24.5		8.0		31.4		89.4		6.2		2.4		1.7	
					Bottom	9.8	24.5	24.5	8.0	8.0	31.4	31.4	88.7	88.8	6.2	6.2	3.6		1.6	
						9.8	24.5		8.0		31.4		88.8		6.2		3.6		1.1	
C2	Sunny	Moderate	08:32	10.6	Surface	1.0	24.6	24.6	8.0	8.0	31.3	31.3	91.3	91.3	6.4	6.4	2.3	2.5	1.5	1.9
						1.0	24.6		8.0		31.3		91.3		6.4		2.3		1.6	
					Middle	5.3	24.5	24.5	8.0	8.0	31.3	31.3	90.0	90.1	6.3		2.1		2.0	
						5.3	24.5		8.0		31.3		90.1		6.3		2.1		2.0	
					Bottom	9.6	24.5	24.5	8.0	8.0	31.5	31.5	88.5	88.5	6.2	6.2	3.0		2.1	
						9.6	24.5		8.0		31.5		88.5		6.2		3.0		2.2	
M1	Sunny	Moderate	08:47	5.9	Surface	1.0	24.5	24.5	7.9	7.9	30.9	30.9	85.8	85.8	6.0	6.0	2.1	2.2	1.5	2.0
						1.0	24.5		7.9		30.9		85.8		6.0		2.1		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.9	24.5	24.5	7.9	7.9	31.0	31.0	85.7	85.7	6.0	6.0	2.3		2.4	
						4.9	24.5		7.9		31.0		85.7		6.0		2.3		2.3	
M2	Sunny	Moderate	08:43	5.5	Surface	1.0	24.5	24.5	7.9	7.9	30.8	30.8	85.3	85.3	6.0	6.0	1.9	2.8	2.1	2.2
						1.0	24.5		7.9		30.8		85.2		6.0		1.9		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.5	24.5	24.5	7.9	7.9	31.1	31.1	86.6	86.6	6.1	6.1	3.8		2.3	
						4.5	24.5		7.9		31.1		86.6		6.1		3.7		2.4	
M3	Sunny	Moderate	08:52	7.0	Surface	1.0	24.5	24.5	7.9	7.9	30.9	30.9	86.5	86.6	6.1	6.1	2.1	3.1	2	2
						1.0	24.5		7.9		30.9		86.6		6.1		2.1		2	
					Middle	3.5	24.5	24.5	7.9	7.9	31.1	31.1	87.2	87.2	6.1		2.7		2	
						3.5	24.5		7.9		31.1		87.2		6.1		2.7		2	
					Bottom	6.0	24.5	24.5	8.0	8.0	31.5	31.5	87.4	87.4	6.1	6.1	4.4		3	
						6.0	24.5		8.0		31.5		87.4		6.1		4.3		2	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 08 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	11:37	10.8	Surface	1.0	24.5	24.5	8.1	8.1	28.8	28.8	102.0	102.1	7.2	7.1	2.6	3.4	2.3	3.3
						1.0	24.5		8.1		28.8		102.1		7.2		2.6		2.6	
					Middle	5.4	24.3	24.3	8.0	8.0	30.2	30.2	98.1	98.3	6.9		3.4		2.0	
						5.4	24.3		8.0		30.1		98.4		6.9		3.4		2.6	
					Bottom	9.8	24.3	24.3	8.0	8.0	30.3	30.3	97.5	97.7	6.9	6.9	4.0		4.8	
						9.8	24.3		8.0		30.2		97.8		6.9		4.1		5.2	
C2	Cloudy	Moderate	11:08	10.3	Surface	1.0	24.3	24.3	8.1	8.1	30.3	30.3	98.7	98.5	7.0	6.8	2.7	3.5	2.3	3.1
						1.0	24.3		8.0		30.3		98.2		6.9		2.7		3.0	
					Middle	5.2	24.3	24.3	8.0	8.0	30.4	30.4	95.2	95.3	6.7		3.1		3.1	
						5.2	24.3		8.0		30.4		95.3		6.7		3.3		2.2	
					Bottom	9.3	24.3	24.3	8.0	8.0	30.5	30.5	94.2	94.3	6.6	6.6	4.4		3.4	
						9.3	24.3		8.0		30.5		94.3		6.6		4.6		4.3	
M1	Cloudy	Calm	11:24	5.7	Surface	1.0	24.2	24.2	8.0	8.0	30.3	30.3	96.3	96.1	6.8	6.8	2.9	3.1	4.0	3.9
						1.0	24.2		8.0		30.3		95.8		6.8		2.9		5.1	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.7	24.2	24.2	8.0	8.0	30.3	30.3	96.6	95.7	6.8	6.8	3.2		2.8	
						4.7	24.2		8.0		30.3		94.8		6.7		3.2		3.7	
M2	Cloudy	Calm	11:20	5.8	Surface	1.0	24.3	24.3	8.0	8.0	30.3	30.3	96.4	96.1	6.8	6.8	2.8	3.6	3.4	3.6
						1.0	24.3		8.0		30.3		95.7		6.8		2.8		4.4	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	24.2	24.2	8.0	8.0	30.4	30.4	95.0	94.3	6.7	6.7	4.4		2.8	
						4.8	24.2		8.0		30.4		93.5		6.6		4.3		3.6	
M3	Cloudy	Moderate	11:29	7.4	Surface	1.0	24.3	24.3	8.0	8.0	30.3	30.3	98.3	98.2	6.9	6.9	3.2	3.4	4	4
						1.0	24.3		8.0		30.3		98.0		6.9		3.3		5	
					Middle	3.7	24.3	24.3	8.0	8.0	30.3	30.3	98.1	97.8	6.9		3.4		5	
						3.7	24.3		8.0		30.3		97.4		6.9		3.4		4	
					Bottom	6.4	24.3	24.3	8.0	8.0	30.3	30.4	97.5	96.7	6.9	6.9	3.5		4	
						6.4	24.3		8.0		30.4		95.9		6.8		3.7		4	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 08 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	16:16	11.0	Surface	1.0	24.7	24.8	8.1	8.1	28.7	28.7	108.6	108.7	7.7	7.4	2.5	3.3	2.2	3.4
						1.0	24.8		8.1		28.7		108.8		7.7		2.5		2.7	
					Middle	5.5	24.5	24.5	8.1	8.1	29.5	29.6	100.7	100.1	7.1		3.2		3.4	
						5.5	24.5		8.1		29.7		99.4		7.0		3.2		3.7	
					Bottom	10.0	24.3	24.3	8.0	8.0	30.3	30.3	95.5	96.3	6.7	6.8	4.0		3.9	
						10.0	24.3		8.0		30.3		97.1		6.8		4.1		4.3	
C2	Cloudy	Moderate	16:42	10.4	Surface	1.0	24.6	24.7	8.1	8.1	29.2	29.1	107.4	107.7	7.6	7.5	2.4	2.8	2.3	2.7
						1.0	24.7		8.1		29.0		107.9		7.6		2.4		2.4	
					Middle	5.2	24.6	24.6	8.1	8.1	29.5	29.6	105.7	105.4	7.4		2.6		2.1	
						5.2	24.5		8.1		29.7		105.0		7.4		2.8		2.8	
					Bottom	9.4	24.4	24.4	8.1	8.1	30.3	30.3	102.1	102.0	7.2	7.2	3.3		3.2	
						9.4	24.4		8.1		30.3		101.9		7.2		3.3		3.1	
M1	Cloudy	Calm	16:28	5.5	Surface	1.0	24.6	24.6	8.1	8.1	29.9	30.0	104.3	104.3	7.3	7.3	3.0	3.3	4.1	3.7
						1.0	24.6		8.1		30.0		104.2		7.3		3.0		3.2	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.5	24.6	24.6	8.1	8.1	30.1	30.1	104.2	104.0	7.3	7.3	3.5		3.7	
						4.5	24.6		8.1		30.1		103.8		7.3		3.6		3.6	
M2	Cloudy	Calm	16:33	5.6	Surface	1.0	24.7	24.7	8.1	8.1	28.9	28.9	107.5	107.6	7.6	7.6	2.6	3.2	3.0	2.8
						1.0	24.7		8.1		28.9		107.7		7.6		2.6		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	24.5	24.5	8.1	8.1	30.0	30.0	101.4	101.4	7.1	7.1	3.9		3.4	
						4.6	24.5		8.0		30.0		101.4		7.1		3.8		2.7	
M3	Cloudy	Moderate	16:23	7.1	Surface	1.0	24.7	24.7	8.1	8.1	28.9	28.9	109.0	109.1	7.7	7.6	2.5	2.7	2	3
						1.0	24.7		8.1		28.9		109.2		7.7		2.5		3	
					Middle	3.6	24.6	24.6	8.1	8.1	29.3	29.3	106.2	106.5	7.5		2.6		3	
						3.6	24.6		8.1		29.3		106.7		7.5		2.5		3	
					Bottom	6.1	24.4	24.4	8.0	8.1	30.1	30.2	101.2	100.5	7.1	7.1	3.0		4	
						6.1	24.4		8.1		30.2		99.8		7.0		2.8		4	

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Water Quality Monitoring
Water Quality Monitoring Results on 10 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	12:02	10.9	Surface	1.0	23.9	23.9	8.0	8.0	31.4	31.4	92.0	92.0	6.5	6.5	3.8	4.0	5.2	4.7
						1.0	23.9		8.0		31.4		92.0		6.5		3.7		5.0	
					Middle	5.5	23.9	23.9	8.0	8.0	31.4	31.4	91.6	91.6	6.5		3.7		4.5	
						5.5	23.9		8.0		31.4		91.5		6.5		3.7		4.3	
					Bottom	9.9	23.8	23.8	8.1	8.1	31.4	31.4	91.0	90.9	6.4	6.4	4.7		4.2	
						9.9	23.8		8.0		31.4		90.7		6.4		4.6		4.7	
C2	Fine	Moderate	12:29	10.3	Surface	1.0	23.9	23.9	8.0	8.0	31.4	31.5	92.6	92.5	6.5	6.5	3.4	5.2	3.6	4.2
						1.0	23.9		8.0		31.5		92.3		6.5		3.5		4.1	
					Middle	5.2	23.8	23.8	8.0	8.0	31.5	31.5	90.6	90.5	6.4		5.4		4.3	
						5.2	23.8		8.0		31.5		90.3		6.4		5.6		3.5	
					Bottom	9.3	23.8	23.8	8.0	8.0	31.6	31.6	89.9	90.0	6.3	6.4	6.5		5.2	
						9.3	23.8		8.0		31.6		90.1		6.4		6.7		4.5	
M1	Fine	Calm	12:15	5.7	Surface	1.0	23.8	23.8	8.0	8.0	31.2	31.3	89.5	89.2	6.3	6.3	3.3	3.5	4.9	4.7
						1.0	23.7		8.0		31.3		88.9		6.3		3.2		4.1	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.7	23.6	23.6	8.0	8.0	31.3	31.3	89.3	89.0	6.3	6.3	3.9		5.2	
						4.7	23.6		8.0		31.3		88.6		6.3		3.7		4.5	
M2	Fine	Calm	12:20	5.8	Surface	1.0	23.7	23.8	8.0	8.0	31.3	31.3	89.9	90.0	6.4	6.4	3.1	3.3	3.1	3.1
						1.0	23.8		8.0		31.3		90.0		6.4		3.2		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	23.6	23.6	8.0	8.0	31.3	31.3	89.8	89.2	6.4	6.4	3.3		3.3	
						4.8	23.6		8.0		31.3		88.5		6.3		3.4		2.9	
M3	Fine	Moderate	12:09	7.5	Surface	1.0	23.9	23.9	8.0	8.0	31.4	31.4	91.0	91.0	6.4	6.4	4.4	4.9	8	7
						1.0	23.9		8.0		31.4		91.0		6.4		4.5		7	
					Middle	3.8	23.8	23.8	8.0	8.0	31.4	31.4	90.9	90.8	6.4		4.7		7	
						3.8	23.8		8.0		31.4		90.7		6.4		4.7		8	
					Bottom	6.5	23.8	23.8	8.0	8.0	31.4	31.4	90.7	90.7	6.4	6.4	5.6		7	
						6.5	23.8		8.0		31.4		90.6		6.4		5.7		7	

