

## Intermodal Transfer Terminal – Bonded Vehicular Bridge and Associated Roads

Monthly EM&A Report for August 2022

September 2022

Airport Authority Hong Kong

Mott MacDonald 3/F Manulife Place 348 Kwun Tong Road Kwun Tong Kowloon Hong Kong

T +852 2828 5757 mottmac.hk

Airport Authority Hong Kong

## Intermodal Transfer Terminal – Bonded Vehicular Bridge and Associated Roads

Monthly EM&A Report for August 2022

September 2022

This Submission of Construction Phase Monthly Environmental Monitoring and Audit (EM&A) Report for August 2022

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:

Mum Clea

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

Date

13 September 2022



AECOM 12/F, Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road, Shatin, Hong Kong 香港新界沙田**鄉**事會路 138 號 新城市中央廣場第 2 座 12 樓 www.aecom.com +852 3922 9000 tel +852 3922 9797 fax

Your Ref: -Our Ref: 60610093/C/FYW2209131

### 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 September 2022

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 August 2022

Reference is made to the Environmental Team's submission of Monthly EM&A Report for August 2022 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 13 September 2022.

We would like to inform you that we have verified on 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 Preconstruction, 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 23<sup>rd</sup> 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 31 August 2022.

### Key Construction Works in the Reporting Period

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

- Plant and material mobilization for marine works
- Plant and material mobilization for landside works
- Marine pier construction
- Bridge deck construction
- Ancillary buildings construction
- Abutment, upramp structure & superstructure
- Retaining wall construction
- Drainage works

### **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 (under ACL project)
Weekly environmental site inspections	5

### **Complaint Log**

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

### **Notifications of Summons and Successful Prosecutions**

There was 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 landside works
- Plant and material mobilization for marine works
- Marine pier construction
- Bridge deck construction
- Ancillary buildings construction
- Abutment, upramp structure & superstructure
- Retaining wall construction
- Drainage 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 23<sup>rd</sup> monthly EM&A report summarising the key findings of the construction phase EM&A programme from 1 to 31 August 2022 (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)	Environmental Team Leader	Thomas Chan	2828 5967
(Mott MacDonald Hong Kong Limited)	Deputy Environmental Team Leader	Gary Chow	2828 5874
Independent Environmental Checker (IEC)	Independent Environmental Checker	Y W Fung	3922 9366
(AECOM Asia Company Limited)	Deputy Independent Environmental Checker	Lemon Lam	3922 9381
Main Contractor	Senior Project Manager	Brian Ho	9041 7535
(Gammon Construction Limited)	Environmental Officer	Elena Lai	6841 3324

### **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:

- Plant and material mobilization for marine works
- Plant and material mobilization for landside works
- Marine pier construction
- Bridge deck construction
- Ancillary buildings construction
- Abutment, upramp structure & superstructure
- Retaining wall construction
- Drainage works

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### 2 Water Quality Monitoring

### 2.1 Impact Water Quality Monitoring

#### 2.1.1 Monitoring Requirement

The impact water quality monitoring was conducted three days per week at mid-flood and midebb 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.

#### 2.1.2 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.

### 2.1.3 Monitoring Locations

With reference to the Baseline Monitoring Report, the water quality monitoring was 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**.

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

#### Table 2.1: Locations of Marine Water Quality Monitoring Stations

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

### 2.1.4 Monitoring Results

As informed by AAHK, the marine works below sea water level of the Project were completed on 25 July 2022. Since the construction activities under sea water level and the impact water quality monitoring of Airport City Link (ACL) project were commenced (i.e. 26 July 2022) right after the completion of the construction activities under the sea water level of the ITT-BVB project, as the impact water quality monitoring programme (e.g. monitoring requirement and parameter) and monitoring locations under the EM&A Manual of EP (Permit no.: EP-581/2020) of ACL project are the same as that of ITT-BVB project. Hence, the water quality monitoring results of ACL project

are adopted and presented in this Monthly EM&A Report as agreed with AAHK, and such arrangement will be continued until the completion of all marine works of the Project.

The impact monitoring results and relevant graphical plots are presented in Appendix D.

### 2.1.5 Monitoring Schedule for the Reporting Period

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

### 2.2 Action and Limit Levels

The Action and Limit Levels for the impact monitoring stations can refer to the Monthly EM&A Report of ACL project.

### 2.3 **Post-Construction Water Quality Monitoring**

The post-construction water quality monitoring of ITT-BVB will combine with the post-construction water quality monitoring of ACL project and will be conducted after completion of the construction activities under sea water level of ACL project.

The alternative arrangement for post-construction water quality monitoring was proposed to EPD on 7 July 2022 and EPD expressed no comment on 18 July 2022 on the alternative arrangement.

### 2.4 Conclusion

As informed by AAHK, the marine works below sea water level was completed on 25 July 2022. Refer to **Section 2.1.4**, the water quality monitoring results of ACL project are adopted and presented in this Monthly EM&A Report as agreed with AAHK, and such arrangement will be continued until the completion of all marine works of the Project.

In addition, the post-construction water quality monitoring of ITT-BVB will combine with the postconstruction water quality monitoring of ACL project and will be conducted after completion of the construction activities under sea water level of ACL project.

### **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 3, 10, 17, 24 and 29 August 2022. Joint IEC site inspection was carried out on 10 August 2022.

Monthly landscape and visual site audit was carried out on 10 August 2022.

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

Inspection Date	Key Observations / Reminders	Recommendations / Actions	Close-Out Date
3 Aug 2022	No drip tray was provided for the chemical containers for spillage prevention at Pier 3.	The Contractor should provide drip trays for the chemical containers to contain any potential spillage.	10 Aug 2022
3 Aug 2022	Site runoff was observed discharged from Pier 3 and silt plume was observed.	Wastewater should be diverted to wastewater treatment facility for proper treatment prior discharge and direct discharge into sea is strictly prohibited.	10 Aug 2022
10 Aug 2022	Chemical container was found without drip tray.	The Contractor should provide a drip tray for the chemical container to contain any potential spillage.	17 Aug 2022
10 Aug 2022	General refuse was improperly disposed near plant building works area.	The Contractor should provide a receptacle to properly collect general refuse.	17 Aug 2022
10 Aug 2022	Desludging pipe of wastewater treatment facility was observed connected to the drain leading to the discharge point.	The Contractor should divert the pipe to a slurry collection area to prevent any accidental muddy discharge into the drain.	17 Aug 2022
10 Aug 2022	The protective measures for the discharge point were insufficient.	The Contractor should enhance the protective measures along the drain to prevent any silt and sand from getting into the public drain.	17 Aug 2022
17 Aug 2022	Dusty material was observed on the paved haul road.	The Contractor should remove the dusty material to prevent fugitive dust emission.	24 Aug 2022
17 Aug 2022	Soil materials were observed deposited on the surface drain.	The Contractor should provide regular cleaning for the surface drain and enhance the mitigation measures to prevent any construction runoff from entering the public drain.	24 Aug 2022

#### Table 3.1: Summary of Site Inspections and Recommendations

Inspection Date	Key Observations / Reminders	Recommendations / Actions	Close-Out Date
17 Aug 2022	Operation manual of the wastewater treatment facility was observed damaged (Reminder).	The Contractor was reminded to replace the operation manual of the wastewater treatment facility.	17 Aug 2022
17 Aug 2022	Water spraying was observed not sufficient (Reminder).	The Contractor was reminded to provide sufficient water spraying for the haul road near ramp works area for fugitive dust suppression.	17 Aug 2022
24 Aug 2022	No water spraying was provided for the breaking works.	The Contractor should provide water spraying for the breaking works for dust suppression.	29 Aug 2022
24 Aug 2022	Dusty material was observed on the haul road near drainage works area.	The Contractor should clean up the haul road to minimise silty runoff under forecasted adverse weather.	29 Aug 2022
24 Aug 2022	Water pipe of temporary site drainage was covered by soil and construction materials.	The Contractor should remove the materials on the water pipes and ensure proper function of the temporary site drainage system during rainstorm.	29 Aug 2022
24 Aug 2022	Cleaning for temporary site drainage was observed not sufficient (Reminder).	The Contractor was reminded to provide regular maintenance and cleaning for temporary site drainage to ensure effective wastewater treatment and holding capacity.	24 Aug 2022
29 Aug 2022	Exposed site area at drainage works area was observed dry.	The Contractor should provide regular water spraying on the exposed site area for dust suppression.	On-going

### 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 F.

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

### 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 H**. 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 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 (Aug 2022)	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 (September 2022) are summarized in **Table 4.1**.

### Table 4.1: Construction Activities for the Next Reporting Period

Period	Description of Activities				
	Plant and material mobilization for landside works				
	<ul> <li>Plant and material mobilization for marine works</li> </ul>				
	Marine pier construction				
Sep 2022	Bridge deck construction				
Seb 2022	Ancillary buildings construction				
	<ul> <li>Abutment, upramp structure &amp; superstructure</li> </ul>				
	Retaining wall construction				
	Drainage works				

### 4.2 Environmental Site Inspection for the Next Reporting Period

The tentative schedule for weekly site inspection for the next reporting period is provided in **Appendix E**.

### 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

As informed by AAHK, the marine works below sea water level was completed on 25 July 2022. Water quality monitoring results of ACL project are adopted and presented in this Monthly EM&A Report as agreed with AAHK, and such arrangement will be continued until the completion of all marine works of the Project.

#### **Environmental Site Inspections**

Environmental site inspections were carried out five (5) 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.

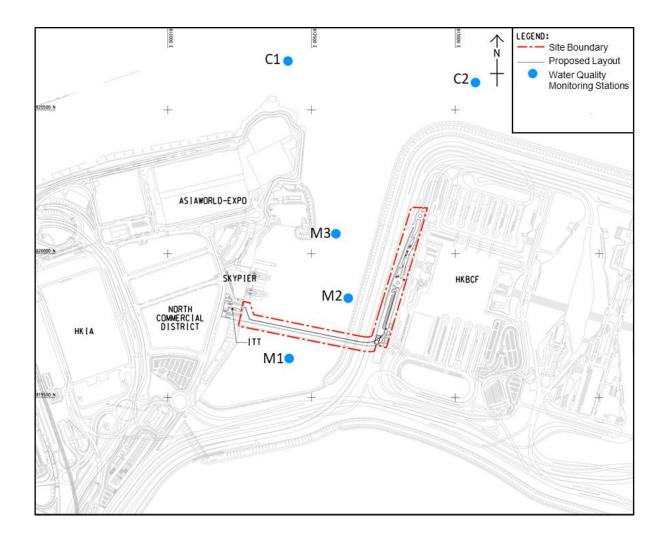
### **Notifications of Summons and Successful Prosecutions**

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

Mott MacDonald | Intermodal Transfer Terminal – Bonded Vehicular Bridge and Associated Roads Monthly EM&A Report for August 2022

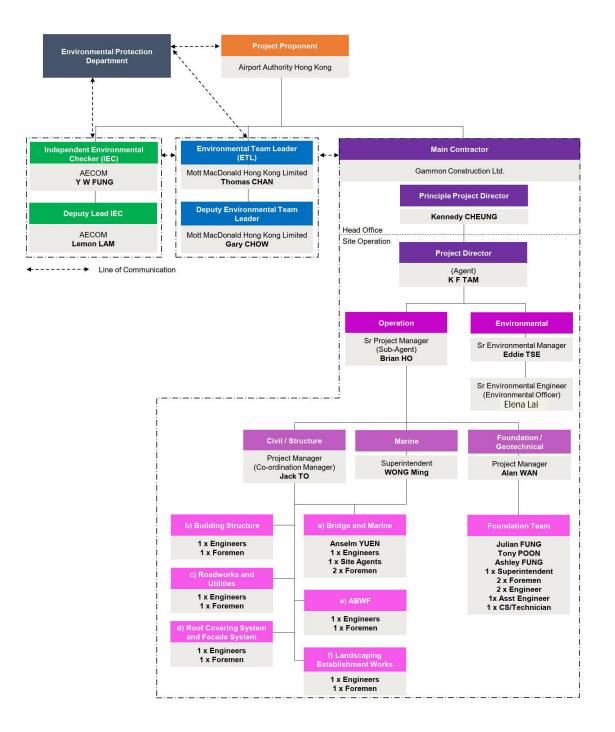
### Figure

### **Figure 2.1 Water Quality Monitoring Locations**



## Appendices

## **Appendix A. Project Organisation**



### **Appendix B. Construction Works Programme**

## C19W10 ITTB AD2 Monthly Programme Rev. C Updated as 31 Aug 2022

tivity ID	Activity Name	Current Start	Current Finish	Orig Dur	Pct Com	Aug Se	2022 p
C19W10 ITTB AD	2 Monthly Programme Rev. C Updated as 31 Aug 2022				<u> </u>		<u> </u>
Contract Dates							
Key Dates (PS Ap	pendix B)						
Contract Completio							
Sections of the W							
19W10.K.KD02	KD-2 Comp. Permanent Structure, Weather-tight for Ancillary Bldgs & Access to Fit-out (108 Wks		10-Nov-22*	0	0%		KD-2 Comp. Permanent Structure, Weather-tigh
Option Works							
19W10.K.KD3A	KD-3A Comp. Optical F/C Connection & Fit-out Works to Govt Facilities for T&C (120 Wks)		19-Oct-22*	0	0%	KD-3A Comp. Optical F/C C	Connection & Fit-out Works to Govt Facilities for T&C (120
Target Completion							
Sections of the W		-	1	,			
19W10.K.TD02	TKD-2 Comp. Permanent Structure, Weather-tight for Ancillary Bldg & Access to Fit-out		10-Nov-22*	0	0%		TKD-2 Comp. Permanent Structure, V
Option Works		-	40.0 1.00*		00/	TD 24 Course O	
19W10.K.TD3A	TD-3A Comp. Optical F/C Connection & Fit-out Works to Govt Facilities for T&C		19-Oct-22*	0	0%	ID-3A Comp. O	ptical F/C Connection & Fit-out Works to Govt Facilities fo
	acate Dates (PS Appendix C2)						
	(PS Appendix C3)						
	liminaries and General Requirements						
	nded Vehicular Bridge - Marine Portion from Chainage CH0.000 to CH43	9.827					
	Substructure Works						
Pier 7							
Pier 6							
Pier 2							
Monopile							
_Marine Superstrue	cture						
Pier 4	Oratility of Crastics of Oracles	00 1-1-00 4	02 0-4 00	00	C4 09/		
19W10.C.31900 19W10.C.31910	Cantilever Erection of 9 cycles Cast the Stitching at Between P3 to P4 Span	06-Jul-22 A 05-Oct-22	03-Oct-22 13-Oct-22	63 7	61.9% 0%	Cast the S	Stitching at Between P3 to P4 Span
19W10.C.31910	Cast the Stitching at Between P4 to P5 Span	05-0d-22 07-0d-22	15-Oct-22	7	0%	I I I I I I I I I I I I I I I I I I I	the Stitching at Between P4 to P5 Span
19W10.C.31920	Stressing P3-P4 Bottom Tendon	14-Oct-22	19-Oct-22	5	0%	Cast I	Stressing P3-P4 Bottom Tendon
19W10.C.31960	Stressing P4-P5 Bottom Tendon	17-Oct-22	21-Oct-22	5	0%	1	Stressing P4-P5 Bottom Tendo
Pier 3		11-00-22	21-001-22	5	070		
19W10.C.31440	Cantilever Segment Erection (Pier 3, 10 cycles)	02-Jul-22 A	22-Sep-22	70	'5.71%		
Pier 7							
19W10.C.31620	Erect Falsework	20-Jul-22 A	05-Sep-22 A	18	100%		
19W10.C.31630	Construct M.J. Segment	29-Aug-22 A	19-Sep-22	14	0%	Construct M.J. Segment	
19W10.C.31640	Cast Packing Between M.J. Segment	20-Sep-22	03-Oct-22	10	0%	Cast Packing Between M.J. Segr	ment
19W10.C.31650	Install TPT & Nailing System	05-Oct-22	07-Oct-22	3	0%		Install TPT & Nailing System
19W10.C.31660	Assembly of Travelling Formworks (TF1 & 2)	08-Oct-22	15-Oct-22	6	0%	Ass	embly of Travelling Formworks (TF1 & 2)
19W10.C.31670	Cantilever Erection of 4 cycles	17-Oct-22	17-Nov-22	28	0%		Cantilever Erection of 4 cycle
19W10.C.31680	Cast the Stitching at Between P7 to P8 Span	18-Nov-22	25-Nov-22	7	0%		
19W10.C.31690	Stressing P7-P8 Bottom Tendon	26-Nov-22	30-Nov-22	4	0%		
Pier 6				1			
19W10.C.32000	Hammer Head	25-Aug-22 A	24-Sep-22	24	20.83%	Hammer Head	
19W10.C.32060	Assembly of Travelling Formworks (TF1 & 2) with Marine Navigation Channel Diversion	26-Sep-22	05-Oct-22	6	0%	Assembly of Travelling Formworks (TF1 & 2) with Marine Navigation C	
19W10.C.32080	Cantilever Erection of 8 cycles	06-Oct-22	10-Dec-22	56	0%		Cantilever Erection of 8 cycles
Pier 2	Outline of Direct	07 0+ 00	00.0-+ 00	2	00/		
19W10.C.32280	Curing of Pier 2	27-Oct-22	29-Oct-22	3	0% 0%		
19W10.C.32290 19W10.C.32360	Steel Frame Setting-up Setting-up the Temporary Jacks	31-Oct-22 23-Nov-22	22-Nov-22 24-Nov-22	20 2	0%		
19W10.C.32300	Casting file End Span	25-Nov-22	15-Dec-22	18	0%		
Installation of Peri		2J-110V-22	IJ-Det-22	10	0 /6		
ITT Transfer Deck							
	nded Vehicular Bridge - Land Portion from Chainage CH439.827 to CH6	5.000					
Cost Centre 5 - An	cillary Buildings						
_Structure Works							
Actual LOE	Critical Remaining Work 🐺 Start Constraint		<b>_</b> ·				Data Date: 31-Aug-22
Remaining LOE	♦ Milestone Finish Constraint		Proje	ect	ID: (	C19W10-DWPG-B-AD-M26	Printed: 13-Sep-22 13:25
Actual Work	Crit Milestone     No Predecessors	3-M	onth R	ollin	na Pi	ogramme (As of 31 August 2022)	Layout: C19W10 ITT 3MRP - M26
Remaining Work	Actual Milestone				9 ' '		TASK filters: 3-Month Rolling (MPU), N
						Page 1 of 4	Level of Effort.

