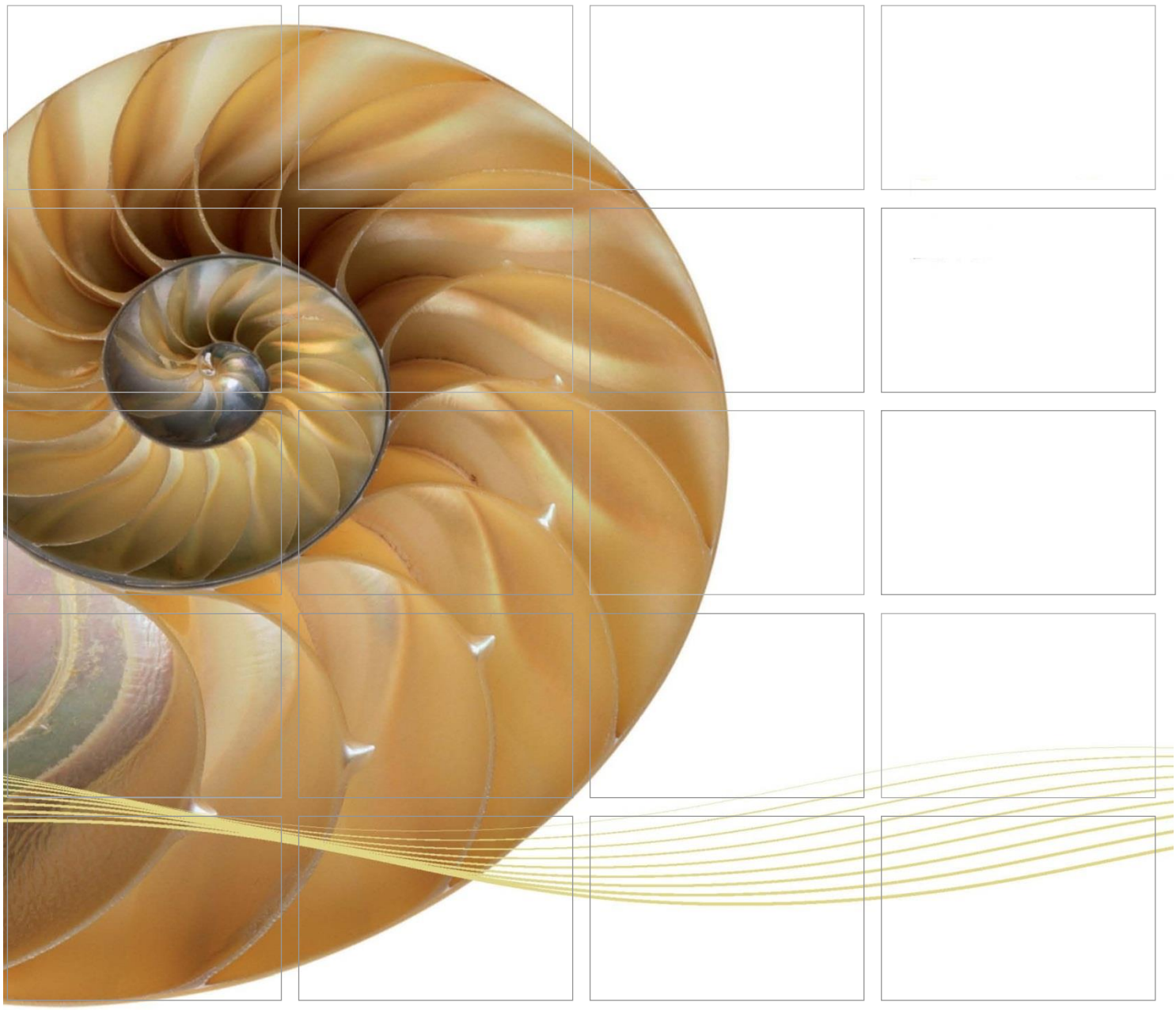
Report



Contract No. HY/2012/08
Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section

Seventy-eighth Monthly Environmental Monitoring & Audit (EM&A) Report

12 May 2020

Environmental Resources Management
2507, 25/F One Harbourfront
18 Tak Fung Street
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Contract No. HY/2012/08
Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section

Seventy-eighth Monthly Environmental Monitoring & Audit (EM&A) Report

Document Code: 0212330_78th Monthly EM&A_20200512.doc

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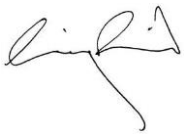
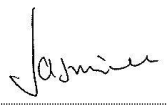
Client: DBJV	Project No: 0212330
Summary: This document presents the Seventy-eighth Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section.	Date: 12 May 2020 Approved by:  *Mr Craig Reid* *Partner* Certified by:  *Dr Jasmine Ng* *ET Leader*

Revision	Description	By	Checked	Approved	Date
	78th Monthly EM&A Report	VAR	JN	CAR	12/05/20

Distribution

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12 May 2020

By Fax (2293 6300) and By Post

AECOM Asia Co. Ltd.
Supervising Officer Representative's Office
No.8 Mong Fat Street, Tuen Mun, New Territories, Hong Kong

Attention: Mr. Roger Man

Dear Mr. Man,

Re: Agreement No. CE 48/2011 (EP)
Environmental Project Office for the
HZMB Hong Kong Link Road, HZMB Hong Kong Boundary Crossing Facilities, and Tuen Mun-Chek Lap Kok Link – Investigation

Contract No. HY/2012/08
TM-CLKL – Northern Connection Sub-sea Tunnel Section
78th Monthly EM&A Report for April 2020 (EP-354/2009/D)

Reference is made to the Monthly EM&A Report for April 2020 (ET's ref.: "0212330_78th Monthly EM&A_20200512.doc") certified by the ET Leader and provided to us via e-mail on 12 May 2020.

Please be informed that we have no adverse comments on the captioned Report. We write to verify the captioned submission in accordance with Condition 4.4 of EP-354/2009/D.

Thank you for your attention. Please do not hesitate to contact the undersigned or the ENPO Leader Mr. Y. H. Hui should you have any queries.

Yours sincerely,

F. C. Tsang
Independent Environmental Checker
Tuen Mun – Chek Lap Kok Link

c.c.

HyD	Mr. Patrick Ng	(By Fax: 3188 6614)
HyD	Mr. Andy Ho	(By Fax: 3188 6614)
AECOM	Mr. Conrad Ng	(By Fax: 3922 9797)
ERM	Dr. Jasmine Ng	(By Fax: 2723 5660)
DBJV	Mr. Bryan Lee	(By Fax: 2293 7499)

Internal: DY, YH, ENPO Site

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Ramboll Hong Kong Limited 英環香港有限公司
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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Under *Contract No. HY/2012/08*, Dragages – Bouygues Joint Venture (DBJV) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Northern Connection Sub-sea Tunnel Section of the Tuen Mun – Chek Lap Kok Link Project (TM-CLK Link Project) while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET) in accordance with *Environmental Permit No. EP-354/2009/A*. Ramboll Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO). Subsequent applications for variation of environmental permits (VEP), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

The construction phase of the Contract commenced on 1 November 2013 and will tentatively be completed in 2020. The impact monitoring of the EM&A programme, including air quality, water quality, marine ecological monitoring and environmental site inspections, were commenced on 1 November 2013.

This is the Seventy-eighth Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 30 April 2020 for the *Contract No. HY/2012/08 Northern Connection Sub-sea Tunnel Section* (the "Contract") in accordance with the Updated EM&A Manual of the TM-CLK Link Contract. As informed by the Contractor, major activities in the reporting period included:

Land-based Works

- Road & Drainage works – Portion S-A, S-B & S-C and Northern Landfall;
- Fireboard installation –Tunnel;
- UU installation - Portion S-A, S-B & S-C and Northern Landfall.

A summary of monitoring and audit activities conducted in the reporting period is listed below:

24-hour TSP Monitoring	10 sessions
1-hour TSP Monitoring	10 sessions
Impact Dolphin Monitoring	2 sessions
Post-Construction Water Quality Monitoring	5 sessions
Joint Environmental Site Inspection	5 sessions

Implementation of Marine Mammal Exclusion Zone

No marine works were undertaken during the reporting period, therefore, daily 250 m marine mammal exclusion zone monitoring was not undertaken during the reporting period.

Summary of Breaches of Action/Limit Levels

Breaches of Action and Limit Levels for Air Quality

Three (3) Action Level and one (1) Limit Level exceedances of 1-hour TSP Monitoring were recorded in the air quality monitoring of this reporting month. No exceedance of 24-hour TSP Monitoring was recorded.

Breaches of Action and Limit Levels for Dolphin Monitoring

Due to monthly variation in dolphin occurrence within the survey area, it would be more appropriate to draw conclusion on whether any unacceptable impacts on dolphins have been detected in relation to the construction activities of this Contract in the quarterly EM&A reports, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

Environmental Complaints, Non-compliance & Summons

No non-compliance with EIA recommendations, EP conditions and other requirements associated with the construction of this Contract was recorded in this reporting period.

No environmental complaint was received in this reporting period.

No environmental summons was received in this reporting period.

Reporting Change

There was no reporting change in the reporting period.

Upcoming Works for the Next Reporting Month

Works to be undertaken in the next monitoring period of May 2020 include the following:

Land-based Works

- Road & Drainage works – Portion S-A, S-B & S-C and Northern Landfall;
- Fireboard installation –Tunnel;
- UU installation - Portion S-A, S-B & S-C and Northern Landfall.

Future Key Issue

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of May 2020 are mainly associated with dust, marine ecology and waste management issues.

1 INTRODUCTION

1.1 BACKGROUND

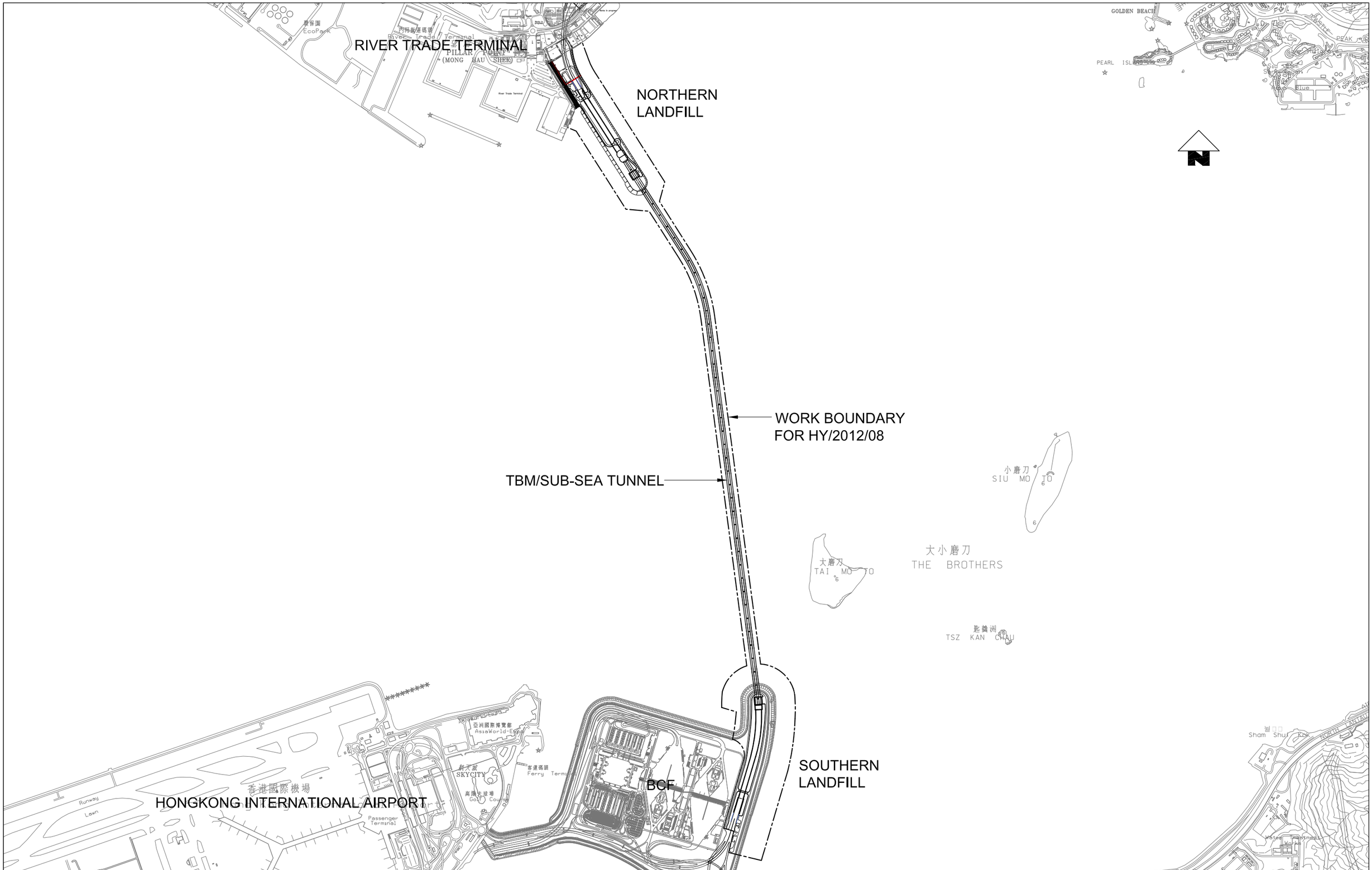
According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated increase in cross boundary traffic, developments in the Northwest New Territories (NWNT), and possible developments in North Lantau, including the Airport developments, the Lantau Logistics Park (LLP) and the Hong Kong – Zhuhai – Macao Bridge (HZMB). In order to cope with the anticipated traffic demand, two new road sections between NWNT and North Lantau – Tuen Mun – Chek Lap Kok Link (TM-CLKL) and Tuen Mun Western Bypass (TMWB) are proposed.

An Environmental Impact Assessment (EIA) of TM-CLKL (the Project) was prepared in accordance with the EIA Study Brief (No. ESB-175/2007) and the *Technical Memorandum of the Environmental Impact Assessment Process* (*EIAO-TM*). The EIA Report was submitted under the Environmental Impact Assessment Ordinance (EIAO) in August 2009. Subsequent to the approval of the EIA Report (EIAO Register Number AEIAR-146/2009), an Environmental Permit (EP-354/2009) for TM-CLKL was granted by the Director of Environmental Protection (DEP) on 4 November 2009, and EP variation (VEP) (EP-354/2009/A) was issued on 8 December 2010. Subsequent applications for variation of environmental permits (VEPs), *EP-354/2009/B, EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

Under *Contract No. HY/2012/08*, Dragages – Bouygues Joint Venture (DBJV) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Northern Connection Sub-sea Tunnel Section of TM-CLKL while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET). Ramboll Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO).

Layout of the Contract components is presented in *Figure 1.1*.

The construction phase of the Contract commenced on 1 November 2013 and will tentatively be completed in 2020. The impact monitoring phase of the EM&A programme, including air quality, water quality, marine ecological monitoring and environmental site inspections, were commenced on 1 November 2013.