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Water Quality Monitoring Results on 10 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	06:42	11.1	Surface	1.0	23.7	23.7	8.0	8.0	31.3	31.3	91.4	91.3	6.5	6.5	5.0	5.2	7.2	6.8
						1.0	23.7		8.0		31.3		91.1		6.5		4.8		8.3	
					Middle	5.6	23.7	23.7	8.0	8.0	31.3	31.3	91.3	91.2	6.5		4.8		6.9	
						5.6	23.7		8.0		31.3		91.0		6.4		4.9		6.6	
					Bottom	10.1	23.7	23.7	8.0	8.0	31.3	31.3	91.0	90.9	6.4	6.4	5.9		6.2	
						10.1	23.7		8.0		31.3		90.7		6.4		6.0		5.3	
C2	Cloudy	Moderate	06:15	10.5	Surface	1.0	23.7	23.7	8.0	8.0	31.3	31.3	89.9	89.6	6.4	6.4	3.8	4.6	6.3	5.4
						1.0	23.7		8.0		31.3		89.3		6.3		3.9		6.9	
					Middle	5.3	23.7	23.7	8.0	8.0	31.3	31.3	90.3	90.1	6.4		4.1		6.0	
						5.3	23.7		8.0		31.3		89.9		6.4		4.2		5.5	
					Bottom	9.5	23.7	23.7	8.0	8.0	31.5	31.5	89.6	89.6	6.3	6.3	5.7		4.0	
						9.5	23.7		8.0		31.5		89.5		6.3		5.6		3.6	
M1	Cloudy	Calm	06:31	5.8	Surface	1.0	23.5	23.6	8.0	8.0	31.2	31.2	87.2	87.1	6.2	6.2	3.3	3.4	4.5	4.3
						1.0	23.6		8.0		31.2		86.9		6.2		3.3		4.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	23.5	23.6	7.9	8.0	31.2	31.2	88.7	87.8	6.3	6.3	3.4		4.7	
						4.8	23.6		8.0		31.2		86.9		6.2		3.4		3.9	
M2	Cloudy	Calm	06:26	5.9	Surface	1.0	23.6	23.6	8.0	8.0	31.2	31.2	87.1	87.0	6.2	6.2	2.9	3.2	4.2	4.4
						1.0	23.6		8.0		31.2		86.8		6.2		2.8		3.1	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.9	23.5	23.5	8.0	8.0	31.2	31.2	87.5	87.3	6.2	6.2	3.4		5.4	
						4.9	23.5		8.0		31.2		87.0		6.2		3.5		4.7	
M3	Cloudy	Moderate	06:36	7.6	Surface	1.0	23.6	23.6	8.0	8.0	31.2	31.2	87.9	87.8	6.2	6.2	3.2	3.7	3	4
						1.0	23.6		8.0		31.2		87.6		6.2		3.2		3	
					Middle	3.8	23.5	23.6	8.0	8.0	31.2	31.2	87.3	87.4	6.2		3.7		4	
						3.8	23.6		8.0		31.2		87.4		6.2		3.5		3	
					Bottom	6.6	23.6	23.7	8.0	8.0	31.3	31.4	87.5	87.7	6.2	6.2	4.3		5	
						6.6	23.7		8.0		31.5		87.8		6.2		4.1		4	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 13 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Misty	Calm	13:14	9.0	Surface	1.0	25.0	25.0	8.1	8.1	28.4	28.4	103.9	104.0	7.3	7.3	4.0	4.8	7.2	6.0
						1.0	25.0		8.1		28.4		104.1		7.3		4.0		6.6	
					Middle	4.5	24.9	25.0	8.1	8.1	28.6	28.6	102.2	102.5	7.2		4.6		5.6	
						4.5	25.0		8.1		28.5		102.7		7.2		4.6		6.5	
					Bottom	8.0	24.9	25.0	8.1	8.1	28.7	28.6	101.2	101.9	7.1	7.2	5.9		5.0	
						8.0	25.0		8.1		28.5		102.5		7.2		5.9		4.8	
C2	Misty	Calm	13:39	10.0	Surface	1.0	25.1	25.1	8.2	8.2	28.5	28.6	107.2	106.9	7.5	7.3	4.0	4.7	5.5	6.1
						1.0	25.0		8.1		28.7		106.5		7.5		4.1		4.8	
					Middle	5.0	25.0	25.0	8.1	8.1	28.7	28.8	101.2	101.5	7.1		4.3		6.4	
						5.0	24.9		8.1		28.8		101.7		7.2		4.4		7.0	
					Bottom	9.0	25.1	25.0	8.1	8.1	28.7	28.8	101.8	101.8	7.1	7.2	5.6		6.7	
						9.0	24.9		8.1		28.8		101.8		7.2		5.6		6.3	
M1	Misty	Calm	13:23	5.4	Surface	1.0	25.1	25.2	8.1	8.1	29.6	29.6	101.7	102.4	7.1	7.2	2.0	2.2	4.2	4.9
						1.0	25.2		8.1		29.5		103.1		7.2		2.1		4.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.4	25.2	25.1	8.1	8.1	29.5	29.6	101.3	101.8	7.1	7.1	2.3		5.5	
						4.4	25.0		8.1		29.6		102.2		7.1		2.4		5.8	
M2	Misty	Calm	13:27	5.0	Surface	1.0	25.0	25.0	8.1	8.1	29.4	29.4	105.5	105.3	7.4	7.4	2.3	2.6	5.2	5.0
						1.0	24.9		8.1		29.4		105.1		7.4		2.3		4.8	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	25.0	24.9	8.1	8.1	29.6	29.7	100.0	99.0	7.0	7.0	3.0		4.4	
						4.0	24.7		8.1		29.7		98.0		6.9		2.9		5.6	
M3	Misty	Calm	13:19	7.4	Surface	1.0	25.0	25.1	8.1	8.1	29.0	28.9	106.0	106.6	7.4	7.3	2.8	4.7	6	5
						1.0	25.1		8.1		28.8		107.2		7.5		2.8		5	
					Middle	3.7	24.8	24.8	8.1	8.1	29.5	29.4	100.0	100.7	7.0		3.8		6	
						3.7	24.8		8.1		29.3		101.3		7.1		3.7		5	
					Bottom	6.4	24.7	24.8	8.1	8.1	29.8	29.6	94.9	95.4	6.7	6.7	7.5		4	
						6.4	24.9		8.1		29.4		95.9		6.7		7.6		4	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 13 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Misty	Calm	07:52	10.6	Surface	1.0	24.5	24.5	8.0	8.0	29.5	29.5	95.6	95.5	6.7	6.7	2.4	4.0	8.7	9.4
						1.0	24.5		8.0		29.5		95.3		6.7		2.4		7.9	
					Middle	5.3	24.5	24.5	8.0	8.0	29.6	29.6	94.8	94.8	6.7		4.0		9.1	
						5.3	24.5		8.0		29.6		94.7		6.7		4.0		9.0	
					Bottom	9.6	24.5	24.5	8.0	8.0	29.6	29.6	95.2	95.1	6.7	6.7	5.6		10.7	
						9.6	24.5		8.0		29.6		95.0		6.7		5.5		10.7	
C2	Misty	Calm	07:29	10.0	Surface	1.0	24.6	24.6	8.1	8.1	29.3	29.3	97.3	97.4	6.9	6.9	4.1	4.7	8.2	8.9
						1.0	24.6		8.1		29.3		97.4		6.9		4.1		7.4	
					Middle	5.0	24.5	24.5	8.1	8.1	29.4	29.4	96.4	96.5	6.8		4.4		7.5	
						5.0	24.5		8.1		29.4		96.5		6.8		4.5		8.0	
					Bottom	9.0	24.5	24.5	8.1	8.1	29.5	29.5	96.6	96.5	6.8	6.8	5.5		11.3	
						9.0	24.5		8.1		29.5		96.4		6.8		5.4		10.8	
M1	Misty	Calm	07:45	5.4	Surface	1.0	24.5	24.5	8.0	8.0	29.8	29.8	93.9	93.8	6.6	6.6	2.3	2.7	2.9	3.8
						1.0	24.5		8.0		29.8		93.7		6.6		2.3		3.7	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.4	24.4	24.5	8.0	8.0	29.9	29.9	93.8	93.8	6.6	6.6	3.0		3.8	
						4.4	24.5		8.0		29.9		93.7		6.6		3.1		4.9	
M2	Misty	Calm	07:40	5.0	Surface	1.0	24.6	24.6	8.0	8.0	29.3	29.3	95.5	95.7	6.7	6.8	2.9	3.2	4.4	5.0
						1.0	24.6		8.0		29.3		95.9		6.8		3.0		4.4	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	24.4	24.4	8.0	8.0	29.9	29.9	93.2	93.2	6.6	6.6	3.5		5.1	
						4.0	24.4		8.0		29.9		93.1		6.6		3.5		6.2	
M3	Misty	Calm	07:47	7.4	Surface	1.0	24.7	24.7	8.1	8.1	28.9	28.9	100.7	100.4	7.1	6.9	1.2	1.7	5	3
						1.0	24.6		8.1		28.9		100.0		7.1		1.2		4	
					Middle	3.7	24.6	24.6	8.1	8.1	28.9	29.4	99.8	96.7	6.6		1.3		3	
						3.7	24.5		8.0		29.9		93.6		6.6		1.4		4	
					Bottom	6.4	24.4	24.5	8.0	8.1	30.0	29.7	93.9	94.1	6.6	6.6	2.5		2	
						6.4	24.6		8.1		29.4		94.2		6.6		2.5		3	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 15 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Rainy	Moderate	14:17	9.0	Surface	1.0	24.8	24.9	8.0	8.1	29.1	29.1	96.5	96.2	6.8	6.7	1.1	2.2	6.5	8.0
						1.0	24.9		8.1		29.1		95.8		6.7		1.0		7.2	
					Middle	4.5	24.9	24.9	8.0	8.1	29.2	29.2	95.3	95.7	6.7		2.1		8.9	
						4.5	24.9		8.1		29.2		96.1		6.7		2.1		8.6	
					Bottom	8.0	24.8	24.9	8.0	8.1	29.2	29.2	95.5	96.3	6.7	6.8	3.4		8.9	
						8.0	24.9		8.1		29.1		97.1		6.8		3.5		8.0	
C2	Rainy	Moderate	14:39	10.0	Surface	1.0	24.9	24.9	8.1	8.1	29.1	29.1	97.4	97.3	6.8	6.8	2.6	3.5	4.9	5.7
						1.0	24.9		8.1		29.1		97.1		6.8		2.5		4.7	
					Middle	5.0	24.9	24.9	8.0	8.1	29.1	29.1	96.4	96.5	6.8		3.6		5.9	
						5.0	24.9		8.1		29.1		96.6		6.8		3.6		5.6	
					Bottom	9.0	24.9	24.9	8.0	8.1	29.1	29.1	96.5	97.3	6.8	6.9	4.5		6.5	
						9.0	24.9		8.1		29.1		98.0		6.9		4.4		6.7	
M1	Rainy	Moderate	14:29	5.4	Surface	1.0	24.8	24.9	8.1	8.1	29.4	29.4	96.5	96.1	6.8	6.8	2.9	3.3	4.9	4.9
						1.0	24.9		8.1		29.3		95.7		6.7		2.9		5.1	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.4	24.8	24.8	8.1	8.1	29.4	29.4	97.5	97.0	6.8	6.8	3.7		4.4	
						4.4	24.8		8.1		29.3		96.4		6.8		3.7		5.1	
M2	Rainy	Moderate	14:32	5.0	Surface	1.0	24.8	24.9	8.1	8.1	29.4	29.4	95.1	94.8	6.7	6.7	2.3	3.0	4.5	5.0
						1.0	24.9		8.0		29.4		94.4		6.6		2.2		5.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	24.8	24.9	8.1	8.1	29.4	29.4	96.1	95.5	6.7	6.7	3.7		4.9	
						4.0	24.9		8.0		29.4		94.8		6.7		3.7		5.4	
M3	Rainy	Moderate	14:24	7.4	Surface	1.0	24.9	24.9	8.0	8.1	29.4	29.4	95.8	95.7	6.7	6.7	3.9	4.1	6	7
						1.0	24.9		8.1		29.4		95.5		6.7		3.9		6	
					Middle	3.7	24.8	24.9	8.0	8.1	29.4	29.4	95.8	95.7	6.7		4.0		6	
						3.7	24.9		8.1		29.4		95.5		6.7		4.1		7	
					Bottom	6.4	24.8	24.9	8.1	8.1	29.4	29.4	96.6	96.3	6.8	6.8	4.4		7	
						6.4	24.9		8.0		29.4		95.9		6.7		4.3		8	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 15 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Rainy	Calm	08:35	9.0	Surface	1.0	24.9	24.9	8.0	8.1	29.3	29.3	95.2	95.3	6.7	6.7	2.5	4.0	6.5	7.3
						1.0	24.9		8.1		29.3		95.3		6.7		2.4		7.0	
					Middle	4.5	24.8	24.8	8.0	8.1	29.6	29.6	93.9	94.1	6.6		3.6		6.2	
						4.5	24.8		8.1		29.5		94.2		6.6		3.6		7.2	
					Bottom	8.0	24.8	24.9	8.0	8.1	29.6	29.5	93.7	94.6	6.6	6.7	5.8		8.0	
						8.0	24.9		8.1		29.4		95.5		6.7		5.9		9.1	
C2	Rainy	Calm	08:07	10.0	Surface	1.0	24.9	25.0	8.1	8.1	29.1	29.1	96.7	96.7	6.8	6.8	3.5	4.6	7.3	5.0
						1.0	25.0		8.1		29.1		96.6		6.8		3.4		7.1	
					Middle	5.0	25.0	25.0	8.1	8.1	29.2	29.2	96.8	96.8	6.8		4.7		4.3	
						5.0	25.0		8.1		29.2		96.7		6.8		4.6		3.8	
					Bottom	9.0	24.9	25.0	8.1	8.1	29.2	29.2	96.9	96.8	6.8	6.8	5.8		4.0	
						9.0	25.0		8.1		29.2		96.6		6.8		5.8		3.6	
M1	Rainy	Calm	08:24	5.4	Surface	1.0	24.9	25.0	8.1	8.1	29.2	29.2	94.2	94.2	6.6	6.6	1.3	1.9	7.1	7.0
						1.0	25.0		8.1		29.2		94.2		6.6		1.4		7.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.4	24.9	25.0	8.1	8.1	29.2	29.2	94.3	94.3	6.6	6.6	2.5		6.3	
						4.4	25.0		8.1		29.2		94.2		6.6		2.4		7.4	
M2	Rainy	Calm	08:19	5.0	Surface	1.0	25.0	25.0	8.0	8.1	29.1	29.1	93.6	93.7	6.6	6.6	2.5	3.0	3.4	5.1
						1.0	25.0		8.1		29.1		93.7		6.6		2.5		4.3	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	24.9	25.0	8.1	8.1	29.1	29.1	93.8	93.7	6.6	6.6	3.5		6.0	
						4.0	25.0		8.0		29.1		93.6		6.6		3.3		6.6	
M3	Rainy	Calm	08:30	7.4	Surface	1.0	25.0	25.0	8.1	8.1	28.7	28.8	97.8	97.1	6.9	6.8	1.0	2.1	4	6
						1.0	25.0		8.1		28.8		96.3		6.8		1.1		4	
					Middle	3.7	25.0	25.0	8.0	8.1	28.9	29.0	94.6	95.3	6.6		1.8		7	
						3.7	25.0		8.1		29.0		95.9		6.7		1.8		7	
					Bottom	6.4	24.9	25.0	8.1	8.1	29.0	28.9	93.7	95.6	6.6	6.7	3.4		6	
						6.4	25.0		8.1		28.8		97.5		6.8		3.4		6	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 17 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Rainy	Calm	15:27	10.6	Surface	1.0	24.8	24.8	8.1	8.1	28.7	28.7	98.0	98.1	6.9	6.8	3.2	5.3	4.2	2.7
						1.0	24.8		8.1		28.7		98.1		6.9		3.3		3.0	
					Middle	5.3	24.7	24.7	8.1	8.1	29.1	29.1	95.6	95.6	6.7		4.6		2.6	
						5.3	24.7		8.1		29.1		95.6		6.7		4.5		2.1	
					Bottom	9.6	24.7	24.7	8.1	8.1	29.5	29.5	94.9	94.9	6.7	6.7	8.2		2.0	
						9.6	24.7		8.1		29.5		94.9		6.7		8.2		2.4	
C2	Rainy	Calm	15:49	10.4	Surface	1.0	24.8	24.8	8.1	8.1	28.7	28.7	98.7	98.8	7.0	6.9	3.1	5.0	4.2	3.4
						1.0	24.8		8.1		28.7		98.8		7.0		3.1		5.0	
					Middle	5.2	24.8	24.8	8.1	8.1	28.8	28.8	96.3	96.5	6.8		3.5		3.2	
						5.2	24.8		8.1		28.8		96.6		6.8		3.4		2.8	
					Bottom	9.4	24.7	24.7	8.1	8.1	29.4	29.4	94.3	94.3	6.6	6.6	8.6		2.5	
						9.4	24.7		8.1		29.4		94.2		6.6		8.4		2.7	
M1	Rainy	Calm	15:38	5.8	Surface	1.0	24.7	24.7	8.1	8.1	28.9	28.9	96.6	96.6	6.8	6.8	2.9	3.4	5.2	4.3
						1.0	24.7		8.1		28.9		96.6		6.8		2.9		4.8	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	24.7	24.7	8.1	8.1	29.3	29.3	91.5	91.5	6.4	6.4	3.8		3.2	
						4.8	24.7		8.1		29.3		91.4		6.4		3.8		3.8	
M2	Rainy	Calm	15:41	5.6	Surface	1.0	24.8	24.8	8.1	8.1	28.7	28.7	93.5	93.6	6.6	6.6	3.2	3.4	2.4	2.9
						1.0	24.8		8.1		28.7		93.6		6.6		3.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	24.7	24.7	8.1	8.1	29.1	29.1	92.2	92.2	6.5	6.5	3.5		3.1	
						4.6	24.7		8.1		29.1		92.2		6.5		3.5		3.6	
M3	Rainy	Calm	15:32	6.8	Surface	1.0	24.8	24.8	8.1	8.1	28.8	28.8	94.3	94.3	6.6	6.6	3.5	3.6	2	3
						1.0	24.8		8.1		28.8		94.3		6.6		3.5		2	
					Middle	3.4	24.8	24.8	8.1	8.1	28.9	28.9	93.6	93.6	6.6		3.4		4	
						3.4	24.8		8.1		28.9		93.5		6.6		3.4		4	
					Bottom	5.8	24.6	24.6	8.1	8.1	29.3	29.3	90.7	90.7	6.4	6.4	3.9		4	
						5.8	24.6		8.1		29.2		90.6		6.4		3.8		4	