)ct				Nov	
or A	ncillary Bldgs &	Access to F	it-out (108 Wks) 🛛 🕸		
/ks)	₽				
,					
eathe	er-tight for Ancill	ary Bldg & I	Access to Fit-out 🛛 🐺		
F&C	₽				
_					
	C	ast the Stite	hing at Between P7 to		
			Stressi	ng P7-P8 Bottom Ter	ndon 📃
	Curing of Pier 2				
		ting up			
	Steel Frame Set	ung-up	• • • •		_
			Setting-up th	e Temporary Jacks	•
				Casting fhe End Spa	an 🗾
	Date		Revision	Checked	Approved
	5-Apr-22	3MRP M		DW	BH
	J-1401-22		ai 2022		
ot					

## C19W10 ITTB AD2 Monthly Programme Rev. C Updated as 31 Aug 2022

	Activity Name	Current Start	Current Finish	Orig Dur	Pct Com		2022
C&ED Observation	Booth					Aug Sep Sep	C
ImmD Kiosk 1							
ImmD Kiosk 2							
	nd Equipment Room						
19W10.C.51080	Excavation	08-Oct-22	17-Oct-22	7	0%		Excavation
19W10.C.51110	Construction of footings	18-Oct-22	25-Oct-22	7	0%		Construction of footing
19W10.C.51120	Construction of screen wall/ column & structure wall	26-Oct-22	02-Nov-22	7	0%		Construction of screen wall/ colum
19W10.C.51190	Mass concrete fill	03-Nov-22	02-110V-22 08-Nov-22	5	0%		
19W10.C.51290			12-Nov-22	4			
	Construction of ground slab	09-Nov-22			0%		onstruction of RC beam & roof slab (C&E
19W10.C.51490	Construction of RC beam & roof slab (C&ED Operation & Equipment Room)	03-Nov-22	10-Nov-22	7	0%		
Toilet A		00.4 00.4	40.4 00.4	0	4000/	i i	
19W10.C.51880	Excavation	09-Aug-22 A	13-Aug-22 A	3	100%	i i	
19W10.C.52110	Construction of footings	15-Aug-22 A	20-Aug-22 A	7	100%		
19W10.C.52120	Construction of screen wall/ column & structure wall	22-Aug-22 A		7	100%		
19W10.C.52310	Mass concrete fill	01-Sep-22	06-Sep-22	5	0%	Mass concrete fill	
19W10.C.52520	Construction of ground slab	07-Sep-22	12-Sep-22	4	0%	Construction of grpund slab	
19W10.C.52840	Construction of RC beam & roof slab (Toilet A)	13-Sep-22	21-Sep-22	7	0%	Construction of RC beam & roof slab (Toilet A)	
C&ED Mobile X-Ra	y Tent						
19W10.C.51865	Installation of ELS	29-Aug-22 A	16-Sep-22	14	4.29%	Installation of ELS	
19W10.C.51870	Excavation	17-Sep-22	23-Sep-22	6	0%	Excavation	
19W10.C.52100	Construction of foortings (3 bays)	24-Sep-22	07-Oct-22	9	0%	Construction offoortings (3 bays)	
19W10.C.52340	Construction of retaining wall	08-Oct-22	22-Oct-22	12	0%	Constru	iction of retaining wall
Electrical Room							
Facade & Roof							
ABWF Works							
Building Services							
Cost Centre 6 - Air	port and Specialist Systems						
Cost Centre 7 - Ext	ternal Works						
Fencing and Modif	fication Works						
Permanent Fencing							
	Submission & approval of shop drawing	16-Jun-21 A	04-Aug-22 A	18	100%		
19W10.C.71422	Install permanent fencing	21-Sep-22	29-Oct-22	30	0%	Install permanent fencing	
Modification of Sig		21 000 22	LU OUL LL	00	070		
19W10.C.71570	Modified site gantry shop drawing submission & approval	25-Jul-22 A	16-Aug-22 A	24	100%		
19W10.C.71572			-			Fabrication & delivery of modified sign gantry DS 23	
	Fabrication & delivery of modified sign gantry DS 23	22-Sep-22	22-Dec-22	79	0%		
19W10.C.71581	Remove existing sign gantry	22-Sep-22	08-Oct-22	12	0%	Remove existing sign gantry	
Retaining Wall (RV							
RW1 (3m height wi	ith 6m length)						
19W10.C.71130	Completion of ELS and Excavatoin	06-May-22 A	31-Aug-22 A	12	100%		
19W10.C.71210	Steel Fixing and Cast the Slab	01-Sep-22	07-Sep-22	6	0%	Steel Fixing and Cast the Slab	
	Steel Fixing and Cast the Wall	08-Sep-22	16-Sep-22	6	0%	Steel Fixing and Cast the Wall	
19W10.C.71220	Backfilling	17-Sep-22	29-Sep-22	10	0%	Backfilling	
19W10.C.71220 19W10.C.71230							
19W10.C.71230	ht with 4m length)			6	0%		
19W10.C.71230 RW2 ( (2.15m heigh		21-May-22 A	07-Sep-22	0			
19W10.C.71230 RW2 ( (2.15m heig) 19W10.C.71250	Completion of ELS and Excavatoin	21-May-22 A	07-Sep-22 16-Sep-22		0%	Steel Fixing and Cast the Slab	
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260	Completion of ELS and Excavatoin Steel Fixing and Castthe Slab	08-Sep-22	16-Sep-22	6	0%	Steel Fixing and Castthe Slab	
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270	Completion of ELS and Excavatoin Steel Fixing and Castthe Slab Steel Fixing and Castthe Wall	08-Sep-22 17-Sep-22	16-Sep-22 23-Sep-22	6 6	0%	\$teel Fixing and Castthe Wall	
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280	Completion of ELS and Excavatoin Steel Fixing and Cast the Slab Steel Fixing and Cast the Wall Backfilling	08-Sep-22	16-Sep-22	6			
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280 <b>RW3 (1.65m heigh</b>	Completion of ELS and Excavatoin Steel Fixing and Cast the Slab Steel Fixing and Cast the Wall Backfilling at with 3.2m length)	08-Sep-22 17-Sep-22 24-Sep-22	16-Sep-22 23-Sep-22 05-Oct-22	6 6 7	0% 0%	\$teel Fixing and Castthe Wall	
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280 <b>RW3 (1.65m heigh</b> 19W10.C.71320	Completion of ELS and Excavatoin         Steel Fixing and Cast the Slab         Steel Fixing and Cast the Wall         Backfilling         It with 3.2m length)         Completion of ELS and Excavatoin	08-Sep-22 17-Sep-22 24-Sep-22 	16-Sep-22 23-Sep-22 05-Oct-22 06-Sep-22	6 6 7 5	0% 0% 0%	\$teel Fixing and Cast the Wall Backfilling	
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280 <b>RW3 (1.65m heigh</b> 19W10.C.71320 19W10.C.71330	Completion of ELS and Excavatoin         Steel Fixing and Cast the Slab         Steel Fixing and Cast the Wall         Backfilling         at with 3.2m length)         Completion of ELS and Excavatoin         Steel Fixing and Cast the Slab	08-Sep-22 17-Sep-22 24-Sep-22 06-Jun-22 A 07-Sep-22	16-Sep-22 23-Sep-22 05-Oct-22 06-Sep-22 15-Sep-22	6 6 7 5 6	0% 0% 0%	\$teel Fixing and Cast the Wall Backfilling Steel Fixing and Cast the Slab	
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280 <b>RW3 (1.65m heigh</b> 19W10.C.71320 19W10.C.71330 19W10.C.71380	Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall         Backfilling         It with 3.2m length)         Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall	08-Sep-22 17-Sep-22 24-Sep-22 06-Jun-22 A 07-Sep-22 16-Sep-22	16-Sep-22 23-Sep-22 05-Oct-22 06-Sep-22 15-Sep-22 22-Sep-22	6 6 7 5 6 6	0% 0% 0% 0%	Steel Fixing and Cast the Wall Backfilling Steel Fixing and Cast the Stab	
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280 <b>RW3 (1.65m heigh</b> 19W10.C.71320 19W10.C.71380 19W10.C.71390	Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall         Backfilling         tt with 3.2m length)         Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall         Backfilling	08-Sep-22 17-Sep-22 24-Sep-22 06-Jun-22 A 07-Sep-22	16-Sep-22 23-Sep-22 05-Oct-22 06-Sep-22 15-Sep-22	6 6 7 5 6	0% 0% 0%	\$teel Fixing and Cast the Wall Backfilling Steel Fixing and Cast the Slab	
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280 <b>RW3 (1.65m heigh</b> 19W10.C.71320 19W10.C.71330 19W10.C.71380	Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall         Backfilling         tt with 3.2m length)         Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall         Backfilling	08-Sep-22 17-Sep-22 24-Sep-22 06-Jun-22 A 07-Sep-22 16-Sep-22	16-Sep-22 23-Sep-22 05-Oct-22 06-Sep-22 15-Sep-22 22-Sep-22	6 6 7 5 6 6	0% 0% 0% 0%	Steel Fixing and Cast the Wall Backfilling Steel Fixing and Cast the Stab	
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280 <b>RW3 (1.65m heigh</b> 19W10.C.71320 19W10.C.71380 19W10.C.71380 19W10.C.71390	Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall         Backfilling         tt with 3.2m length)         Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall         Backfilling	08-Sep-22 17-Sep-22 24-Sep-22 06-Jun-22 A 07-Sep-22 16-Sep-22	16-Sep-22 23-Sep-22 05-Oct-22 06-Sep-22 15-Sep-22 22-Sep-22	6 6 7 5 6 6	0% 0% 0% 0%	Steel Fixing and Cast the Wall       Backfilling       Steel Fixing and Cast the Slab       Steel Fixing and Cast the Wall       Backfilling	ıy sub-base
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280 <b>RW3 (1.65m heigh</b> 19W10.C.71330 19W10.C.71330 19W10.C.71390 <b>At-Grade Roadwo</b>	Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall         Backfilling         tt with 3.2m length)         Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Vall         Backfilling         orks	08-Sep-22 17-Sep-22 24-Sep-22 06-Jun-22 A 07-Sep-22 16-Sep-22 23-Sep-22	16-Sep-22 23-Sep-22 05-Oct-22 06-Sep-22 15-Sep-22 22-Sep-22 30-Sep-22	6 6 7 5 6 6 6 6	0% 0% 0% 0% 0%	Steel Fixing and Cast the Wall       Backfilling       Steel Fixing and Cast the Slab       Steel Fixing and Cast the Wall       Backfilling	ıy sub-base
19W10.C.71230 <b>RW2 ( (2.15m heigl</b> 19W10.C.71250 19W10.C.71260 19W10.C.71270 19W10.C.71280 <b>RW3 (1.65m heigh</b> 19W10.C.71330 19W10.C.71330 19W10.C.71390 <b>At-Grade Roadwo</b>	Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Wall         Backfilling         tt with 3.2m length)         Completion of ELS and Excavatoin         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Slab         Steel Fixing and Castthe Vall         Backfilling         orks	08-Sep-22 17-Sep-22 24-Sep-22 06-Jun-22 A 07-Sep-22 16-Sep-22 23-Sep-22	16-Sep-22 23-Sep-22 05-Oct-22 06-Sep-22 15-Sep-22 22-Sep-22 30-Sep-22 02-Nov-22	6 6 7 5 6 6 6 6 25	0% 0% 0% 0% 0%	Steel Fixing and Cast the Wall       Backfilling       Steel Fixing and Cast the Slab       Steel Fixing and Cast the Wall       Backfilling	iy sub-base

Remaining Work 🔶

🔶 Actual Milestone

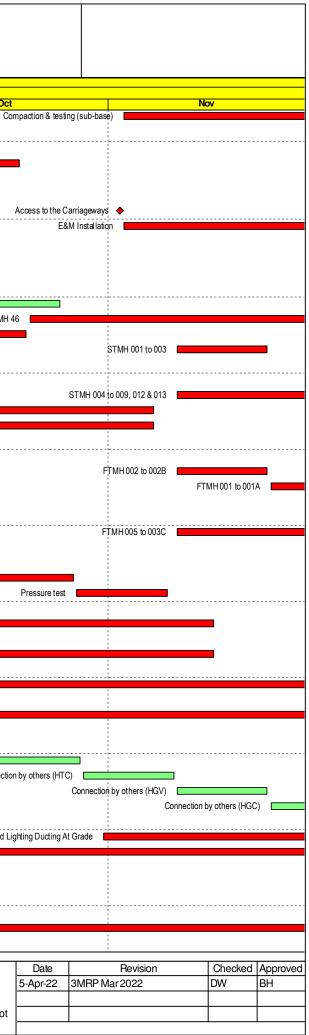
No Successors

3-Month Rolling Programme (As of 31 August 2022) Page 2 of 4 Printed: 13-Sep-22 13:25 Layout: C19W10 ITT 3MRP - M26 TASK filters: 3-Month Rolling (MPU), Not Level of Effort.

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## C19W10 ITTB AD2 Monthly Programme Rev. C Updated as 31 Aug 2022

ty ID	Activity Name	Current Start	Current Finish	Orig Dur	Pct Com	A	2022 Son		
19W10.C.71580	Compaction & testing (sub-base)	03-Nov-22	01-Dec-22	25	0%	Aug		Sep	
	s Inspection Aera Canopy								
19W10.C.71470	Submit BA10	01-Sep-22	08-Sep-22	7	0%	Submit BA10			
I9W10.C.71476	Submit BA8 and BA10 for Glass Glazing and Metal Cladding Installation	01-Sep-22	18-Oct-22	35		and BA10 for Glass Glazing and Metal Cladding Installation			
& M Works		01 000 22	10 000 22		0,0	g			
E&M Works at Car	riaceway								
19W10.C.71170	Access to the Carriageways		02-Nov-22	0	0%				
19W10.C.71180	E&M Installation	03-Nov-22	07-Dec-22	30	0%				
		03-1107-22	07-Dec-22	50	0 /8				
tilities									
	utside Chainage CH685)	10 Aug 22 A	07 Can 22	10	E00/	SMH 37 to SMH 39			
19W10.C.71030	SMH 37 to SMH 39	19-Aug-22 A	07-Sep-22	12	50%				
19W10.C.71060	SMH 46 to SMH 55	31-Mar-21 A	13-Sep-22	30	i6.67%		, <b>r</b>		
19W10.C.71120	SMH 26 to SMH 37	13-May-22 A	24-Oct-22	60	13.33%				0111140 += 0
19W10.C.71290	SMH 40 to SMH 46	20-Oct-22	30-Nov-22	36	0%				SMH 40 to S
19W10.C.71300	SMH 09 to SMH 26	20-Jun-22 A	19-Oct-22	48	25%				
19W10.C.71310	STMH 001 to 003	11-Nov-22	24-Nov-22	12	0%				
19W10.C.71340	SMH 1201 to 1203	15-Jul-22 A	07-Sep-22	12	50%				
19W10.C.71400	Modify Existing SMH 1301 to 1303	08-Sep-22	23-Sep-22	12	0%	Modify Existing SMH	1301 to 1303		
19W10.C.71430	STMH 004 to 009, 012 & 013	11-Nov-22	13-Dec-22	28	0%				
19W10.C.71510	SMH 01 to SMH 08	15-Sep-22	07-Nov-22	42	0%		SMH 01 to SMH 08		
19W10.C.71515	SMH 1101 to 1108	15-Sep-22	07-Nov-22	42	0%		SMH 1101 to 1108		
19W10.C.71660	CCTV (others)	24-Sep-22	11-Oct-22	12	0%			CCTV (others)	
Sewerage									
19W10.C.71410	FTMH 002 to 002B	11-Nov-22	24-Nov-22	12	0%				
19W10.C.71440	FTMH 001 to 001A	25-Nov-22	08-Dec-22	12	0%				
19W10.C.71460	FTMH 003 to 003C	13-Jan-22 A	12-Sep-22	18	50%		v.		
19W10.C.71490	FTMH 004 to 003B	13-Jan-22 A	03-Sep-22	6	50%		<b>7</b>		
19W10.C.71500	FTMH 005 to 003C	11-Nov-22	01-Dec-22	18	0%				
19W10.C.71520	FTMH 006 to 003B	13-Jan-22 A	03-Sep-22	6	50%		<b>V</b>		
19W10.C.71530	FTMH 007 to 010	25-Jan-22 A	11-Oct-22	30	0%		¥		
19W10.C.71670	CCTV	13-Oct-22	26-Oct-22	12	0%				CCTV
19W10.C.71680	Pressure test	27-Oct-22	09-Nov-22	12	0%				
ELV Ducting		Į							
19W10.C.71150	ELV Ducting At Grade	01-Sep-22	16-Nov-22	60	0%	ELV Ducting At Grade			
Water Main									
19W10.C.71080	Install Water Main	02-Apr-22 A	16-Nov-22	91	i4.07%		<b>V</b>		
EL Cable & Ducting	0								
19W10.C.71090	EL Cable & Ducting At Grade	01-Sep-22	01-Feb-23	120	0%	EL Cable & Ducting At Grade		·····	
TCSS Ducting						, s			
19W10.C.71350	TCSS Ducting	30-Sep-22	19-Jan-23	90	0%			TCSS Ducting	
Telecom Ducting		00 00p 22			0,3				
19W10.C.72000	Telecom Ducting	01-Sep-22	13-Oct-22	31	0%	Telecom Ducting			
19W10.C.72010	Connection by others (PCCW)	14-Oct-22	27-Oct-22	12	0%			Connecti	on by others (PCCW)
19W10.C.81380	Connection by others (HTC)	28-Oct-22	10-Nov-22	12	0%				Conr
19W10.C.81390	Connection by others (HGV)	11-Nov-22	24-Nov-22	12	0%				0011
19W10.C.81400	Connection by others (HGC)	25-Nov-22	08-Dec-22	12	0%				
Road Lighting Duc		23-110-22	00-060-22	١Z	0 /0				
19W10.C.71360	Road Lighting Ducting At Grade	31 0+ 22	18-Feb-23	90	0%				Ro
	Road Lighting Ducting At Grade Drawing Submission and Material Ordering	31-Oct-22			0%	Drawing Submission and Material Ordering			RU
19W10.C.71610		01-Sep-22	21-Dec-22	90	0%	Drawing Submission and Material Ordering			
	Cubrid WWO 046 Dest 1.8.2	04.4 00		0	00/	Submit WWO 046 Part 1 & 2			
19W10.S.71000	Submit WWO 046 Part 1 & 2	31-Aug-22	00.0 00	0	0%				
19W10.S.71010	Consent of Works		29-Sep-22	0	0%			Consent of Works 🔶	
Fire Hydrant			o						
19W10.C.71110	Fire Hydrant At Grade	01-Sep-22	21-Dec-22	90	0%	Fire Hydrant At Grade			
E-Bus Charger									
Actual LOE	Critical Remaining Work 🐺 Start Constraint		Proie	ect	D:	C19W10-DWPG-B-AD-M2	26	Data Date: 31-Aug-	
Remaining LOE	<ul> <li>♦ Milestone</li> <li>♥ Finish Constraint</li> <li>♦ Orit Milestone</li> </ul>		-					Printed: 13-Sep-22	
Actual Work	Crit Milestone No Predecessors	3-M	onth R	ollin	a Pi	rogramme (As of 31 Augu	st 2022)	Layout: C19W10 IT	T 3MRP - M26 th Rolling (MPU), N