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				Drawn By	DAI
				Approved By	SPo PP
A	FIRST ISSUE	11SEP13	PKV	Date	11SEP2013
Rev.	Description	Date	Checked		

Main Contractor

香寶嘉 Dragages HongKong

A member of the Bouygues Construction group

BOUYGUES TRAVAUX PUBLICS

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Client

路政署 HIGHWAYS DEPARTMENT

Contractor's Designer

ARUP Ove Arup & Partners Hong Kong Limited

Project

Contract No. HY/2012/08
Tuen Mun - Chek Lap Kok Link -
Northern Connection Sub-Sea Tunnel Section

Drawing Title

Figure 1.1

Drawing no.	TMCLKL8-DBJ-GEN-DWG-00174
Scale	1:25000 @ A3
CADD Ref.	TMCLKL8-DBJ-GEN-DWG-00174-DFT-A
Issue Status	DFT (DRAFT)
Revision	A

1.2 SCOPE OF REPORT

This is the Seventy-eighth Monthly EM&A Report under the *Contract No. HY/2012/08 Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section*. This report presents a summary of the environmental monitoring and audit works in April 2020.

1.3 ORGANIZATION STRUCTURE

The organization structure of the Contract is shown in *Appendix A*. The key personnel contact names and contact details are summarized in *Table 1.1* below.

Table 1.1 Contact Information of Key Personnel

Party	Position	Name	Telephone	Fax
Highways Department	Engr 24/SD	Ken T.M. Cheng	2762 4062	3188 6614
SOR (AECOM Asia Company Limited)	Chief Resident Engineer	Roger Man	2293 6388	2293 6300
ENPO / IEC (Ramboll Hong Kong Ltd.)	ENPO Leader	Y.H. Hui	3465 2850	3465 2899
	IEC	Dr. F.C. Tsang	3465 2851	3465 2899
Contractor (Dragages – Bouygues Joint Venture)	Deputy Environmental Manager	Bryan Lee	2293 7323	2293 7499
	24-hour hotline		2293 7330	
ET (ERM-HK)	ET Leader	Jasmine Ng	2271 3311	2723 5660

1.4 SUMMARY OF CONSTRUCTION WORKS

The construction phase of this Contract was commenced on 1 November 2013. The construction programme is shown in *Appendix B*.

As per DBJV's information, details of major construction works carried out in this reporting period are summarized in *Table 1.2*.

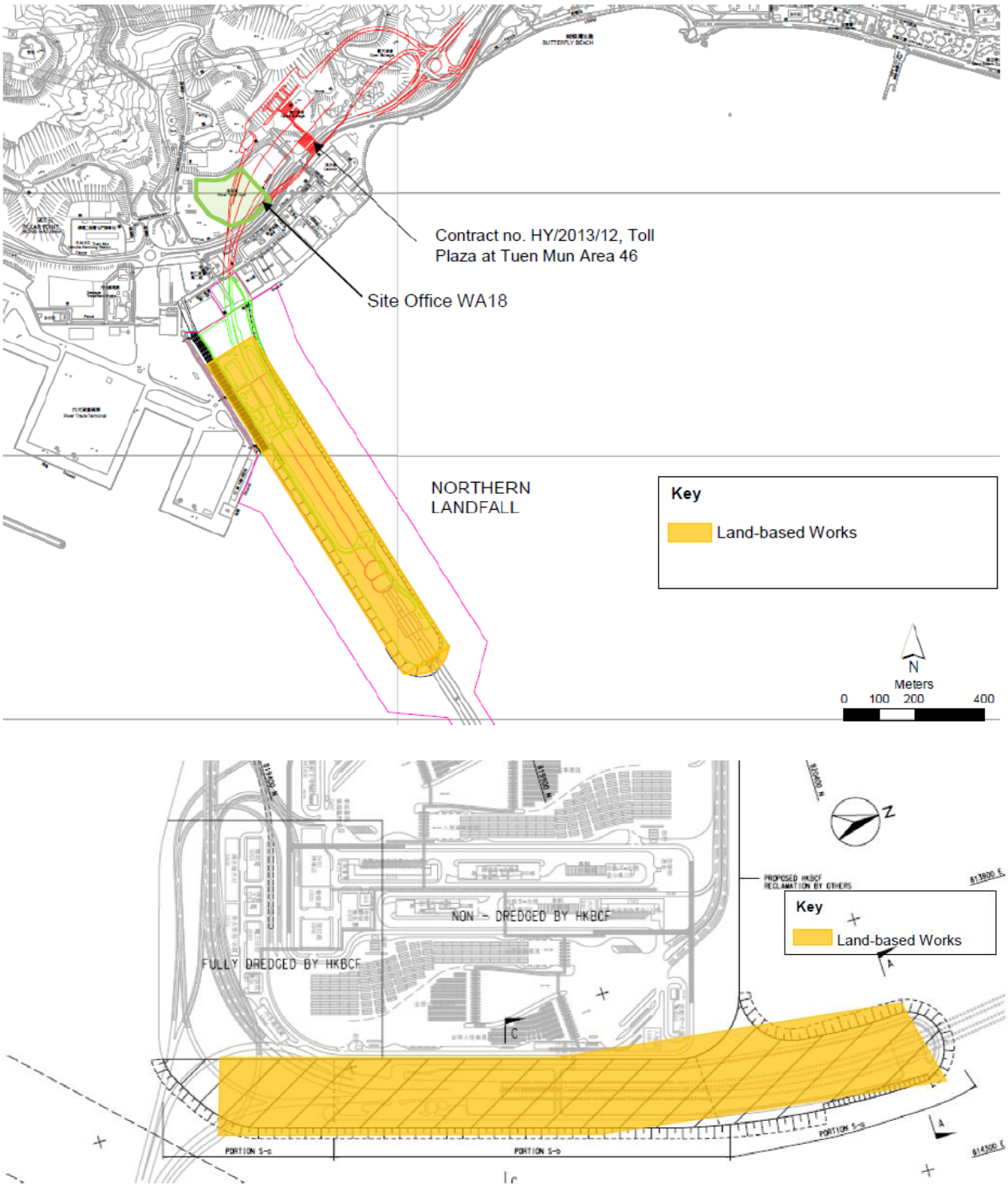
The general layout plan of the site showing the detailed works areas is shown in *Figure 1.2*. The Environmental Sensitive Receivers in the vicinity of the Contract are shown in *Figure 1.3*.

The implementation schedule of environmental mitigation measures is presented in *Appendix C*.

Table 1.2 Summary of Construction Activities Undertaken during the Reporting Period

Construction Activities Undertaken
Land-based Works
• Road & Drainage works – Portion S-A, S-B & S-C and Northern Landfall; • Fireboard installation –Tunnel; • UU installation - Portion S-A, S-B & S-C and Northern Landfall.

Figure 1.2 Locations of Construction Activities – April 2020



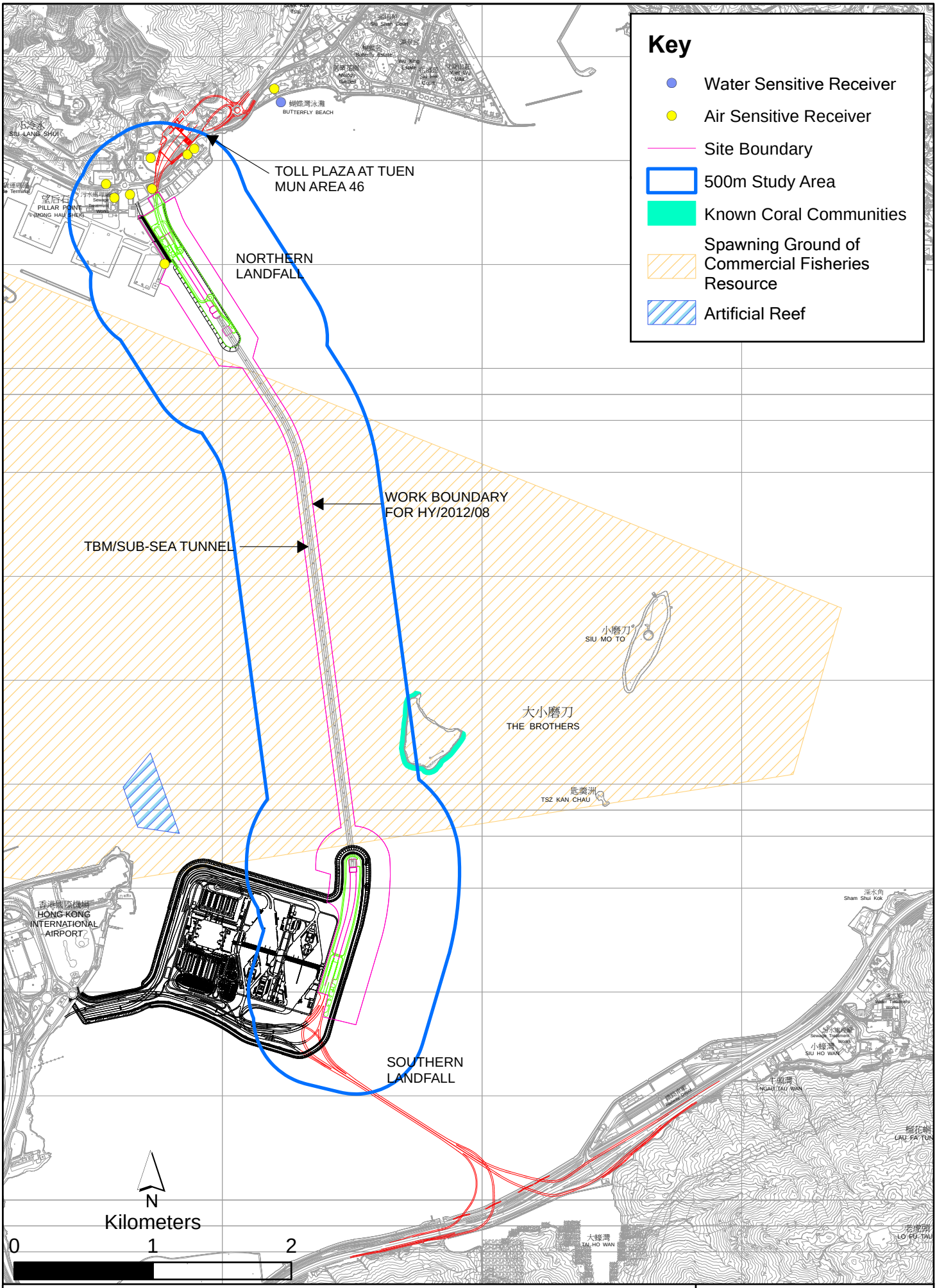


Figure 1.3 Environmental Sensitive Receivers in the vicinity of Contract No. HY/2012/08 Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-Sea Tunnel Section

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Date: 15/4/2014

Environmental Resources Management

The EM&A programme required environmental monitoring for air quality, water quality and marine ecology as well as environmental site inspections for air quality, noise, water quality, waste management, marine ecology and landscape and visual impacts. The EM&A requirements and related findings for each component are summarized in the following sections

2.1 AIR QUALITY

2.1.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual and the Enhanced TSP Monitoring Plan, impact 1-hour TSP monitoring was conducted three (3) times every six (6) days and impact 24-hour TSP monitoring was carried out once every six (6) days when the highest dust impact was expected. 1-hr and 24-hr TSP monitoring frequency was increased to three times per day every three days and daily every three days, respectively, as excavation works for launching shaft commenced on 24 October 2014.

High volume samplers (HVSs) were used to carry out the 1-hour and 24-hour TSP monitoring on 2, 5, 8, 11, 14, 17, 20, 23, 26 and 29 April 2020 at the five (5) air quality monitoring stations in accordance with the requirements stipulated in the Updated EM&A Manual (*Figure 2.1*; *Table 2.1*). Wind meter was installed at the rooftop of ASR5 for logging wind speed and wind direction. Details of the equipment deployed are provided in *Table 2.2*. Copies of the calibration certificates for the equipment are presented in *Appendix E*.

Table 2.1 Locations of Impact Air Quality Monitoring Stations and Monitoring Dates in this Reporting Period

Monitoring Station	Monitoring Dates	Location	Description	Parameters & Frequency
ASR1	2, 5, 8, 11, 14, 17, 20, 23, 26 and 29 April 2020	Tuen Mun Fireboat Station	Office	TSP monitoring • 1-hour Total Suspended Particulates (1-hour TSP, µg/m³), 3 times in every 6 days • 24-hour Total Suspended Particulates (24-hour TSP, µg/m³), daily for 24-hour in every 6 days Enhanced TSP monitoring (commenced on 24 October 2014) • 1-hour Total Suspended Particulates (1-hour TSP, µg/m³), 3 times in every 3 days • 24-hour Total Suspended Particulates (24-hour TSP, µg/m³), daily for 24-hour in every 3 days
ASR5		Pillar Point Fire Station	Office	
AQMS1		Previous River Trade Golf	Bare ground	
ASR6		Butterfly Beach Laundry	Office	
ASR10		Butterfly Beach Park	Recreational uses	

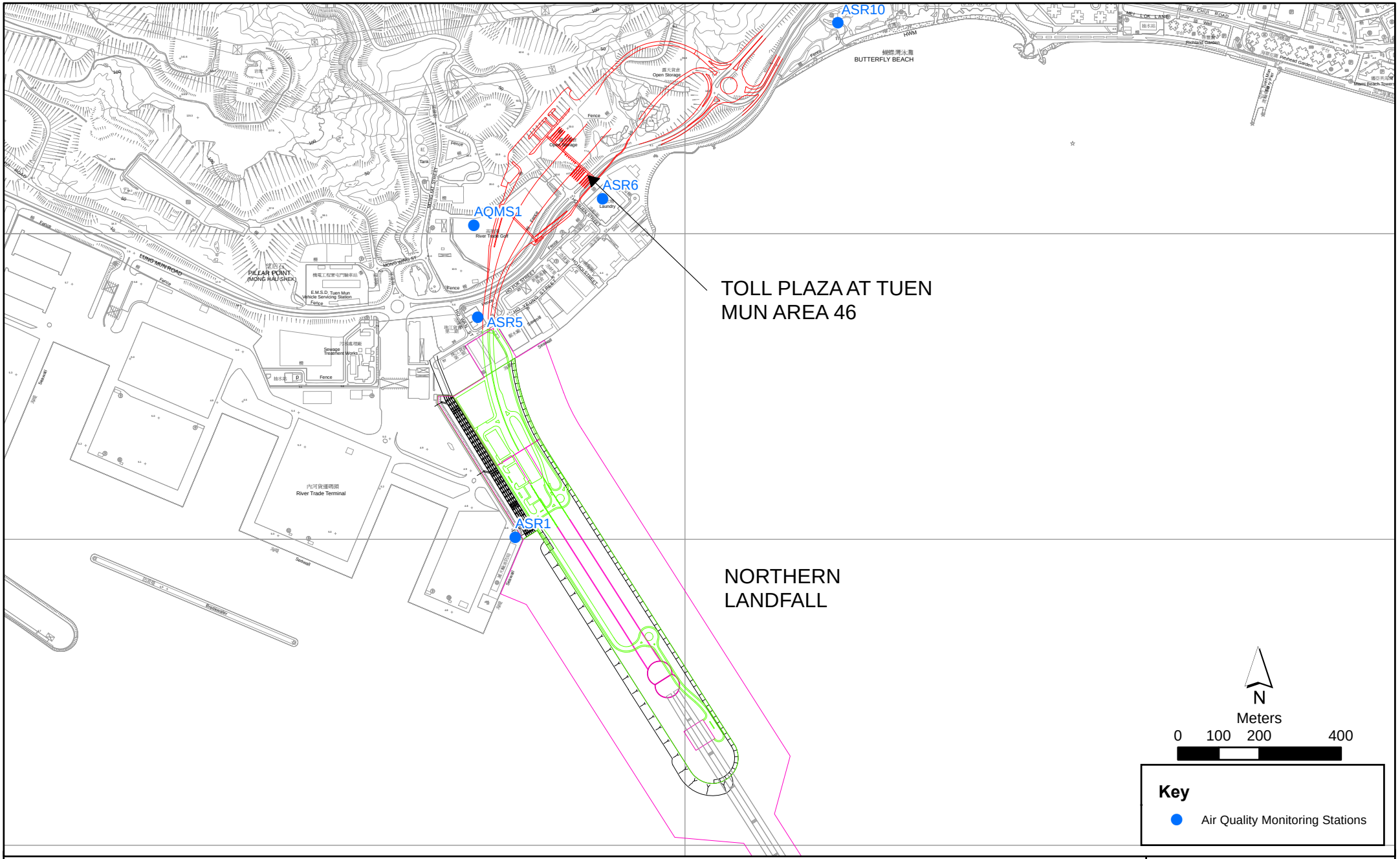

Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring

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Date: 21/2/2014

Environmental Resources Management

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Table 2.2 ***Air Quality Monitoring Equipment***

Equipment	Brand and Model
High Volume Sampler (1-hour TSP and 24-hour TSP)	Tisch Environmental Mass Flow Controlled Total Suspended Particulate (TSP) High Volume Sampler (Model No. TE-5170)
Wind Meter	Davis (Model: Vantage Pro 2 (S/N: AS160104014)
Wind Anemometer for calibration	Lutron (Model No. AM-4201)

2.1.2 Action & Limit Levels

The Action and Limit Levels of the air quality monitoring is provided in *Appendix D*. The Event and Action plan is presented in *Appendix K.*

2.1.3 Monitoring Schedule for the Reporting Month

The schedule for air quality monitoring in April 2020 is provided in *Appendix F*.