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

Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 17 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Cloudy	Calm	09:21	10.9	Surface	1.0	24.8	24.8	8.1	8.1	28.7	28.8	96.8	96.8	6.8	6.7	3.5	6.2	1.6	2.1
						1.0	24.8		8.1		28.8		96.8		6.8		3.6		2.0	
					Middle	5.5	24.7	24.7	8.1	8.1	29.2	29.2	93.7	93.8	6.6		6.8		2.5	
						5.5	24.7		8.1		29.2		93.8		6.6		6.7		1.9	
					Bottom	9.9	24.7	24.7	8.1	8.1	29.2	29.2	93.8	93.8	6.6	6.6	8.4		2.6	
						9.9	24.7		8.1		29.2		93.8		6.6		7.9		2.0	
C2	Cloudy	Calm	08:58	10.7	Surface	1.0	24.7	24.8	8.1	8.1	28.6	28.6	97.0	97.2	6.8	6.8	4.1	5.4	1.5	1.7
						1.0	24.8		8.1		28.6		97.3		6.9		4.0		2.2	
					Middle	5.4	24.6	24.6	8.1	8.1	29.2	29.2	94.8	94.9	6.7		5.9		2.0	
						5.4	24.6		8.1		29.2		94.9		6.7		5.9		1.8	
					Bottom	9.7	24.6	24.6	8.1	8.1	29.2	29.2	94.6	94.6	6.7	6.7	6.0		1.2	
						9.7	24.6		8.1		29.2		94.6		6.7		6.3		1.4	
M1	Cloudy	Calm	09:12	5.9	Surface	1.0	24.7	24.7	8.1	8.1	28.6	28.6	94.9	95.0	6.7	6.7	3.1	3.3	1.9	2.1
						1.0	24.7		8.1		28.6		95.0		6.7		3.0		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.9	24.6	24.6	8.1	8.1	29.1	29.1	92.2	92.2	6.5	6.5	3.5		2.3	
						4.9	24.6		8.1		29.1		92.2		6.5		3.6		2.5	
M2	Cloudy	Calm	09:08	5.6	Surface	1.0	24.9	24.9	8.1	8.1	28.3	28.3	98.1	98.2	6.9	6.9	2.6	3.2	3.4	2.9
						1.0	24.9		8.1		28.3		98.2		6.9		2.6		3.4	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	24.7	24.7	8.1	8.1	28.8	28.8	92.2	92.2	6.5	6.5	3.9		2.4	
						4.6	24.7		8.1		28.8		92.2		6.5		3.8		2.4	
M3	Cloudy	Calm	09:16	7.2	Surface	1.0	24.9	24.9	8.1	8.1	27.8	27.8	101.7	101.7	7.2	7.2	2.5	3.1	1	2
						1.0	24.9		8.1		27.8		101.7		7.2		2.5		2	
					Middle	3.6	24.9	24.9	8.1	8.1	28.0	28.0	100.1	100.2	7.1		2.5		2	
						3.6	24.9		8.1		28.0		100.2		7.1		2.5		2	
					Bottom	6.2	24.7	24.7	8.1	8.1	29.0	29.0	91.4	91.4	6.4	6.4	4.2		3	
						6.2	24.7		8.1		29.0		91.3		6.4		4.1		2	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 20 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	18:05	8.9	Surface	1.0	23.9	23.9	8.0	8.0	30.5	30.5	86.6	86.8	6.1	6.1	1.7	2.0	4.1	4.5
						1.0	23.9		8.0		30.4		86.9		6.2		1.5		4.5	
					Middle	4.5	23.9	23.9	8.0	8.0	30.6	30.6	86.0	85.6	6.1		2.0		4.1	
						4.5	23.9		8.0		30.6		85.1		6.0		2.0		4.6	
					Bottom	7.9	23.9	23.9	8.0	8.0	30.7	30.7	87.4	86.4	6.2	6.1	2.5		5.0	
						7.9	23.9		8.0		30.7		85.4		6.0		2.3		4.4	
C2	Fine	Moderate	18:24	9.9	Surface	1.0	23.9	23.9	8.0	8.0	30.7	30.7	88.0	87.8	6.2	6.2	2.4	2.5	5.0	4.7
						1.0	23.9		8.0		30.7		87.6		6.2		2.3		5.6	
					Middle	5.0	23.8	23.8	8.0	8.0	30.8	30.8	88.0	87.6	6.2		2.9		4.2	
						5.0	23.8		8.0		30.8		87.1		6.2		3.0		4.8	
					Bottom	8.9	23.8	23.8	8.0	8.0	30.9	30.9	89.0	88.3	6.3	6.3	2.3		4.5	
						8.9	23.8		8.0		30.8		87.5		6.2		2.3		3.9	
M1	Fine	Moderate	18:14	5.2	Surface	1.0	23.4	23.4	8.0	8.0	29.9	29.9	89.1	88.8	6.4	6.4	1.7	1.7	4.2	3.6
						1.0	23.4		8.0		29.9		88.5		6.3		1.8		3.4	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.2	23.4	23.4	8.0	8.0	29.9	29.9	89.9	89.3	6.4	6.4	1.6		3.5	
						4.2	23.4		8.0		29.9		88.6		6.4		1.8		3.2	
M2	Fine	Moderate	18:17	4.8	Surface	1.0	23.7	23.7	8.1	8.1	29.9	29.9	89.8	89.3	6.4	6.4	3.1	3.6	3.6	3.8
						1.0	23.7		8.1		29.9		88.7		6.3		3.2		3.4	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	3.8	23.6	23.6	8.1	8.1	30.0	30.0	90.3	89.6	6.5	6.5	4.0		3.6	
						3.8	23.6		8.1		29.9		88.9		6.4		3.9		4.5	
M3	Fine	Moderate	18:10	7.5	Surface	1.0	23.8	23.8	8.0	8.0	30.2	30.1	87.3	87.9	6.2	6.2	2.1	2.5	4	4
						1.0	23.7		8.0		29.9		88.4		6.3		2.2		4	
					Middle	3.8	23.9	23.9	8.0	8.0	30.4	30.4	87.1	87.0	6.2		2.7		4	
						3.8	23.9		8.0		30.3		86.9		6.2		2.9		3	
					Bottom	6.5	23.8	23.8	8.0	8.0	30.5	30.4	89.1	88.6	6.3	6.3	2.4		5	
						6.5	23.8		8.0		30.2		88.1		6.3		2.6		4	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 20 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Calm	05:52	9.4	Surface	1.0	23.8	23.8	8.0	8.0	30.2	30.1	87.5	87.9	6.2	6.2	1.2	1.8	3.9	4.6
						1.0	23.7		8.0		30.0		88.2		6.3		1.2		4.1	
					Middle	4.7	23.9	23.9	8.0	8.0	30.5	30.5	87.3	87.0	6.2		2.3		4.5	
						4.7	23.9		8.0		30.5		86.6		6.1		2.2		5.4	
					Bottom	8.4	23.8	23.9	8.0	8.0	30.6	30.6	89.8	88.4	6.4	6.3	1.9		4.4	
						8.4	23.9		8.0		30.6		86.9		6.2		1.7		5.5	
C2	Fine	Calm	05:32	10.1	Surface	1.0	23.8	23.8	8.0	8.0	30.2	30.3	88.5	87.7	6.3	6.2	1.5	2.1	3.6	3.9
						1.0	23.8		8.0		30.3		86.8		6.2		1.6		3.2	
					Middle	5.1	23.9	23.9	8.0	8.0	30.5	30.5	86.0	86.0	6.1		2.1		3.4	
						5.1	23.9		8.0		30.5		85.9		6.1		2.3		3.8	
					Bottom	9.1	23.9	23.9	8.0	8.0	30.6	30.7	86.6	86.1	6.1	6.1	2.3		5.2	
						9.1	23.9		8.0		30.7		85.6		6.1		2.5		4.4	
M1	Fine	Calm	05:43	5.4	Surface	1.0	23.6	23.6	8.0	8.0	29.9	29.9	89.3	88.7	6.4	6.4	1.6	1.9	3.1	3.3
						1.0	23.5		8.0		29.8		88.1		6.3		1.4		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.4	23.7	23.7	8.0	8.0	30.2	30.1	89.8	88.9	6.4	6.4	2.2		4.3	
						4.4	23.6		8.0		30.0		88.0		6.3		2.3		3.7	
M2	Fine	Calm	05:39	5.1	Surface	1.0	23.6	23.6	8.0	8.0	29.9	29.9	87.6	87.7	6.3	6.3	3.2	3.0	4.4	4.8
						1.0	23.6		8.0		29.8		87.8		6.3		3.3		4.8	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.1	23.7	23.7	8.0	8.0	30.1	30.0	88.6	88.3	6.3	6.3	2.7		5.3	
						4.1	23.6		8.0		29.9		87.9		6.3		2.8		4.7	
M3	Fine	Calm	05:47	7.2	Surface	1.0	23.6	23.6	8.0	8.0	29.9	29.9	88.8	88.7	6.3	6.3	1.0	1.7	5	4
						1.0	23.6		8.0		29.9		88.5		6.3		1.0		4	
					Middle	3.6	23.7	23.8	8.0	8.0	30.1	30.2	87.6	87.3	6.2		1.5		4	
						3.6	23.8		8.0		30.2		86.9		6.2		1.8		5	
					Bottom	6.2	23.9	23.9	8.0	8.0	30.5	30.5	87.4	87.8	6.2	6.3	2.6		4	
						6.2	23.9		8.0		30.4		88.1		6.3		2.4		3	