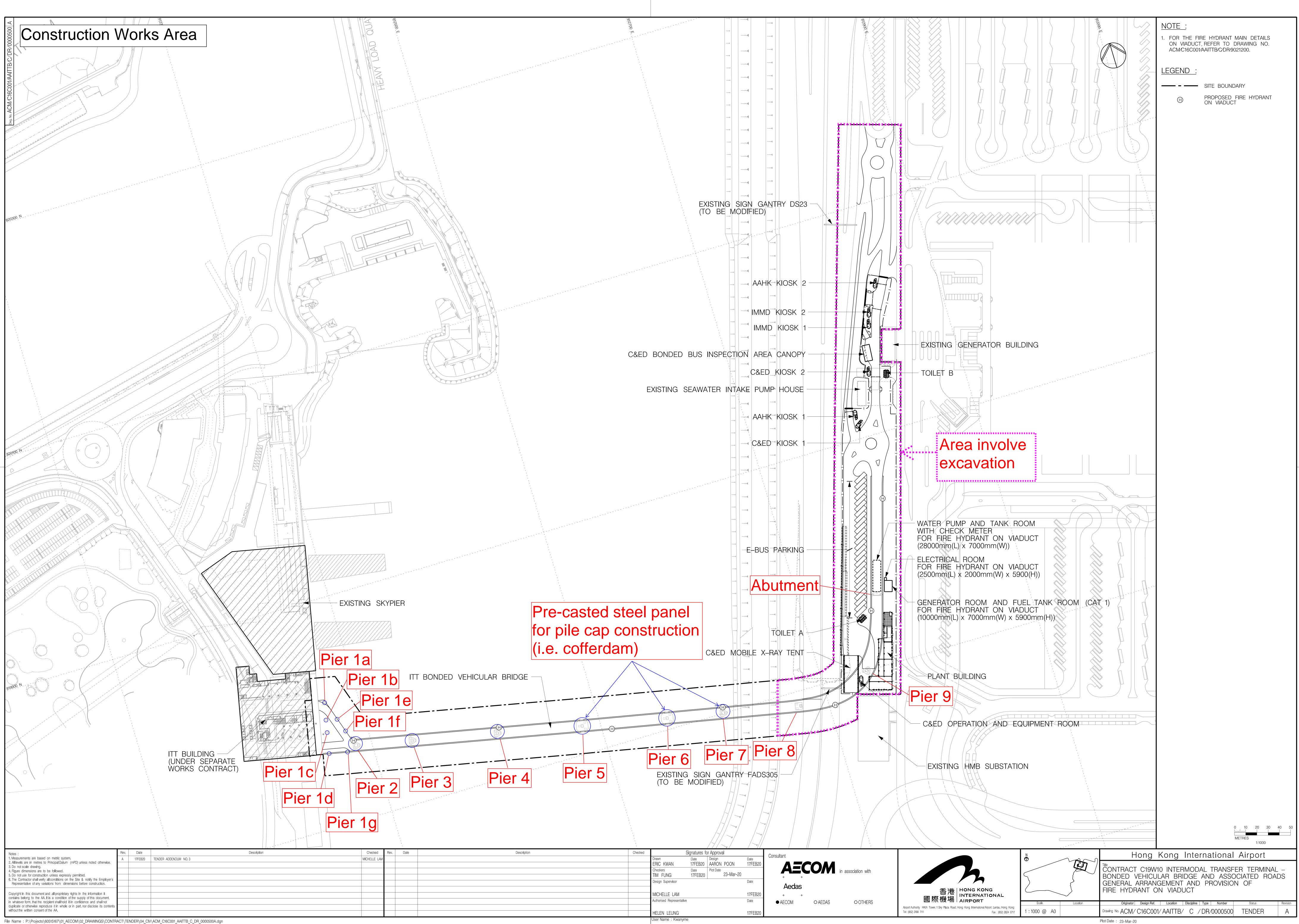
		C19W10 IT	ТВ А	.D2 N	lon	thly	Programme Rev. (	C Updated as 31 Aug	2022					
Activity ID	Activity Name		Current Start		Orig Dur			2022	2022					
			Clart		- Du.	00	Aug	Sep	Oct	Nov				
19W10.C.72030	Material Order & delivery		03-Jun-22 A	01-Mar-23	180	2.78%	;							
Cost Centre 8 - Project Site Office at Chun Yue Road														
							1       							

Actual LOE Critical Remaining Work 🛛 🐺 Remaining LOE Milestone • Actual Work 🔶 Crit Milestone ٩ • 📃 Remaining Work 🔶 🔶 Actual Milestone 

Start Constraint ₽ Finish Constraint No Predecessors No Successors

	Date	Revision	Checked	Approved
	5-Apr-22	3MRP Mar 2022	DW	BH
lot				

## **Appendix C. Construction Works Area**



# Appendix D. Monitoring Data and Graphical Plots

#### Water Quality Monitoring Results on 02 August 22 during Mid-Ebb Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Average Value Average Value DA Value DA Value DA Average Average 1.0 29.9 8.1 19.6 106.5 7.2 2.2 2.1 Surface 29.9 8.1 19.6 106.6 8.1 19.6 106.6 1.0 29.9 7.3 2.1 2.4 6.6 6.0 5.5 29.0 8.1 21.1 87.9 3.8 2.9 C1 21.1 87.9 3.6 2.7 Sunny Moderate 14:44 10.9 Middle 29.0 8.1 87.9 5.5 8.1 21.1 3.8 28.9 6.0 2.7 9.9 27.1 8.0 25.2 66.6 4.6 4.9 3.2 27.1 8.0 25.2 66.6 4.6 Bottom 9.9 27.1 8.0 25.1 66.6 4.6 4.8 3.0 1.0 29.6 20.0 105.0 7.2 1.3 2.2 8.1 29.7 8.1 20.0 105.1 Surface 1.0 29.7 8.1 19.9 105.1 1.2 7.2 2.3 6.8 4.8 29.1 8.1 20.9 92.8 6.3 1.8 2.8 C2 Calm 15:14 9.5 Middle 29.1 8.1 20.9 93.0 2.9 2.7 Sunny 4.8 8.1 20.9 93.1 6.4 1.8 2.5 29.1 8.5 8.0 24.0 4.9 3.0 27.0 70.9 5.6 Bottom 27.1 8.0 23.9 71.4 5.0 23.7 8.5 27.1 8.0 71.8 5.0 5.6 3.1 1.0 28.9 21.4 92.5 6.3 8.1 2.1 3.2 Surface 29.0 8.1 21.4 92.6 1.0 29.0 8.1 21.3 92.7 6.3 2.1 2.8 6.3 --------M1 15:06 4.7 Middle 2.3 2.7 Sunnv Calm --------3.7 28.6 22.4 87.5 6.0 2.5 2.4 8.1 28.6 8.1 22.5 87.4 6.0 Bottom 3.7 28.5 8.1 22.5 87.2 6.0 2.4 2.2 1.0 29.2 8.0 20.9 90.6 6.2 2.0 3.4 Surface 29.2 8.0 20.9 90.7 1.0 29.2 8.0 20.9 90.8 6.2 2.0 3.5 6.2 --------2.3 M2 Sunny Calm 15:10 5.6 Middle 3.1 ---------4.6 2.5 2.8 27.7 8.0 24.1 76.1 5.2 5.2 27.7 8.0 24.1 76.0 Bottom 4.6 27.6 8.0 24.1 75.9 5.2 2.5 2.5 1.0 28.9 21.5 91.4 6.3 2.1 2 8.1 29.0 8.1 21.5 91.5 Surface 1.0 29.0 8.1 21.4 91.5 6.3 2.1 2 6.0 3.6 28.5 8.0 22.4 82.9 5.7 2.6 2 M3 14:52 7.2 Middle 28.5 8.0 22.4 82.8 3.9 2 Sunny Moderate 22.4 2.5 3.6 28.5 8.0 82.7 5.7 2 6.2 26.5 26.3 60.6 4.2 8.0 7.0 1 4.2 26.5 8.0 26.3 60.6 Bottom 6.2 26.5 8.0 26.3 60.6 4.2 7.0 2

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

#### Water Quality Monitoring Results on 02 August 22 during Mid-Flood Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 27.9 8.0 22.9 71.0 4.9 2.3 2.1 27.9 8.0 22.9 71.1 Surface 1.0 8.0 22.9 4.9 27.9 71.1 2.3 2.2 4.6 5.9 27.0 7.9 25.0 61.0 4.2 3.0 2.4 3.1 C1 Sunnv Moderate 09:14 11.8 Middle 27.0 7.9 25.0 61.0 2.6 7.9 25.0 5.9 27.0 61.0 4.2 3.0 2.6 10.8 7.9 4.0 3.2 26.6 25.9 58.7 4.1 4.1 26.6 7.9 25.9 58.6 Bottom 25.9 7.9 58.5 4.1 4.0 3.1 10.8 26.6 1.0 28.3 78.0 5.4 3.2 21.8 2.4 8.0 28.3 8.0 21.8 78.1 Surface 1.0 28.3 8.0 21.8 78.2 5.4 3.2 2.6 5.2 5.1 27.8 8.0 23.1 70.7 4.9 4.7 2.1 C2 08:51 10.1 Middle 27.8 8.0 23.1 70.7 4.5 2.1 Sunny Moderate 5.1 27.8 8.0 23.1 70.7 4.9 4.6 2.2 9.1 26.6 7.9 26.1 60.2 4.2 5.4 1.6 26.6 7.9 26.1 60.1 4.2 Bottom 9.1 26.6 7.9 26.1 60.0 4.2 5.6 1.9 1.0 28.6 3.8 8.0 20.3 79.8 5.5 1.4 Surface 28.6 8.0 20.3 79.9 20.3 79.9 1.0 28.6 8.0 5.5 3.7 1.5 5.5 --------4.2 M1 Sunnv Calm 09:02 5.8 Middle --1.6 ------. -4.8 28.2 7.9 22.3 70.8 4.9 4.8 1.9 28.2 7.9 22.4 70.8 4.9 Bottom 4.8 7.9 22.4 70.8 4.9 4.5 1.7 28.2 1.0 28.5 21.3 79.5 5.5 3.2 2.0 8.0 Surface 28.5 8.0 21.4 79.5 1.0 28.5 8.0 21.4 79.5 5.5 2.2 3.1 5.5 --------4.1 M2 Sunnv Calm 09:05 5.3 Middle 1.9 -----------4.3 28.5 78.7 5.4 5.0 1.8 8.0 21.9 8.0 21.9 78.7 5.4 Bottom 28.5 4.3 28.5 8.0 21.9 78.6 5.4 5.0 1.6 1.0 28.5 8.0 21.1 75.8 5.2 1.5 3 28.5 8.0 21.1 75.9 Surface 21.1 1.0 28.5 8.0 75.9 5.2 1.5 3 5.1 3.6 28.3 7.9 21.6 70.8 4.9 2.3 3 21.6 M3 Sunnv Calm 09:10 7.2 Middle 28.3 7.9 70.8 3.3 3 3.6 28.3 7.9 21.6 70.8 4.9 2.3 3 6.2 27.8 7.9 23.0 63.6 4.4 6.2 2 4.4 Bottom 27.8 7.9 23.0 63.6 6.2 27.8 7.9 23.0 63.5 4.4 6.2 2

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

Water Qua	lity Moni	toring Resu	ilts on		04 August 22	during Mid	-Ebb Tid	е												
Monitoring	Weather	Sea Condition		Water Depth	Sampling De	epth (m)	Water Te	mperature (°C)	p	эΗ	Salir	iity (ppt)	DO Satu	ation (%)	Dissolved (mg/		Turbidity(	NTU)	Suspende (mg	
Station	Condition		Time	(m)	1 0	,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	26.6	26.7	8.0	8.0	24.1	24.5	69.8	69.4	4.9		2.3		2.7	
					Sullace	1.0	26.7	20.7	8.0	0.0	24.8	24.0	69.0	09.4	4.8	4.8	2.2		2.5	
C1	Misty	Moderate	16:16	9.2	Middle	4.6	26.3	26.5	7.9	8.0	26.6	26.3	69.3	69.3	4.8	4.0	3.2	3.0	2.3	2.0
0.	initiation	modelate		0.2		4.6	26.7	2010	8.0	0.0	26.0	2010	69.2	0010	4.7		3.1	0.0	2.1	
					Bottom	8.2	26.3	26.5	7.9	8.0	26.7	26.7	71.5	71.5	5.0	5.0	3.5		1.4	4
						8.2	26.6 26.5		8.0		26.7		71.5 68.4	1	4.9 4.8		3.6 4.7		1.2 1.2	<u> </u>
					Surface	1.0	26.5	26.5	8.0 8.0	8.0	24.2 23.7	24.0	68.2	68.3	4.8		4.7		1.2	1
						5.0	26.3		8.0		27.0		68.7		4.8	4.8	5.3		1.4	
C2	Misty	Moderate	16:32	10.0	Middle	5.0	26.6	26.5	8.0	8.0	26.8	26.9	68.4	68.6	4.7	-	5.3	5.4	1.8	1.8
					Detterre	9.0	26.4	00.5	8.0	8.0	27.0	27.0	75.2	75.2	5.2	5.2	6.2		2.3	
					Bottom	9.0	26.6	26.5	8.0	8.0	27.0	27.0	75.1	75.2	5.1	5.2	6.1		2.1	
				4.8	Surface	1.0	27.1	27.3	8.0	8.0	23.3	23.2	76.1	76.5	5.3		4.8		1.2	
		Moderate	16:26		Guilace	1.0	1.0 27.4 7.9 0.0 2	23.1	20.2	76.9	10.0	5.3	5.3	4.8		1.3	1			
M1	Misty				Middle	-	-	-	-	-	-	-	-		-	0.0	-	4.9	-	1.8
						-	-	- 2/1	-		-		-		-		-	-	-	4
						3.8 3.8	26.7 27.4		8.0 8.0	8.0	8.0 23.8 23.2	23.5	83.0 83.0	83.0	5.8 5.7	5.8	5.0 5.0		2.4 2.1	-
						1.0	27.4		8.0		23.2		83.0		5.7	1	2.1		1.3	
					Surface	1.0	27.4	27.2	8.0	8.0	23.2	23.3	82.0	81.9	5.7	-	2.1		1.1	
						-	-		-		-		-		-	5.7	-		-	
M2	Misty	Moderate	16:28	4.0	Middle	-	-	-	-	-	-	-	-		-		-	3.0	-	1.4
					Bottom	3.0	26.7	27.0	8.0	8.0	23.7	23.5	87.3	87.9	6.1	6.1	3.8		1.5	
					Bottom	3.0	27.2	21.0	8.0	0.0	23.3	20.0	88.5	07.5	6.1	0.1	3.9		1.7	
					Surface	1.0	27.5	27.5	7.9	7.9	23.3	23.3	75.9	76.0	5.3		2.3		2	
						1.0	27.5		7.9	7.9	23.3		76.1		5.3	5.3	2.4		2	4
M3	Misty	Moderate	16:23	6.2	Middle	3.1	27.5	27.5	7.9	7.9	23.3	23.3	77.9	78.2	5.4	-	3.7 3.6	3.4	2	2
						3.1	27.5	27.5	7.9		23.3		78.4 80.5		5.3 5.5		3.6 4.3		2	1
					Bottom	5.2 5.2	27.4	27.5	7.9 7.9	7.9	23.3 23.3	23.3	80.5 80.4	80.5	5.5 5.5	5.5	4.3		3	1
	1		I			0.2	21.0		1.9		23.3		00.4	I	0.0		4.3		3	1

DA: Depth-averaged

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

#### Water Quality Monitoring Results on 04 August 22 during Mid-Flood Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 26.8 7.9 23.3 70.7 5.0 3.6 1.3 26.9 7.9 23.7 69.7 Surface 1.0 7.9 24.1 27.0 68.7 4.8 3.6 1.4 4.9 4.1 26.5 7.9 24.6 69.6 4.9 4.9 1.5 4.2 C1 Mistv Moderate 10:47 8.2 Middle 26.7 7.9 25.1 68.9 1.6 7.9 25.5 4.1 26.9 68.1 4.7 4.9 1.6 7.2 7.9 26.5 26.2 74.0 5.1 4.0 1.9 26.7 7.9 26.1 72.4 5.0 Bottom 7.2 7.9 26.0 70.7 4.1 1.7 26.9 4.9 68.5 2.5 1.0 26.6 7.9 24.2 4.8 1.2 26.7 7.9 23.6 70.1 Surface 1.0 26.8 7.9 23.0 71.6 5.0 2.4 1.4 4.8 4.7 26.4 7.9 26.5 69.0 4.8 3.2 1.7 C2 10:29 9.4 Middle 26.5 7.9 26.3 66.7 3.5 1.8 Misty Moderate 4.7 26.6 7.9 26.0 64.4 4.5 3.1 1.9 8.4 26.5 7.9 26.5 71.8 5.0 4.8 2.2 4.9 26.6 7.9 26.1 70.3 Bottom 8.4 26.6 7.9 25.6 68.8 4.8 4.9 2.1 1.0 27.4 7.9 85.8 6.0 3.0 22.4 1.3 27.4 7.9 22.6 85.6 Surface 27.4 7.9 22.7 1.0 85.4 5.9 3.0 1.6 6.0 --------10:35 3.3 1.9 M1 Mistv Moderate 5.8 Middle --------. -4.8 27.4 7.9 23.1 90.3 6.3 3.6 2.4 27.4 7.9 22.9 90.4 6.3 Bottom 4.8 7.9 22.7 90.4 6.3 2.2 27.4 3.6 1.0 27.4 22.5 79.1 8.0 5.5 4.3 1.1 Surface 27.4 8.0 22.6 79.2 1.0 22.7 27.4 8.0 79.2 5.4 4.3 1.2 5.5 --------4.7 1.5 M2 Mistv Moderate 10:37 5.4 Middle -----------4.4 27.3 23.3 88.9 6.1 5.0 1.9 8.0 27.4 8.0 23.0 88.7 6.1 Bottom 4.4 27.4 8.0 22.7 88.4 6.1 5.0 1.6 1.0 27.4 8.0 23.4 72.2 5.0 2.1 1 27.4 8.0 23.3 71.5 Surface 7.9 23.2 1.0 27.4 70.7 4.9 2.0 1 5.0 3.0 27.4 8.0 23.5 72.4 5.0 3.6 2 M3 Mistv Moderate 10:40 6.0 Middle 27.4 8.0 23.4 71.8 3.5 2 3.0 27.4 7.9 23.3 71.1 4.9 3.7 2 5.0 27.4 8.0 23.5 74.3 5.2 4.9 2 Bottom 27.4 8.0 23.4 73.1 5.1 5.0 27.4 7.9 23.3 71.9 5.0 4.8 2