2.1.4 Results and Observations

The monitoring results for 1-hour TSP and 24-hour TSP are summarized in *Tables 2.3* and *2.4,* respectively. Detailed impact air quality monitoring results and graphical presentations are presented in *Appendix G.*

Table 2.3 ***Summary of 1-hour TSP Monitoring Results in this Reporting Period***

Station	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
ASR1	179	14 - 673	331	500
ASR5	154	14 - 384	340	500
AQMS1	97	14 - 214	335	500
ASR6	91	14 - 267	338	500
ASR10	61	14 - 149	337	500

Table 2.4 ***Summary of 24-hour TSP Monitoring Results in this Reporting Period***

Station	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
ASR1	85	37 - 128	213	260
ASR5	92	42 - 121	238	260
AQMS1	65	28 - 93	213	260
ASR6	64	28 - 109	238	260
ASR10	42	23 - 62	214	260

The weather condition during the monitoring period varied from sunny to cloudy. The major dust sources in the reporting period included construction activities under the Contract as well as nearby traffic emissions.

A total of 10 1-hour TSP and 24-hour TSP monitoring were undertaken in this reporting month. Three (3) Action Level and one (1) Limit Level exceedances

of 1-hour TSP Monitoring were recorded in the air quality monitoring of this reporting month. No exceedance of 24-hour TSP Monitoring was recorded.

Meteorological information collected at the ASR5, including wind speed and wind direction, is provided in *Appendix H*.

2.2 WATER QUALITY MONITORING

2.2.1 Monitoring Requirements & Equipment

According to the Updated EM&A Manual, a post-construction water quality monitoring shall be carried out upon completion of all marine-based construction activities. Post-construction water quality monitoring was undertaken three days per week for at least 4 weeks in accordance with the Updated EM&A Manual. The proposal for post-construction water quality monitoring was approved by EPD on 5 March 2020. The post construction water quality monitoring commenced on 17 March 2020 and completed on 11 April 2020. Locations of water quality monitoring stations presented in *Figure 2.2* and *Figure 2.3* and in *Table 2.5*.

Table 2.5 Locations of Post-Construction Water Quality Monitoring Stations and the Corresponding Monitoring Requirements

Station ID	Type	Coordinates		*Parameters, unit	Depth	Frequency
		Easting	Northing			
IS(Mf)11	Impact Station (Close to HKBCF construction site)	813562	820716	• Temperature(°C) • pH(pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt)	3 water depths: 1m below sea surface, mid-depth and 1m above sea bed. If the water depth is less than 3m, mid-depth sampling only. If water depth less than 6m, mid-depth may be omitted.	Impact monitoring: 3 days per week, at mid-flood and mid-ebb tides during the construction period of the Contract.
IS17	Impact Station (Close to HKBCF construction site)	814539	820391	• DO (mg/L and % of saturation) • SS (mg/L)		
SR7	Sensitive receivers (Tai Mo Do)	814293	821431			

Station ID	Type	Coordinates		*Parameters, unit	Depth	Frequency
IS(Mf)9	Impact Station (Close to HKBCF construction site)	813273	818850			
IS(Mf)16	Impact Station (Close to HKBCF construction site)	814328	819497			
IS8(N)	Impact Station (Close to HKBCF construction site)	814413	818570			
SR4(N2)	Sensitive receiver (Tai Ho Inlet)	814688	817996			
SR4a	Sensitive receiver	815247	818067			
CS(Mf)3(N)	Control Station	808814	822355			
CS(Mf)5	Control Station	817990	821129			
IS12	Impact Station (Close to TMCLKL construction site)	813218	823681			
IS13	Impact Station (Close to TMCLKL construction site)	813667	824325			
IS14	Impact Station (Close to TMCLK construction site)	812592	824172			
IS15	Impact Station (Close to TMCLK construction site)	813356	825008			
SR8	Sensitive receiver (Gazettal beaches in Tuen Mun)	816306	825715			
SR9	Sensitive receiver (Butterfly Beach)	813601	825858			
SR10A(N)	Sensitive receiver (Ma Wan FCZ)	823644	823484			
CS4	Control Station	810025	824004			

Station ID	Type	Coordinates		*Parameters, unit	Depth	Frequency
CS6	Control Station	817028	823992			

*Notes:
In addition to the parameters presented monitoring location/position, time, water depth, sampling depth, tidal stages, weather conditions and any special phenomena or works underway nearby were also recorded.
Water Quality Monitoring Station CS(Mf)3 was relocated to CS(Mf)3(N) since 2 May 2017.
Water Quality Monitoring Station SR4 was relocated to SR4(N) since 2 March 2018.
Water Quality Monitoring Station SR4(N) was relocated to SR4(N2) since 12 June 2019
Water Quality Monitoring Station IS8 was relocated to IS8(N) since 12 June 2019.
Water Quality Monitoring Station SR10A was relocated to SR10A(N) since 5 March 2020.

Table 2.6 summarizes the equipment used in the post-construction water quality monitoring programme. Copies of the calibration certificates are attached in *Appendix E*.

Table 2.6 Water Quality Monitoring Equipment

Equipment	Model
Multi-Parameters	YSI 6920V2 00019CB2
Multi-Parameters	YSI 6920V2 0001C6A7
Multi-Parameters	YSI ProDss 16H104234
Multi-Parameters	YSI ProDss 17H105557
Multi-Parameters	YSI ProDss 17E100747
Multi-Parameters	YSI ProDss 18A104824
Positioning Equipment	Furuno GP-170
Water Depth Detector	Lowrance Mark 5x / Garmin Striker 4

2.2.2 Monitoring Schedule for the Reporting Month

The schedule for post-construction water quality monitoring in April 2020 is provided in *Appendix F.*

2.2.3 Results and Observations

In total of 5 monitoring events for post-construction water quality monitoring were conducted at all designated monitoring stations in the reporting month. Post-construction water quality monitoring results and graphical presentations are provided in *Appendix J.*

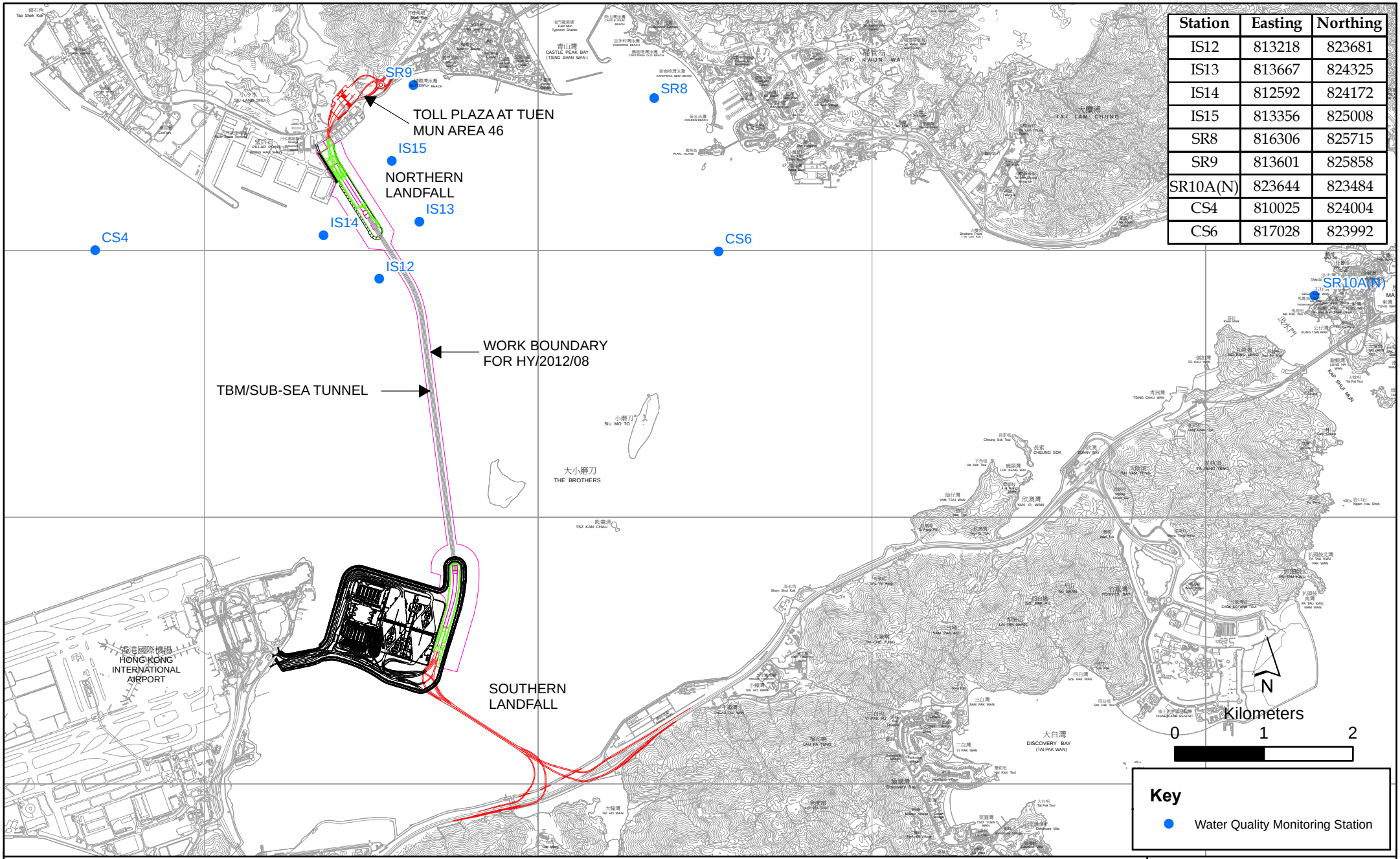
2.3 DOLPHIN MONITORING

2.3.1 Monitoring Requirements

Impact dolphin monitoring is required to be conducted by a qualified dolphin specialist team to evaluate whether there have been any effects on the dolphins. In order to fulfil the EM&A requirements and make good use of available resources, Contract No. HY/2012/08 has taken over the responsibility for implementation of dolphin monitoring from HZMB HKLR Contract No. HY/2011/03 since October 2019.

2.3.2 Monitoring Equipment

Table 2.7 summarises the equipment used for the impact dolphin monitoring.



Station	Easting	Northing
IS12	813218	823681
IS13	813667	824325
IS14	812592	824172
IS15	813356	825008
SR8	816306	825715
SR9	813601	825858
SR10A(N)	823644	823484
CS4	810025	824004
CS6	817028	823992

Figure 2.2

Water Quality Monitoring Station

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Date: 15/11/2013

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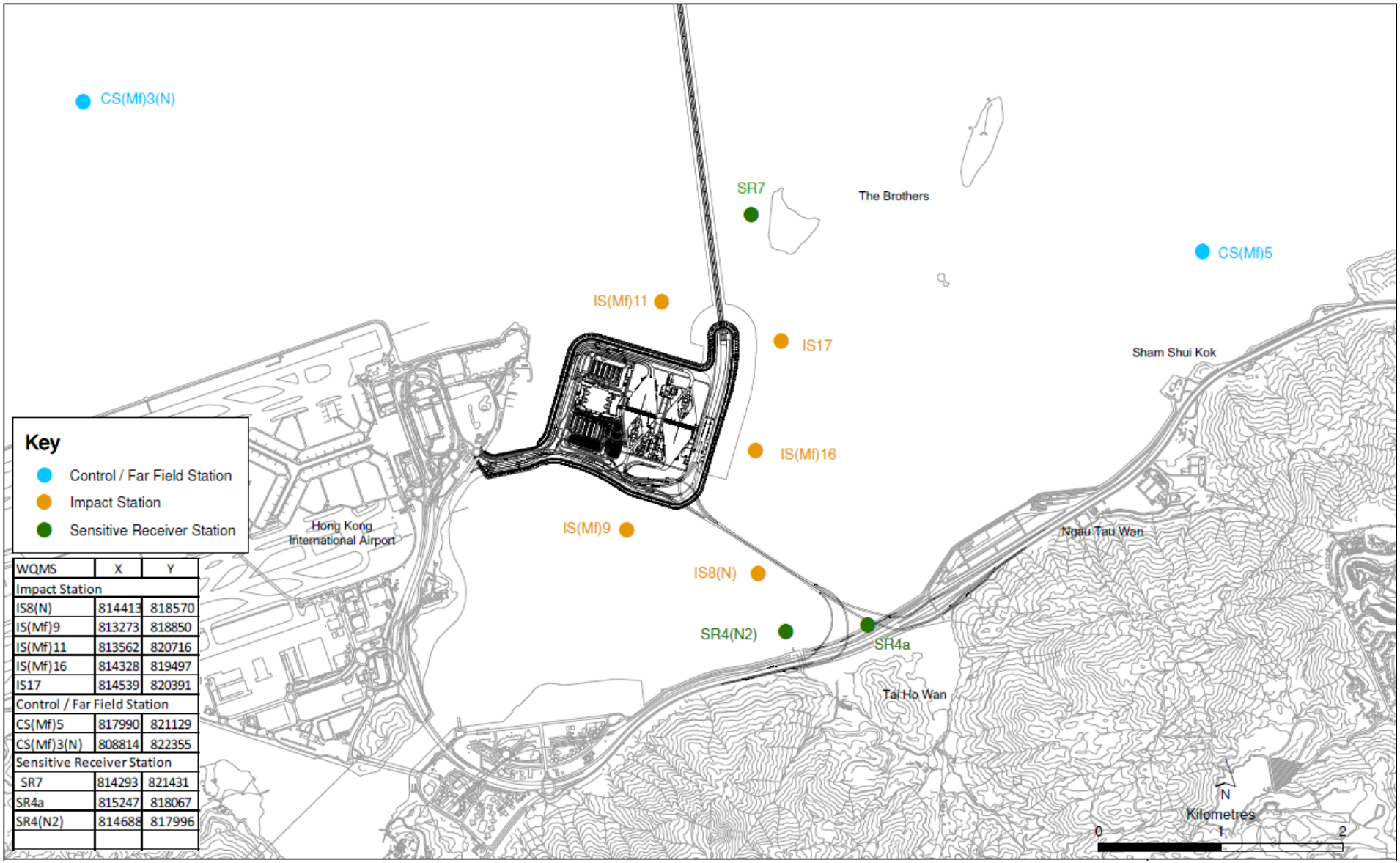

WQMS	X	Y
Impact Station		
IS8(N)	814413	818570
IS(Mf)9	813273	818850
IS(Mf)11	813562	820716
IS(Mf)16	814328	819497
IS17	814539	820391
Control / Far Field Station		
CS(Mf)5	817990	821129
CS(Mf)3(N)	808814	822355
Sensitive Receiver Station		
SR7	814293	821431
SR4a	815247	818067
SR4(N2)	814688	817996

Figure 2.3

Water Quality Monitoring Stations

Environmental Resources Management

ERM

Table 2.7 Dolphin Monitoring Equipment

Equipment	Model
Global Positioning System (GPS)	Garmin 18X-PC Geo One Phottix
Camera	Nikon D90 300m 2.8D fixed focus Nikon D90 20-300m zoom lens
Laser Binocular	Infinitor LRF 1000
Marine Binocular	Bushell 7 x 50 marine binocular with compass and reticules
Vessel for Monitoring	65 foot single engine motor vessel with viewing platform 4.5m above water level

2.3.3 Monitoring Parameter, Frequencies & Duration

Dolphin monitoring should cover all transect lines in Northeast Lantau (NEL) and the Northwest Lantau (NWL) survey areas twice per month throughout the entire construction period. The monitoring data should be compatible with, and should be made available for, long-term studies of small cetacean ecology in Hong Kong. In order to provide a suitable long-term dataset for comparison, identical methodology and line transects employed in baseline dolphin monitoring was followed in the impact dolphin monitoring.