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

Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 22 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	09:59	10.9	Surface	1.0	25.0	25.1	8.2	8.2	25.3	25.2	102.4	102.7	7.3	7.2	1.2	2.3	2.5	2.9
						1.0	25.1		8.2		25.1		103.0		7.4		1.1		2.2	
					Middle	5.5	24.2	24.2	8.2	8.2	29.8	29.9	98.9	98.9	7.0		2.3		3.0	
						5.5	24.2		8.2		29.9		98.9		7.0		2.5		2.8	
					Bottom	9.9	24.2	24.2	8.2	8.2	30.0	30.1	97.5	97.5	6.9	6.9	3.3		3.6	
						9.9	24.2		8.2		30.1		97.5		6.9		3.3		3.2	
C2	Cloudy	Moderate	09:30	10.7	Surface	1.0	24.5	24.5	8.2	8.2	27.3	27.4	101.7	101.8	7.3	7.0	1.9	2.8	3.6	3.0
						1.0	24.5		8.2		27.4		101.8		7.3		1.7		2.7	
					Middle	5.4	24.1	24.1	8.2	8.2	30.2	30.2	93.7	93.7	6.6		3.7		3.4	
						5.4	24.1		8.2		30.2		93.7		6.6		3.3		2.6	
					Bottom	9.7	24.1	24.1	8.2	8.2	30.2	30.2	93.9	93.9	6.6	6.6	3.3		3.0	
						9.7	24.1		8.2		30.2		93.9		6.6		3.1		2.4	
M1	Cloudy	Calm	09:46	5.8	Surface	1.0	24.2	24.2	8.2	8.2	28.6	28.7	97.9	97.9	7.0	7.0	0.9	1.3	1.9	2.7
						1.0	24.2		8.2		28.7		97.9		7.0		1.0		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	24.1	24.1	8.2	8.2	30.1	30.0	95.7	96.1	6.8	6.8	1.8		3.3	
						4.8	24.1		8.2		29.9		96.4		6.8		1.5		3.0	
M2	Cloudy	Calm	09:42	5.5	Surface	1.0	24.1	24.1	8.2	8.2	29.1	29.2	97.7	97.7	6.9	6.9	1.0	2.4	2.1	2.7
						1.0	24.1		8.2		29.3		97.6		6.9		0.9		2.6	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.5	24.1	24.2	8.2	8.2	30.2	30.2	95.4	95.3	6.7	6.7	3.8		2.5	
						4.5	24.2		8.2		30.2		95.2		6.7		4.0		3.6	
M3	Cloudy	Moderate	09:51	7.2	Surface	1.0	24.4	24.4	8.2	8.2	28.3	28.4	99.7	99.8	7.1	7.0	1.0	2.1	3	3
						1.0	24.4		8.2		28.5		99.8		7.1		1.1		4	
					Middle	3.6	24.2	24.2	8.2	8.2	30.0	30.1	97.4	97.0	6.9		1.7		3	
						3.6	24.2		8.2		30.1		96.5		6.8		1.9		3	
					Bottom	6.2	24.1	24.2	8.2	8.2	30.2	30.2	95.2	95.4	6.7	6.7	3.3		3	
						6.2	24.2		8.2		30.2		95.5		6.7		3.3		3	

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

Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 22 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	14:09	10.5	Surface	1.0	25.6	25.5	8.3	8.3	25.2	25.3	118.9	118.9	8.4	7.8	0.9	1.6	4.4	4.5
						1.0	25.4		8.2		25.3		118.8		8.5		1.1		3.7	
					Middle	5.3	24.5	24.5	8.2	8.2	28.9	28.8	101.7	101.9	7.2		1.7		4.0	
						5.3	24.5		8.2		28.7		102.1		7.2		2.0		4.6	
					Bottom	9.5	24.2	24.3	8.2	8.2	30.0	29.9	97.5	98.6	6.9	7.0	2.0		4.8	
						9.5	24.3		8.2		29.8		99.6		7.0		2.0		5.2	
C2	Cloudy	Moderate	14:36	10.6	Surface	1.0	25.9	25.9	8.3	8.3	25.5	25.5	123.5	123.2	8.7	7.9	0.7	1.8	5.0	5.0
						1.0	25.9		8.3		25.5		122.9		8.7		0.7		5.5	
					Middle	5.3	24.4	24.4	8.2	8.2	29.2	29.2	99.4	99.6	7.0		1.4		5.4	
						5.3	24.4		8.2		29.1		99.7		7.1		1.5		5.4	
					Bottom	9.6	24.1	24.1	8.2	8.2	30.6	30.6	92.5	92.8	6.5	6.6	3.1		4.4	
						9.6	24.1		8.2		30.6		93.1		6.6		3.1		4.0	
M1	Cloudy	Calm	14:22	5.6	Surface	1.0	25.6	25.5	8.3	8.3	26.8	27.0	119.2	119.1	8.4	8.4	1.0	1.0	3.5	3.9
						1.0	25.4		8.3		27.2		119.0		8.4		1.1		4.6	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	24.7	24.9	8.3	8.3	29.0	28.4	113.7	113.7	8.0	8.0	1.0		4.2	
						4.6	25.1		8.3		27.8		113.7		8.0		1.0		3.4	
M2	Cloudy	Calm	14:27	5.4	Surface	1.0	25.9	25.7	8.3	8.3	26.6	26.9	121.0	120.7	8.5	8.5	1.0	1.3	4.0	4.1
						1.0	25.4		8.3		27.1		120.4		8.5		1.2		5.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.4	24.9	25.0	8.3	8.3	27.8	27.8	111.9	112.4	7.9	8.0	1.6		3.8	
						4.4	25.0		8.3		27.7		112.9		8.0		1.5		3.5	
M3	Cloudy	Moderate	14:16	6.8	Surface	1.0	25.7	25.6	8.3	8.3	26.2	26.4	119.3	119.1	8.4	8.3	0.9	2.3	4	4
						1.0	25.5		8.3		26.5		118.8		8.4		1.1		3	
					Middle	3.4	25.3	25.2	8.3	8.3	27.1	27.4	117.6	117.0	8.3		1.2		4	
						3.4	25.0		8.2		27.7		116.3		8.2		1.3		5	
					Bottom	5.8	24.9	24.8	8.3	8.3	27.8	28.4	111.8	110.1	7.9	7.8	4.7		4	
						5.8	24.6		8.2		28.9		108.4		7.7		4.5		5	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 24 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Sunny	Moderate	11:03	10.8	Surface	1.0	26.2	26.2	8.4	8.4	23.2	23.2	126.6	126.8	9.0	8.0	2.0	3.2	8.2	7.0
						1.0	26.2		8.4		23.2		126.9		9.0		2.0		7.7	
					Middle	5.4	24.8	24.8	8.2	8.2	28.7	28.7	98.8	98.7	7.0		3.7		6.5	
						5.4	24.8		8.2		28.7		98.5		6.9		3.7		7.1	
					Bottom	9.8	24.6	24.6	8.2	8.2	29.7	29.7	90.3	90.2	6.4	6.4	4.0		6.0	
						9.8	24.6		8.2		29.7		90.1		6.3		4.0		6.2	
C2	Sunny	Moderate	10:40	10.6	Surface	1.0	26.2	26.2	8.4	8.4	23.0	23.0	132.6	132.7	9.4	9.3	1.4	1.7	4.7	4.6
						1.0	26.2		8.4		23.0		132.7		9.4		1.4		5.0	
					Middle	5.3	25.9	25.9	8.4	8.4	24.0	24.0	129.0	129.2	9.2		1.7		4.7	
						5.3	25.9		8.4		24.0		129.4		9.2		1.7		4.6	
					Bottom	9.6	25.3	25.4	8.3	8.3	27.1	27.1	118.2	118.5	8.3	8.4	1.9		4.3	
						9.6	25.4		8.3		27.0		118.7		8.4		1.9		4.5	
M1	Sunny	Calm	10:52	5.9	Surface	1.0	25.7	25.7	8.4	8.4	26.3	26.3	124.5	124.7	8.8	8.8	1.3	2.6	3.4	4.6
						1.0	25.7		8.4		26.3		124.8		8.8		1.3		4.2	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.9	24.8	24.8	8.2	8.2	28.8	28.8	98.9	98.9	7.0	7.0	3.8		5.3	
						4.9	24.8		8.2		28.8		98.8		7.0		3.8		5.5	
M2	Sunny	Calm	10:48	5.5	Surface	1.0	25.7	25.7	8.4	8.4	26.3	26.3	122.9	123.0	8.6	8.7	1.2	2.6	6.2	5.6
						1.0	25.7		8.4		26.2		123.1		8.7		1.1		6.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.5	24.9	24.9	8.2	8.2	28.7	28.7	100.5	100.3	7.1	7.1	4.1		4.8	
						4.5	24.9		8.2		28.7		100.1		7.1		4.0		5.2	
M3	Sunny	Calm	10:57	7.0	Surface	1.0	26.0	26.0	8.4	8.4	24.8	24.8	138.6	138.7	9.8	9.4	1.4	2.1	6	5
						1.0	26.0		8.4		24.8		138.8		9.8		1.4		5	
					Middle	3.5	25.8	25.8	8.4	8.4	25.8	25.8	127.6	127.8	9.0		0.9		5	
						3.5	25.8		8.4		25.8		128.0		9.0		0.9		5	
					Bottom	6.0	24.8	24.8	8.2	8.2	28.6	28.6	98.4	98.5	6.9	6.9	4.1		4	
						6.0	24.8		8.2		28.6		98.5		6.9		4.1		4	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 24 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Sunny	Moderate	16:24	10.6	Surface	1.0	26.1	26.1	8.4	8.4	25.1	25.1	140.9	141.3	9.9	8.5	1.6	5.8	5.4	4.8
						1.0	26.1		8.4		25.1		141.7		10.0		1.7		5.1	
					Middle	5.3	25.2	25.2	8.2	8.2	27.1	27.1	100.6	100.7	7.1		4.0		4.6	
						5.3	25.2		8.2		27.1		100.7		7.1		4.0		4.8	
					Bottom	9.6	24.9	24.9	8.2	8.2	28.1	28.1	96.0	95.9	6.8	6.8	11.7		4.4	
						9.6	24.9		8.2		28.1		95.8		6.8		11.7		4.4	
C2	Sunny	Moderate	16:47	10.4	Surface	1.0	25.5	25.5	8.4	8.4	26.2	26.2	124.2	124.1	8.8	8.7	2.0	3.4	4.2	5.2
						1.0	25.5		8.4		26.2		123.9		8.8		2.0		4.1	
					Middle	5.2	25.4	25.4	8.3	8.3	27.5	27.5	122.3	122.5	8.6		1.6		5.5	
						5.2	25.4		8.3		27.5		122.7		8.6		1.5		5.2	
					Bottom	9.4	24.7	24.7	8.2	8.2	29.3	29.3	96.2	96.2	6.8	6.8	6.5		6.0	
						9.4	24.7		8.2		29.3		96.1		6.8		6.6		6.0	
M1	Sunny	Calm	16:36	5.8	Surface	1.0	26.4	26.4	8.5	8.5	25.7	25.7	155.0	155.2	10.8	10.8	1.7	1.9	8.2	6.8
						1.0	26.4		8.5		25.7		155.3		10.8		1.7		7.4	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	26.3	26.3	8.5	8.5	25.9	25.9	150.9	151.1	10.5	10.5	2.1		5.9	
						4.8	26.3		8.5		25.9		151.2		10.5		2.1		5.8	
M2	Sunny	Calm	16:39	5.6	Surface	1.0	26.4	26.4	8.5	8.5	25.3	25.3	156.2	156.3	10.9	10.9	1.2	1.4	7.4	6.3
						1.0	26.4		8.5		25.3		156.4		10.9		1.3		6.7	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	26.2	26.2	8.5	8.5	25.6	25.6	145.7	145.7	10.2	10.2	1.4		5.5	
						4.6	26.2		8.5		25.6		145.7		10.2		1.5		5.4	
M3	Sunny	Calm	16:30	6.8	Surface	1.0	26.3	26.3	8.5	8.5	25.4	25.4	151.0	151.2	10.6	10.4	1.5	1.7	5	6
						1.0	26.3		8.5		25.4		151.3		10.6		1.5		6	
					Middle	3.4	26.1	26.1	8.4	8.4	25.7	25.7	145.7	145.8	10.2		1.5		7	
						3.4	26.1		8.4		25.7		145.8		10.2		1.6		6	
					Bottom	5.8	25.8	25.8	8.4	8.4	26.6	26.6	128.4	128.5	9.0	9.0	2.1		7	
						5.8	25.8		8.4		26.6		128.6		9.0		2.1		7	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 27 April 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Rainy	Moderate	12:29	9.0	Surface	1.0	24.7	24.7	8.2	8.2	26.6	26.6	94.6	94.7	6.8	6.8	2.7	3.2	8.5	6.8
						1.0	24.7		8.2		26.6		94.7		6.8		2.6		9.2	
					Middle	4.5	24.7	24.7	8.2	8.2	27.3	27.1	94.0	94.1	6.7		3.2		7.0	
						4.5	24.7		8.2		26.9		94.1		6.7		3.2		6.3	
					Bottom	8.0	24.7	24.7	8.2	8.2	27.5	27.5	93.5	93.8	6.6	6.7	3.7		4.8	
						8.0	24.7		8.2		27.4		94.0		6.7		3.8		5.2	
C2	Rainy	Moderate	12:50	10.0	Surface	1.0	24.7	24.7	8.2	8.2	26.8	26.9	94.0	93.9	6.7	6.7	3.9	6.1	5.7	4.3
						1.0	24.7		8.2		27.0		93.8		6.7		3.9		5.5	
					Middle	5.0	24.7	24.7	8.2	8.2	27.4	27.4	93.9	93.8	6.7		4.8		4.6	
						5.0	24.7		8.2		27.4		93.7		6.7		4.8		4.5	
					Bottom	9.0	24.7	24.7	8.2	8.2	27.6	27.3	94.9	94.5	6.7	6.7	9.6		2.8	
						9.0	24.7		8.2		27.0		94.1		6.7		9.5		2.6	
M1	Rainy	Moderate	12:36	5.4	Surface	1.0	24.6	24.6	8.2	8.2	27.8	27.8	92.8	92.4	6.6	6.6	4.2	4.2	2.7	4.0
						1.0	24.6		8.2		27.8		92.0		6.5		4.2		3.5	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.4	24.4	24.5	8.2	8.2	28.0	27.9	95.3	93.8	6.8	6.7	4.3		5.0	
						4.4	24.6		8.2		27.8		92.2		6.6		4.2		4.8	
M2	Rainy	Moderate	12:40	5.0	Surface	1.0	24.6	24.7	8.2	8.2	27.9	27.9	92.1	91.7	6.5	6.5	2.5	2.9	4.3	3.7
						1.0	24.7		8.2		27.9		91.2		6.5		2.4		4.3	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	24.5	24.6	8.2	8.2	28.0	28.0	95.1	93.4	6.8	6.7	3.3		3.4	
						4.0	24.6		8.2		27.9		91.6		6.5		3.4		2.7	
M3	Rainy	Moderate	12:33	7.4	Surface	1.0	24.7	24.7	8.2	8.2	27.8	27.8	93.1	92.9	6.6	6.6	2.9	3.5	5	4
						1.0	24.7		8.2		27.8		92.6		6.6		2.8		5	
					Middle	3.7	24.7	24.7	8.2	8.2	27.9	28.3	92.7	91.8	6.6		3.3		4	
						3.7	24.7		8.2		28.6		90.8		6.4		3.4		4	
					Bottom	6.4	24.7	24.7	8.2	8.2	28.5	28.8	92.0	90.7	6.5	6.4	4.3		3	
						6.4	24.7		8.2		29.0		89.3		6.3		4.2		3	