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

Water Qua	lity Moni	toring Resu	ilts on		06 August 22	during Mid	-Ebb Tid	le												
Monitoring	Weather	Sea Condition		Water Depth	Sampling De	epth (m)	Water Te	emperature (°C)	р	Н	Salir	ity (ppt)	DO Satu	ation (%)	Dissolved ( (mg/l		Turbidity(	NTU)	Suspende (mg	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	26.9	27.0	7.8	7.8	19.7	19.7	71.4	71.3	5.1		2.4		2.8	
					Sunace	1.0	27.0	27.0	7.8	1.0	19.6	19.7	71.1	71.5	5.1	4.9	2.3		3.1	l
C1	Misty	Moderate	08:40	8.2	Middle	4.1	26.8	26.9	7.8	7.8	20.6	21.3	64.2	64.9	4.6	4.5	3.0	3.0	2.6	2.6
0.	····ovy	modelate	00.10	0.2		4.1	27.0	2010	7.8		22.0		65.5	0.110	4.6		3.1	0.0	2.4	
					Bottom	7.2	26.8	26.9	7.7	7.8	22.3	22.3	65.4	66.2	4.6	4.7	3.7		2.4	1
						7.2	27.0		7.8		22.3		67.0		4.7		3.7 1.0		2.2	
					Surface	1.0	27.0 27.0	27.0	7.7 7.8	7.8	20.3 20.2	20.3	69.7 71.6	70.7	5.0 5.1	-	1.0		4.0 3.7	1
						4.7	27.0		7.7		20.2		69.3		4.9	5.0	1.1	1.1	3.1	ł
C2	Misty	Moderate	08:20	9.4	Middle	4.7	27.0	27.0	7.8	7.8	20.2	20.3	71.4	70.4	5.1		1.1		3.3	3.3
					D //	8.4	27.0	07.0	7.7		20.2		69.2	70.4	4.9	5.0	1.2		2.4	
					Bottom	8.4	27.0	27.0	7.7	7.7	20.2	20.2	71.0	70.1	5.1	5.0	1.2		2.6	1
					Surface	1.0	26.9	26.9	7.7	7.8	21.2	21.2	66.6	67.2	4.7		1.5		2.1	1
					Odnace	1.0	26.9	26.9 7.8 7.0 21.1 21.2 67.7 07.2	4.8	4.8	1.4	_	2.3	1						
M1	Misty	Moderate	08:27	5.0	Middle	-	-	-	-	-	-	-	-		-		-	1.5	-	2.6
						-	-	26.9	-		-		-		-		-		-	
						4.0	26.9		7.7 7.8		21.2	21.2	66.3 67.2	66.8	4.7 4.8	4.8	1.5 1.5		2.9 3.0	ł
			1			4.0	26.9 26.9		7.8		21.2		67.2		4.8		1.5		3.0 2.6	<u> </u>
					Surface	1.0	26.9	26.9	7.8	7.8	21.2	21.3	67.8	67.5	4.8	-	1.7		3.0	1
						-	-		-		-		-		-	4.8	-		-	1
M2	Misty	Moderate	08:30	5.4	Middle	-	-	-	-	-	-	-	-	-	-		-	1.9	-	2.5
					Bottom	4.4	26.9	26.9	7.6	7.7	21.3	21.3	66.3	66.9	4.7	4.8	1.9		2.3	ł
					Bollom	4.4	26.9	20.9	7.7	1.1	21.3	21.3	67.5	00.9	4.8	4.0	2.0		2.1	I
					Surface	1.0	26.7	26.9	7.8	7.8	20.8	20.8	70.1	70.2	5.0		1.1		2	
					Cunado	1.0	27.0	20.0	7.8	.8	20.7	20.0	70.2	10.2	5.0	5.0	1.1		2	ł
M3	Misty	Moderate	08:34	6.0	Middle	3.0	26.6	26.8	7.8 7.	7.8	20.9	20.9	68.1	68.6	4.9		1.1	1.1	3	3
				0.0		3.0	27.0		7.8		20.9		69.1		4.9		1.1			3
					Bottom	5.0	26.8	26.9	7.8 7.8	7.8	22.2 22.6	22.4	59.2 60.1	59.7	4.1 4.2	4.2	1.1 1.1		3	l
						5.0 27.0		1.8		22.6		60.1		4.2		1.1		3	ı	

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

#### Water Quality Monitoring Results on 06 August 22 during Mid-Flood Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 26.8 7.8 21.5 69.8 5.0 1.0 2.2 26.8 7.8 21.1 70.1 Surface 1.0 7.8 20.7 26.8 70.3 5.0 1.0 2.1 4.8 4.6 26.7 7.8 22.3 64.0 4.5 1.5 2.6 1.4 C1 Mistv Moderate 12:36 9.2 Middle 26.8 7.8 22.3 64.5 2.6 7.8 22.3 4.6 26.8 64.9 4.6 1.4 2.8 8.2 26.7 7.8 24.4 64.9 4.6 1.7 2.9 4.7 26.8 7.8 24.6 67.0 Bottom 8.2 7.8 24.8 69.1 1.6 3.2 26.9 4.8 5.3 1.0 26.7 20.4 73.6 2.3 3.2 7.8 26.9 7.8 20.6 73.4 Surface 1.0 27.1 7.8 20.7 73.2 5.1 2.3 3.4 5.1 5.0 26.4 7.8 23.1 70.9 4.9 3.6 2.6 C2 12:53 10.0 Middle 26.7 7.8 22.6 70.8 3.4 2.8 Misty Moderate 5.0 26.9 7.8 22.0 70.6 4.9 3.5 2.9 9.0 26.5 7.7 24.2 70.2 4.9 4.2 2.6 26.7 7.8 24.6 70.3 4.9 Bottom 9.0 26.8 7.8 24.9 70.4 4.9 4.2 2.3 1.0 75.9 1.5 26.6 7.8 21.5 5.4 3.1 26.9 7.8 21.3 75.8 Surface 7.8 1.0 27.1 21.1 75.6 5.3 1.6 2.8 5.4 --------5.2 1.9 2.6 M1 Misty Moderate 12:44 Middle --------. -4.2 26.4 7.7 21.5 77.1 5.5 2.3 2.1 26.6 7.8 76.4 5.5 Bottom 21.4 4.2 7.8 21.3 75.7 2.3 2.3 26.8 5.4 1.0 7.8 21.2 76.6 5.5 2.3 26.7 1.1 Surface 27.0 7.8 20.9 76.3 1.0 20.6 27.2 7.8 75.9 5.4 2.5 1.1 5.5 --------1.4 2.8 M2 Mistv Moderate 12:47 4.8 Middle -----------3.8 26.5 7.7 78.6 5.6 1.6 2.9 21.1 7.8 21.0 77.5 5.5 Bottom 26.8 3.8 27.0 7.8 20.8 76.3 5.4 1.6 3.4 1.0 27.0 7.8 20.5 76.5 5.4 1.0 2 27.1 7.8 20.5 76.2 Surface 7.8 20.4 1.0 27.2 75.8 5.4 1.0 2 5.4 3.1 26.8 7.8 20.7 76.5 5.5 1.2 3 20.6 1.2 M3 Mistv Moderate 12:40 6.2 Middle 27.0 7.8 76.2 3 3.1 27.2 7.8 20.5 75.8 5.4 1.1 3 5.2 26.6 7.7 20.9 77.2 5.5 1.4 3 Bottom 26.9 7.8 20.7 76.8 5.5 5.2 27.2 7.8 20.4 76.4 5.4 1.5 3

DA: Depth-averaged

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

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

Water Qua	lity Moni	toring Resu	lts on		09 August 22	during Mid	-Ebb Tid	le												
Monitoring	Weather	Sea Condition	Sampling		Sampling De	epth (m)	Water Te	mperature (°C)	p	Н	Salir	ity (ppt)	DO Satu	ration (%)	Dissolved (mg/		Turbidity(	NTU)	Suspende (mg	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	27.1	27.1	8.0	8.0	25.5	25.5	79.0	79.0	5.5		3.3		1.8	
					Sunace	1.0	27.1	27.1	8.0	0.0	25.5	20.0	79.0	79.0	5.5	5.5	3.3		1.7	
C1	Rainy	Rough	09:35	10.6	Middle	5.3	27.1	27.1	8.0	8.0	25.6	25.6	77.6	77.7	5.4	0.0	5.5	5.4	2.2	2.3
0.		ricugn	00.00	1010	inidalo	5.3	27.1		8.0	0.0	25.6	2010	77.8		5.4		5.5	0	2.4	2.0
					Bottom	9.6	26.8	26.8	8.0	8.0	26.7	26.7	76.4	76.3	5.3	5.3	7.4		2.6	
		1				9.6	26.8		8.0		26.6		76.1		5.2		7.4		2.9	<u> </u>
					Surface	1.0	27.1 27.1	27.1	8.0 8.0	8.0	24.9 24.9	24.9	78.7 78.7	78.7	5.4 5.4	_	3.3 3.3		2.0 2.3	1
						5.2	27.1		8.0		24.9		77.7		5.4	5.4	3.5		2.5	1
C2	Rainy	Rough	10:07	10.4	Middle	5.2	27.1	27.1	8.0	8.0	24.9	24.9	77.8	77.8	5.4	-	3.5	3.8	2.6	2.6
					D //	9.4	26.9	00.0	7.9	7.0	26.5	00 F	62.5	00 F	4.3	4.3	4.5		3.0	
					Bottom	9.4	26.9	26.9	7.9	7.9	26.5	26.5	62.5	62.5	4.3	4.3	4.5		3.0	
					Surface	1.0	27.1	27.1	7.9	7.9	25.4	25.4	75.9	76.0	5.2		3.9		1.9	
					Odnace	1.0	27.1	27.1	7.9	1.5	25.3	20.4	76.0	70.0	5.3	5.3	3.9		1.8	
M1	Rainy	Rough	09:50	5.1	Middle	-	-	-	-	-	-	-	-	-	-	0.0	-	5.7	-	1.7
				-		-	-		-		-		-		-		-		-	1
					Bottom	4.1	26.7 26.8	26.8	7.9 7.9	7.9	26.9 26.8	26.9	69.2 68.9	69.1	4.8 4.8	4.8	7.4 7.4		1.4 1.6	4
						1.0	26.8		7.9		26.8		75.9		4.8 5.2		4.0		1.6	┝────
					Surface	1.0	27.1	27.1	7.9	7.9	25.3	25.4	76.0	76.0	5.3	-	4.0		1.0	1
						-	-		-		-		-		-	5.3	-		-	
M2	Rainy	Rough	09:55	4.8	Middle	-	-	-	-	-	-	-	-	-	-		-	4.4	-	2.1
					Bottom	3.8	27.0	27.0	7.9	7.9	26.1	26.1	68.9	68.9	4.7	4.7	4.7		2.3	
					Bollom	3.8	27.0	27.0	7.9	7.9	26.1	20.1	68.9	00.9	4.7	4.7	4.7		2.6	
					Surface	1.0	27.1	27.1	8.0	8.0	25.5	25.5	78.5	78.6	5.4		3.3		2	
					Cundoo	1.0	27.1	27.1	8.0	0.0	25.5	20.0	78.6	70.0	5.4	5.4	3.4		2	1
M3	Rainy	Rough	09:41	7.3	Middle	3.7	27.1	27.1	8.0	8.0	25.5	25.5	77.9	78.0	5.4		3.4	3.5	2	2
	-	, J				3.7	27.1		8.0		25.5		78.0		5.4		3.4		2	4
					Bottom	6.3 6.3	27.0 27.0	27.0	8.0 8.0	8.0	25.9 25.9	25.9	74.2 74.1	74.2	5.1 5.1	5.1	3.8 3.8		3	4
						6.3	27.0		8.U		25.9		74.1		5.1		3.8		3	1

DA: Depth-averaged

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

### Water Quality Monitoring Results on **09 August 22** during Mid-Flood Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 26.7 8.0 26.4 76.0 5.2 4.1 1.7 26.7 8.0 26.4 76.1 Surface 1.0 8.0 26.4 26.7 76.1 5.2 4.0 1.5 5.2 4.7 26.3 8.0 27.2 73.9 5.1 5.3 1.6 Rough 4.5 C1 Rainy 02:58 9.4 Middle 26.4 8.0 27.2 74.0 1.8 8.0 27.1 4.7 26.4 74.0 5.1 5.3 1.9 8.4 4.0 2.2 26.0 8.0 29.2 69.4 4.8 4.8 26.0 8.0 29.2 69.4 Bottom 8.4 8.0 29.2 69.4 4.8 4.0 2.1 26.0 1.0 26.7 70.7 7.9 26.3 4.9 3.3 1.9 26.7 7.9 26.3 70.7 Surface 1.0 26.7 7.9 26.3 70.7 4.9 3.3 1.7 4.9 4.8 25.8 8.0 29.2 72.1 5.0 3.6 2.1 C2 02:26 9.6 Middle 25.8 8.0 29.2 72.1 3.8 2.2 Rainy Rough 4.8 25.8 8.0 29.2 72.0 4.9 3.6 2.2 8.6 26.2 27.7 70.4 4.8 4.6 2.6 8.0 26.3 8.0 27.7 70.4 4.8 Bottom 8.6 26.3 8.0 27.6 70.4 4.8 4.6 2.8 1.0 26.9 5.0 4.1 3.3 7.9 25.4 72.5 Surface 26.9 7.9 25.4 72.5 7.9 25.4 1.0 26.9 72.5 5.0 4.1 2.9 5.0 --------4.3 5.2 2.7 M1 Rainv Moderate 02:44 Middle --------. -3.3 26.6 7.9 26.8 69.8 4.8 6.3 2.3 26.6 7.9 26.8 69.8 4.8 Bottom 3.3 7.9 26.8 69.7 4.8 2.2 26.6 6.3 1.0 26.8 7.9 25.5 72.7 5.0 3.5 2.5 Surface 26.8 7.9 25.5 72.7 1.0 7.9 25.4 26.8 72.7 5.0 3.4 2.3 5.0 --------3.9 2.6 M2 Rainv Moderate 02:39 4.1 Middle -----------3.1 26.8 7.9 25.5 72.6 5.0 4.3 3.0 7.9 25.5 72.6 5.0 Bottom 26.8 3.1 26.8 7.9 25.5 72.6 5.0 4.3 2.7 1.0 26.7 8.0 26.6 75.9 5.2 4.0 4 26.7 8.0 26.6 76.0 Surface 26.5 1.0 26.7 8.0 76.1 5.2 3.9 3 5.2 3.4 26.6 8.0 27.0 75.5 5.2 4.6 3 75.5 Rough M3 Rainy 02:52 6.8 Middle 26.6 8.0 27.0 4.5 3 3.4 26.6 8.0 27.0 75.5 5.2 4.6 2 5.8 26.2 8.0 28.1 74.2 5.0 2 5.1 Bottom 26.3 8.0 28.1 74.2 5.1 5.8 26.3 8.0 28.0 74.2 5.1 5.0 2

DA: Depth-averaged

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

### Water Quality Monitoring Results on 11 August 22 during Mid-Ebb Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Average Value Average Value DA Value DA Value DA Average Average 1.0 26.3 7.9 24.1 83.4 5.9 2.1 2.8 Surface 26.3 7.9 24.0 83.4 7.9 23.9 83.4 1.0 26.3 5.8 2.0 3.0 5.9 5.9 4.6 26.2 7.9 24.2 83.4 2.4 3.4 C1 7.9 24.1 83.4 2.5 3.5 Misty Moderate 11:02 9.2 Middle 26.3 4.6 7.9 23.9 83.4 2.4 26.3 5.8 3.3 8.2 26.2 7.9 24.2 90.6 6.4 2.9 4.4 26.3 7.9 24.1 90.6 6.4 Bottom 7.9 8.2 26.3 24.0 90.6 6.3 3.0 4.2 1.0 26.2 7.9 24.3 86.0 6.1 2.2 3.3 26.2 7.9 24.2 84.6 Surface 1.0 26.2 7.9 24.1 83.2 5.9 2.3 3.0 6.0 5.0 26.2 7.9 24.4 87.2 6.1 3.1 2.8 C2 11:20 10.0 Middle 26.2 7.9 24.4 85.7 3.4 2.7 Misty Moderate 5.0 26.2 7.9 24.3 5.9 3.2 2.5 84.2 9.0 7.9 24.4 6.3 4.8 26.2 89.0 2.1 Bottom 26.2 7.9 24.3 87.2 6.2 7.9 24.2 9.0 26.2 85.3 6.0 4.9 2.4 1.0 25.9 24.0 89.1 6.3 7.9 1.8 2.6 26.1 7.9 24.0 89.1 Surface 1.0 26.3 7.9 23.9 89.1 6.2 1.8 2.8 6.3 --------M1 11:10 4.6 Middle 2.0 2.5 Mistv Moderate --------3.6 25.9 7.9 24.0 92.3 6.6 2.1 2.3 26.0 7.9 24.0 92.3 6.6 Bottom 3.6 26.1 7.9 23.9 92.3 6.6 2.2 2.1 1.0 26.3 7.9 23.7 83.8 5.9 1.1 1.7 Surface 26.3 7.9 23.8 83.5 1.0 26.3 7.9 23.8 83.2 5.9 1.1 1.9 5.9 --------1.3 M2 Misty Moderate 11:13 4.8 Middle 2.1 ---------3.8 2.3 26.3 7.9 23.5 84.4 6.0 1.4 26.3 7.9 23.7 84.0 6.0 Bottom 3.8 26.3 7.9 23.8 83.6 5.9 1.4 2.6 1.0 26.2 7.9 23.9 88.1 6.2 1.0 2 26.3 7.9 23.8 86.9 Surface 1.0 26.3 7.9 23.7 85.7 6.1 1.1 2 6.2 3.1 26.2 7.9 24.1 6.3 2.2 89.8 2 M3 11:06 6.2 Middle 26.2 7.9 24.0 88.3 2.1 3 Misty Moderate 7.9 23.8 2.2 3 3.1 26.2 86.8 6.1 5.2 26.2 7.9 24.0 92.4 6.5 2.9 3 6.4 26.2 7.9 23.9 89.9 Bottom 5.2 26.2 7.9 23.7 87.4 6.2 3.0 3