2.3.4 Monitoring Location

The impact dolphin monitoring was carried out in the NEL and NWL along the line transect as depicted in *Figure 2.4*. The co-ordinates of all transect lines are shown in *Table 2.8* below.

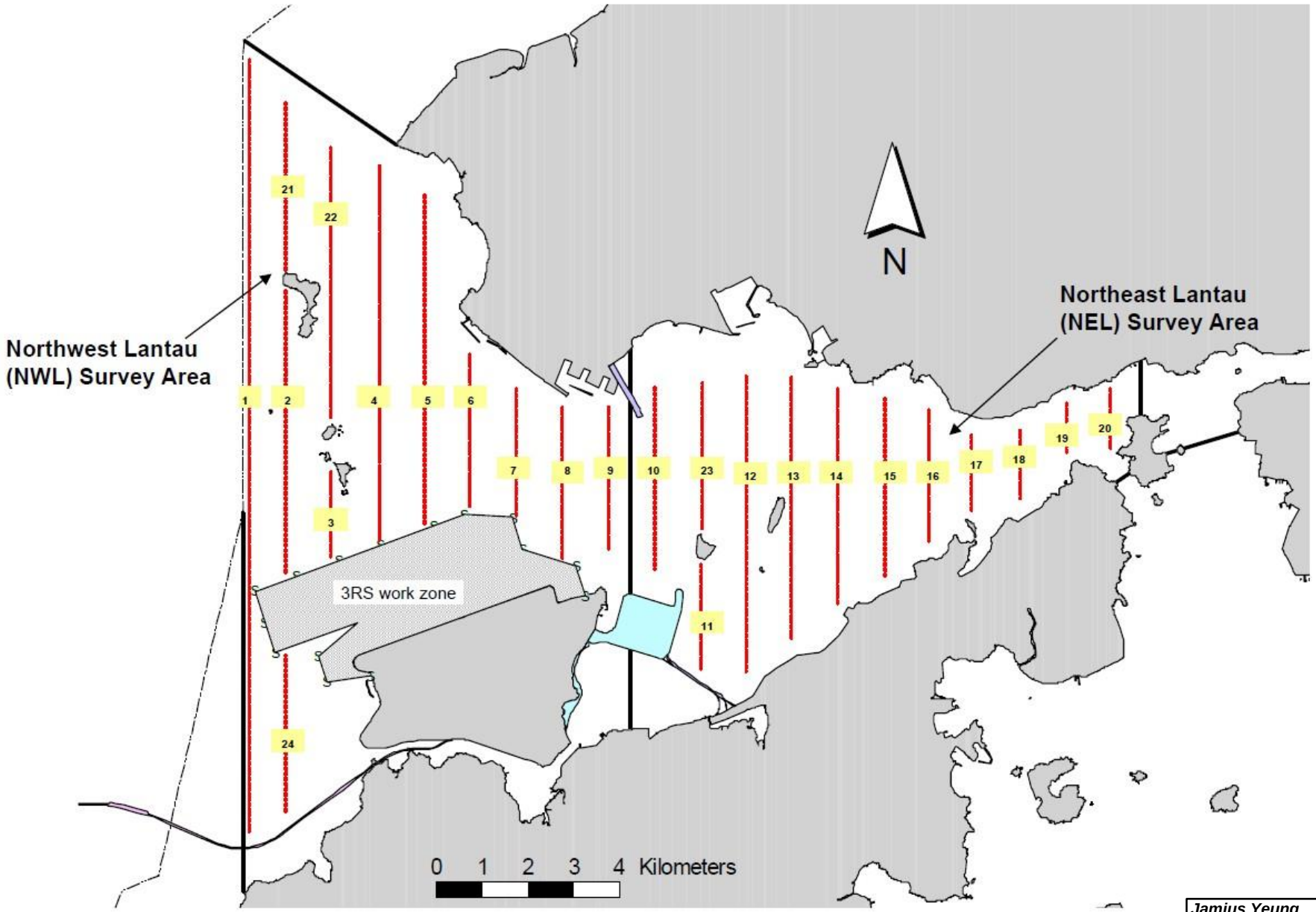

Figure 2.4

Layout of Transect Lines of Dolphin Monitoring in Northwest and Northeast Lantau Areas

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Date: 29/11/2013

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Figure 2.2

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Table 2.8 Impact Dolphin Monitoring Line Transect Co-ordinates

Line No.		Easting	Northing	Line No.		Easting	Northing
1	Start Point	804671	815456	13	Start Point	816506	819480
1	End Point	804671	831404	13	End Point	816506	824859
2	Start Point	805476	820800*	14	Start Point	817537	820220
2	End Point	805476	826654	14	End Point	817537	824613
3	Start Point	806464	821150*	15	Start Point	818568	820735
3	End Point	806464	822911	15	End Point	818568	824433
4	Start Point	807518	821500*	16	Start Point	819532	821420
4	End Point	807518	829230	16	End Point	819532	824209
5	Start Point	808504	821850*	17	Start Point	820451	822125
5	End Point	808504	828602	17	End Point	820451	823671
6	Start Point	809490	822150*	18	Start Point	821504	822371
6	End Point	809490	825352	18	End Point	821504	823761
7	Start Point	810499	822000*	19	Start Point	822513	823268
7	End Point	810499	824613	19	End Point	822513	824321
8	Start Point	811508	821123	20	Start Point	823477	823402
8	End Point	811508	824254	20	End Point	823477	824613
9	Start Point	812516	821303	21	Start Point	805476	827081
9	End Point	812516	824254	21	End Point	805476	830562
10	Start Point	813525	821176	22	Start Point	806464	824033
10	End Point	813525	824657	22	End Point	806464	829598
11	Start Point	814556	818853	23	Start Point	814559	821739
11	End Point	814556	820992	23	End Point	814559	824768
12	Start Point	815542	818807	24*	Start Point	805476*	815900*
12	End Point	815542	824882	24*	End Point	805476*	819100*

Remarks: The coordinates of several starting and ending points have been revised due to the presence of a work zone to the north of the airport platform with intense construction activities in association with the construction of the third runway expansion for the Hong Kong International Airport. Co-ordinates in red and marked with asterisk are revised co-ordinates of transect line.

2.3.5 *Action & Limit Levels*

The Action and Limit levels of impact dolphin monitoring are shown in *Appendix D*. The Event and Action plan is presented in *Appendix K*.

2.3.6 *Monitoring Schedule for the Reporting Month*

Dolphin monitoring was carried out on 8, 14, 21 and 22 April 2020. The dolphin monitoring schedule for the reporting month is shown in *Appendix F*.

2.3.7 *Results & Observations*

A total of 257.56 km of survey effort was collected, with 95.2% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility) in April 2020. Among the two areas, 98.00 km and 159.56 km of survey effort were collected from NEL and NWL survey areas, respectively. The total survey effort conducted on primary and secondary lines were 191.80 km and 65.76 km respectively. The survey efforts are summarized in *Appendix I.*

1 Chinese White Dolphin sighting was recorded during the two sets of surveys in April 2020. The dolphin sighting was made in NWL, while none was sighted in NEL. The dolphin sighting was made during on-effort search and was made on primary lines. The dolphin was not associated with any operating fishing vessel.

No dolphin sighting was made in the proximity of the TM-CLKL alignment. The distribution of dolphin sightings during the reporting month is shown in *Figure 2.5*.

The southern end of transect line no. 8 was not travelled on 8 and 22 April 2020 during the dolphin monitoring due to the presence of construction boats along the transect line. Part of the transect line was not travelled due to safety concerns.

Encounter rates of Chinese White Dolphins are deduced from the survey effort and on-effort sighting data made under favourable conditions (Beaufort 3 or below) in April 2020 with the results present in *Tables 2.9* and *2.10.*

Table 2.9 Individual Survey Event Encounter Rates

		Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)	**Encounter rate (ANI)** (no. of dolphins from all on-effort sightings per 100 km of survey effort)
		Primary Lines Only	**Primary Lines Only**
NEL	Set 1: April 8th / 14th	0.0	0.0
	Set 2: April 21st / 22nd	0.0	0.0
NWL	Set 1: April 8th / 14th	1.7	1.7
	Set 2: April 21st / 22nd	0.0	0.0

Note: Dolphin Encounter Rates are deduced from the Two Sets of Surveys (Two Surveys in Each Set) in April 2020 in Northeast (NEL) and Northwest Lantau (NWL)

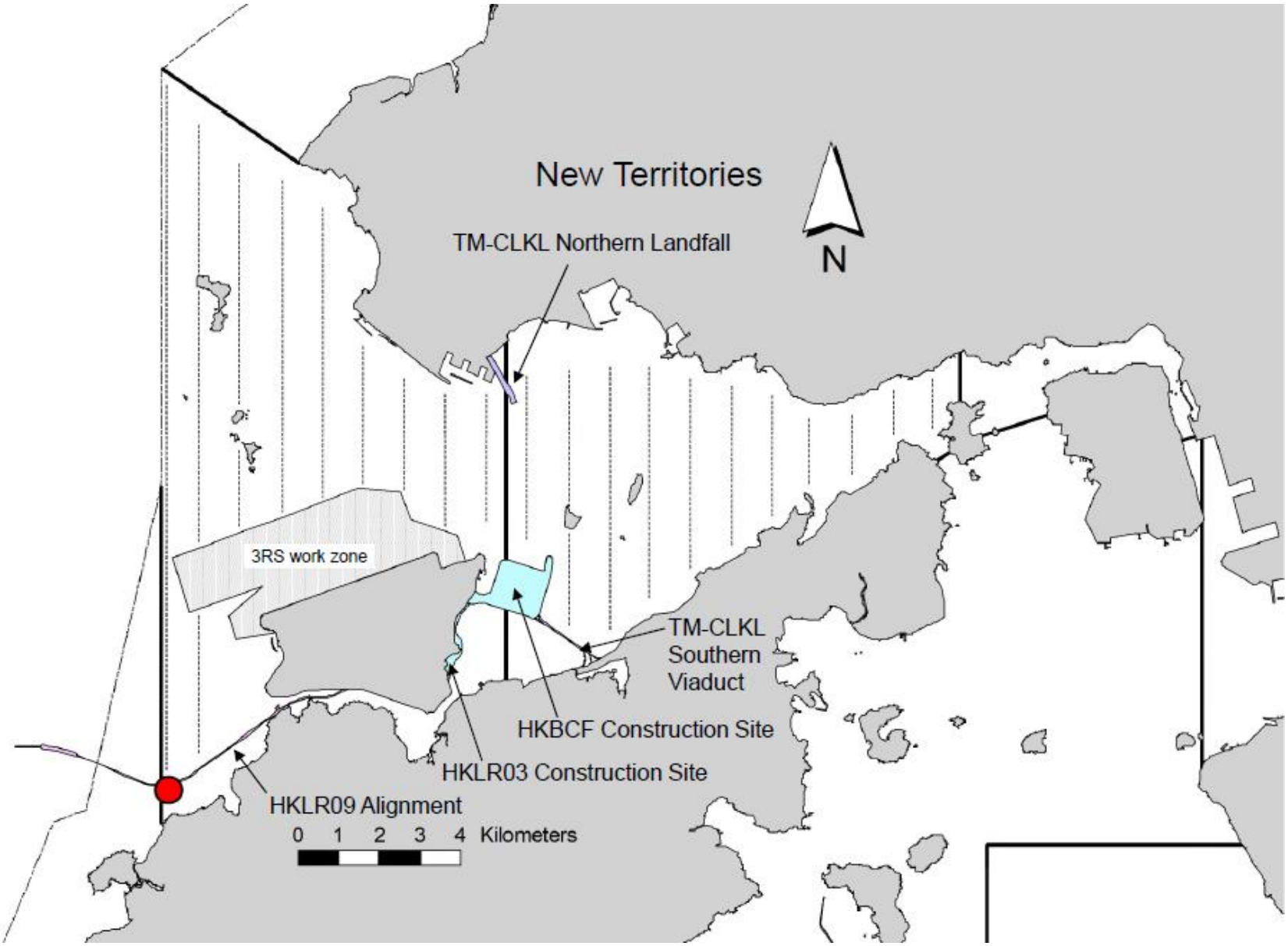

Figure 2.5

HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section
The distribution of dolphin sightings during the reporting period

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Table 2.10 Monthly Average Encounter Rates

	Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)		Encounter rate (ANI) (no. of dolphins from all on-effort sightings per 100 km of survey effort)	
	Primary Lines Only	**Both Primary and Secondary Lines**	**Primary Lines Only**	**Both Primary and Secondary Lines**
Northeast Lantau	0.0	0.0	0.0	0.0
Northwest Lantau	0.9	0.7	0.9	0.7

Note: Overall dolphin encounter rates (sightings per 100 km of survey effort) from all four surveys are conducted in April 2020 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau.

Due to monthly variation in dolphin occurrence within the survey area, it would be more appropriate to draw conclusion on whether any unacceptable impacts on dolphins have been detected in relation to the construction activities of this Contract in the quarterly EM&A reports, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

2.3.8 Implementation of Marine Mammal Exclusion Zone

No marine works were undertaken during the reporting period, therefore, daily 250 m marine mammal exclusion zone monitoring was not undertaken during the reporting period.

2.4 EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting month, five (5) site inspections were carried out on 1, 8, 15, 22 and 29 April 2020.

Key observations and recommendations during the site inspections in this reporting period are summarized in *Table 2.11*.