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Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 27 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Misty	Calm	07:32	9.0	Surface	1.0	24.7	24.8	8.2	8.2	27.5	27.5	93.8	93.5	6.7	6.7	6.9	7.8	8.6	6.5
						1.0	24.8		8.2		27.4		93.1		6.6		6.8		8.4	
					Middle	4.5	24.7	24.7	8.2	8.2	27.5	27.5	93.7	93.6	6.7		7.4		8.4	
						4.5	24.7		8.2		27.5		93.5		6.6		7.5		7.8	
					Bottom	8.0	24.4	24.6	8.2	8.2	27.7	27.6	93.0	93.2	6.6	6.6	8.9		2.8	
						8.0	24.7		8.2		27.5		93.3		6.6		9.0		3.1	
C2	Misty	Calm	07:14	10.0	Surface	1.0	24.7	24.7	8.2	8.2	27.4	27.5	93.4	93.5	6.6	6.7	4.9	5.7	7.0	6.8
						1.0	24.7		8.2		27.5		93.6		6.7		4.9		7.4	
					Middle	5.0	24.7	24.7	8.2	8.2	27.7	27.7	93.4	93.5	6.6		5.4		7.1	
						5.0	24.7		8.2		27.7		93.6		6.7		5.4		6.6	
					Bottom	9.0	24.7	24.7	8.2	8.2	27.7	27.6	93.1	93.2	6.6	6.6	6.7		6.4	
						9.0	24.7		8.2		27.4		93.2		6.6		6.7		6.4	
M1	Misty	Calm	07:25	5.4	Surface	1.0	24.6	24.6	8.2	8.2	27.6	27.6	93.0	92.8	6.6	6.6	2.4	2.5	3.3	3.3
						1.0	24.6		8.2		27.6		92.5		6.6		2.4		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.4	24.6	24.6	8.2	8.2	27.6	27.6	94.2	93.4	6.7	6.7	2.5		3.4	
						4.4	24.6		8.2		27.6		92.6		6.6		2.6		3.4	
M2	Misty	Calm	07:20	5.0	Surface	1.0	24.6	24.6	8.2	8.2	27.5	27.5	92.4	92.1	6.6	6.6	2.1	2.2	5.4	4.7
						1.0	24.6		8.2		27.5		91.8		6.5		2.1		4.9	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	24.6	24.6	8.2	8.2	27.5	27.5	93.6	92.8	6.7	6.6	2.3		4.1	
						4.0	24.6		8.2		27.5		91.9		6.5		2.4		4.3	
M3	Misty	Calm	07:28	7.4	Surface	1.0	24.6	24.7	8.2	8.2	27.1	27.1	92.3	92.1	6.6	6.5	1.5	2.3	4	3
						1.0	24.7		8.2		27.1		91.8		6.5		1.5		4	
					Middle	3.7	24.6	24.6	8.2	8.2	27.4	27.4	91.8	91.7	6.5		2.5		3	
						3.7	24.6		8.2		27.4		91.6		6.5		2.6		3	
					Bottom	6.4	24.5	24.6	8.1	8.2	27.5	27.5	93.0	92.6	6.6	6.6	2.8		3	
						6.4	24.6		8.2		27.4		92.1		6.6		2.9		3	

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

Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 29 April 21 during Mid-Ebb Tide

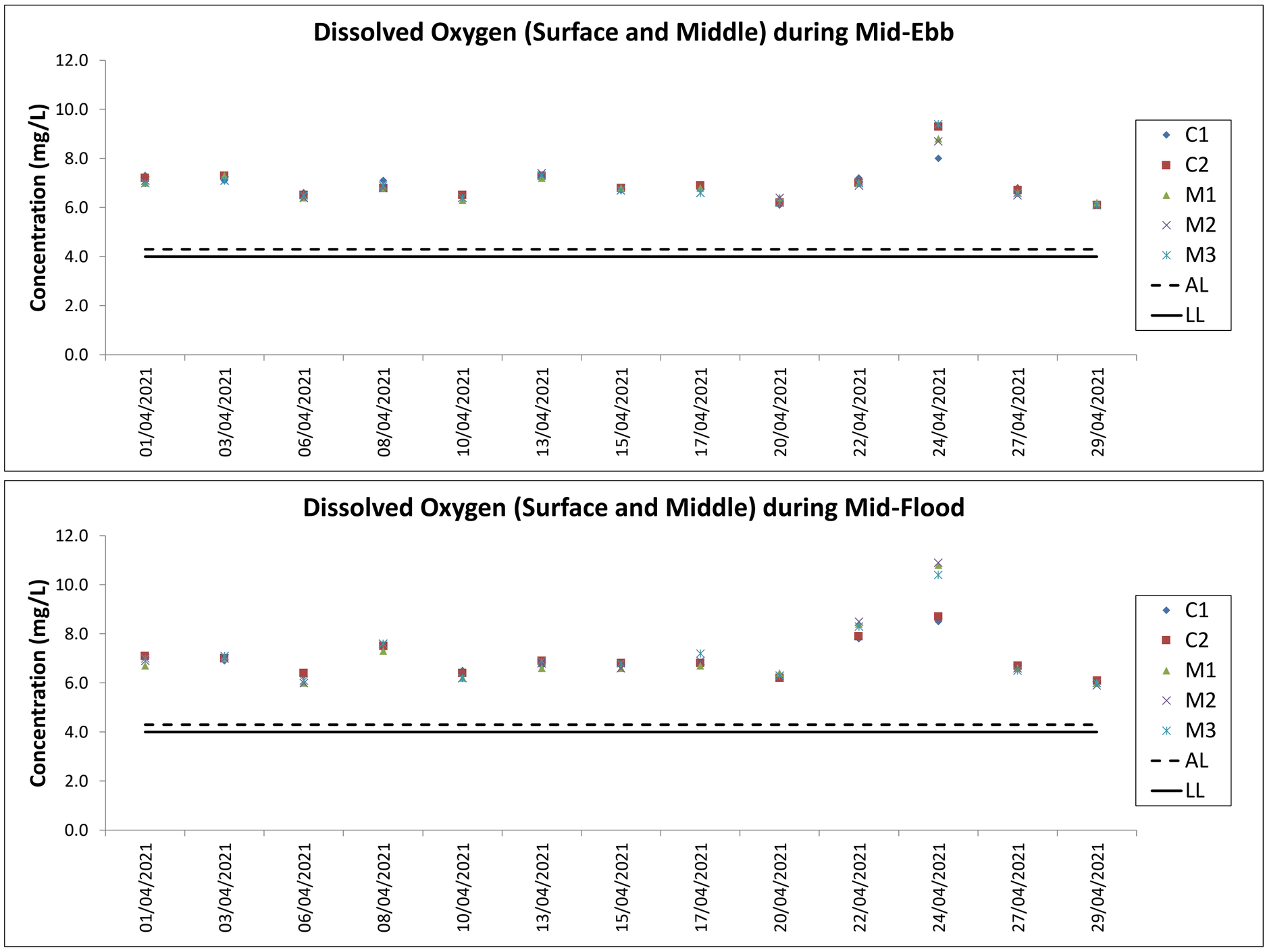
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	14:17	10.9	Surface	1.0	25.1	25.1	8.3	8.3	26.7	26.7	87.0	86.8	6.2	6.1	6.5	11.3	9.7	12.9
						1.0	25.0		8.3		26.7		86.5		6.1		6.7		10.3	
					Middle	5.5	24.8	24.8	8.3	8.3	27.1	27.1	85.9	85.8	6.1		11.9		12.8	
						5.5	24.8		8.3		27.1		85.6		6.1		11.8		11.3	
					Bottom	9.9	24.9	24.9	8.4	8.4	27.1	27.2	86.3	85.6	6.1	6.1	15.2		17.4	
						9.9	24.8		8.3		27.2		84.9		6.0		15.4		16.1	
C2	Fine	Moderate	14:24	10.6	Surface	1.0	25.1	25.1	8.2	8.2	26.8	26.8	86.8	86.7	6.1	6.1	6.9	18.8	10.0	35.5
						1.0	25.1		8.2		26.8		86.6		6.1		7.1		9.3	
					Middle	5.3	24.8	24.8	8.2	8.2	27.3	27.3	84.8	84.8	6.0		24.3		38.6	
						5.3	24.8		8.2		27.3		84.7		6.0		24.1		42.3	
					Bottom	9.6	24.8	24.8	8.2	8.2	27.7	27.7	84.3	84.3	6.0	6.0	25.2		58.4	
						9.6	24.8		8.2		27.7		84.2		6.0		25.0		54.6	
M1	Fine	Calm	14:45	5.5	Surface	1.0	25.1	25.1	8.2	8.2	27.3	27.3	87.7	87.6	6.2	6.2	3.9	3.5	6.9	5.7
						1.0	25.1		8.2		27.2		87.4		6.2		3.8		6.1	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.5	24.9	24.9	8.2	8.2	28.0	27.9	86.5	86.1	6.1	6.1	3.1		4.6	
						4.5	24.9		8.2		27.8		85.6		6.1		3.1		5.1	
M2	Fine	Calm	14:39	5.6	Surface	1.0	25.1	25.1	8.2	8.2	27.0	27.0	86.5	86.5	6.1	6.1	5.3	4.5	10.0	8.6
						1.0	25.1		8.2		27.0		86.5		6.1		5.6		9.3	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	24.8	24.8	8.2	8.2	28.0	28.0	84.8	84.6	6.0	6.0	3.5		7.2	
						4.6	24.8		8.2		28.0		84.3		6.0		3.4		8.0	
M3	Fine	Moderate	14:34	7.7	Surface	1.0	25.2	25.2	8.2	8.2	27.0	27.0	87.2	86.8	6.2	6.1	4.8	5.7	9	10
						1.0	25.1		8.2		27.0		86.4		6.1		5.3		9	
					Middle	3.9	24.9	24.9	8.2	8.2	27.6	27.6	84.8	84.6	6.0		6.0		10	
						3.9	24.9		8.2		27.6		84.4		6.0		5.7		9	
					Bottom	6.7	24.6	24.7	8.3	8.3	29.8	29.5	83.1	82.9	5.8	5.8	6.2		11	
						6.7	24.7		8.2		29.2		82.7		5.8		6.3		12	