DA: Depth-averaged

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

					11 August 22	during Mid-	11000													
	Weather	Sea Condition	Sampling	Water Depth	Sampling Dep	th (m)	Water Te	emperature (°C)	p	эΗ	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved ( (mg/L		Turbidity(1	NTU)	Suspende (mg/	
Station	Condition		Time	(m)	g		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	26.0	26.0	7.9	7.9	23.7	24.5	80.8	80.5	5.7		2.2		2.2	
					Sunace	1.0	26.0	20.0	7.9	7.9	25.2	24.3	80.2	00.5	5.7	5.7	2.1		2.3	1
C1	Rainy	Moderate	07:02	8.2	Middle	4.1	25.9	25.9	7.9	7.9	25.6	25.7	81.9	81.9	5.8	0.7	3.4	3.2	2.5	2.7
01	rearry	modorato	01.02	0.2	Middle	4.1	25.9	20.5	7.9	7.5	25.7	20.1	81.8	01.0	5.7		3.5	0.2	2.8	
					Bottom	7.2	25.9	26.0	7.9	7.9	25.7	25.5	85.8	85.7	6.0	6.0	4.0		3.2	1
					20110111	7.2	26.0	20.0	7.9		25.3	20.0	85.6		6.0	0.0	4.0		3.1	Ļ
					Surface	1.0	26.0	26.1	7.9	7.9	25.2	25.1	82.1	81.4	5.8		1.6		3.4	4
						1.0	26.1		7.9		24.9		80.6		5.7	5.8	1.6		3.6	4
C2	Rainy	Moderate	06:44	9.4	Middle	4.7	25.9 26.0	26.0	7.9 7.9	7.9	25.5	25.3	82.9 81.5	82.2	5.8 5.7		1.9 2.0	2.0	3.8 4.1	4.1
						4.7	26.0		7.9		25.1 25.7		81.5		5.7 6.1		2.0		4.1 5.1	i i
					Bottom	8.4	25.9	26.0	7.9	7.9	25.7	25.4	81.8	84.3	5.8	6.0	2.5	4.7	i i	
						1.0	25.9		7.9		24.6		84.6		6.0		1.1		5.1	<u> </u>
					Surface	1.0	26.1	26.0	7.9	7.9	24.2	24.4	84.5	84.6	5.9		1.1		4.8	i i
	<b>.</b> .					-	-		-		-		-		-	6.0	-		-	
M1	Rainy	Moderate	06:50	5.0	Middle	-	-	-	-	-	-	-	-	-	-		-	1.9	-	5.2
					Bottom	4.0	25.8	25.9	7.9	7.9	25.2	24.8	87.3	87.3	6.2	6.2	2.6		5.3	i i
					Bollom	4.0	26.0	23.9	7.9	7.9	24.4	24.0	87.2	07.5	6.1	0.2	2.7		5.7	L
					Surface	1.0	26.1	26.2	7.9	7.9	23.7	23.6	84.7	84.5	6.0		1.0		3.8	
					Gundoo	1.0	26.2	20.2	7.9	1.0	23.4	20.0	84.2	01.0	5.9	6.0	1.0		3.4	1
M2	Rainy	Moderate	06:53	5.4	Middle	-	-	-	-	-	-	-	-	_	-	0.0	-	1.6	-	3.9
						-	-		-		-		-		-		-		-	1
					Bottom	4.4	25.9	26.0	7.9	7.9	24.8	24.2	90.0	90.1	6.4	6.4	2.2		4.0	1
						4.4	26.1		7.9		23.6		90.1		6.3		2.3		4.4	<u> </u>
					Surface	1.0	26.0	26.1	7.9	7.9	24.6	24.5	81.5	81.5	5.8		1.4		3	4
						1.0	26.1		7.9		24.3		81.4		5.6	5.8	1.3		2	1
M3	Rainy	Moderate	06:57	6.0	Middle	3.0 3.0	26.0 26.1	26.1	7.9 7.9	7.9	25.0 24.5	24.8	82.1 82.6	82.4	5.8 5.8		2.8 2.8	2.5	4	4
						5.0	26.1		7.9		24.5 25.4		82.6		5.8 6.1		3.4		4 5	i –
					Bottom	5.0	26.1	26.1	7.9	7.9	24.5	25.0	86.1	86.1	6.1	6.1	3.4		5	i

DA: Depth-averaged

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

### Water Quality Monitoring Results on 13 August 22 during Mid-Ebb Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Average Value Average Value DA Value DA Value DA Average Average 1.0 27.4 8.0 22.9 79.8 5.6 2.7 3.1 Surface 27.4 8.0 23.1 79.5 8.0 23.2 79.1 1.0 27.3 5.5 2.8 2.9 5.5 5.6 27.2 8.0 23.4 79.5 5.5 3.4 2.3 C1 8.0 23.4 79.2 3.1 2.4 Fine Moderate 12:38 11.2 Middle 27.2 8.0 23.4 78.9 5.5 3.1 5.6 27.2 2.6 10.2 27.2 8.0 23.4 80.8 5.6 3.3 1.8 27.3 8.0 23.3 80.0 5.6 Bottom 10.2 27.3 8.0 23.2 79.1 5.5 3.0 1.5 1.0 27.2 23.6 77.4 5.4 2.8 2.3 8.0 27.3 8.0 23.3 78.3 Surface 1.0 27.4 8.0 23.0 79.2 5.5 2.6 2.1 5.4 5.2 27.1 8.0 23.9 76.1 5.3 4.6 1.8 C2 Fine 13:00 10.4 Middle 27.1 8.0 23.9 76.6 5.5 1.8 Moderate 5.2 8.0 23.9 77.0 5.4 5.4 27.1 1.7 9.4 8.0 24.0 8.5 1.5 27.1 73.8 5.1 Bottom 27.1 8.0 24.1 75.3 5.2 24.1 9.4 27.1 8.0 76.8 5.2 9.0 1.4 1.0 23.7 75.8 3.2 2.8 26.8 8.0 5.3 26.8 8.0 24.2 76.2 Surface 1.0 26.8 8.0 24.6 76.6 5.3 3.0 2.4 5.3 --------M1 12:48 5.9 Middle 3.8 2.1 Fine Moderate --------4.9 26.6 26.1 77.1 5.4 4.4 1.6 8.0 26.8 8.0 25.4 77.0 5.4 Bottom 4.9 26.9 8.0 24.6 76.8 5.4 4.4 1.7 1.0 27.2 8.0 23.5 80.3 5.6 2.0 1.4 Surface 27.2 8.0 23.6 79.9 1.0 27.1 8.0 23.7 79.5 5.5 2.2 1.5 5.6 --------2.3 M2 Fine Moderate 12:51 5.7 Middle 1.9 ---------4.7 2.7 2.2 26.9 8.0 24.0 78.5 5.5 27.0 8.0 23.8 79.3 5.6 Bottom 4.7 27.1 8.0 23.6 80.1 5.6 2.4 2.4 1.0 27.2 23.4 82.1 5.7 1.4 8.0 4 27.2 8.0 23.6 81.4 Surface 1.0 27.1 8.0 23.7 80.6 5.6 1.5 4 5.5 3.7 26.8 8.0 23.8 5.4 6.0 76.9 3 M3 Middle 26.8 8.0 24.4 75.7 4.9 3 Fine Moderate 12:44 7.4 25.0 6.2 3.7 26.7 8.0 74.4 5.2 3 6.4 26.9 8.0 25.5 75.7 5.2 6.8 2 74.9 5.2 26.8 8.0 25.5 Bottom 6.4 26.7 8.0 25.5 74.0 5.1 7.2 2

DA: Depth-averaged

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

Water Qua	lity Moni	toring Resu	lts on		13 August 22	during Mid	-Flood 1	lide												
Monitoring	Weather	Sea Condition	Sampling		Sampling De	pth (m)	Water Te	emperature (°C)	þ	эΗ	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/l		Turbidity(	NTU)	Suspende (mg.	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	26.8	26.8	8.0	8.0	24.7	24.9	76.1	75.0	5.3		3.9		3.1	
					Sullace	1.0	26.7	20.0	8.0	0.0	25.0	24.9	73.8	75.0	5.1	5.2	3.8		2.9	l
C1	Fine	Moderate	07:43	11.0	Middle	5.5	26.6	26.6	8.0	8.0	25.7	25.5	75.3	74.4	5.2	5.2	9.3	5.6	2.7	2.6
01	1 IIIC	Woderate	07.40	11.0	Middle	5.5	26.6	20.0	8.0	0.0	25.3	20.0	73.5	74.4	5.1		8.3	0.0	2.4	2.0
					Bottom	10.0	26.6	26.7	8.0	8.0	25.9	26.2	75.8	74.4	5.3	5.2	4.0		2.2	l
					Dottom	10.0	26.8	20.1	8.0	0.0	26.4	20.2	72.9	77.7	5.0	0.2	4.1		2.1	1
					Surface	1.0	26.9	26.9	8.0	8.0	23.9	23.9	77.7	77.6	5.4		2.8		4.6	1
						1.0	26.9		8.0		23.8		77.4		5.4	5.2	3.2		4.2	1
C2	Fine	Moderate	07:24	10.8	Middle	5.4	26.5	26.5	8.0	8.0	27.3	27.3	71.6	71.5	4.9		7.9	5.3	3.6	3.5
						5.4	26.5		8.0		27.3		71.3		4.9		7.7		3.3	1
					Bottom	9.8	26.4	26.6	8.0	8.0	27.6	27.5	72.6	72.2	5.0	5.0	5.5		2.8	1
						9.8	26.8		8.0		27.4		71.8		4.9		4.9		2.5	
					Surface	1.0	26.9	26.9	8.0 7.9	8.0	23.0 23.1	23.1	78.5	77.5	5.5	-	3.8		3.7 3.6	1
						1.0	26.8		7.9		23.1		76.5		5.4	5.5	3.8			1
M1	Fine	Moderate	07:35	5.7	Middle	-	-	-	-	-	-	-	-	-	-			3.3	-	3.4
						4.7	26.7		8.0		- 25.5		76.3		5.3		2.8		3.2	1
					Bottom	4.7	26.9	26.8	7.9	8.0	25.2	25.4	75.1	75.7	5.2	5.3	2.0		2.9	1
						1.0	26.8		7.9		24.3		79.3		5.5		4.6		2.6	
					Surface	1.0	26.8	26.8	7.9	7.9	24.1	24.2	77.4	78.4	5.4		4.3		2.8	1
						-	-		-		-		-		-	5.5	-		-	1
M2	Fine	Moderate	07:32	5.7	Middle	-	-	-	-	-	-	-	-	-	-		-	4.4	-	2.5
					_	4.7	26.7		7.9		24.7		80.0		5.6		4.6		2.1	1
					Bottom	4.7	26.8	26.8	7.9	7.9	24.0	24.4	78.1	79.1	5.5	5.6	4.0		2.5	ł
						1.0	26.7		8.0		23.5		77.9		5.5		3.4		4	[
					Surface	1.0	26.7	26.7	8.0	8.0	23.6	23.6	74.8	76.4	5.3		3.7		3	ł
M3	Fine	Madarata	07:39	7.0	Middle	3.6	26.6	26.6	8.0	8.0	24.5	24.5	77.3	75.7	5.4	5.4	4.2	3.6	3	
IVI3	Fine	Moderate	07:39	7.2	IVIIdale	3.6	26.6	20.0	8.0	8.0	24.5	24.5	74.0	/5./	5.2	1	4.2	3.0	3	3
					Bottom	6.2	26.5	26.6	8.0	8.0	26.5	26.4	81.5	77.7	5.1	5.1	2.9		3	l
					DOLLOITI	6.2	26.7	20.0	8.0	0.0	26.3	20.4	73.8	//./	5.1	5.1	3.3		2	i

DA: Depth-averaged

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

### Water Quality Monitoring Results on 16 August 22 during Mid-Ebb Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Average Value Average Value DA Value DA Value DA Average Average 1.0 28.4 8.1 21.2 87.0 6.0 3.9 1.7 Surface 28.4 8.1 21.2 86.3 8.0 21.1 85.6 1.0 28.4 5.9 3.9 1.9 6.0 4.6 28.1 8.1 21.4 88.0 6.1 4.0 2.7 C1 8.1 21.4 86.8 4.3 2.5 Sunny Calm 14:48 9.2 Middle 28.2 4.6 8.0 21.4 85.5 5.9 4.0 28.3 2.4 8.2 28.4 8.0 21.2 86.5 6.0 5.0 3.2 28.4 8.0 21.2 86.5 6.0 Bottom 8.2 28.4 8.0 21.1 86.5 6.0 5.0 2.9 1.0 28.2 20.3 90.4 6.3 1.0 2.6 8.0 28.2 8.0 20.2 90.1 Surface 1.0 28.2 8.0 20.1 89.7 6.3 1.0 2.3 6.0 5.0 28.0 8.1 22.2 82.2 5.7 2.1 3.0 C2 Calm 15:05 10.0 Middle 28.0 8.1 22.3 81.7 2.0 3.1 Sunny 2.2 5.0 28.0 8.0 22.4 5.6 2.8 81.1 9.0 22.1 82.4 3.6 28.0 8.1 5.7 2.7 Bottom 28.2 8.1 22.4 81.9 5.7 22.7 9.0 28.3 8.0 81.4 5.6 2.7 4.0 1.0 27.7 85.1 5.9 5.7 8.1 23.1 1.6 Surface 27.9 8.1 23.0 85.4 1.0 28.0 8.0 22.9 85.6 5.8 1.6 5.3 5.9 --------M1 14:56 5.6 Middle 2.0 5.0 Sunnv Calm --------4.6 27.5 23.6 87.5 6.1 2.3 4.6 8.1 27.8 8.1 23.3 87.5 6.1 Bottom 4.6 28.0 8.1 23.0 87.5 6.0 2.3 4.2 1.0 27.8 8.1 22.5 86.8 6.0 1.5 6.0 Surface 28.0 8.1 22.4 86.6 1.0 28.2 8.0 22.3 86.4 5.9 1.6 5.8 6.0 --------14:59 1.8 5.5 M2 Sunny Calm 5.2 Middle ---------4.2 5.3 27.6 8.1 23.0 88.2 6.1 2.1 27.8 8.1 22.7 88.7 6.1 Bottom 4.2 28.0 8.1 22.4 89.2 6.0 2.1 5.0 1.0 28.3 8.0 21.8 87.9 6.1 1.1 2 28.4 8.0 21.8 87.8 Surface 1.0 28.4 8.0 21.7 87.6 6.0 1.1 2 6.1 3.1 28.3 8.1 21.9 88.4 6.1 1.3 3 M3 14:52 6.2 Middle 28.4 8.1 21.8 88.0 1.6 3 Sunny Calm 21.7 1.3 3.1 28.4 8.0 87.6 6.0 3 5.2 27.9 8.1 22.1 90.3 6.3 2.2 4 21.9 6.2 28.2 8.1 89.0 Bottom 5.2 28.4 8.0 21.7 87.6 6.0 2.3 4

DA: Depth-averaged

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

Water Qua	lity Moni	toring Resu	lts on		16 August 22	during Mid-	Flood	Гide												
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	oth (m)	Water T	emperature (°C)	F	Η	Salin	ity (ppt)	DO Satu	ration (%)	Dissolved (mg/l		Turbidity(	(NTU)	Suspende (mg	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.1	28.2	8.0	8.0	21.0	20.9	83.0	83.0	5.8		1.0		1.6	
					Sunace	1.0	28.2	20.2	8.0	0.0	20.8	20.3	83.0	05.0	5.8	5.8	1.1		1.5	
C1	Sunny	Calm	09:37	8.8	Middle	4.4	28.0	28.1	8.0	8.0	21.3	21.1	82.2	82.7	5.7	0.0	1.2	1.4	2.1	2.3
01	o anny	Call	00.01	0.0	Middlo	4.4	28.2	20.1	8.0	0.0	20.8	2	83.2	02.1	5.8		1.2		2.3	
					Bottom	7.8	27.6	27.9	8.0	8.0	22.9	22.5	87.0	85.2	6.1	6.0	2.0		2.8	1
						7.8	28.2		8.0		22.1		83.4		5.8		2.0		3.2	<u> </u>
					Surface	1.0	27.8	27.9	8.0	8.0	20.8	20.8	81.6	80.3	5.7		3.6		7.7	4
						1.0	27.9		8.0		20.7		79.0		5.5	5.6	3.6		8.0	4
C2	Sunny	Calm	09:19	9.2	Middle	4.6 4.6	27.7 27.9	27.8	8.0 8.0	8.0	23.1 22.4	22.8	82.9 77.5	80.2	5.7 5.4	-	4.1 4.2	4.3	8.8 8.5	8.7
						8.2	27.9		8.0		22.4		84.7		5.4	-	4.2 5.2		8.5 9.9	-
					Bottom	8.2	27.9	27.8	8.0	8.0	22.2	22.7	81.8	83.3	5.7	5.8	5.2		9.5	•
						1.0	28.2		7.9		20.4		85.6		6.0		1.6		2.9	<u> </u>
					Surface	1.0	28.2	28.2	7.9	7.9	20.5	20.5	83.3	84.5	5.8		1.6		3.2	1
			00.00	10	No. 1 II	-	-		-		-		-		-	5.9	-	~ 4	-	1
M1	Sunny	Calm	09:26	4.6	Middle	-	-	-	-	-	-	-	-	-	-		-	2.1	-	4.1
					Bottom	3.6	28.2	28.2	7.9	7.9	20.9	20.8	87.7	86.1	6.1	6.0	2.6		4.9	
					Dottom	3.6	28.2	20.2	7.9	1.5	20.6	20.0	84.5	00.1	5.9	0.0	2.5		5.2	
					Surface	1.0	28.2	28.2	8.0	8.0	21.4	21.5	84.5	83.6	5.9		4.5		3.9	_
					Cunado	1.0	28.2	2012	8.0	0.0	21.5	2.10	82.6	00.0	5.7	5.8	4.5		3.8	1
M2	Sunny	Calm	09:29	5.0	Middle	-	-	_	-	-	-	-	-	_	-	0.0	-	5.1	-	3.6
						-	-		-		-		-		-		-		-	
					Bottom	4.0	28.2	28.2	8.0	8.0	21.4	21.5	87.6	85.6	6.1	6.0	5.6		3.4	-
			-			4.0	28.2		8.0		21.5		83.5		5.8		5.6		3.1	<u> </u>
					Surface	1.0	28.3 28.3	28.3	8.0 8.0	8.0	20.2	20.2	86.6	85.1	6.0	4	1.0		4	4
						-					20.1		83.6		5.8	5.9	1.0		4	4
M3	Sunny	Calm	09:33	6.0	Middle	3.0 3.0	28.3 28.3	28.3	8.0 8.0	8.0	20.2 20.3	20.3	86.7 82.2	84.5	6.0 5.7	-	1.1 1.1	1.3	4	4
						5.0	28.3		8.0		20.3		82.2		6.2		1.1		4	1
					Bottom	5.0	28.3	28.3	8.0	8.0	20.3	21.1	86.6	87.7	6.0	6.1	1.9		3	1
	1	1	I		1	5.0	20.5	1	0.0		21.3		00.0	1	0.0	1	1.0		5	1