Table 2.11 Specific Observations and Recommendations during the Weekly Site Inspection in this Reporting Month

Inspection Date	Observations	Recommendations/ Remarks
1 April 2020	Tunnel • Residuals were observed at site.	Tunnel • The Contractor was reminded to keep better housekeeping.
8 April 2020	Tunnel • Chemical should be placed in drip tray. Southern Landfall nearby Cell 15 • Stockpile should be covered with tarpaulin sheet or apply watering to avoid windblown dust.	Tunnel • The Contractor was reminded to place chemical in drip tray. Southern Landfall nearby Cell 15 • The Contractor was reminded to cover or water the stockpile.
15 April 2020	Near Carpark • Chemical should be placed in drip tray.	Near Carpark • The Contractor was reminded to place chemical in drip tray.
22 April 2020	South Ventilation Building • Chemical should be placed in drip tray.	South Ventilation Building • The Contractor was reminded to place chemical in drip tray.
29 April 2020	Northern Landfall (Pumpsum) • Chemical should be placed in drip tray. • Accumulated residuals were observed on site.	Northern Landfall (Pumpsum) • The Contractor was reminded to place chemical in drip tray. • The Contractor was reminded to keep better housekeeping.

The Contractor has rectified all of the observations as identified during environmental site inspections in the reporting month.

2.5 WASTE MANAGEMENT STATUS

The Contractor had submitted application form for registration as chemical waste producer under the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.

Wastes generated during this reporting period included mainly construction wastes (inert and non-inert). Reference has been made to the waste flow table prepared by the Contractor (*Appendix M*). The quantities of different types of wastes are summarized in *Table 2.12*.

Table 2.12 Quantities of Different Waste Generated in the Reporting Month

Month/Year	Inert Construction Waste [a] (tonnes)	Inert Construction Waste Re-used (tonnes)	Non-inert Construction Waste [b] (tonnes)	Recyclable Materials [c] (kg)	Chemical Wastes (kg)	Marine Sediment (m^3)		
						Category L	Category M (M_p & M_f)	Mixed (L+M)
April 2020	4,200	0	521	1,300	6,400	0	0	0

Notes:

(a) Inert construction wastes include hard rock and large broken concrete, and materials disposed as public fill.

(b) Non-inert construction wastes include general refuse disposed at landfill.

(c) Recyclable materials include metals, paper, cardboard, plastics, timber and others.

The Contractor was advised to properly maintain on site C&D materials and waste collection, sorting and recording system, dispose of C&D materials and wastes at designated ground and maximize reuse/ recycle of C&D materials and wastes. The Contractor was also reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.

For chemical waste containers, the Contractor was reminded to treat properly and store temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

2.6 ENVIRONMENTAL LICENSES AND PERMITS

The status of environmental licensing and permit is summarized in *Table 2.13* below.

Table 2.13 Summary of Environmental Licensing and Permit Status

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Environmental Permit	EP-354/2009/D	13 March 2015	Throughout the Contract	HyD	Application for VEP on 3 March 2015 to supersede EP-354/2009/C
Construction Dust Notification	435068	27 June 2018	Throughout the Contract	DBJV	Northern Landfall
Construction Dust Notification	435505	12 July 2018	Throughout the Contract	DBJV	Southern Landfall
Chemical Waste Registration	5213-422-D2516-02	18 January 2017	Throughout the Contract	DBJV	Northern Landfall
Chemical Waste Registration	5213-951-D2591-01	25 May 2016	Throughout the Contract	DBJV	Southern Landfall
Construction Waste Disposal Account	7018108	28 August 2013	Throughout the Contract	DBJV	Waste disposal in Contract No. HY/2012/08
Waste Water Discharge License	WT00031435-2018	2 August 2018	31 August 2023	DBJV	Southern Landfall
Waste Water Discharge License	WT00034060-2019	25 July 2019	30 June 2024	DBJV	Northern Landfall (4 Discharge Point)
Construction Noise Permit	GW-RW0406-18	17 October 2019	15 April 2020	DBJV	Urmston Road in front of Pillar Point
Construction Noise Permit	GW-RW0181-20	29 April 2020	14 October 2020	DBJV	Urmston Road in front of Pillar Point
Construction Noise Permit	GW-RS1137-19	26 December 2019	5 June 2020	DBJV	Southern Landfall
Construction Noise Permit	GW-RW0144-20	14 April 2020	31 August 2020	DBJV	WA23 Tsing Yi Storage Area

Notes:
HyD = Highways Department
DBJV = Dragages – Bouygues Joint Venture
VEP = Variation of Environmental Permit

2.7 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

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

A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in *Appendix C*. The necessary mitigation measures relevant to this Contract were implemented properly.

2.8 SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT

Three (3) Action Level and one (1) Limit Level exceedances of 1-hour TSP Monitoring were recorded in the air quality monitoring of this reporting month. No exceedance of 24-hour TSP Monitoring was recorded.

Cumulative statistics are provided in *Appendix L*.

2.9 SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

The Environmental Complaint Handling Procedure is provided in *Figure 2.6*.

No environmental complaint was received in this reporting period.

No environmental summons was received in this reporting period.

Statistics on complaints, notifications of summons and successful prosecutions are summarized in *Appendix L*.

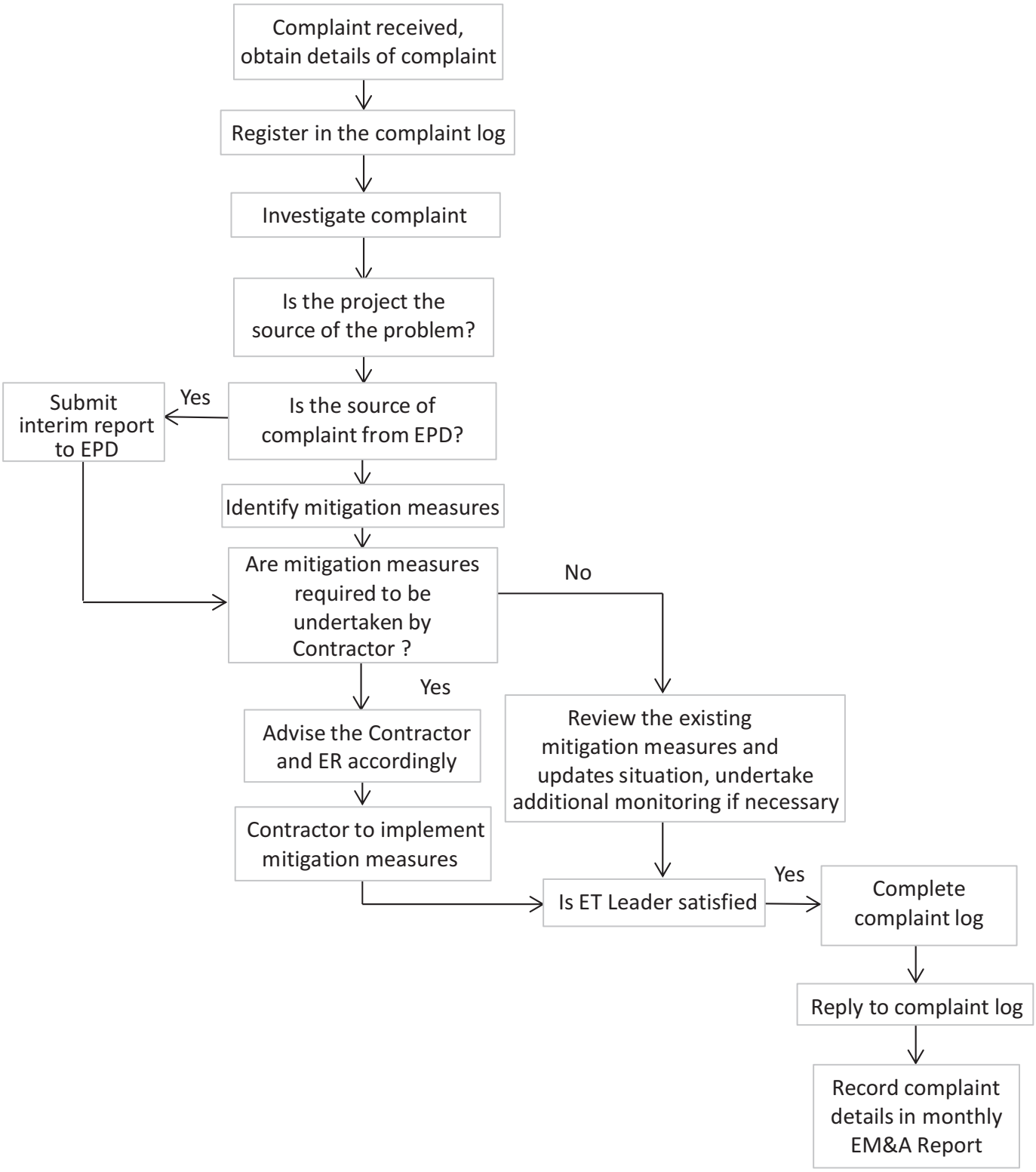

Figure 2.6

Environmental Complaint Handling Procedure

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DATE: 06/12/2013

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3 FUTURE KEY ISSUES

3.1 CONSTRUCTION ACTIVITIES FOR THE COMING MONTH

As informed by the Contractor, the major works for the Contract in May 2020 are summarized in *Table 3.1*.

Table 3.1 Construction Works to Be Undertaken in the Coming Month

Works to be undertaken
Land-based Works • Road & Drainage works – Portion S-A, S-B & S-C and Northern Landfall; • Fireboard installation –Tunnel; • UU installation - Portion S-A, S-B & S-C and Northern Landfall.

3.2 KEY ISSUES FOR THE COMING MONTH

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of May 2020 are mainly associated with dust, marine ecology and waste management issues.

3.3 MONITORING SCHEDULE FOR THE COMING MONTH

The tentative schedule for environmental monitoring in May 2020 is provided in *Appendix F*.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

This Seventy-eighth Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 30 April 2020, in accordance with the Updated EM&A Manual and the requirements of EP-354/2009/D.

Air quality (including 1-hour TSP and 24-hour TSP), post-construction water quality monitoring (DO, turbidity and SS) and dolphin monitoring were carried out in this reporting month.

Three (3) Action Level and one (1) Limit Level exceedances of 1-hour TSP Monitoring were recorded in the air quality monitoring of this reporting month. No exceedance of 24-hour TSP Monitoring was recorded.

1 Chinese White Dolphin sighting was recorded during the two sets of surveys in April 2020. The dolphin sighting was made in NWL, while none was sighted in NEL. The dolphin sighting was made during on-effort search and was made on primary lines. The dolphin was not associated with any operating fishing vessel..

Environmental site inspection was carried out five (5) times in April 2020. Remedial actions recommended for the deficiencies identified during the site audits were properly implemented by the Contractor.

No non-compliance event was recorded during the reporting period.

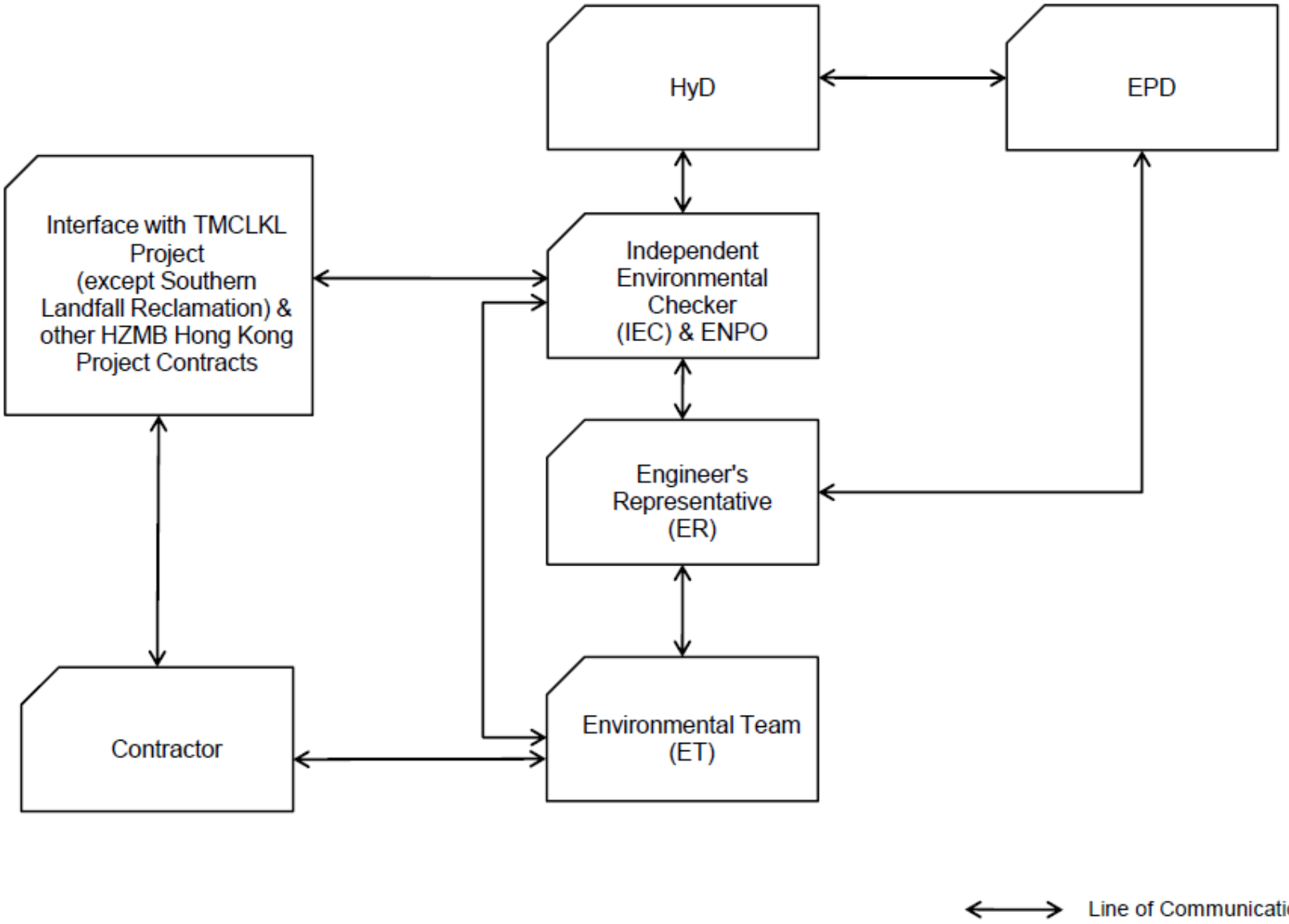
No environmental complaint was received in this reporting period.

No environmental summons was received in this reporting period.