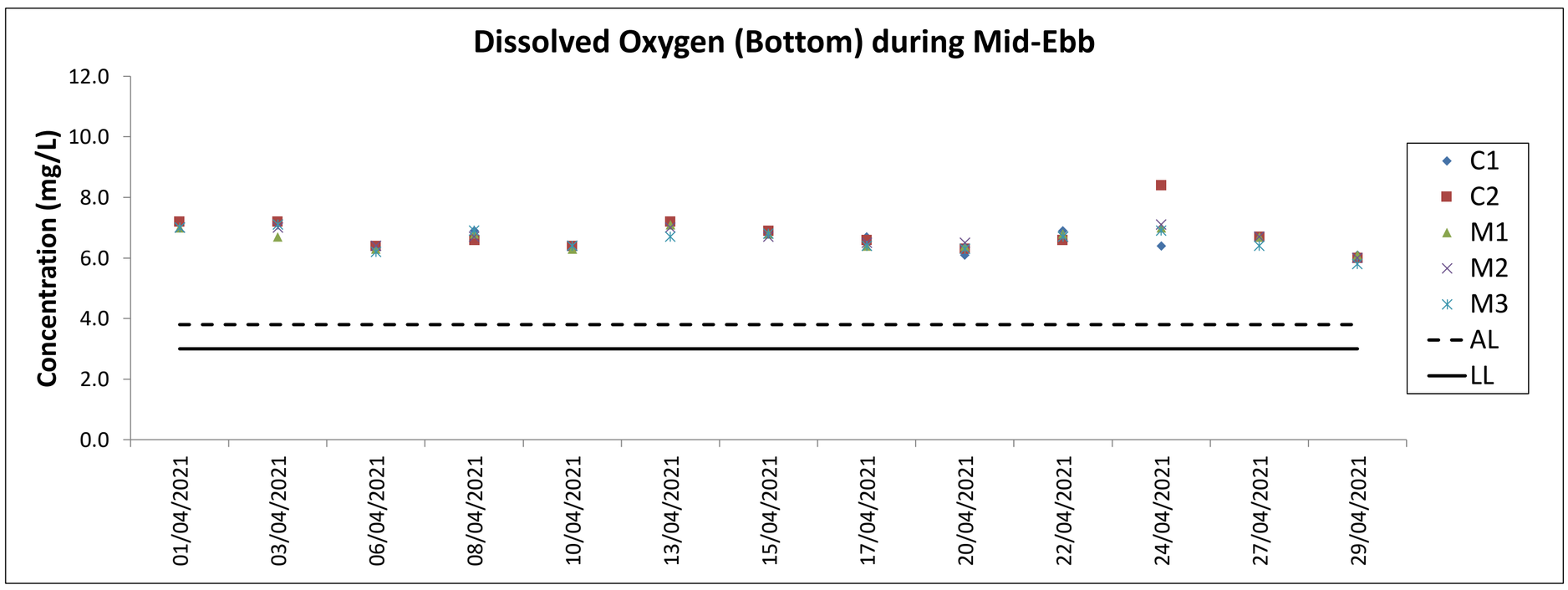
DA: Depth-averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

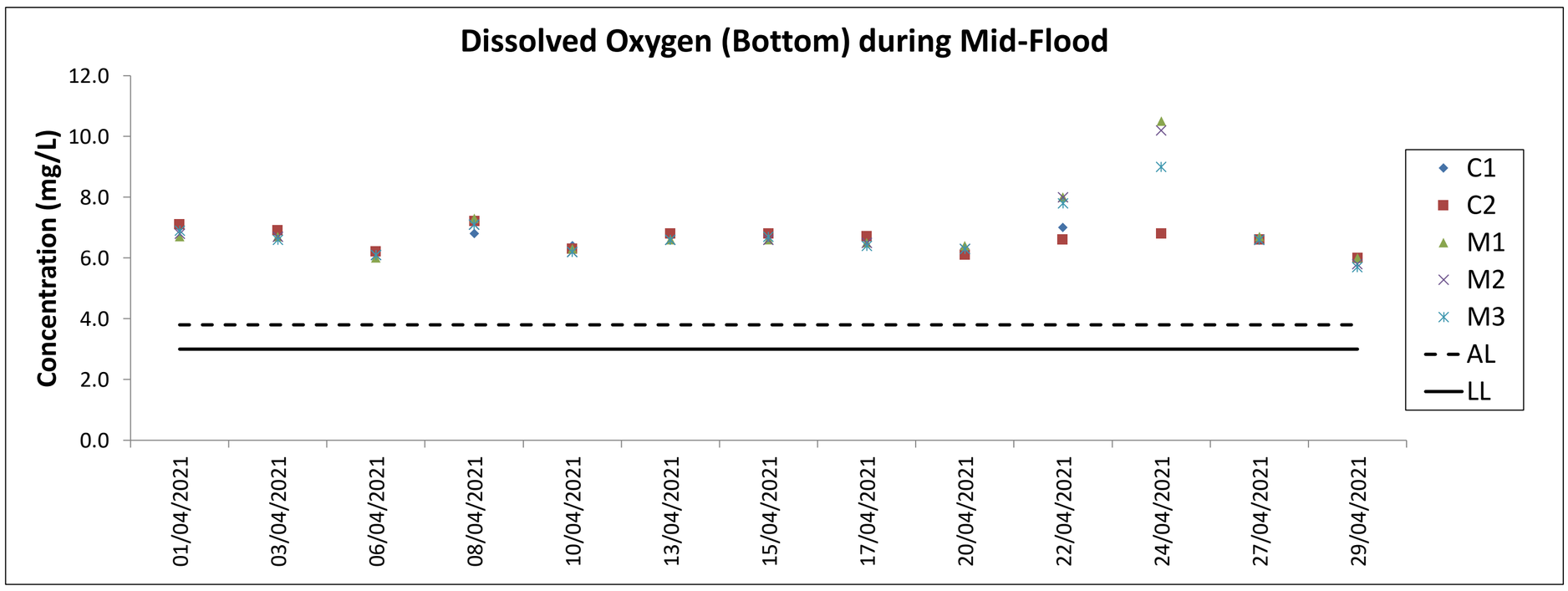
Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Road
Water Quality Monitoring
Water Quality Monitoring Results on 29 April 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Rainy	Moderate	08:07	10.7	Surface	1.0	24.7	24.8	8.2	8.2	27.2	27.0	85.4	85.3	6.1	6.1	6.5	9.2	6.2	6.7
						1.0	24.8		8.2		26.7		85.1		6.1		6.4		6.4	
					Middle	5.4	24.7	24.8	8.2	8.2	27.2	27.2	85.1	85.1	6.1		8.4		6.8	
						5.4	24.8		8.2		27.2		85.0		6.1		8.4		6.2	
					Bottom	9.7	24.7	24.7	8.2	8.2	27.9	27.8	84.4	84.5	6.0	6.0	12.7		7.3	
						9.7	24.7		8.2		27.6		84.6		6.0		12.5		7.0	
C2	Rainy	Moderate	07:38	10.4	Surface	1.0	24.7	24.7	8.2	8.2	26.9	26.9	85.7	85.7	6.1	6.1	7.4	8.8	7.5	8.7
						1.0	24.7		8.2		26.9		85.6		6.1		7.1		8.0	
					Middle	5.2	24.7	24.7	8.2	8.2	27.3	27.4	85.2	85.1	6.1		8.9		7.6	
						5.2	24.7		8.2		27.4		85.0		6.0		8.8		8.5	
					Bottom	9.4	24.7	24.7	8.2	8.2	27.7	27.7	84.8	84.8	6.0	6.0	10.1		10.0	
						9.4	24.7		8.2		27.6		84.8		6.0		10.4		10.5	
M1	Rainy	Calm	07:55	5.7	Surface	1.0	24.7	24.7	8.2	8.2	27.4	27.4	83.7	83.7	6.0	6.0	3.8	4.3	7.0	6.1
						1.0	24.7		8.2		27.4		83.6		5.9		3.8		6.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.7	24.6	24.6	8.2	8.2	27.6	27.6	83.7	83.6	6.0	6.0	4.9		5.8	
						4.7	24.6		8.2		27.6		83.5		5.9		4.7		5.6	
M2	Rainy	Calm	07:50	5.8	Surface	1.0	24.8	24.8	8.2	8.2	26.7	26.7	83.2	83.1	5.9	5.9	3.3	4.5	5.3	5.0
						1.0	24.8		8.2		26.6		83.0		5.9		3.2		4.8	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	24.7	24.7	8.2	8.2	27.6	27.6	82.2	82.2	5.8	5.8	5.9		5.2	
						4.8	24.7		8.2		27.6		82.1		5.8		5.7		4.8	
M3	Rainy	Moderate	08:00	7.3	Surface	1.0	24.8	24.8	8.2	8.2	26.3	26.3	84.7	84.4	6.1	6.0	4.2	4.4	6	5
						1.0	24.8		8.2		26.3		84.0		6.0		3.9		7	
					Middle	3.7	24.7	24.7	8.2	8.2	26.4	26.6	83.8	83.1	6.0		3.6		5	
						3.7	24.7		8.2		26.8		82.4		5.9		3.3		5	
					Bottom	6.3	24.7	24.7	8.2	8.2	27.7	27.7	80.0	80.4	5.7	5.7	5.7		4	
						6.3	24.7		8.2		27.7		80.7		5.7		5.5		4	

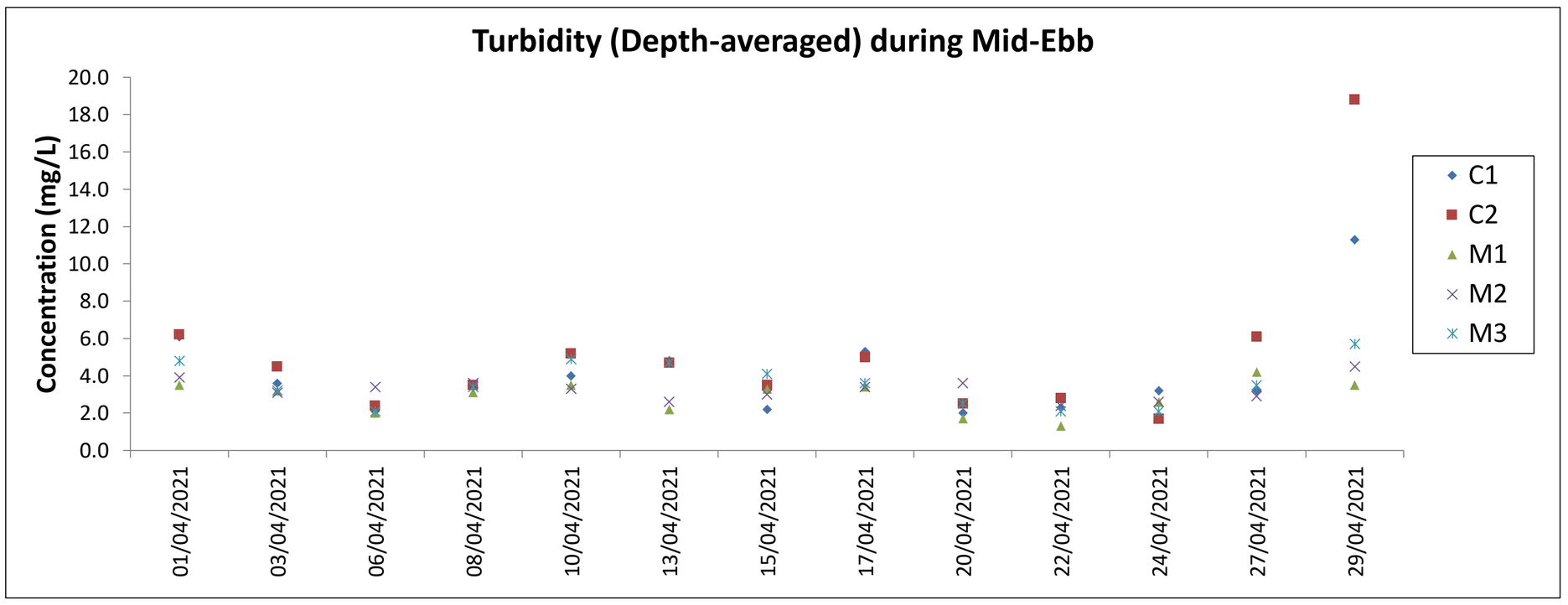
DA: Depth-averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