DA: Depth-averaged

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

### Water Quality Monitoring Results on 18 August 22 during Mid-Ebb Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Average Value Average Value DA Value DA Value DA Average Average 1.0 28.9 8.4 24.5 150.7 10.0 1.0 2.6 Surface 28.9 8.4 24.4 150.4 8.4 24.3 150.1 1.0 28.8 10.0 1.1 2.3 9.2 8.3 4.5 28.7 8.2 24.9 123.2 1.3 3.2 C1 28.9 8.3 24.8 123.4 1.3 Sunny Calm 16:11 9.0 Middle 3.0 4.5 8.3 24.7 123.6 8.3 1.3 29.0 2.9 8.0 28.8 8.2 24.8 126.1 8.5 1.5 3.8 29.0 8.2 25.2 131.0 8.5 Bottom 8.0 29.1 8.2 25.6 135.9 8.5 1.4 3.4 1.0 28.4 25.4 141.9 9.6 1.0 4.0 8.4 28.5 8.5 25.4 142.3 Surface 1.0 28.5 8.5 25.3 142.7 9.6 4.2 1.0 8.4 4.9 28.6 8.2 25.0 108.1 7.3 1.1 3.7 C2 Calm 16:25 9.8 Middle 28.6 8.2 25.2 107.3 1.2 3.7 Sunny 4.9 28.5 8.2 25.3 7.2 1.1 3.5 106.4 8.8 8.2 24.8 28.8 117.1 7.9 1.5 3.1 117.3 Bottom 28.7 8.2 25.1 7.9 8.2 25.3 8.8 28.5 117.5 7.9 1.4 3.4 1.0 28.3 109.3 3.5 8.2 25.7 7.4 4.4 Surface 28.4 8.2 25.5 109.3 1.0 28.5 8.2 25.3 109.3 7.2 4.5 3.8 7.3 --------M1 16:18 5.2 Middle 4.9 3.9 Sunnv Calm --------4.2 28.3 26.0 97.4 6.6 5.4 4.4 8.0 28.4 8.1 25.7 97.4 6.6 Bottom 4.2 28.5 8.2 25.4 97.4 6.6 5.3 4.0 1.0 28.8 8.3 24.6 105.2 7.0 4.9 3.2 Surface 28.9 8.3 24.5 105.2 1.0 29.0 8.3 24.4 105.2 7.0 4.9 3.6 7.0 --------5.3 M2 Sunny Calm 16:20 5.0 Middle 3.1 ---------4.0 2.8 28.8 8.3 24.7 114.0 7.7 5.7 114.0 28.9 8.3 24.6 7.6 Bottom 24.5 4.0 28.9 8.3 114.0 7.5 5.7 2.6 1.0 28.1 8.2 26.1 107.6 7.3 1.1 3 28.2 8.3 26.1 108.8 Surface 1.0 28.2 8.3 26.0 109.9 7.4 1.1 3 6.7 3.1 28.0 26.7 6.0 1.6 8.1 88.3 4 M3 6.2 Middle 28.1 8.1 26.4 89.1 1.8 3 Sunny Calm 16:14 26.0 1.7 3.1 28.2 8.1 89.8 6.1 3 5.2 28.0 8.1 26.8 2.7 91.0 6.1 4 6.2 28.1 8.1 26.4 92.2 Bottom 5.2 28.2 8.1 26.0 93.3 6.3 2.4 4

DA: Depth-averaged

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

Water Qua	lity Moni	toring Resu	lts on		18 August 22	during Mid-	Flood 7	Гide												
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	oth (m)	Water T	emperature (°C)	p	Н	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity(	NTU)	Suspende (mg	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.5	28.5	8.1	8.1	23.8	23.9	102.0	102.0	6.9		2.1		2.2	
					Sullace	1.0	28.5	20.5	8.1	0.1	23.9	23.9	102.0	102.0	6.9	6.8	2.1		2.6	
C1	Sunny	Calm	10:26	8.4	Middle	4.2	28.5	28.5	8.0	8.1	23.9	23.9	98.7	98.7	6.7	0.0	3.4	3.2	3.3	3.1
0.	o anny	Call		0.1		4.2	28.5	20.0	8.1	0.1	23.8	20.0	98.7	00.1	6.6		3.4	0.2	3.0	
					Bottom	7.4	28.5	28.5	8.0	8.1	23.9	23.8	99.7	99.7	6.8	6.8	4.0		3.9	1
			-			7.4	28.5		8.1	-	23.7		99.7		6.7		4.1		3.5	<u> </u>
					Surface	1.0	28.5	28.5	8.1	8.1	23.8	23.8	97.2	97.2	6.6	-	1.1		2.3	1
						1.0	28.5		8.1		23.7		97.2		6.5 6.6	6.6	1.0		2.4	1
C2	Sunny	Calm	10:08	9.0	Middle	4.5 4.5	28.5 28.5	28.5	8.1 8.1	8.1	23.8 23.7	23.8	96.9 96.9	96.9	6.6 6.6	-	1.1 1.2	1.6	2.7 2.9	2.8
						8.0	28.5		8.1		23.8		90.9 97.3		6.6		2.5		3.3	1
					Bottom	8.0	28.5	28.5	8.1	8.1	23.7	23.8	97.3	97.3	6.7	6.7	2.4		3.0	1
					<u> </u>	1.0	28.5	00.5	7.9		23.7	00.7	102.9	100.5	7.0		2.1		3.1	<u> </u>
					Surface	1.0	28.5	28.5	8.1	8.0	23.6	23.7	104.0	103.5	7.1	7.1	2.0		3.2	1
M1	Sunny	Calm	10:14	4.6	Middle	-	-		-		-	-	-	_	-	7.1	-	2.6	-	2.9
IVII	Sunny	Callin	10.14	4.0	WIGULE	-	-	-	-	-	-	-	-		-		-	2.0	-	2.5
					Bottom	3.6	28.5	28.5	7.9	8.0	23.8	23.8	102.8	103.1	7.0	7.0	3.2		2.5	1
					Bottom	3.6	28.5	2010	8.1	0.0	23.7	20.0	103.3		7.0		3.1		2.7	<u> </u>
					Surface	1.0	28.5	28.5	8.1	8.1	24.0	24.0	102.5	102.8	7.0		1.2		2.5	4
						1.0	28.5		8.1		24.0		103.0		7.0	7.0	1.2		2.8	1
M2	Sunny	Calm	10:16	4.8	Middle	-	-		-	-	-	-	-		-	-	-	1.5	-	3.0
						-	-		-		-		-		-		-		-	1
					Bottom	3.8 3.8	28.5 28.5	28.5	8.0 8.1	8.1	24.0 24.0	24.0	102.4 102.8	102.6	7.0 7.0	7.0	1.8 1.7		3.5 3.2	1
						1.0	28.4		8.1		24.0		96.4		6.5		1.7		3.2 4	<u> </u>
					Surface	1.0	28.4	28.4	8.1	8.1	24.4	24.5	95.9	96.2	6.5	1	1.3		4	ĺ
	_					3.1	28.4		8.1		24.5		96.4		6.5	6.5	2.7		4	1
M3	Sunny	Calm	10:19	6.2	Middle	3.1	28.4	28.4	8.1	8.1	24.5	24.5	96.4	96.4	6.5	1	2.6	2.6	3	3
					Dattana	5.2	28.4	00.4	8.0	0.4	24.5	04.5	96.7	00.0	6.6		3.7		3	l l
					Bottom	5.2	28.4	28.4	8.1	8.1	24.4	24.5	96.8	96.8	6.6	6.6	3.8		2	1

DA: Depth-averaged

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

### Water Quality Monitoring Results on 20 August 22 during Mid-Ebb Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 27.9 8.3 23.7 122.7 8.4 1.0 4.2 Surface 28.0 8.3 23.7 124.7 8.3 23.6 126.7 1.0 28.0 8.7 1.0 4.6 8.2 4.0 27.8 8.2 23.9 112.6 7.7 1.2 4.0 C1 27.9 8.3 23.8 114.1 1.5 Sunny Moderate 09:09 8.0 Middle 3.9 4.0 8.3 23.6 7.9 1.2 28.0 115.6 3.8 7.0 27.8 8.2 23.8 115.5 7.9 2.1 3.2 27.9 8.3 23.7 117.7 8.1 Bottom 7.0 28.0 8.3 23.6 119.9 8.2 2.2 3.6 1.0 28.0 8.3 24.0 112.1 7.7 2.0 2.8 28.0 8.3 23.9 112.1 Surface 1.0 28.0 8.3 23.7 112.1 7.6 1.9 3.0 7.3 4.4 27.9 8.2 24.2 102.6 7.0 2.2 3.2 C2 08:53 8.8 Middle 28.0 8.3 24.0 102.6 2.1 3.4 Moderate Sunny 4.4 28.0 8.3 23.8 102.6 7.0 2.1 3.5 7.8 8.2 24.1 3.8 27.9 104.2 7.1 2.2 Bottom 28.0 8.2 24.0 104.2 7.1 8.2 23.9 7.8 28.0 104.2 7.1 2.2 4.2 1.0 27.9 24.0 114.8 7.9 1.6 3.2 8.3 27.9 8.4 24.0 116.4 Surface 1.0 27.9 8.4 23.9 118.0 8.1 1.6 3.5 8.0 --------M1 08.28 5.0 Middle 2.0 3.7 Sunnv Moderate --------4.0 27.9 8.2 24.1 116.3 8.0 2.3 4.1 27.9 8.3 24.1 116.0 8.0 Bottom 4.0 27.9 8.3 24.0 115.7 7.9 23 3.9 1.0 27.8 8.4 24.0 115.9 8.0 3.8 2.6 Surface 27.8 8.4 24.0 115.7 1.0 27.8 8.4 23.9 115.4 7.9 3.9 2.4 8.0 --------4.0 M2 Sunny Moderate 09:01 4.8 Middle 3.0 -. -------3.8 3.6 27.8 8.4 23.9 116.9 8.0 4.0 27.8 8.4 23.9 116.4 8.0 Bottom 3.8 27.8 8.4 23.9 115.9 8.0 4.1 3.2 1.0 27.8 8.3 24.1 115.5 7.9 2.0 4 27.9 8.3 24.0 117.7 Surface 1.0 27.9 8.3 23.9 119.9 8.2 2.0 4 7.9 3.0 27.8 8.2 24.3 7.8 2.7 113.0 5 M3 09:05 Middle 27.8 8.3 24.2 111.3 2.6 5 Sunny Moderate 6.0 8.3 24.1 2.7 5 3.0 27.8 109.6 7.5 5.0 27.8 8.2 24.2 117.8 8.1 3.1 6 117.9 8.1 27.9 8.2 24.2 Bottom 5.0 27.9 8.2 24.1 118.0 8.1 3.0 6

DA: Depth-averaged

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

### Water Quality Monitoring Results on 20 August 22 during Mid-Flood Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 28.1 8.6 23.4 134.2 9.1 1.0 3.8 28.2 8.6 23.3 134.2 Surface 1.0 8.6 23.2 134.2 28.2 9.1 1.1 3.6 9.1 4.2 28.1 8.5 23.6 133.2 9.0 1.3 3.1 1.3 C1 Sunnv Moderate 18:17 8.4 Middle 28.1 8.5 23.4 133.4 3.3 4.2 8.4 23.2 28.1 133.5 9.1 1.3 3.4 7.4 8.4 2.9 28.0 23.7 130.1 8.9 1.6 8.9 28.1 8.4 23.5 130.1 Bottom 7.4 8.4 23.2 130.0 1.5 2.7 28.1 8.9 1.0 28.2 130.1 8.9 23.5 1.7 5.4 8.6 8.6 23.4 130.1 Surface 28.3 1.0 28.3 8.6 23.3 130.0 8.8 1.6 5.0 8.8 4.7 28.1 8.4 23.8 127.8 8.8 1.9 4.8 C2 18:34 9.4 Middle 28.2 8.4 23.6 127.8 1.9 4.6 Sunny Moderate 4.7 28.2 8.4 23.3 127.8 8.7 1.8 4.6 8.4 28.0 8.4 23.7 129.4 8.9 2.2 4.1 28.1 8.4 23.6 129.4 8.9 Bottom 8.4 28.2 8.4 23.4 129.4 8.8 2.2 3.9 1.0 27.5 24.0 120.9 3.7 5.3 8.4 8.4 27.8 8.4 23.9 120.5 Surface 8.4 23.7 120.1 1.0 28.0 8.2 3.8 5.6 8.3 --------18:27 3.9 M1 Sunnv Moderate 5.4 Middle --4.6 ------. -4.4 27.2 8.4 24.1 116.3 8.1 4.1 4.0 27.5 8.4 24.0 116.4 8.1 Bottom 4.4 8.4 23.9 116.5 8.0 4.1 3.5 27.7 1.0 27.6 24.0 122.0 8.3 2.1 3.3 8.4 Surface 27.9 8.4 23.9 122.2 8.4 23.8 122.4 1.0 28.1 8.3 3.6 2.1 8.3 --------2.6 M2 Sunnv Moderate 18:29 5.4 Middle 4.0 ----------4.4 27.2 23.6 120.4 8.3 3.0 4.5 8.4 8.4 23.8 120.2 8.3 Bottom 27.5 4.4 27.8 8.4 23.9 120.0 8.2 3.0 4.7 1.0 28.1 8.5 23.7 128.1 8.8 3.1 3 28.1 8.5 23.7 128.3 Surface 8.5 23.7 1.0 28.1 128.4 8.7 3.0 3 8.6 3.0 27.9 8.4 24.0 124.5 8.5 3.1 3 124.5 M3 Sunnv Moderate 18:22 6.0 Middle 28.0 8.4 23.9 3.6 3 3.0 28.1 8.4 23.8 124.5 8.5 3.2 3 5.0 27.8 8.3 24.2 125.2 8.6 4.4 4 Bottom 28.0 8.3 24.0 125.4 8.6 5.0 28.1 8.3 23.7 125.6 8.5 4.5 3

DA: Depth-averaged

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

### Water Quality Monitoring Results on 23 August 22 during Mid-Ebb Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Average Value Average Value DA Value DA Value DA Average Average 1.0 28.8 8.7 15.6 119.8 8.4 1.0 3.9 Surface 28.7 8.7 15.1 119.8 8.7 14.5 119.7 1.0 28.6 8.4 1.1 3.7 7.7 3.9 28.3 8.2 24.7 105.4 7.1 1.2 3.1 C1 8.2 24.4 105.0 1.4 Sunny Moderate 11:18 7.8 Middle 28.6 3.2 3.9 8.2 24.1 104.5 7.0 1.1 28.8 3.3 6.8 28.4 8.2 24.6 101.7 6.9 2.0 2.8 28.4 8.2 24.3 101.6 6.9 Bottom 6.8 28.4 8.2 23.9 101.5 6.8 2.0 2.6 1.0 29.1 8.7 15.4 124.1 8.6 1.1 3.0 8.7 15.5 123.3 Surface 29.1 1.0 29.0 8.7 15.5 122.5 8.6 1.0 2.8 7.9 4.2 29.0 8.2 22.5 106.5 7.2 1.1 3.1 C2 11:00 8.4 Middle 29.1 8.2 22.9 107.5 1.3 3.2 Moderate Sunny 4.2 8.2 23.2 1.2 3.2 29.1 108.4 7.3 7.4 8.3 23.8 102.4 6.9 3.4 29.4 1.7 Bottom 29.4 8.3 23.5 102.5 6.9 7.4 29.4 8.3 23.1 102.6 6.8 1.8 3.7 1.0 17.2 120.2 8.2 30.1 8.7 2.6 3.6 29.9 8.7 17.0 120.7 Surface 1.0 29.7 8.7 16.8 121.1 8.3 2.7 3.3 8.3 --------M1 11:04 5.2 Middle 2.9 3.8 Sunnv Moderate --------4.2 30.2 8.6 17.2 119.6 8.2 3.2 4.0 30.0 8.7 17.7 119.5 8.2 Bottom 4.2 29.8 8.7 18.1 119.4 8.1 3.2 4.2 1.0 29.6 8.7 17.5 144.6 10.0 2.0 3.7 Surface 29.7 8.7 17.4 144.6 1.0 29.7 8.7 17.3 144.5 9.9 2.0 4.0 10.0 --------2.1 M2 Sunny Moderate 11:07 4.6 Middle 3.6 ---------3.6 3.5 29.6 8.7 17.5 143.4 9.9 2.1 29.6 8.7 17.5 143.4 9.9 Bottom 3.6 29.6 8.7 17.5 143.4 9.8 2.1 3.1 1.0 29.4 8.6 18.7 129.8 8.8 1.1 5 29.4 8.6 18.8 129.8 Surface 1.0 29.4 8.6 18.8 129.8 8.9 1.0 5 8.5 3.1 29.5 8.5 19.4 8.2 1.6 120.2 4 M3 6.2 Middle 29.5 8.5 19.5 120.7 1.8 Sunny Moderate 11:10 4 8.5 19.6 1.7 3.1 29.5 121.1 8.2 4 5.2 29.9 8.4 22.4 123.2 8.3 2.6 3 8.4 123.3 8.3 29.7 23.2 Bottom 5.2 29.5 8.3 23.9 123.4 8.2 2.6 4