The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Appendix A

Project Organization for Environmental Works



Appendix A1

Contract No. HY/2012/08 Northern Connection Sub-sea Tunnel Section
Project Organization

DATE: 06/03/2013

Environmental Resources Management

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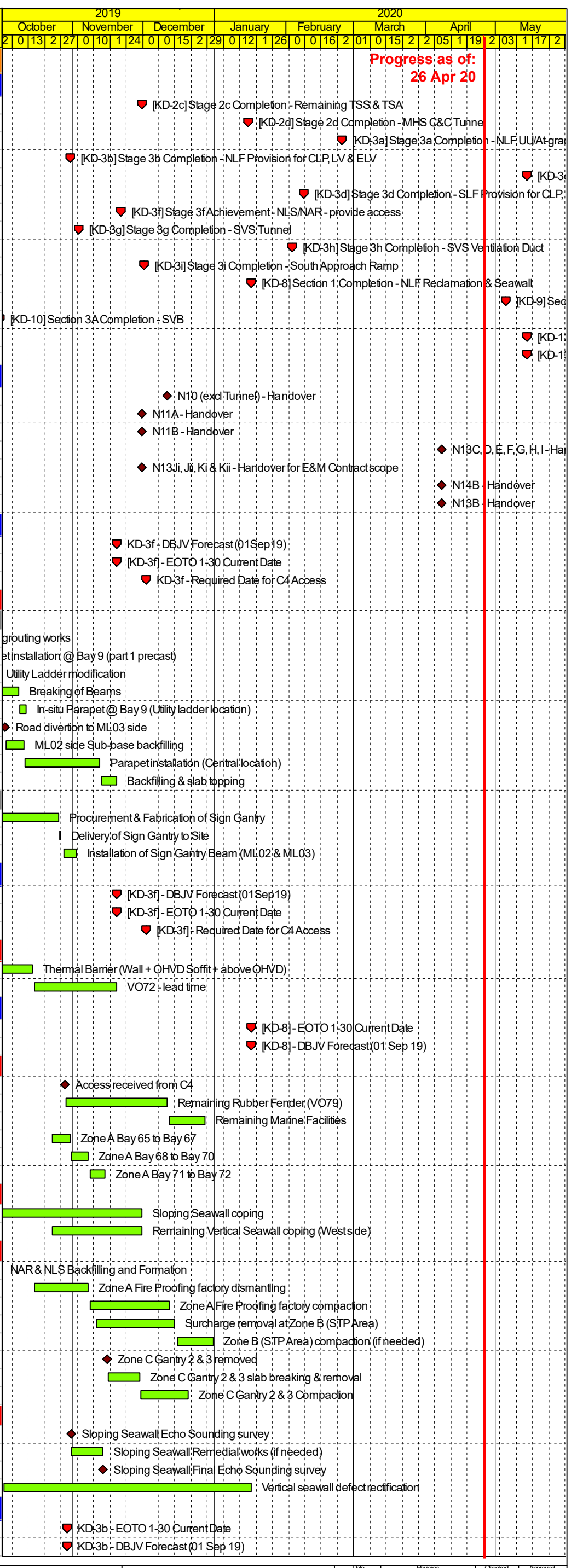
Appendix B

Construction Programme

#	Activity Name	Orig Dur	Start	Finish
1	**TMCLKL Northern Connection Sub-sea Tunnel Section**			
2	**Contract Key Dates**			
3	[KD-2c] Stage 2c Completion - Remaining TSS & TSA	0		30-Nov-19*
4	[KD-2d] Stage 2d Completion - MHS C&C Tunnel	0		15-Jan-20*
5	[KD-3a] Stage 3a Completion - NLF UU/At-grade Provision	0		24-Feb-20*
6	[KD-3b] Stage 3b Completion - NLF Provision for CLP, LV & ELV	0		30-Oct-19*
7	[KD-3c] Stage 3c Completion - SLF UU & At-grade works provision	0		14-May-20*
8	[KD-3d] Stage 3d Completion - SLF Provision for CLP, LV & ELV	0		08-Feb-20*
9	[KD-3f] Stage 3f Achievement - NLS/NAR - provide access	0		21-Nov-19*
10	[KD-3g] Stage 3g Completion - SVS Tunnel	0		03-Nov-19*
11	[KD-3h] Stage 3h Completion - SVS Ventilation Duct	0		03-Feb-20*
12	[KD-3i] Stage 3i Completion - South Approach Ramp	0		01-Dec-19*
13	[KD-8] Section 1 Completion - NLF Reclamation & Seawall	0		16-Jan-20*
14	[KD-9] Section 2 Completion - Tunnels and Approach Ramp	0		05-May-20*
15	[KD-10] Section 3A Completion - SVB	0		30-Sep-19*
16	[KD-12] Section 4 Completion - SLF At-grade Road	0		14-May-20*
17	[KD-13] Section 5 Completion - Preservation and Protection of Trees	0		14-May-20*
18	**Portion Handover Dates**			
19	N10 (excl Tunnel) - Handover	0		11-Dec-19*
20	N11A - Handover	0		30-Nov-19*
21	N11B - Handover	0		30-Nov-19*
22	N13C, D, E, F, G, H, I - Handover	0		07-Apr-20*
23	N13Ji, Jii, Ki & Kii - Handover for E&M Contract scope	0		30-Nov-19*
24	N14B - Handover	0		07-Apr-20*
25	N13B - Handover	0		07-Apr-20
26	**North Approach Ramp KD-3f**			
27	KD-3f - DBJV Forecast (01Sep19)	0		19-Nov-19
28	[KD-3f] - EOTO 1-30 Current Date	0		19-Nov-19*
29	KD-3f - Required Date for C4 Access	0		02-Dec-19*
30	**North Approach Ramp**			
31	*Internal Structure*			
32	Parapet grouting works	12	27-Aug-19A	09-Sep-19
33	Parapet installation @ Bay 9 (part 1 precast)	4	10-Sep-19	13-Sep-19
34	Utility Ladder modification	12	16-Sep-19	28-Sep-19
35	Breaking of Beams	6	30-Sep-19	08-Oct-19
36	In-situ Parapet @ Bay 9 (Utility ladder location)	3	09-Oct-19	11-Oct-19
37	Road divertion to ML03 side	0		02-Oct-19*
38	ML02 side Sub-base backfilling	6	03-Oct-19	10-Oct-19
39	Parapet installation (Central location)	28	11-Oct-19	12-Nov-19
40	Backfilling & slab topping	6	13-Nov-19	19-Nov-19
41	*Sign Gantry*			
42	Procurement & Fabrication of Sign Gantry	41	05-Sep-19*	25-Oct-19
43	Delivery of Sign Gantry to Site	1	26-Oct-19	26-Oct-19
44	Installation of Sign Gantry Beam (ML02 & ML03)	6	28-Oct-19	02-Nov-19
45	**North Launching Shaft KD-3f**			
46	[KD-3f] - DBJV Forecast (01Sep19)	0		19-Nov-19
47	[KD-3f] - EOTO 1-30 Current Date	0		19-Nov-19*
48	[KD-3f] - Required Date for C4 Access	0		02-Dec-19*
49	**North Launching Shaft**			
50	Thermal Barrier (Wall + OHVD Soffit + above OHVD)	70	22-Jul-19A	14-Oct-19
51	VO72 - lead time	31	15-Oct-19	19-Nov-19
52	**Remaining North Reclamation KD-8**			
53	[KD-8] - EOTO 1-30 Current Date	0		16-Jan-20*
54	[KD-8] - DBJV Forecast (01 Sep 19)	0		16-Jan-20
55	**Vertical Seawall**			
56	Access received from C4	0		28-Oct-19*
57	Remaining Rubber Fender (VO79)	38	29-Oct-19	11-Dec-19
58	Remaining Marine Facilities	12	12-Dec-19	27-Dec-19
59	Zone A Bay 65 to Bay 67	7	23-Oct-19	30-Oct-19
60	Zone A Bay 68 to Bay 70	7	31-Oct-19	07-Nov-19
61	Zone A Bay 71 to Bay 72	6	08-Nov-19	14-Nov-19
62	**Sloping Seawall**			
63	Sloping Seawall coping	75	02-Sep-19	30-Nov-19
64	Remaining Vertical Seawall coping (West side)	34	23-Oct-19	30-Nov-19
65	**Removal, Backfilling & Compaction**			
66	NAR & NLS Backfilling and Formation	51	01-Aug-19A	30-Sep-19
67	Zone A Fire Proofing factory dismantling	21	15-Oct-19*	07-Nov-19
68	Zone A Fire Proofing factory compaction	30	08-Nov-19	12-Dec-19
69	Surcharge removal at Zone B (STP Area)	30	11-Nov-19*	14-Dec-19
70	Zone B (STP Area) compaction (if needed)	12	16-Dec-19	31-Dec-19
71	Zone C Gantry 2 & 3 removed	0		15-Nov-19*
72	Zone C Gantry 2 & 3 slab breaking & removal	12	16-Nov-19	29-Nov-19
73	Zone C Gantry 2 & 3 Compaction	18	30-Nov-19	20-Dec-19
74	**Overall**			
75	Sloping Seawall Echo Sounding survey	0		31-Oct-19*
76	Sloping Seawall Remedial works (if needed)	12	31-Oct-19	13-Nov-19
77	Sloping Seawall Final Echo Sounding survey	0		13-Nov-19
78	Vertical seawall defect rectification	88	02-Oct-19	16-Jan-20
79	**NLF Demobilization & At-grade works**			
80	KD-3b - EOTO 1-30 Current Date	0		29-Oct-19*
81	KD-3b - DBJV Forecast (01 Sep 19)	0		29-Oct-19*



Planned Bar
Planned Milestone
Key Date
Progress Milestone
Progress Bar

TMCLKL Northern Connection Sub-sea Tunnel Section

Detailed Works Programme Rev. K

Three Months Rolling Programme

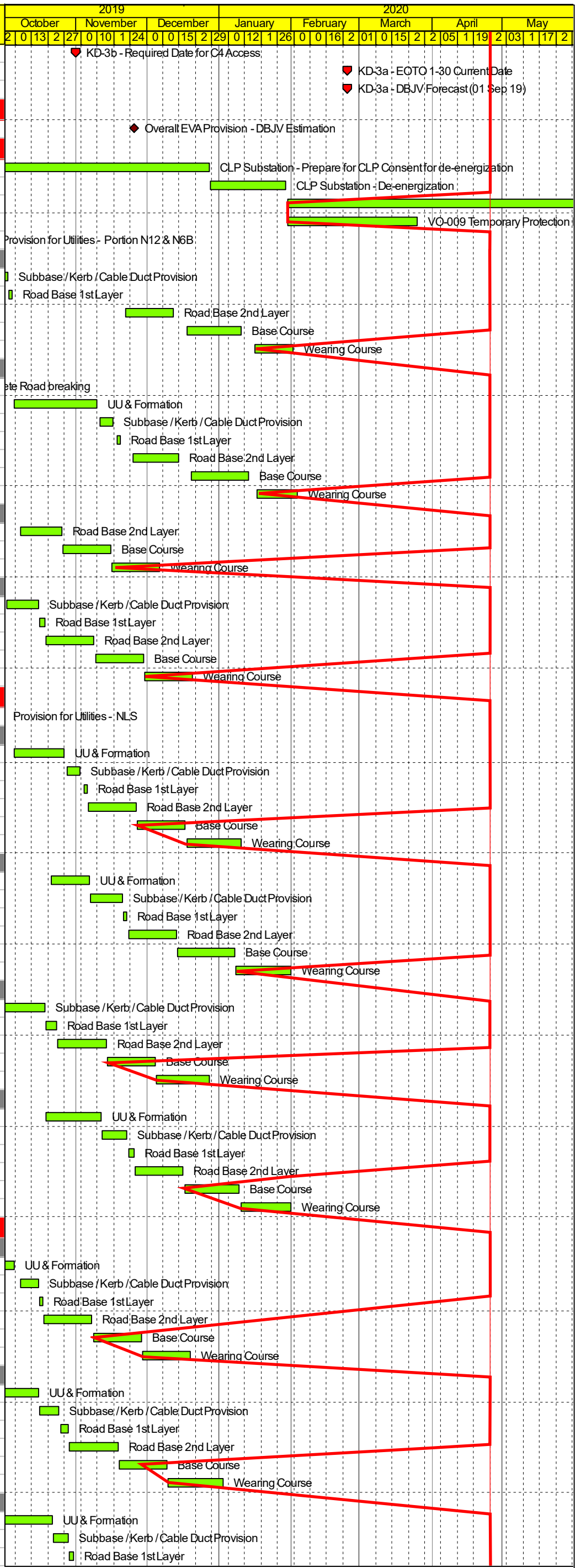
Dragages Hong Kong 香港寶嘉

A member of the Bouygues Construction group

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Date	Revision	Checked	Approved
22-Dec-17	Rev.H	WYu	
05-Feb-18	Rev.IAC	WYu	
07-Mar-18	Rev.I	WYu	
04-Jun-18	Rev.J	WYu	
11-Nov-19	Rev.K	SPa	WYu
22-Jan-20	Rev.K1	SPa	WYu

#	Activity Name	Orig Dur	Start	Finish
82	KD-3b - Required Date for C4 Access	0		31-Oct-19*
83	KD-3a - EOTO 1-30 Current Date	0		24-Feb-20*
84	KD-3a - DBJV Forecast (01 Sep 19)	0		24-Feb-20
85	**Requirement**			
86	Overall EVA Provision - DBJV Estimation	0		25-Nov-19*
87	**Portion N12 & Portion N6B**			
88	CLP Substation - Prepare for CLP Consent for de-energization	96	02-Sep-19	27-Dec-19
89	CLP Substation - De-energization	24	28-Dec-19	29-Jan-20
90	CLP Substation - Dismantling & Removal	101	30-Jan-20	02-Jun-20
91	VO-009 Temporary Protection Barrier - Dismantling & Removal	48	30-Jan-20	25-Mar-20
92	Provision for Utilities - Portion N12 & N6B	133	15-Apr-19A	25-Sep-19
93	**NPO5 (ML03)**			
94	Subbase / Kerb / Cable Duct Provision	25	02-Sep-19	02-Oct-19
95	Road Base 1st Layer	2	03-Oct-19	04-Oct-19
96	Road Base 2nd Layer	18	22-Nov-19	12-Dec-19
97	Base Course	18	18-Dec-19	10-Jan-20
98	Wearing Course	12	16-Jan-20	01-Feb-20
99	**NPO5 (ML02) + NP05 (MD)**			
100	Concrete Road breaking	6	07-Sep-19	13-Sep-19
101	UU & Formation	30	05-Oct-19	09-Nov-19
102	Subbase / Kerb / Cable Duct Provision	6	11-Nov-19	16-Nov-19
103	Road Base 1st Layer	2	18-Nov-19	19-Nov-19
104	Road Base 2nd Layer	18	25-Nov-19	14-Dec-19
105	Base Course	18	20-Dec-19	13-Jan-20
106	Wearing Course	12	17-Jan-20	03-Feb-20
107	**Portion N6**			
108	Road Base 2nd Layer	16	08-Oct-19*	25-Oct-19
109	Base Course	18	26-Oct-19	15-Nov-19
110	Wearing Course	18	16-Nov-19	06-Dec-19
111	**Retaining Wall A**			
112	Subbase / Kerb / Cable Duct Provision	11	02-Oct-19*	15-Oct-19
113	Road Base 1st Layer	3	16-Oct-19	18-Oct-19
114	Road Base 2nd Layer	18	19-Oct-19	08-Nov-19
115	Base Course	18	09-Nov-19	29-Nov-19
116	Wearing Course	18	30-Nov-19	20-Dec-19
117	**North Launching Shaft**			
118	Provision for Utilities - NLS	48	05-Aug-19A	30-Sep-19
119	**Roundabout at NLS**			
120	UU & Formation	18	05-Oct-19	26-Oct-19
121	Subbase / Kerb / Cable Duct Provision	6	28-Oct-19	02-Nov-19
122	Road Base 1st Layer	2	04-Nov-19	05-Nov-19
123	Road Base 2nd Layer	18	06-Nov-19	26-Nov-19
124	Base Course	18	27-Nov-19	17-Dec-19
125	Wearing Course	18	18-Dec-19	10-Jan-20
126	**Carpark**			
127	UU & Formation	15	21-Oct-19	06-Nov-19
128	Subbase / Kerb / Cable Duct Provision	12	07-Nov-19	20-Nov-19
129	Road Base 1st Layer	2	21-Nov-19	22-Nov-19
130	Road Base 2nd Layer	18	23-Nov-19	13-Dec-19
131	Base Course	18	14-Dec-19	07-Jan-20
132	Wearing Course	18	08-Jan-20	31-Jan-20
133	**Retaining Wall A to B**			
134	Subbase / Kerb / Cable Duct Provision	32	09-Sep-19	18-Oct-19
135	Road Base 1st Layer	4	19-Oct-19	23-Oct-19
136	Road Base 2nd Layer	18	24-Oct-19	13-Nov-19
137	Base Course	18	14-Nov-19	04-Dec-19
138	Wearing Course	18	05-Dec-19	27-Dec-19
139	**NPO3**			
140	UU & Formation	20	19-Oct-19	11-Nov-19
141	Subbase / Kerb / Cable Duct Provision	10	12-Nov-19	22-Nov-19
142	Road Base 1st Layer	2	23-Nov-19	25-Nov-19
143	Road Base 2nd Layer	18	26-Nov-19	16-Dec-19
144	Base Course	18	17-Dec-19	09-Jan-20
145	Wearing Course	16	10-Jan-20	31-Jan-20
146	**Sloping Seawall**			
147	**Workshop 14-9**			
148	UU & Formation	127	06-May-19A	05-Oct-19
149	Subbase / Kerb / Cable Duct Provision	7	08-Oct-19	15-Oct-19
150	Road Base 1st Layer	2	16-Oct-19	17-Oct-19
151	Road Base 2nd Layer	18	18-Oct-19	07-Nov-19
152	Base Course	18	08-Nov-19	28-Nov-19
153	Wearing Course	18	29-Nov-19	19-Dec-19
154	**Workshop 9-1**			
155	UU & Formation	107	07-Jun-19A	15-Oct-19
156	Subbase / Kerb / Cable Duct Provision	8	16-Oct-19	24-Oct-19
157	Road Base 1st Layer	3	25-Oct-19	28-Oct-19
158	Road Base 2nd Layer	18	29-Oct-19	18-Nov-19
159	Base Course	18	19-Nov-19	09-Dec-19
160	Wearing Course	18	10-Dec-19	02-Jan-20
161	**Outfall C 1/2**			
162	UU & Formation	86	10-Jul-19A	21-Oct-19
163	Subbase / Kerb / Cable Duct Provision	6	22-Oct-19	28-Oct-19
164	Road Base 1st Layer	2	29-Oct-19	30-Oct-19