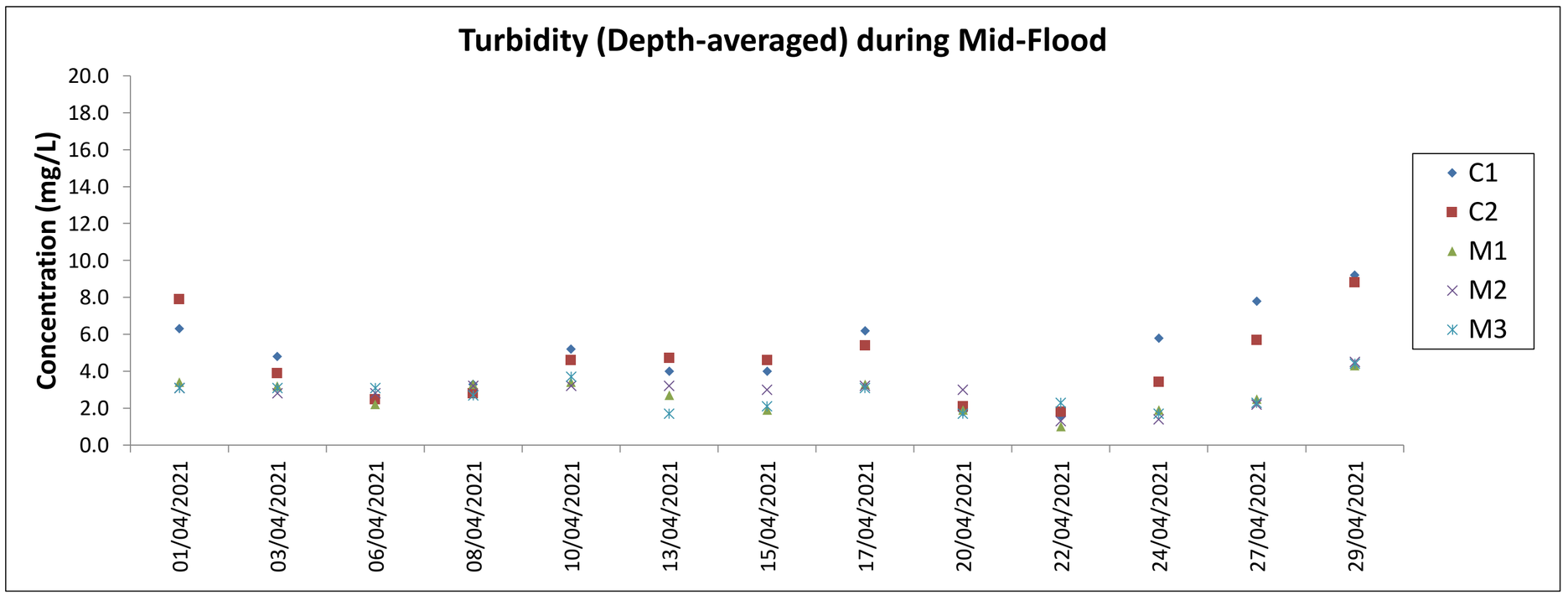




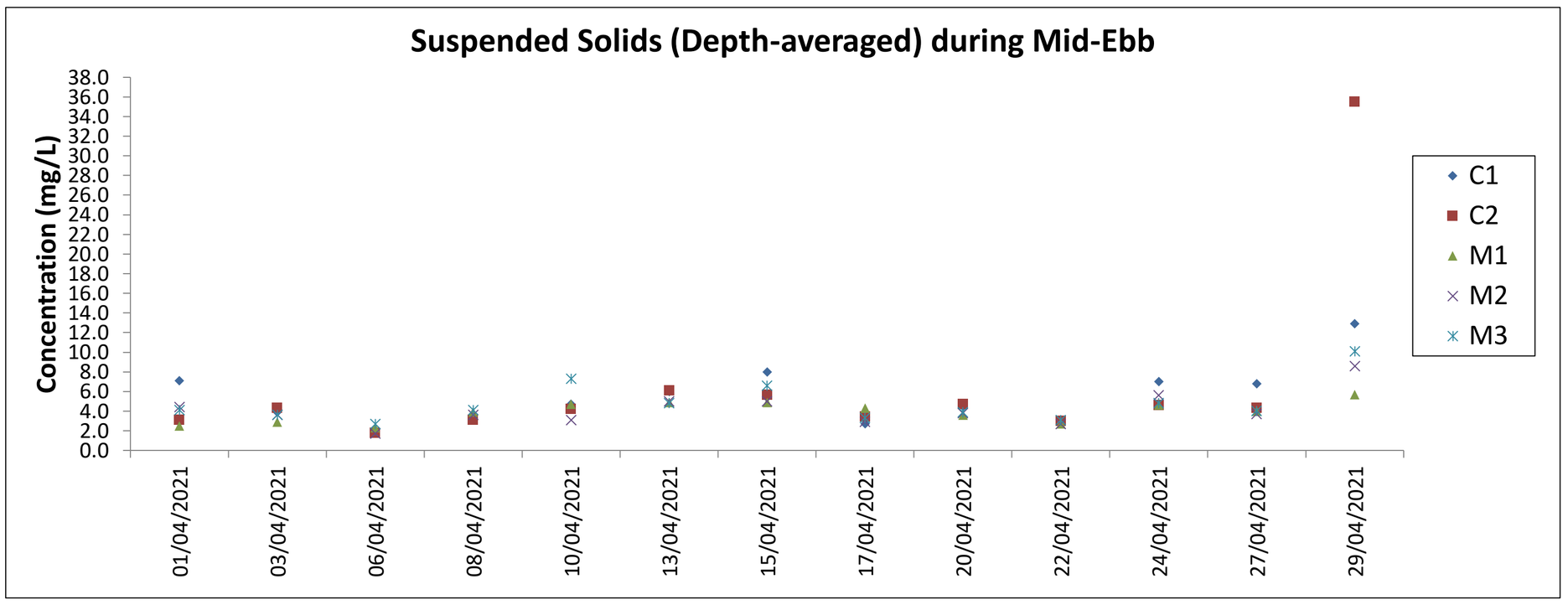


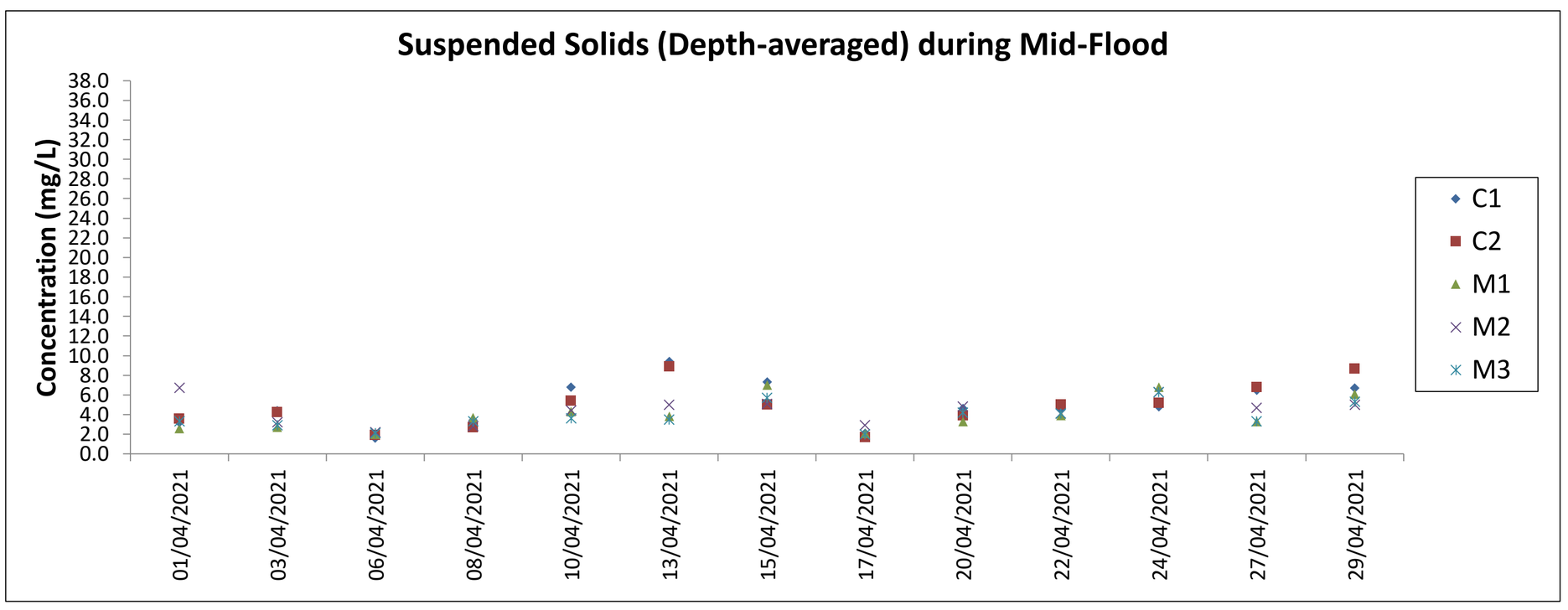
Note: The Action and Limit Level of dissolved oxygen can be referred to Table 2.3 of the monthly EM&A report.
Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
Weather conditions during monitoring are presented in the data tables above.
QA/ QC requirements as stipulated in the EM&A Manual were carried out during measurement.





Note: The Action and Limit Level of turbidity can be referred to Table 2.3 of the monthly EM&A report.
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.





Note: The Action and Limit Level of suspended solids can be referred to Table 2.3 of the monthly EM&A report.
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.

Appendix H. Waste Flow Table

AAHK Contract No. 19W10 Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Roads

Monthly Waste Flow Table

Month	Excavated Waste (tonnes)	Actual Quantities of Inert C&D Materials (excluding ecavated waste) (tonnes) *e.g. broken concrete*					Actual Quantities of Non-inert C&D Waste (tonnes)						
		(a) Total inert C&D material generated (a) = (b) + (c) + (d) + (e)	(b) Reused in contract	(c) Reused in other projects	(d) Sent to recycling company	(e) Disposed to public fill	(f) Recycled scrap metal	(g) Reused / recycled timber	(h) Chemical waste	(i) Other waste disposed to landfill	(j) Total non-inert C&D material generated (j) = (f) + (g) + (h) + (i)	(k) Total recyclable waste (k) = (b) + (c) + (d) + (f) + (g)	(l) Total construction waste generated (l) = (a) + (j)
Jul-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.04	4.04	0.00	4.04
Oct-20	740.49	740.49	0.00	0.00	0.00	740.49	0.00	0.00	0.00	3.55	3.55	0.00	744.04
Nov-20	574.90	574.90	0.00	0.00	0.00	574.90	0.00	0.00	0.00	6.76	6.76	0.00	581.66
Dec-20	536.08	536.08	0.00	0.00	0.00	536.08	0.00	0.00	0.00	2.33	2.33	0.00	538.41
Jan-21	1778.61	1778.61	0.00	0.00	0.00	1778.61	0.00	0.00	0.00	5.33	5.33	0.00	1783.94
Feb-21	4109.08	4109.08	0.00	2832.32	0.00	1276.76	0.00	0.00	0.00	4.40	4.40	2832.32	4113.48
Mar-21	1921.26	1921.26	0.00	419.77	0.00	1501.49	0.00	0.00	0.00	12.28	12.28	419.77	1933.54
Apr-21	3929.82	3930.79	0.00	1702.03	0.97	2227.79	0.00	0.00	0.00	26.48	26.48	1703.00	3957.27
May-21													
Jun-21													
Jul-21													
Aug-21													
Total	**13590.24**	**13591.21**	**0.00**	**4954.12**	**0.00**	**8636.12**	**0.00**	**0.00**	**0.00**	**65.17**	**65.17**	**4955.09**	**13656.38**

Appendix I. Status of Environmental Permits and Licences

Table I.1: Summary of Environmental Licenses and Permits

Type of Licence / Permit	Reference No.	Valid From	Valid Until	Remark
Environmental Permit	EP-560/2018	24 August 2017	End of Project	N/A
Billing Account for Disposal of Construction Waste	7037763	6 July 2020	End of Project	N/A
Billing Account for Vessel Disposal of Construction Waste	7038221	22 March 2021	5 July 2021	N/A
Construction Dust Notification under APCO	458075	13 July 2020	N/A	N/A
Construction Noise Permit	GW-RS0786-20	23 October 2020	21 April 2021	This Permit was replaced by GW-RS0251-21 on 17 April 2021
	GW-RS0251-21	17 April 2021	13 October 2021	N/A
Chemical Waste Producer	5213-951-G2857-02	24 August 2020	End of Project	N/A
Water Discharge License – Landside	WT00037071-2020	12 January 2021	31 January 2026	N/A
Water Discharge License – Marine	Under Application	N/A	N/A	N/A

Appendix J. Environmental Mitigation Measures Implementation Status

Recommended Mitigation Measures for Air Quality Impact

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S3.7.1	S2.2.1	• Relevant control measures as required in the Air Pollution Control (Construction Dust) Regulation shall be implemented to minimise dust impact.	Obs
		• Skip hoist for material transport should be totally enclosed by impervious sheeting.	N/A
		• All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation to maintain the dusty materials wet.	Obs / Rem
		• All stockpiles of aggregate or spoil should be covered and/or water applied.	Obs
		• The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading.	N/A
		• Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.	Yes
		• The load of dusty materials carried by a vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle.	N/A
		• All NRMMs operated on-site are approved or exempted (as the case may be) and affixed with the requisite approval/exemption labels under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, or are in the process of application for such approval/exemption during the relevant grace period.	Yes

Recommended Mitigation Measures for Noise Impact

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S4.5.2	S3.2.1	• Only well-maintained plant should be operated on-site and plant should be serviced regularly.	Yes
		• Silencers or mufflers on construction plant should be utilised.	Yes
		• Mobile plant should be sited as far away from sensitive uses as possible.	Yes
		• Machines and plant that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum.	Yes
		• Plant known to emit noise strongly in one direction should, where possible, be orientated so that noise is directed away from the nearby sensitive uses.	Yes
		• Material stockpiles and other structures such as site hoarding should be effectively utilised to screen noise from on-site construction activities.	N/A
		• Noisy construction activities such as road breaking, should be scheduled to less sensitive hours during the day, e.g. midday.	Yes

Recommended Mitigation Measures for Water Quality Impact

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.9.1	S4.3.1	• Steel pile casing and watertight cofferdam should be installed at the pier site and seawater trapped inside the casing and cofferdam should be pumped out to generate a dry working environment prior to carrying out sediment excavation.	Yes
S5.9.2	S4.3.1	• During dewatering of the cofferdam, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meeting the WPCO / TM-DSS requirements before discharge.	Yes
S5.9.3	S4.3.1	• To minimise any adverse water quality impact during the excavation of sediment, a funnel should be placed at the top of pile casing during excavation and silt curtains should be deployed to completely enclose the cofferdam and steel pile casing. Silt curtains should be deployed prior to installation of temporary platform on barge, cofferdam and steel pile casing. Silt curtains should only be removed after completion of pile caps and piers. The Contractor should be responsible for the design, installation and maintenance of the silt curtain to minimise the impacts on water quality. The design and specification of the silt curtains should be submitted by the Contractor to the Project Manager or Project Manager's Representative of AAHK for approval. The marine bridge piers should not be constructed at the same time to avoid adverse hydrodynamic impact due to flow blockage increase during the interim construction stages. All vessels should 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.	Yes
S5.9.5	S4.3.1	• Surface run-off from construction sites should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels or earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided on site boundaries where necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	Obs / Rem
S5.9.6	S4.3.1	• Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to prevent local flooding. Before disposal at the public fill reception facilities, the deposited silt and grit should be solicited in such a way that it can be contained and delivered by dump truck instead of tanker truck. Any practical options for the diversion and re-alignment of drainage should comply with both engineering and environmental requirements in order to provide adequate hydraulic capacity of all drains.	Rem
S5.9.7	S4.3.1	• Construction works should be programmed to minimise soil excavation works in rainy seasons (April to September). If excavation in soil cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm.	Yes
S5.9.8	S4.3.1	• Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.	Yes