DA: Depth-averaged

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

### Water Quality Monitoring Results on 23 August 22 during Mid-Flood Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 28.9 8.9 14.8 130.5 9.1 3.4 5.0 28.9 8.9 14.8 130.5 Surface 1.0 8.9 14.7 130.4 28.9 9.1 3.3 4.8 8.9 4.1 28.4 8.7 15.8 123.8 8.7 4.2 4.3 3.9 C1 Sunnv Moderate 21:29 8.2 Middle 28.4 8.8 15.8 123.7 4.4 8.8 4.1 28.4 15.8 123.5 8.8 4.1 4.6 7.2 8.4 4.0 28.3 16.5 129.8 9.1 3.8 9.1 28.3 8.4 16.7 130.0 Bottom 7.2 28.3 8.3 16.8 130.1 9.1 4.2 4.0 122.4 4.0 1.0 30.0 8.4 1.8 8.9 15.1 30.0 8.9 15.2 122.3 Surface 1.0 29.9 8.9 15.2 122.1 8.4 1.9 3.9 8.4 4.5 29.4 8.8 15.9 120.5 8.3 2.8 4.5 C2 21:48 9.0 Middle 29.2 8.8 16.5 120.8 2.9 4.6 Sunny Moderate 4.5 28.9 8.7 17.1 121.1 8.5 2.8 4.6 8.0 28.4 24.5 118.4 8.0 3.9 5.4 8.4 28.4 8.4 24.8 118.4 8.0 Bottom 8.0 28.3 8.4 25.0 118.4 7.9 4.0 5.2 1.0 30.2 7.6 1.5 4.2 8.9 16.4 111.5 30.2 8.9 16.3 111.5 Surface 30.1 8.9 111.4 1.0 16.2 7.7 1.5 4.0 7.7 --------2.0 M1 Sunnv Moderate 21:41 4.8 Middle --4.4 -----. --3.8 30.2 8.9 16.3 115.6 7.8 2.4 4.9 30.2 8.9 17.1 115.6 7.8 Bottom 3.8 8.9 17.9 115.6 7.8 4.6 30.2 2.4 1.0 16.5 133.1 9.0 1.2 4.8 30.1 8.8 Surface 30.1 8.8 16.2 133.2 15.8 4.4 1.0 30.1 8.8 133.2 9.1 1.2 9.1 --------1.8 M2 Sunnv Moderate 21:44 5.2 Middle 4.3 -----------4.2 30.1 138.3 9.5 2.5 4.1 8.8 16.4 8.8 16.9 138.4 9.4 Bottom 30.1 4.2 30.1 8.8 17.4 138.4 9.3 2.4 3.8 1.0 29.9 8.8 16.9 120.6 8.2 2.8 5 30.0 8.8 16.9 121.1 Surface 1.0 30.0 8.8 16.8 121.6 8.2 2.8 4 8.0 3.0 29.8 8.8 17.9 115.1 7.8 3.4 4 8.8 17.6 M3 Sunnv Moderate 21:37 6.0 Middle 29.9 115.2 3.6 4 3.0 29.9 8.8 17.3 115.2 7.9 3.4 4 5.0 30.0 8.6 21.0 114.5 7.7 4.5 4 Bottom 30.0 8.7 20.8 114.6 7.7 5.0 29.9 8.7 20.6 114.6 7.6 4.6 3

DA: Depth-averaged

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

### Water Quality Monitoring Results on 25 August 22 during Mid-Flood Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 28.2 8.4 13.2 108.1 7.8 5.1 6.1 28.2 8.4 13.2 108.1 Surface 1.0 8.4 13.2 28.2 108.0 7.7 5.0 5.7 7.5 5.5 27.7 8.3 15.4 101.4 7.2 5.9 4.6 4.9 C1 Rainv Moderate 19:11 10.9 Middle 27.7 8.3 15.4 101.3 4.4 8.3 5.5 27.7 15.4 101.1 7.2 5.8 4.0 9.9 4.0 27.6 8.0 16.1 107.4 7.7 2.8 7.7 27.6 8.0 16.3 107.6 Bottom 27.6 8.0 16.4 107.7 7.7 3.7 9.9 3.1 1.0 29.3 100.0 13.2 7.0 3.6 3.0 8.4 29.3 8.4 13.3 99.9 Surface 1.0 29.2 8.3 13.3 99.7 7.0 3.6 3.2 7.0 5.4 28.7 8.3 15.5 98.1 6.9 4.6 3.6 C2 19:34 10.8 Middle 28.5 8.3 16.1 98.4 4.6 3.8 Rainy Moderate 5.4 28.2 8.3 16.7 98.7 6.9 4.6 3.9 9.8 27.7 24.1 96.0 6.5 5.7 4.6 8.1 27.7 8.1 24.4 96.0 6.5 Bottom 9.8 27.6 8.0 24.6 96.0 6.5 5.7 4.4 1.0 29.5 6.2 3.2 3.7 8.3 15.2 89.1 29.5 8.3 15.3 89.1 Surface 29.4 8.3 15.4 1.0 89.0 6.2 3.2 4.1 6.2 --------19:25 5.7 3.7 3.3 M1 Rainv Moderate Middle --------. -4.7 29.5 8.3 15.9 93.2 6.4 4.1 2.5 29.5 8.3 16.7 93.2 6.4 Bottom 4.7 8.3 17.5 93.2 6.4 4.2 2.8 29.5 1.0 15.6 110.7 7.7 2.9 29.4 8.4 4.0 Surface 29.4 8.4 15.4 110.8 8.4 15.2 4.2 1.0 29.4 110.8 2.9 7.7 7.7 --------3.5 3.6 M2 Rainv Moderate 19:28 5.6 Middle -----------4.6 29.4 115.9 8.0 4.2 3.3 8.4 16.0 8.4 16.5 8.0 Bottom 29.4 116.0 4.6 29.4 8.4 17.0 116.0 8.0 4.1 3.0 1.0 29.2 8.4 15.2 98.2 6.8 4.5 2 29.3 8.5 15.3 98.7 Surface 8.5 15.4 1.0 29.3 99.2 6.9 4.5 2 6.6 3.4 29.1 8.4 17.5 92.7 6.4 5.1 3 8.5 M3 Rainy Moderate 19:21 6.8 Middle 29.2 17.2 92.8 5.3 3 3.4 29.2 8.5 16.9 92.8 6.4 5.1 3 5.8 29.3 8.3 20.6 92.1 6.2 6.2 4 Bottom 29.3 8.3 20.4 92.2 6.3 5.8 29.2 8.2 20.2 92.2 6.3 6.3 4

DA: Depth-averaged

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

### Water Quality Monitoring Results on 27 August 22 during Mid-Ebb Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Average Value Average Value DA Value DA Value DA Average Average 1.0 28.9 8.1 22.5 86.2 5.9 4.3 4.4 Surface 29.0 8.1 22.0 86.2 8.1 21.5 86.1 1.0 29.1 5.9 4.3 4.7 5.8 4.4 28.7 8.1 23.2 84.9 5.8 5.7 4.9 C1 22.6 83.9 5.4 Fine Moderate 14:30 8.8 Middle 28.9 8.1 5.1 4.4 8.1 21.9 82.8 5.7 5.2 29.1 5.6 7.8 28.8 8.1 23.0 87.1 5.9 6.1 5.8 29.0 8.1 23.1 85.1 5.8 Bottom 7.8 29.2 8.1 23.2 83.1 5.7 6.1 5.5 1.0 28.9 22.0 88.0 6.0 2.2 4.4 8.1 28.9 8.1 22.0 88.7 Surface 1.0 28.9 8.1 22.0 89.3 6.1 2.3 4.1 5.9 4.9 28.9 8.1 22.2 87.0 5.9 3.9 4.7 C2 Fine 14:10 9.8 Middle 28.9 8.1 22.2 85.4 3.6 4.8 Moderate 4.9 28.9 8.1 22.1 5.7 3.9 83.8 4.9 8.8 22.2 4.6 5.5 28.8 8.1 88.7 6.1 Bottom 29.0 8.1 21.9 86.9 6.0 21.6 8.8 29.1 8.1 85.1 5.8 4.6 5.2 1.0 28.9 22.7 87.7 6.0 2.8 8.1 5.0 29.0 8.1 22.5 86.9 Surface 1.0 29.0 8.1 22.3 86.1 2.8 5.9 5.3 6.0 --------M1 14:16 5.2 Middle 3.3 5.9 Fine Moderate --------4.2 28.9 23.0 90.0 6.1 3.7 6.8 8.1 28.9 8.1 22.8 88.7 6.0 Bottom 4.2 28.9 8.1 22.5 87.3 5.9 3.8 6.4 1.0 28.8 8.1 22.1 89.1 6.0 3.2 5.8 Surface 28.9 8.1 22.1 89.1 1.0 28.9 8.1 22.1 89.1 6.0 3.3 6.1 6.0 --------3.7 M2 Fine Moderate 14:19 5.8 Middle 5.2 ---------4.8 4.3 28.4 8.1 25.0 86.5 5.9 4.0 28.6 8.1 24.5 86.5 5.9 Bottom 4.8 28.8 8.1 23.9 86.5 5.9 4.1 4.5 1.0 28.7 23.0 81.1 5.5 3.2 5 8.1 28.8 8.1 22.8 81.3 Surface 1.0 28.9 8.1 22.6 81.5 5.5 3.2 4 5.5 3.1 28.5 8.0 23.6 5.4 4.1 79.9 5 M3 14:22 6.2 Middle 28.7 8.0 23.3 80.7 5 Fine Moderate 4.1 22.9 4.1 3.1 28.8 8.0 81.4 5.5 5 5.2 28.7 25.4 83.0 5.6 5.1 8.0 6 24.3 82.5 5.6 28.8 8.0 Bottom 5.2 28.8 8.0 23.1 81.9 5.6 5.1 6

DA: Depth-averaged

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

### Water Quality Monitoring Results on 27 August 22 during Mid-Flood Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 29.7 8.2 20.8 94.5 6.4 4.8 3.7 29.8 8.2 20.8 95.2 Surface 1.0 8.2 20.7 29.8 95.8 6.5 4.8 4.0 6.5 5.4 29.8 8.2 20.6 98.0 6.6 5.7 4.4 4.9 C1 Fine Moderate 18:29 10.8 Middle 29.8 8.2 20.6 97.0 4.5 8.2 5.4 29.8 20.6 96.0 6.5 5.7 4.8 9.8 4.0 5.2 29.8 8.2 20.7 95.2 6.5 29.8 8.2 20.7 95.2 6.5 Bottom 8.2 20.7 95.2 6.5 4.1 9.8 29.8 5.0 5.0 1.0 29.7 8.2 20.7 97.9 6.6 4.3 29.8 8.2 20.6 98.2 Surface 1.0 29.8 8.2 20.4 98.4 6.7 5.1 4.1 6.7 4.9 29.6 8.2 20.9 98.0 6.7 6.2 5.0 C2 18:47 9.8 Middle 29.7 8.2 20.7 98.0 6.1 5.0 Fine Moderate 4.9 29.8 8.2 20.5 97.9 6.6 6.2 4.6 8.8 29.6 8.2 20.9 99.6 6.8 7.0 6.0 29.7 8.2 20.8 98.8 6.8 Bottom 8.8 29.7 8.2 20.6 98.0 6.7 7.0 5.8 1.0 29.5 5.1 8.1 21.8 93.1 6.3 5.1 29.6 8.1 21.7 92.8 Surface 21.6 92.4 1.0 29.6 8.1 6.2 5.1 4.8 6.3 --------5.9 4.2 M1 Fine Moderate 18:41 4.8 Middle -------. --3.8 29.5 8.1 21.9 94.6 6.4 6.7 3.6 29.6 8.1 21.8 93.9 6.4 Bottom 3.8 8.1 21.6 93.1 6.3 3.2 29.6 6.7 1.0 21.3 95.7 29.6 8.2 6.5 4.1 4.0 Surface 29.7 8.2 21.1 94.5 1.0 20.8 93.3 4.4 8.2 6.3 4.0 29.7 6.4 --------4.6 M2 Fine Moderate 18:44 4.2 Middle 4.6 -----------3.2 29.6 97.7 6.6 5.1 5.0 8.2 21.5 8.2 22.0 96.9 6.5 Bottom 29.7 3.2 29.8 8.2 22.4 96.0 6.3 5.1 4.8 1.0 29.1 8.1 22.2 87.7 6.0 3.7 6 29.2 8.1 22.2 87.7 Surface 22.2 1.0 29.3 8.1 87.7 6.0 3.7 5 5.9 3.2 28.8 8.1 22.6 85.1 5.8 4.6 5 22.6 M3 Fine Moderate 18:38 6.4 Middle 29.1 8.1 85.1 4.5 5 3.2 29.3 8.1 22.6 85.1 5.7 4.5 4 5.4 29.1 22.7 84.1 5.7 5.3 4 8.1 Bottom 29.2 8.1 22.7 84.1 5.7 5.4 29.3 8.1 22.7 84.1 5.6 5.3 4

DA: Depth-averaged

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

### Water Quality Monitoring Results on 30 August 22 during Mid-Ebb Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Average Value Average Value DA Value DA Value DA Average Average 1.0 28.7 8.1 22.1 71.4 4.9 7.3 5.4 Surface 28.7 8.1 22.1 71.6 8.1 22.1 71.7 1.0 28.7 4.9 6.8 5.9 4.8 4.7 5.9 28.4 8.1 22.9 68.7 12.2 6.6 C1 28.4 22.9 10.9 Fine Moderate 13:30 11.7 Middle 8.1 68.6 6.6 5.9 8.1 22.9 68.5 4.7 12.3 28.4 6.3 10.7 27.5 8.1 25.9 62.9 4.3 13.2 7.9 8.1 25.9 63.3 4.4 Bottom 27.5 10.7 27.5 8.1 25.9 63.6 4.4 13.7 7.5 1.0 28.5 22.7 69.7 4.8 7.4 5.1 8.1 28.5 8.1 22.7 70.2 Surface 1.0 28.5 8.1 22.7 70.6 4.8 5.2 7.6 4.7 5.2 28.0 8.1 23.5 66.5 4.6 9.5 6.4 C2 Fine 13:55 10.4 Middle 28.1 8.1 23.9 65.9 8.9 6.6 Moderate 5.2 8.1 24.2 65.2 4.5 10.0 28.1 6.0 9.4 26.4 4.5 10.0 8.2 27.3 8.1 65.7 4.5 Bottom 27.5 8.1 25.8 65.2 25.2 9.4 27.7 8.1 64.6 4.4 8.7 8.5 1.0 28.2 24.0 66.0 4.5 8.5 8.1 5.7 28.2 8.1 24.0 65.8 Surface 1.0 28.2 8.1 24.0 65.6 4.5 8.3 6.0 4.5 --------M1 13:42 5.9 Middle 9.0 6.6 Fine Moderate --------4.9 27.8 24.7 67.7 4.6 9.4 7.0 8.1 28.0 8.1 24.4 67.1 4.6 Bottom 4.9 28.2 8.1 24.0 66.4 4.5 9.8 7.5 1.0 28.3 8.1 23.0 70.3 4.8 3.5 6.0 Surface 28.5 8.1 23.1 70.1 1.0 28.6 8.0 23.2 69.8 4.8 3.8 6.3 4.8 --------13:45 8.4 M2 Fine Moderate 5.7 Middle 7.0 ---------4.7 27.7 8.1 25.1 61.6 4.2 13.2 8.1 4.2 27.9 8.1 24.6 61.0 Bottom 4.7 28.0 8.0 24.1 60.3 4.1 13.0 7.7 1.0 28.8 23.0 72.1 4.9 6.1 8 8.1 28.8 8.1 23.1 70.7 Surface 1.0 28.7 8.1 23.1 69.2 4.7 6.3 9 4.7 3.6 28.4 23.5 4.7 7.9 8.1 69.2 8 M3 13:37 7.1 Middle 28.4 8.1 23.6 68.0 7 Fine Moderate 7.4 23.7 8.3 3.6 28.3 8.1 66.8 4.6 7 6.1 28.2 23.9 69.1 4.7 8.4 8.1 6 4.6 28.3 8.1 23.8 67.8 Bottom 6.1 28.4 8.1 23.6 66.4 4.5 7.5 7

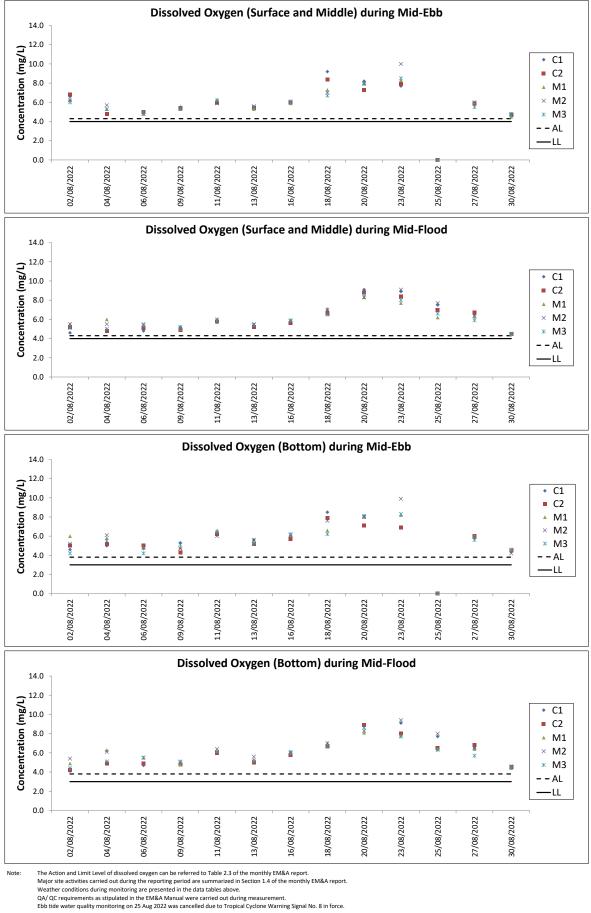
DA: Depth-averaged

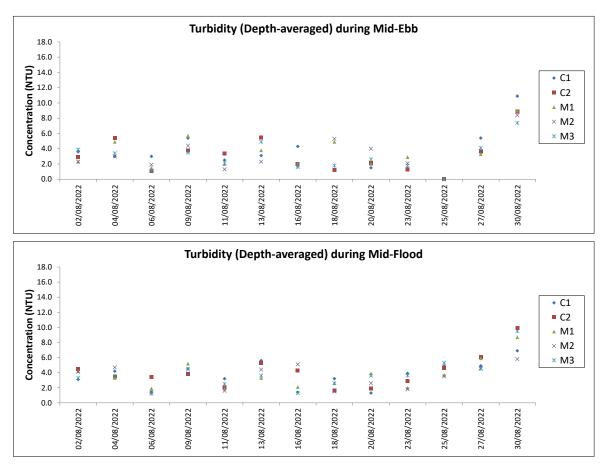
Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