Data Date: 01-Sep-19

Planned Bar
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TMCLKL Northern Connection Sub-sea Tunnel Section

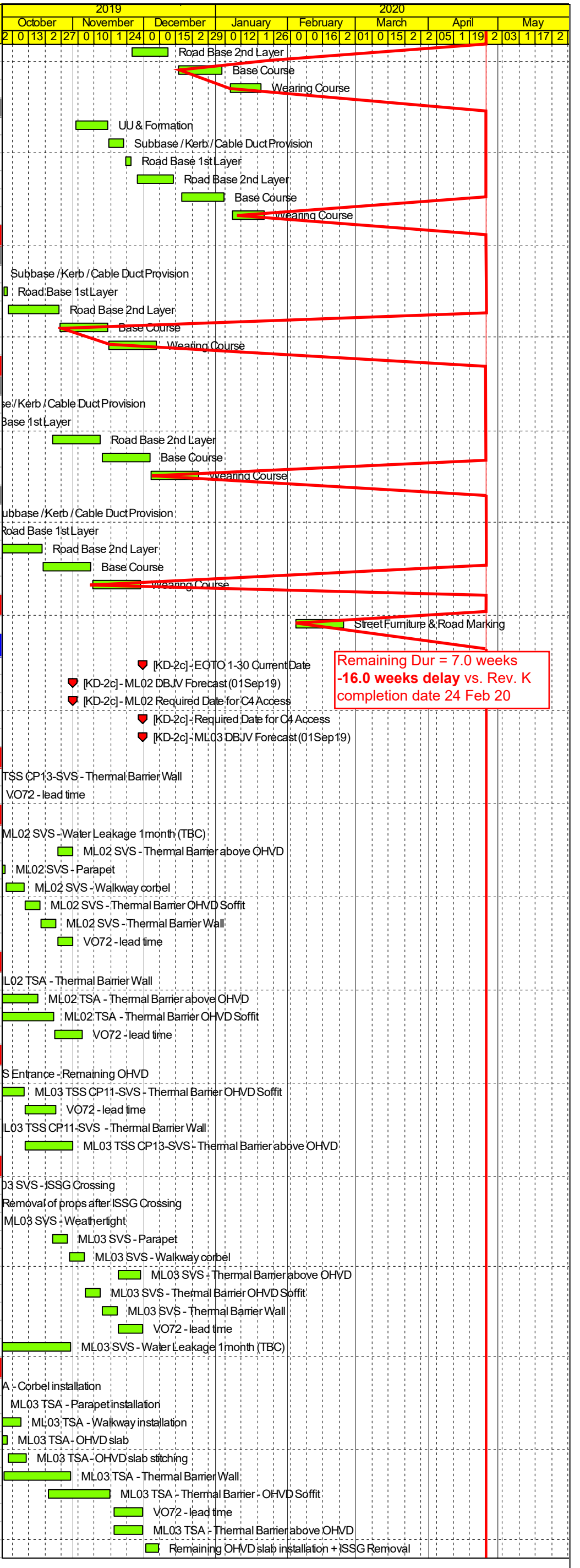
Detailed Works Programme Rev. K

Three Months Rolling Programme

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Date	Revision	Checked	Approved
22-Dec-17	Rev.H	WYu	
05-Feb-18	Rev.IAC	WYu	
07-Mar-18	Rev.I	WYu	
04-Jun-18	Rev.J	WYu	
11-Nov-19	Rev.K	SPa	WYu
22-Jan-20	Rev.K1	SPa	WYu

#	Activity Name	Orig Dur	Start	Finish
165	Road Base 2nd Layer	14	26-Nov-19	11-Dec-19
166	Base Course	14	16-Dec-19	03-Jan-20
167	Wearing Course	12	07-Jan-20	20-Jan-20
168	**Outfall C 2/2**			
169	UU & Formation	12	02-Nov-19	15-Nov-19
170	Subbase / Kerb / Cable Duct Provision	6	16-Nov-19	22-Nov-19
171	Road Base 1st Layer	2	23-Nov-19	25-Nov-19
172	Road Base 2nd Layer	14	28-Nov-19	13-Dec-19
173	Base Course	14	17-Dec-19	04-Jan-20
174	Wearing Course	12	08-Jan-20	21-Jan-20
175	**Precast Segment Yard**			
176	**Roundabout/G4**			
177	Subbase / Kerb / Cable Duct Provision	24	02-Sep-19	30-Sep-19
178	Road Base 1st Layer	2	02-Oct-19	03-Oct-19
179	Road Base 2nd Layer	18	04-Oct-19	25-Oct-19
180	Base Course	18	26-Oct-19	15-Nov-19
181	Wearing Course	18	16-Nov-19	06-Dec-19
182	**NVS & STP (Portion N7 Interface)**			
183	**North Ventilation Building**			
184	Subbase / Kerb / Cable Duct Provision	9	02-Sep-19	11-Sep-19
185	Road Base 1st Layer	2	12-Sep-19	13-Sep-19
186	Road Base 2nd Layer	18	23-Oct-19	12-Nov-19
187	Base Course	18	13-Nov-19	03-Dec-19
188	Wearing Course	18	04-Dec-19	24-Dec-19
189	**FSD/CEDD**			
190	Subbase / Kerb / Cable Duct Provision	18	02-Sep-19	23-Sep-19
191	Road Base 1st Layer	2	24-Sep-19	25-Sep-19
192	Road Base 2nd Layer	18	26-Sep-19	18-Oct-19
193	Base Course	18	19-Oct-19	08-Nov-19
194	Wearing Course	18	09-Nov-19	29-Nov-19
195	**Northern Landfall - Overall**			
196	Street Furniture & Road Marking	18	04-Feb-20	24-Feb-20
197	**Remaining Internal Structure KD-2c**			
198	[KD-2c] - EOTO 1-30 Current Date	0		30-Nov-19*
199	[KD-2c] - ML02 DBJV Forecast (01Sep19)	0		31-Oct-19
200	[KD-2c] - ML02 Required Date for C4 Access	0		31-Oct-19*
201	[KD-2c] - Required Date for C4 Access	0		30-Nov-19*
202	[KD-2c] - ML03 DBJV Forecast (01Sep19)	0		30-Nov-19
203	**ML02 TSS**			
204	ML02 TSS CP13-SVS - Thermal Barrier Wall	47	22-Jul-19A	13-Sep-19
205	VO72 - lead time	12	16-Sep-19	28-Sep-19
206	**ML02 SVS**			
207	ML02 SVS - Water Leakage 1month (TBC)	26	27-Aug-19A	26-Sep-19
208	ML02 SVS - Thermal Barrier above OHVD	6	25-Oct-19	31-Oct-19
209	ML02 SVS - Parapet	12	18-Sep-19*	02-Oct-19
210	ML02 SVS - Walkway corbel	6	03-Oct-19	10-Oct-19
211	ML02 SVS - Thermal Barrier OHVD Soffit	6	11-Oct-19	17-Oct-19
212	ML02 SVS - Thermal Barrier Wall	6	18-Oct-19	24-Oct-19
213	VO72 - lead time	6	25-Oct-19	31-Oct-19
214	**ML02 TSA**			
215	ML02 TSA - Thermal Barrier Wall	18	02-Sep-19	23-Sep-19
216	ML02 TSA - Thermal Barrier above OHVD	18	24-Sep-19	16-Oct-19
217	ML02 TSA - Thermal Barrier OHVD Soffit	24	24-Sep-19	23-Oct-19
218	VO72 - lead time	10	24-Oct-19	04-Nov-19
219	**ML03 TSS**			
220	ML03 TSS Entrance - Remaining OHVD	17	20-Aug-19A	07-Sep-19
221	ML03 TSS CP11-SVS - Thermal Barrier OHVD Soffit	19	17-Sep-19	10-Oct-19
222	VO72 - lead time	12	11-Oct-19	24-Oct-19
223	ML03 TSS CP11-SVS - Thermal Barrier Wall	30	19-Aug-19A	23-Sep-19
224	ML03 TSS CP13-SVS - Thermal Barrier above OHVD	18	11-Oct-19	31-Oct-19
225	**ML03 SVS**			
226	ML03 SVS - ISSG Crossing	9	09-Sep-19	19-Sep-19
227	Removal of props after ISSG Crossing	6	20-Sep-19	26-Sep-19
228	ML03 SVS - Weathertight	0		27-Sep-19*
229	ML03 SVS - Parapet	6	23-Oct-19	29-Oct-19
230	ML03 SVS - Walkway corbel	6	30-Oct-19	05-Nov-19
231	ML03 SVS - Thermal Barrier above OHVD	9	20-Nov-19	29-Nov-19
232	ML03 SVS - Thermal Barrier OHVD Soffit	6	06-Nov-19	12-Nov-19
233	ML03 SVS - Thermal Barrier Wall	6	13-Nov-19	19-Nov-19
234	VO72 - lead time	10	20-Nov-19	30-Nov-19
235	ML03 SVS - Water Leakage 1month (TBC)	26	28-Sep-19	30-Oct-19
236	**ML03 TSA**			
237	ML03 TSA - Corbel installation	93	21-May-19A	07-Sep-19
238	ML03 TSA - Parapet installation	29	27-Aug-19A	30-Sep-19
239	ML03 TSA - Walkway installation	30	02-Sep-19	09-Oct-19
240	ML03 TSA - OHVD slab	11	20-Sep-19	03-Oct-19
241	ML03 TSA - OHVD slab stitching	6	04-Oct-19	11-Oct-19
242	ML03 TSA - Thermal Barrier Wall	24	02-Oct-19	30-Oct-19
243	ML03 TSA - Thermal Barrier - OHVD Soffit	24	21-Oct-19	16-Nov-19
244	VO72 - lead time	12	18-Nov-19	30-Nov-19
245	ML03 TSA - Thermal Barrier above OHVD	12	18-Nov-19	30-Nov-19
246	Remaining OHVD slab installation + ISSG Removal	6	02-Dec-19	07-Dec-19



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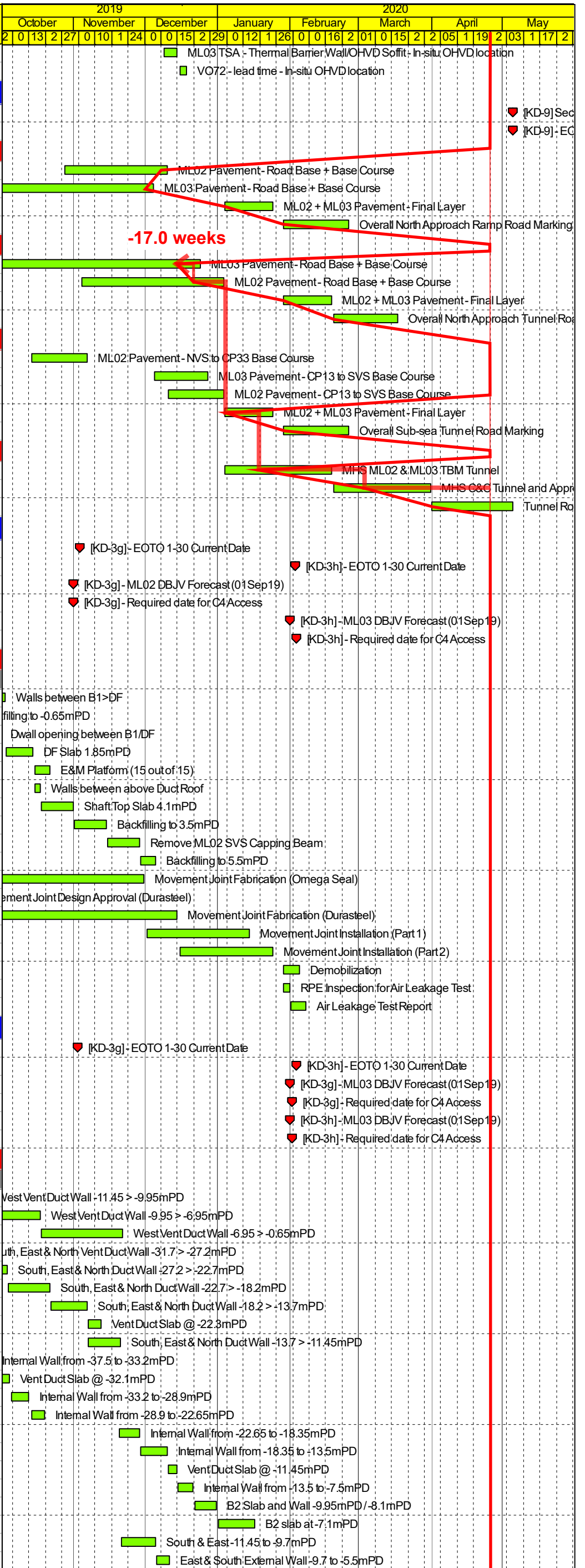
11-Nov-19	Rev.K	SPa	WYu
22-Jan-20	Rev.K1	SPa	WYu