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.9.9	S4.3.1	• Measures should be taken to minimise the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	Yes
S5.9.10	S4.3.1	• Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	Rem
S5.9.11	S4.3.1	• If bentonite slurries are required for any construction works, they should be reconditioned and reused wherever practicable to minimise the disposal volume of used bentonite slurries. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after the related construction activities are completed. Requirements as stipulated in ProPECC Note PN 1/94 should be closely followed when handling and disposing bentonite slurries.	N/A
S5.9.12	S4.3.1	• Loading of the excavated marine-based sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water.	Yes
		• The barge transporting the excavated marine-based sediment to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation.	Yes
		• 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 the Director of Environmental Protection (DEP).	Yes
S5.9.13	S4.3.1	• Water used in ground boring and drilling for site investigation or rock/soil anchoring should as far as practicable be re-circulated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.	N/A
S5.9.14	S4.3.1	• All vehicles and plant should be cleaned before they leave a construction site to minimise the deposition of earth, mud, debris on roads. A wheel washing bay should be provided at every site exit if practicable and wash-water should have sand and silt settled out or removed before discharging into storm drains. The section of construction road between the wheel washing bay and the public road should be paved with backfall to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	N/A
S5.9.15	S4.3.1	• There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO license.	Yes

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.9.16	S4.3.1	• No discharge of sewage to the storm water system and marine water will be allowed. Sufficient chemical toilets should be provided in the works areas to handle the sewage generated from the construction workforce. A licensed waste collector should be deployed to clean the chemical toilets on a regular basis.	Obs
S5.9.17	S4.3.1	• Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment. Regular environmental audit of the construction site will provide an effective control of any malpractices and can encourage continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the project would not cause water pollution problem after undertaking all required measures.	Yes
S5.9.18	S4.3.1	• Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation, should be observed and complied with for control of chemical wastes.	Yes
S5.9.19	S4.3.1	• Any service shop and maintenance facilities should be located on hard standings within a bonded area, and sumps should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.	N/A
S5.9.20	S4.3.1	• Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport.	Obs
		• Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents.	Yes
		• Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.	Yes
S5.9.22	S4.3.1	• For the operation of road works, a surface water drainage system should be provided to collect the road runoff. The road drainage should be provided with adequately designed silt trap as necessary. The design of the operational phase mitigation measures for the road works shall take into account the guidelines published in ProPECC PN 5/93 *"Drainage Plans subject to Comment by the EPD"*	Yes
S5.9.23 to 5.9.29	S4.3.1	<u>Design Measures:</u> • Exposed surface shall be avoided within the roads to minimise soil erosion. The roads shall be hard paved. • The drainage system should be designed to avoid flooding.	N/A
		<u>Devices and Facilities:</u> • Screening facilities such as standard gully grating and trash grille, with spacing which is capable of screening large substances such as rubbish should be provided at the inlet of drainage system. • Road gullies with standard design and silt traps should be provided to remove particles present in stormwater runoff, where appropriate.	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
		Administrative Measures: • Good management measures such as regular cleaning and sweeping of road surface/ open areas are suggested. The road surface/ open area cleaning should also be carried out prior to occurrence rainstorm. • Manholes, as well as stormwater gullies, ditches provided at the Project site should be regularly inspected and cleaned (e.g. monthly). Additional inspection and cleansing should be carried out before forecast heavy rainfall.	N/A
S5.9.30	S4.3.1	All the sewage flow generated from the proposed toilets should be properly collected and conveyed to the existing sewerage system on HKBCF Island. No direct discharge of sewage effluent into the marine water will be allowed.	Yes

Recommended Mitigation Measures for Waste Management

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S6.5.3	S5.2.1	Good Site Practices: • Nomination of approved personnel, such as a site manager, to be responsible for implementation of good site practices, arrangements for waste collection and effective disposal to an appropriate facility.	Yes
		• Training of site personnel in site cleanliness, concepts of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures.	Yes
		• Provision of sufficient waste reception/ disposal points, and regular collection of waste.	N/A
		• Adoption of appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	N/A
		• Provision of regular cleaning and maintenance programme for drainage systems and sumps.	N/A
		• Adoption of a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites).	N/A
		• Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP).	N/A
S6.5.4	S5.2.1	Waste Reduction Measures: • Segregate and store different types of construction related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.	Yes
		• Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general refuse generated by the work force, and to encourage collection by individual collectors.	N/A
		• Recycle any unused chemicals or those with remaining functional capacity.	N/A
		• Maximise the use of reusable steel formwork to reduce the amount of C&D materials.	N/A
		• Adopt proper storage and site practices to minimise the potential for damage to, or contamination of construction materials.	Yes
		• Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated.	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
		• Minimise over ordering and wastage through careful planning during purchasing of construction materials.	N/A
S6.5.6	S5.2.1	<u>C&D materials:</u> • Proper handling and storage of waste such as soil by means of covers and/or water spraying system to minimise the potential environmental impact and to prevent materials from wind-blown or being washed away.	Rem
		• Covering materials during heavy rainfall.	Rem
		• Locating stockpiles to minimise potential visual impacts.	N/A
		• Minimising land intake of stockpile areas as far as possible.	N/A
		• Adopting GPS or equivalent system for tracking and monitoring of all dump trucks engaged for the Project in recording their travel routings and parking locations to prohibit illegal dumping and landfilling of C&D materials.	N/A
		• Keeping record and analysis of data collected by GPS or equivalent system related to travel routings and parking locations of dump trucks engaged on site.	N/A
S6.5.7 to 6.5.9	S5.2.1	<u>General Refuse:</u> • General refuse should be stored in covered bins or compaction units separately from C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site regularly, separately from C&D materials. An enclosed and covered area is preferred to reduce the occurrence of “wind blown” light materials.	N/A
		• The recyclable component of general refuse, such as aluminium cans, paper and cleansed plastic containers shall be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste shall be set up by the Contractor. The Contractor shall also be responsible for arranging recycling companies to collect these materials.	N/A
		• The Contractor should carry out an education programme for workers in avoiding, reducing, reusing and recycling of materials generation. Posters and leaflets advising on the use of the bins should also be provided in the site as reminders.	N/A
S6.5.10 to 6.5.12	S5.2.1	<u>Chemical Waste:</u> • If chemical wastes were to be produced, the Contractor would be required to register with the EPD as a Chemical Waste Producer, and to follow the guidelines stated in the *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*.	N/A
		• Appropriate containers with proper labels should be used for storage of chemical wastes. Chemical wastes should be collected and delivered to designated outlet by a licensed collector. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the CWTC, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Yes
		• Any unused chemicals or those with remaining functional capacity should be collected for reuse as far as practicable.	N/A
S6.5.13 to 6.5.16	S5.2.1	<u>Sediment:</u> • The sediment should be excavated, handled, treated, transported and/or disposed of in a manner that would minimise adverse environmental impacts.	Yes

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
		• Requirements of the Air Pollution Ordinance (Construction Dust) Regulation, where relevant, shall be adhered to during excavation, treatment, transportation and disposal of the sediment.	N/A
		• The land-based sediment will be treated using S/S technique and will be reused on site (e.g. as backfilling materials).	N/A
		• Any treatment area for the land-based sediment should be confined for carrying out the cement S/S process and any temporary stockpiling. The area should be designed to prevent leachate from entering the ground. Leachate, if any, should be collected and discharged according to the Water Pollution Control Ordinance (WPCO). In order to minimise the exposure to contaminated materials, workers shall, if necessary, wear appropriate personal protective equipments (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities shall also be provided on site.	N/A
S6.5.17	S5.2.1	• For off-site disposal, the basic requirements and procedures specified under PNAP No. 252 (ADV-21) shall be followed. Marine Fill Committee (MFC) of CEDD is managing the disposal facilities in Hong Kong for the excavated sediment, while EPD is the authority of issuing marine dumping permit under the Dumping at Sea Ordinance (DASO).	N/A
S6.5.18 to 6.5.19	S5.2.1	• For the purpose of site allocation and application of marine dumping permit and if considered necessary by Dumping at Sea Ordinance (DASO) Team/EPD, separate submissions (e.g. SSTP/SQR) shall be submitted to DASO team/EPD for agreement under DASO. Additional SI works, based on the SSTP, shall then be carried out in order to confirm the disposal arrangements of the excavated sediment. A Sediment Quality Report (SQR), reporting the chemical and biological screening results and the estimated quantities of sediment under different disposal options, shall then be submitted to DASO team/EPD for agreement under DASO. • To ensure disposal space is allocated for the Project, the Project Proponent should be responsible for obtaining agreement from MFC on the allocation of the disposal site. The contractor(s), on the other hand, should be responsible for the application of the marine dumping permit under DASO from EPD for the sediment disposal.	N/A
S6.5.20 to 6.5.23	S5.2.1	• The excavated sediments is expected to be loaded onto the barge and transported to the designated disposal sites allocated by MFC. The excavated sediment would be disposed of according to its determined disposal options and PNAP No. 252 (ADV-21).	N/A
		• Stockpiling of contaminated sediments should be avoided as far as possible. If temporary stockpiling of contaminated sediments is necessary, the excavated sediment should be covered and the area should be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and surrounding water bodies. The stockpiles area should be completely paved in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas should be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, should be collected and discharged according to the Water Pollution Control Ordinance (WPCO).	Yes
		• In order to minimise the potential odour / dust emissions during excavation and transportation of the sediment, the excavated sediments shall be wetted during excavation / material handling and shall be properly covered when placed on trucks or barges. Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water.	N/A
		• The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
		place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP.	
S6.5.24	S5.2.1	Potential Floating Refuse: • Proper management and education should be given to construction site workers such that accidental release or intentional disposal would be avoided. The refuse should be stored in enclosed bin to avoid adverse impacts to the surroundings including marine environment. Regular checking should also be carried out to ensure that the refuse is stored properly.	N/A

Recommended Mitigation Measures for Marine Ecological Impact

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S7.8.3	S6.3.3	• Based upon a precautionary approach, a speed limit of 10 knots should be strictly enforced on all construction-related vessels.	Yes
S7.8.6	S6.3.1	• Good site practices, guidelines and mitigation measures detailed in Water Quality Sections 5.9.1 to 5.9.20 should be adopted to further alleviate water quality impacts.	Yes
S7.8.9	S6.3.2	• Coral colonies at REA2 under the direct impacts of habitat loss should be translocated as a precautionary measure. A detailed Coral Translocation Proposal, including description of methodology and precautionary post-translocation monitoring programme, should be prepared and subject to agreement with the authority before commencement of the coral translocation.	N/A

Recommended Mitigation Measures for Landscape and Visual Impact

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S8.9.2	S7.3.1	Preservation of New Tree Planting: • All the planned new trees to be retained and not to be affected by the Project shall be carefully protected during construction in accordance with DevB TCW No. 7/2015 – Tree Preservation during Development issued by GLTM Section of DevB.	N/A
		• Any existing vegetation in landscaped area and natural terrain not to be affected by the Project shall be carefully preserved.	N/A
S8.9.2	S7.3.1	Transplanting of Affected Trees: • Planned trees to be planted under HKBCF unavoidably affected by the works shall be transplanted within the Project boundary or off-site within the Airport Island (i.e. within area of approx. 6.2km) as far as possible in accordance with DevB TCW No. 7/2015 – Tree Preservation and the latest Guidelines on Tree Transplanting issued by GLTM Section of DevB.	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S8.9.2	S7.3.1	Compensatory Tree Planting: • Any planned trees to be planted under HKBCF to be felled under the Project shall be compensated within the Project boundary or off-site within the Airport Island (i.e. within area of approx. 6.2km), in accordance with DevB TCW No. 7/2015 – Tree Preservation. The compensatory planting shall be of a ratio not less than 1:1 in terms of number, i.e. the number of compensatory trees shall not be lower than that of the number of trees to be felled. Justification shall be provided if tree compensation requirement could not be met. For trees to be compensated on slopes, the guidelines for tree planting stipulated in GEO Publication No. 1/2011 will be followed.	N/A
S8.9.2	S7.3.1	Control of night-time lighting glare: • Any lighting provision of the construction works at night shall be carefully control to prevent light overspill to the nearby VSRs and into the sky.	N/A
S8.9.2	S7.3.1	Erection of Decorative Screen Hoarding: • Decorative Hoarding, which is compatible with the surrounding settings, shall be erected during construction to minimise the potential landscape and visual impacts due to the construction works and activities.	N/A
S8.9.2	S7.3.1	Management of Construction Activities and Facilities: • The facilities and activities at works sites and areas, which include site office, temporary storage areas, temporary works etc., shall be carefully managed and controlled on the height, deposition and arrangement to minimise any potential adverse landscape and visual impacts.	N/A
S8.9.2	S7.3.1	Reinstatement of Temporarily Disturbed Landscape Areas: • All hard and soft landscape areas disturbed temporarily during construction shall be reinstated on like-to-like basis, to the satisfaction of the relevant Government Departments.	N/A
S8.9.2	S7.3.1	Aesthetically Pleasing Design of Aboveground / Above-sea Structures: • The proposed structures in regard of layouts, forms, materials and finishes shall be sensitively designed so as to blend in the structures to the adjacent landscape and visual context.	N/A
S8.9.2	S7.3.1	Provision of Amenity Planting: • Amenity planting, including groundcover and trees shall be provided to soften the proposed above-ground structures on HKBCF as far as appropriate.	N/A

Notes:

Yes = Implemented where applicable

No = Not implemented

Obs/Rem = Observations or reminders were issued, and items were rectified

N/A = Not applicable to the construction works implemented during the reporting period

^ Checked by ET through site inspection and record provided by the Contractor.

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