### Water Quality Monitoring Results on 30 August 22 during Mid-Flood Tide Dissolved Oxygen Suspended Solids Turbidity(NTU) Water Temperature (°C) pН Salinity (ppt) DO Saturation (%) Water Depth (mg/L) (mg/L) Monitoring Weather Sampling Sea Condition Sampling Depth (m) Station Condition Time (m) Value Value Value Value Average Value DA Value DA Value DA Average Average Average 1.0 28.4 8.0 22.7 67.5 4.6 6.0 8.6 28.3 8.0 23.1 66.1 Surface 1.0 8.0 23.4 28.2 64.6 4.4 5.6 8.4 4.4 6.1 27.9 8.0 24.3 63.1 4.3 10.5 8.0 C1 Fine Moderate 09:18 12.1 Middle 27.9 8.0 24.4 62.8 6.9 7.9 6.1 27.9 8.0 24.4 62.4 4.3 10.9 7.7 24.6 4.4 4.0 7.4 11.1 27.8 8.0 63.5 4.4 27.9 8.0 24.6 62.9 Bottom 8.0 24.5 62.3 4.3 4.4 7.4 11.1 28.0 1.0 28.3 23.1 66.1 4.5 7.2 8.8 8.0 28.3 8.0 23.3 65.5 Surface 1.0 28.2 8.0 23.4 64.8 4.4 8.0 8.4 4.5 4.5 5.5 28.0 8.0 23.8 65.8 9.3 6.3 C2 08:55 11.0 Middle 28.0 8.0 24.0 64.9 9.9 6.7 Fine Moderate 5.5 28.0 8.0 24.1 64.0 4.4 9.6 6.0 10.0 27.8 24.6 66.9 4.6 12.0 5.4 8.1 27.9 8.1 24.6 65.5 4.5 Bottom 10.0 28.0 8.0 24.5 64.0 4.4 13.0 5.5 1.0 28.4 22.7 8.1 8.2 8.0 66.6 4.6 28.4 8.0 22.7 65.7 Surface 28.4 22.6 1.0 8.0 64.7 4.4 7.8 7.8 4.5 --------8.7 7.1 M1 Fine Moderate 09:09 5.9 Middle --------. -4.9 28.4 8.0 22.9 66.9 4.6 9.3 6.2 28.4 8.0 22.9 4.6 Bottom 66.1 4.9 8.0 22.9 65.2 4.5 9.5 28.4 6.0 1.0 28.4 22.8 66.5 6.0 8.0 4.6 6.8 Surface 28.4 8.0 22.9 65.4 22.9 64.3 4.4 1.0 28.4 8.0 6.5 5.8 4.5 --------5.8 7.6 M2 Fine Moderate 09:05 5.8 Middle -----------4.8 28.4 22.8 68.1 4.7 5.8 8.7 8.0 8.0 22.9 66.8 4.6 Bottom 28.4 4.8 28.4 8.0 22.9 65.4 4.5 5.6 8.4 1.0 28.5 8.0 22.5 68.0 4.7 6.2 6 28.5 8.0 22.7 66.2 Surface 22.8 1.0 28.4 8.0 64.3 4.4 6.5 7 4.5 3.3 28.1 8.0 23.7 63.5 4.4 10.4 8 M3 Fine Moderate 09:13 6.6 Middle 28.1 8.0 23.6 63.3 9.5 8 3.3 28.1 8.0 23.5 63.1 4.3 10.9 8 5.6 27.8 8.0 24.6 64.5 4.4 9 11.5 4.4 Bottom 27.9 8.0 24.5 63.5 5.6 28.0 8.0 24.3 62.4 4.3 11.5 9

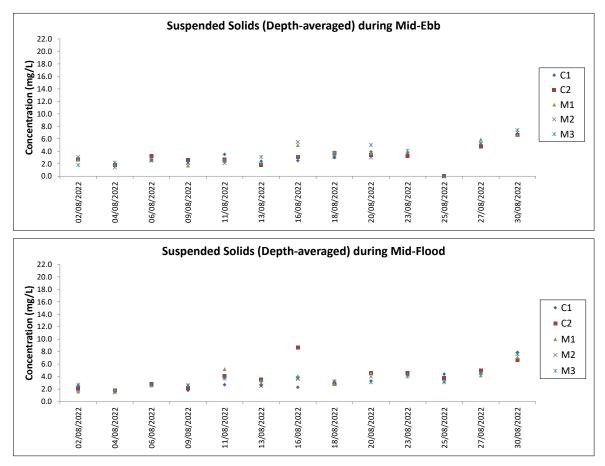
DA: Depth-averaged

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





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. Ebb tide water quality monitoring on 25 Aug 2022 was cancelled due to Tropical Cyclone Warning Signal No. 8 in force. 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. Ebb tide water quality monitoring on 25 Aug 2022 was cancelled due to Tropical Cyclone Warning Signal No. 8 in force. Note:

# Appendix E. Environmental Site Inspection Schedule

### ITT-BVB Site Inspection Schedule for Aug 2022

## Aug-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	/
	1	2	3	4	5	6	
			(1) Environmental Site Inspection		)		(1
		Water Quality Monitoring		Water Quality Monitoring		Water Quality M	lonitoring
			:54	mid- ebb: 17:07		mid- ebb:	7:10
			:10	mid-flood: 10:48		mid- flood:	13:48
7	8	9	10	11	12	13	
			(1) Environmental Site Inspection		)		(1)
		Water Quality Monitoring		Water Quality Monitoring		Water Quality M	
			:36	mid- ebb: 12:26		mid- ebb:	14:01
			:14	mid-flood: 5:19		mid- flood:	7:07
14	15	16	17	18	19	20	
			(1) Environmental Site Inspection		)		(1)
		Water Quality Monitoring		Water Quality Monitoring		Water Quality M	0
			:01	mid-ebb: 17:00		mid- ebb:	7:29
			:36	mid-flood: 11:2		mid- flood:	19:58
21	22	23	24	25	26	27	
			(1) Environmental Site Inspection		.)	Mater Overline M	(1)
		Water Quality Monitoring		Water Quality Monitoring		Water Quality M	0
			:49	mid-ebb: 12:09		mid- ebb:	13:19
28	29	mid- flood: 23 30	: <u>13</u> 31	mid-flood: 19:19	9	mid- flood:	20:07
20	Environmental Site Inspection		(1)				
	Environmental Site Inspection	Water Quality Monitoring					
		· · · · ·	:53				
			:24				
		Notes:	.27				
			ring schedule under the ACL projec	t			
			phitoring on 25 Aug 2022 was canc		arning Signal No. 8 in force		

### ITT-BVB Site Inspection Schedule for Sep 2022

## Sep-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
				1	2	3	
				(1)			(1)
				Water Quality Monitoring		Water Quality Monit	oring
				mid- ebb: 16:00		mid- ebb:	17:47
				mid-flood: 9:52		mid- flood:	12:18
4	5	6	7	8	9	10	
		(1)		(1)			(1)
		Water Quality Monitoring	Environmental Site Inspection	Water Quality Monitoring		Water Quality Monit	-
		mid- ebb: 9:15		mid- ebb: 11:23		mid- ebb:	12:59
		mid-flood: 17:29		mid-flood: 18:48	10	mid- flood:	19:53
11	12	13	14	15	16	17	(1)
		(1) Water Quality Monitoring	Environmental Site Inspection	Water Quality Monitoring		Water Quality Monit	
		mid- ebb: 14:51	Environmental Site inspection	mid- ebb: 15:54		mid- ebb:	17:07
		mid- flood: 8:39		mid- flood: 10:12		mid- flood:	12:28
18	19	20	21	22	23	24	12.20
10	15	(1)	21	(1)	25	24	(1)
		Water Quality Monitoring	Environmental Site Inspection	Water Quality Monitoring		Water Quality Monit	oring
		mid- ebb: 9:01		mid- ebb: 11:00		mid- ebb:	12:16
		mid- flood: 21:48		mid- flood: 18:17		mid- flood:	18:56
25	26	27	28	29	30		
		(1)		(1)			
		Water Quality Monitoring	Environmental Site Inspection	Water Quality Monitoring			
		mid- ebb: 13:54		mid- ebb: 15:05			
		mid-flood: 7:39		mid-flood: 9:08			
		Notes:					
		(1) The water quality monitoring	schedule under the ACL project	t.			

## **Appendix F. Waste Flow Table**

## AAHK Contract No. 19W10 Intermodal Transfer Terminal - Bonded Vehicular Bridge and Associated Roads <u>Monthly Waste Flow Table</u>

		Actual Quan		C&D Materials (e s) e.g. broken co	-	vated waste)	Act	tual Quantities	of Non-inert C&	D Waste (tonn	ies)		
Month	Excavated 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)	(I) Total construction waste generated (I) = (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	5.53	0.00	1784.14
Feb-21	4031.66	4031.66	0.00	2832.32	0.00	1199.34	0.00	0.00	0.00	4.40	4.40	2832.32	4036.06
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	3929.82	0.00	1702.03	0.00	2227.79	0.00	0.00	0.00	26.48	26.48	1702.03	3956.30
May-21	2062.98	2062.98	0.00	1694.52	0.00	368.46	0.00	0.00	0.00	12.63	12.63	1694.52	2075.61
Jun-21	5098.30	5098.30	0.00	4446.42	0.00	651.88	0.00	0.00	0.54	23.41	23.95	4446.42	5122.25
Jul-21	6868.66	6868.66	0.00	6440.45	0.00	428.21	0.00	0.00	0.00	12.92	12.92	6440.45	6881.58
Aug-21	6884.63	6884.63	0.00	5662.00	0.00	1222.63	8.56	0.00	1.08	38.91	48.55	5670.56	6933.18
Sep-21	3949.49	3949.49	0.00	2798.89	0.00	1150.60	0.00	0.00	0.00	15.66	15.66	2798.89	3965.15
Oct-21	389.98	389.98	0.00	235.10	0.00	154.88	6.20	0.00	0.00	15.48	21.68	241.30	411.66
Nov-21	1926.96	1926.96	285.00	650.00	0.00	991.96	13.78	0.00	0.00	16.18	29.96	948.78	1956.92
Dec-21	672.20	672.20	240.00	0.00	0.00	432.20	0.00	0.00	0.00	17.40	17.40	240.00	689.60
Jan-22	584.00	584.00	584.00	0.00	0.00	0.00	6.03	0.00	0.00	22.17	28.20	590.03	612.20
Feb-22	1056.52	1056.52	378.00	240.26	0.00	438.26	0.00	0.00	0.00	33.95	33.95	618.26	1090.47
Mar-22	1426.34	1426.34	0.00	1199.88	0.00	226.46	0.00	0.00	0.00	38.49	38.49	1199.88	1464.83
Apr-22	68.10	68.10	0.00	0.00	0.00	68.10	0.00	0.00	0.00	50.11	50.11	0.00	118.21
May-22	366.14	366.14	0.00	0.00	0.00	366.14	0.00	0.00	0.00	55.50	55.50	0.00	421.64
Jun-22	5806.30	5806.30	0.00	3751.49	0.00	2054.81	0.00	0.00	0.72	74.26	74.98	3751.49	5881.28
Jul-22	4334.71	4334.71	0.00	3561.75	0.00	772.96	0.00	0.00	0.00	81.66	81.66	3561.75	4416.37
Aug-22	7115.76	7115.76	1588.85	2406.49	0.00	3120.42	3.73	0.00	0.00	72.25	75.98	3999.07	7191.74
Total	62123.89	62123.89	3075.85	38041.37	0.00	21006.67	38.30	0.00	2.34	646.15	686.99	41155.52	62810.88

# Appendix G. Status of Environmental Permits and Licences

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 Inert Construction Waste	7038221	19 April 2022	18 July 2022	Application No: CEDD01148
Construction Dust Notification under APCO	458075	13 July 2020	N/A	N/A
Construction Noise Permit	GW-RS0504-22	24 Jun 2022	09 Aug 2022	Special case
Construction Noise Permit	GW-RS0607-22	27 Jul 2022	25 Jan 2023	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	WT00037556- 2021	9 Jun 2021	31 May 2026	Variation of discharge license WT00037556-2021 granted on 14 May 2021

## Table G.1: Summary of Environmental Licenses and Permits

## Appendix H. Environmental Mitigation Measures Implementation Status

## **Recommended Mitigation Measures for Air Quality Impact**

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
		Relevant control measures as required in the Air Pollution Control (Construction Dust) Regulation shall be implemented to minimise dust impact.	Obs/ Rem
		Skip hoist for material transport should be totally enclosed by impervious sheeting.	Yes
		• All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation to maintain the dusty materials wet.	Yes
		• All stockpiles of aggregate or spoil should be covered and/or water applied.	Yes
S3.7.1	S2.2.1	<ul> <li>The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading.</li> </ul>	N/A
		• Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.	Yes
		<ul> <li>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.</li> </ul>	Yes
		• 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? ^
		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
S4.5.2	\$3.2.1	• 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
		<ul> <li>Noisy construction activities such as road breaking, should be scheduled to less sensitive hours during the day, e.g. midday.</li> </ul>	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	<ul> <li>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.</li> </ul>	Yes
S5.9.2	S4.3.1	<ul> <li>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.</li> </ul>	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.	Obs
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
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.	Obs/ Rem
S5.9.7	S4.3.1	<ul> <li>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.</li> </ul>	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	<ul> <li>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.</li> </ul>	Yes
S5.9.10	S4.3.1	<ul> <li>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.</li> </ul>	Yes
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
		<ul> <li>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.</li> </ul>	Yes
S5.9.12	S4.3.1	• 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
		<ul> <li>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).</li> </ul>	Yes
S5.9.13	S4.3.1	<ul> <li>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.</li> </ul>	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.	Yes
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	<ul> <li>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.</li> </ul>	Yes
S5.9.17	S4.3.1	<ul> <li>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.</li> </ul>	Yes
S5.9.18	S4.3.1	<ul> <li>The 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.</li> </ul>	Yes
S5.9.19	S4.3.1	<ul> <li>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.</li> </ul>	N/A
S5.9.20		• Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport.	Yes
	S4.3.1	• 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 <i>"Drainage Plans subject to Comment by the EPD"</i>	Yes
S5.9.23 to 5.9.29		<ul> <li><u>Design Measures:</u></li> <li>Exposed surface shall be avoided within the roads to minimise soil erosion. The roads shall be hard paved.</li> <li>The drainage system should be designed to avoid flooding.</li> </ul>	Yes
	S4.3.1	<ul> <li><u>Devices and Facilities:</u></li> <li>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.</li> <li>Road gullies with standard design and silt traps should be provided to remove particles present in stormwater runoff, where appropriate.</li> </ul>	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	Obs
S5.9.30	S4.3.1	<ul><li>(e.g. monthly). Additional inspection and cleansing should be carried out before forecast heavy rainfall.</li><li>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.</li></ul>	Yes
Recomme	ended Mitiga	tion Measures for Waste Management	
EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S6.5.3		<ul> <li><u>Good Site Practices:</u></li> <li>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.</li> </ul>	Yes
		<ul> <li>Training of site personnel in site cleanliness, concepts of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures.</li> </ul>	Yes
	S5.2.1	Provision of sufficient waste reception/ disposal points, and regular collection of waste.	Yes
		• 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.	Yes
		Provision of regular cleaning and maintenance programme for drainage systems and sumps.	Yes
		• Adoption of a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites).	Yes
		• Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP).	Yes
		<ul> <li>Waste Reduction Measures:</li> <li>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.</li> </ul>	Yes
S6.5.4		<ul> <li>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.</li> </ul>	Yes
	S5.2.1	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.	Yes
		<ul> <li>Adopt proper storage and site practices to minimise the potential for damage to, or contamination of construction materials.</li> </ul>	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
		<ul> <li><u>C&amp;D materials:</u></li> <li>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.</li> </ul>	Yes
		Covering materials during heavy rainfall.	N/A
S6.5.6	S5.2.1	Locating stockpiles to minimise potential visual impacts.	Implemented? ^         N/A         Yes         N/A         N/A         N/A         N/A         N/A         N/A         Obs         Yes         N/A
30.3.0	55.2.1	Minimising land intake of stockpile areas as far as possible.	
		<ul> <li>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&amp;D materials.</li> </ul>	
		<ul> <li>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.</li> </ul>	N/A
S6.5.7 to 6.5.9		<u>General Refuse:</u> <ul> <li>General refuse should be stored in covered bins or compaction units separately from C&amp;D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site regularly, separately from C&amp;D materials. An enclosed and covered area is preferred to reduce the occurrence of "wind blown" light materials.</li> </ul>	Obs
	S5.2.1	• 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.	Yes
		<ul> <li>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.</li> </ul>	N/A
S6.5.10 to 6.5.12		<u>Chemical Waste:</u> <ul> <li>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.</li> </ul>	Yes
	S5.2.1	• 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.	Obs
		• 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	<ul> <li>Sediment:</li> <li>The sediment should be excavated, handled, treated, transported and/or disposed of in a manner that would minimise adverse environmental impacts.</li> </ul>	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.	Yes
		• The land-based sediment will be treated using S/S technique and will be reused on site (e.g. as backfilling materials).	Yes
		• 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.	Yes
S6.5.17	S5.2.1	<ul> <li>For off-site disposal, the basic requirements and procedures specified under PNAP No. 252 (ADV-21) shall be followed.</li> <li>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).</li> </ul>	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.	N/A
S6.5.18 to 6.5.19	S5.2.1	<ul> <li>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.</li> </ul>	N/A
S6.5.20 to 6.5.23		<ul> <li>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).</li> </ul>	N/A
	S5.2.1	• 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.	
		Potential Floating Refuse:	
S6.5.24	S5.2.1	<ul> <li>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.</li> </ul>	N/A
Recomme	ended Mitiga	tion Measures for Marine Ecological Impact	
EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S7.8.3	S6.3.3	<ul> <li>Based upon a precautionary approach, a speed limit of 10 knots should be strictly enforced on all construction-related vessels.</li> </ul>	Yes
S7.8.6	S6.3.1	<ul> <li>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.</li> </ul>	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
Recomme	ended Mitiga	tion Measures for Landscape and Visual Impact	
EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
		Preservation of New Tree Planting:	
S8.9.2	S7.3.1	<ul> <li>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.</li> </ul>	N/A
		Any existing vegetation in landscaped area and natural terrain not to be affected by the Project shall be carefully preserved.	N/A
		Transplanting of Affected Trees:	
S8.9.2	S7.3.1	<ul> <li>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.</li> </ul>	N/A
S8.9.2	S7.3.1	Compensatory Tree Planting:	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
		<ul> <li>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.</li> </ul>	
\$8.9.2	S7.3.1	<u>Control of night-time lighting glare:</u> <ul> <li>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.</li> </ul>	N/A
S8.9.2	S7.3.1	<ul> <li><u>Erection of Decorative Screen Hoarding:</u></li> <li>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.</li> </ul>	N/A
S8.9.2	S7.3.1	<ul> <li><u>Management of Construction Activities and Facilities:</u></li> <li>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.</li> </ul>	N/A
S8.9.2	S7.3.1	<ul> <li><u>Reinstatement of Temporarily Disturbed Landscape Areas:</u></li> <li>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.</li> </ul>	N/A
\$8.9.2	S7.3.1	Aesthetically Pleasing Design of Aboveground / Above-sea Structures: <ul> <li>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.</li> </ul>	N/A
\$8.9.2	S7.3.1	Provision of Amenity Planting: <ul> <li>Amenity planting, including groundcover and trees shall be provided to soften the proposed above-ground structures on HKBCF as far as appropriate.</li> </ul>	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.