#	Activity Name	Orig Dur	Start	Finish
247	ML03 TSA - Thermal Barrier Wall/OHVD Soffit - In-situ OHVD locati	6	09-Dec-19	14-Dec-19
248	VO72 - lead time - In-situ OHVD location	3	16-Dec-19	18-Dec-19
249	**Tunnel Roadworks**			
250	[KD-9] Section 2 Completion - Tunnels and Approach Ramp	0		05-May-20
251	[KD-9] - EOTO 1-30 Current Date	0		05-May-20*
252	**North Approach Ramp & North Launching Shaft**			
253	ML02 Pavement - Road Base + Base Course	38	28-Oct-19*	10-Dec-19
254	ML03 Pavement - Road Base + Base Course	83	27-Aug-19A	04-Dec-19
255	ML02 + ML03 Pavement - Final Layer	18	04-Jan-20	24-Jan-20
256	Overall North Approach Ramp Road Marking	24	29-Jan-20	25-Feb-20
257	**North Approach Tunnel to North Ventilation Shaft**			
258	ML03 Pavement - Road Base + Base Course	72	30-Sep-19*	24-Dec-19
259	ML02 Pavement - Road Base + Base Course	50	04-Nov-19*	03-Jan-20
260	ML02 + ML03 Pavement - Final Layer	18	29-Jan-20	18-Feb-20
261	Overall North Approach Tunnel Road Marking	24	19-Feb-20	17-Mar-20
262	**Sub-sea Tunnel**			
263	ML02 Pavement - NVS to CP33 Base Course	21	14-Oct-19*	06-Nov-19
264	ML03 Pavement - CP13 to SVS Base Course	18	05-Dec-19	27-Dec-19
265	ML02 Pavement - CP13 to SVS Base Course	18	11-Dec-19	03-Jan-20
266	ML02 + ML03 Pavement - Final Layer	18	04-Jan-20	24-Jan-20
267	Overall Sub-sea Tunnel Road Marking	24	29-Jan-20	25-Feb-20
268	**MHS TBM Tunnel, Cut & Cover & South Approach Ramp**			
269	MHS ML02 & ML03 TBM Tunnel	36	04-Jan-20	18-Feb-20
270	MHS C&C Tunnel and Approach Ramp	36	19-Feb-20	31-Mar-20
271	Tunnel Road Marking	24	01-Apr-20	05-May-20
272	**ML02 South Ventilation Shaft**			
273	[KD-3g] - EOTO 1-30 Current Date	0		03-Nov-19*
274	[KD-3h] - EOTO 1-30 Current Date	0		03-Feb-20*
275	[KD-3g] - ML02 DBJV Forecast (01Sep19)	0		31-Oct-19
276	[KD-3g] - Required date for C4 Access	0		31-Oct-19*
277	[KD-3h] - ML03 DBJV Forecast (01Sep19)	0		31-Jan-20
278	[KD-3h] - Required date for C4 Access	0		03-Feb-20*
279	**ML02 SVS Structure**			
280	**Above Tunnel Vent Duct**			
281	Walls between B1>DF	30	27-Aug-19A	02-Oct-19
282	Backfilling to -0.65mPD	12	02-Sep-19	16-Sep-19
283	Dwall opening between B1/DF	12	17-Sep-19	30-Sep-19
284	DF Slab 1.85mPD	9	03-Oct-19	14-Oct-19
285	E&M Platform (15 out of 15)	6	15-Oct-19	21-Oct-19
286	Walls between above Duct Roof	3	15-Oct-19	17-Oct-19
287	Shaft Top Slab 4.1mPD	12	18-Oct-19	31-Oct-19
288	Backfilling to 3.5mPD	12	01-Nov-19	14-Nov-19
289	Remove ML02 SVS Capping Beam	12	15-Nov-19	28-Nov-19
290	Backfilling to 5.5mPD	6	29-Nov-19	05-Dec-19
291	Movement Joint Fabrication (Omega Seal)	136	21-Jun-19A	30-Nov-19
292	Movement Joint Design Approval (Durasteel)	0		16-Sep-19*
293	Movement Joint Fabrication (Durasteel)	75	17-Sep-19	14-Dec-19
294	Movement Joint Installation (Part 1)	35	02-Dec-19	14-Jan-20
295	Movement Joint Installation (Part 2)	32	16-Dec-19	24-Jan-20
296	Demobilization	6	29-Jan-20	04-Feb-20
297	RPE Inspection for Air Leakage Test	3	29-Jan-20	31-Jan-20
298	Air Leakage Test Report	6	01-Feb-20	07-Feb-20
299	**ML03 South Ventilation Shaft**			
300	[KD-3g] - EOTO 1-30 Current Date	0		02-Nov-19*
301	[KD-3h] - EOTO 1-30 Current Date	0		03-Feb-20*
302	[KD-3g] - ML03 DBJV Forecast (01Sep19)	0		31-Jan-20
303	[KD-3g] - Required date for C4 Access	0		01-Feb-20*
304	[KD-3h] - ML03 DBJV Forecast (01Sep19)	0		31-Jan-20
305	[KD-3h] - Required date for C4 Access	0		01-Feb-20*
306	**ML03 SVS Structure**			
307	**Above Tunnel Vent Duct**			
308	West Vent Duct Wall -11.45 > -9.95mPD	23	28-Aug-19A	24-Sep-19
309	West Vent Duct Wall -9.95 > -6.95mPD	18	25-Sep-19	17-Oct-19
310	West Vent Duct Wall -6.95 > -0.65mPD	30	18-Oct-19	21-Nov-19
311	South, East & North Vent Duct Wall -31.7 > -27.2mPD	21	27-Aug-19A	20-Sep-19
312	South, East & North Duct Wall -27.2 > -22.7mPD	10	21-Sep-19	03-Oct-19
313	South, East & North Duct Wall -22.7 > -18.2mPD	14	04-Oct-19	21-Oct-19
314	South, East & North Duct Wall -18.2 > -13.7mPD	14	22-Oct-19	06-Nov-19
315	Vent Duct Slab @ -22.3mPD	5	07-Nov-19	12-Nov-19
316	South, East & North Duct Wall -13.7 > -11.45mPD	12	07-Nov-19	20-Nov-19
317	Internal Wall from -37.5 to -33.2mPD	6	20-Sep-19*	26-Sep-19
318	Vent Duct Slab @ -32.1mPD	6	27-Sep-19	04-Oct-19
319	Internal Wall from -33.2 to -28.9mPD	6	05-Oct-19	12-Oct-19
320	Internal Wall from -28.9 to -22.65mPD	6	14-Oct-19	19-Oct-19
321	Internal Wall from -22.65 to -18.35mPD	8	20-Nov-19	28-Nov-19
322	Internal Wall from -18.35 to -13.5mPD	12	29-Nov-19	10-Dec-19
323	Vent Duct Slab @ -11.45mPD	4	11-Dec-19	14-Dec-19
324	Internal Wall from -13.5 to -7.5mPD	7	15-Dec-19	21-Dec-19
325	B2 Slab and Wall -9.95mPD / -8.1mPD	10	22-Dec-19	31-Dec-19
326	B2 slab at -7.1mPD	16	01-Jan-20	16-Jan-20
327	South & East -11.45 to -9.7mPD	15	21-Nov-19	05-Dec-19
328	East & South External Wall -9.7 to -5.5mPD	6	06-Dec-19	11-Dec-19



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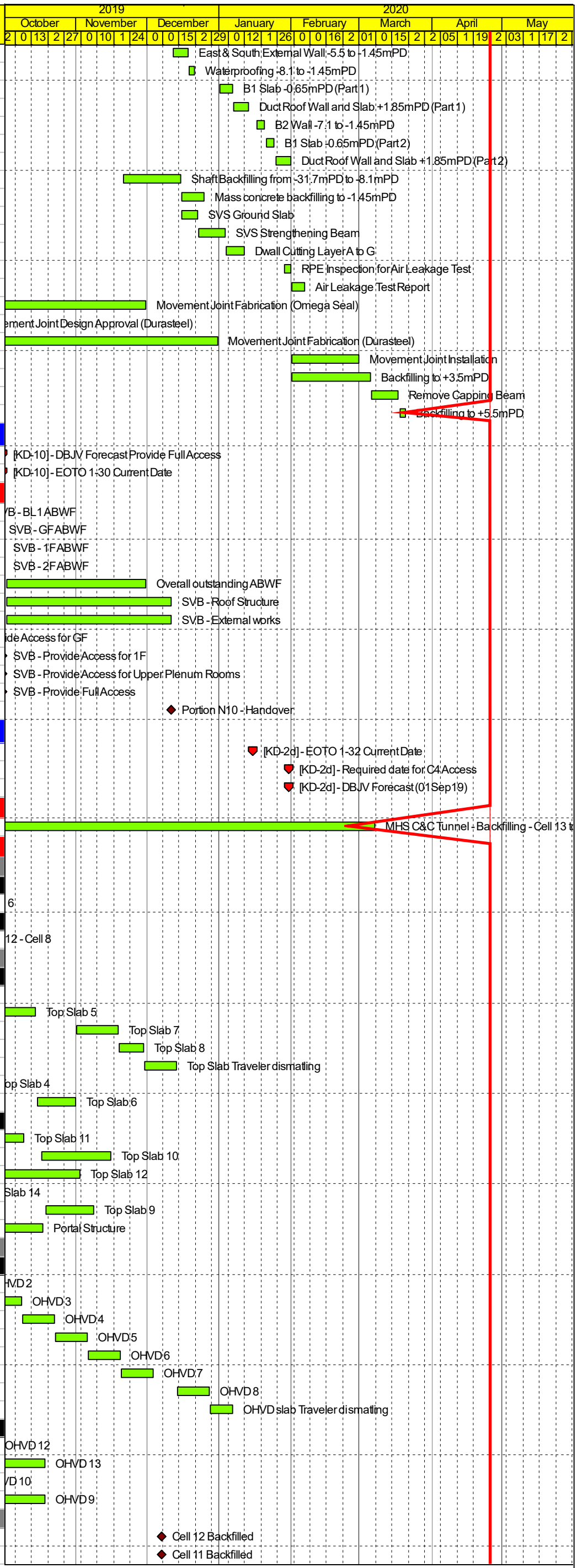
11-Nov-19	Rev.K	SPa	WYu
22-Jan-20	Rev.K1	SPa	WYu

#	Activity Name	Orig Dur	Start	Finish
329	East & South External Wall -5.5 to -1.45mPD	7	12-Dec-19	18-Dec-19
330	Waterproofing -8.1 to -1.45mPD	3	19-Dec-19	21-Dec-19
331	B1 Slab -0.65mPD (Part 1)	6	01-Jan-20	06-Jan-20
332	Duct Roof Wall and Slab +1.85mPD (Part 1)	7	07-Jan-20	13-Jan-20
333	B2 Wall -7.1 to -1.45mPD	4	17-Jan-20	20-Jan-20
334	B1 Slab -0.65mPD (Part 2)	4	21-Jan-20	24-Jan-20
335	Duct Roof Wall and Slab +1.85mPD (Part 2)	7	25-Jan-20	31-Jan-20
336	Shaft Backfilling from -31.7mPD to -8.1mPD	25	21-Nov-19	15-Dec-19
337	Mass concrete backfilling to -1.45mPD	10	16-Dec-19	25-Dec-19
338	SVS Ground Slab	7	16-Dec-19	22-Dec-19
339	SVS Strengthening Beam	12	23-Dec-19	03-Jan-20
340	Dwall Cutting Layer A to G	8	04-Jan-20	11-Jan-20
341	RPE Inspection for Air Leakage Test	3	29-Jan-20	31-Jan-20
342	Air Leakage Test Report	6	01-Feb-20	06-Feb-20
343	Movement Joint Fabrication (Omega Seal)	136	21-Jun-19 A	30-Nov-19
344	Movement Joint Design Approval (Durasteel)	0		16-Sep-19*
345	Movement Joint Fabrication (Durasteel)	87	17-Sep-19	31-Dec-19
346	Movement Joint Installation	29	01-Feb-20	29-Feb-20
347	Backfilling to +3.5mPD	34	01-Feb-20	05-Mar-20
348	Remove Capping Beam	12	06-Mar-20	17-Mar-20
349	Backfilling to +5.5mPD	3	18-Mar-20	20-Mar-20
350	**South Ventilation Building KD-10**			
351	[KD-10] - DBJV Forecast Provide Full Access	0		30-Sep-19
352	[KD-10] - EOTO 1-30 Current Date	0		30-Sep-19*
353	**ABWF**			
354	SVB - BL1 ABWF	79	20-Jun-19 A	21-Sep-19
355	SVB - GF ABWF	85	20-Jun-19 A	28-Sep-19
356	SVB - 1F ABWF	42	12-Aug-19 A	30-Sep-19
357	SVB - 2F ABWF	27	29-Aug-19 A	30-Sep-19
358	Overall outstanding ABWF	51	02-Oct-19	30-Nov-19
359	SVB - Roof Structure	60	02-Oct-19	11-Dec-19
360	SVB - External works	60	02-Oct-19	11-Dec-19
361	SVB - Provide Access for GF	0		04-Sep-19*
362	SVB - Provide Access for 1F	0		30-Sep-19*
363	SVB - Provide Access for Upper Plenum Rooms	0		30-Sep-19*
364	SVB - Provide Full Access	0		30-Sep-19
365	Portion N10 - Handover	0		11-Dec-19*
366	**MHS Cut-and-cover Tunnel KD-2d**			
367	[KD-2d] - EOTO 1-32 Current Date	0		15-Jan-20*
368	[KD-2d] - Required date for C4 Access	0		30-Jan-20*
369	[KD-2d] - DBJV Forecast (01Sep19)	0		30-Jan-20
370	**MHS C&C Tunnel Backfilling**			
371	MHS C&C Tunnel - Backfilling - Cell 13 to Cell 01	199	10-Jul-19 A	07-Mar-20
372	**South MHS Cut-and-cover KD-2d**			
373	**Wall**			
374	**Traveller Formworks**			
375	Wall 9 - Cell 6	22	09-Aug-19 A	03-Sep-19
376	**Traditional Formworks**			
377	Wall 12 - Cell 8	40	31-Jul-19 A	16-Sep-19
378	**Top Slab**			
379	**Traveller Formworks**			
380	Top Slab 3	22	12-Aug-19 A	05-Sep-19
381	Top Slab 5	15	25-Sep-19	14-Oct-19
382	Top Slab 7	15	01-Nov-19	18-Nov-19
383	Top Slab 8	10	19-Nov-19	29-Nov-19
384	Top Slab Traveler dismatling	12	30-Nov-19	13-Dec-19
385	Top Slab 4	15	06-Sep-19	24-Sep-19
386	Top Slab 6	15	15-Oct-19	31-Oct-19
387	**Traditional Formworks**			
388	Top Slab 11	21	12-Sep-19	09-Oct-19
389	Top Slab 10	26	17-Oct-19	15-Nov-19
390	Top Slab 12	30	27-Sep-19	02-Nov-19
391	Top Slab 14	31	12-Aug-19 A	17-Sep-19
392	Top Slab 9	18	19-Oct-19	08-Nov-19
393	Portal Structure	24	18-Sep-19	17-Oct-19
394	**OHVD**			
395	**Traveller Formworks**			
396	OHVD 2	20	29-Aug-19 A	21-Sep-19
397	OHVD 3	12	23-Sep-19	08-Oct-19
398	OHVD 4	12	09-Oct-19	22-Oct-19
399	OHVD 5	12	23-Oct-19	05-Nov-19
400	OHVD 6	12	06-Nov-19	19-Nov-19
401	OHVD 7	12	20-Nov-19	03-Dec-19
402	OHVD 8	10	14-Dec-19	27-Dec-19
403	OHVD slab Traveler dismatling	7	28-Dec-19	06-Jan-20
404	**Traditional Formworks**			
405	OHVD 12	25	28-Aug-19 A	26-Sep-19
406	OHVD 13	21	23-Sep-19	18-Oct-19
407	OHVD 10	21	24-Aug-19 A	18-Sep-19
408	OHVD 9	18	26-Sep-19	18-Oct-19
409	**Backfilling**			
410	Cell 12 Backfilled	0		07-Dec-19*
411	Cell 11 Backfilled	0		07-Dec-19*



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Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

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05-Feb-18	Rev.IAC	WYu	
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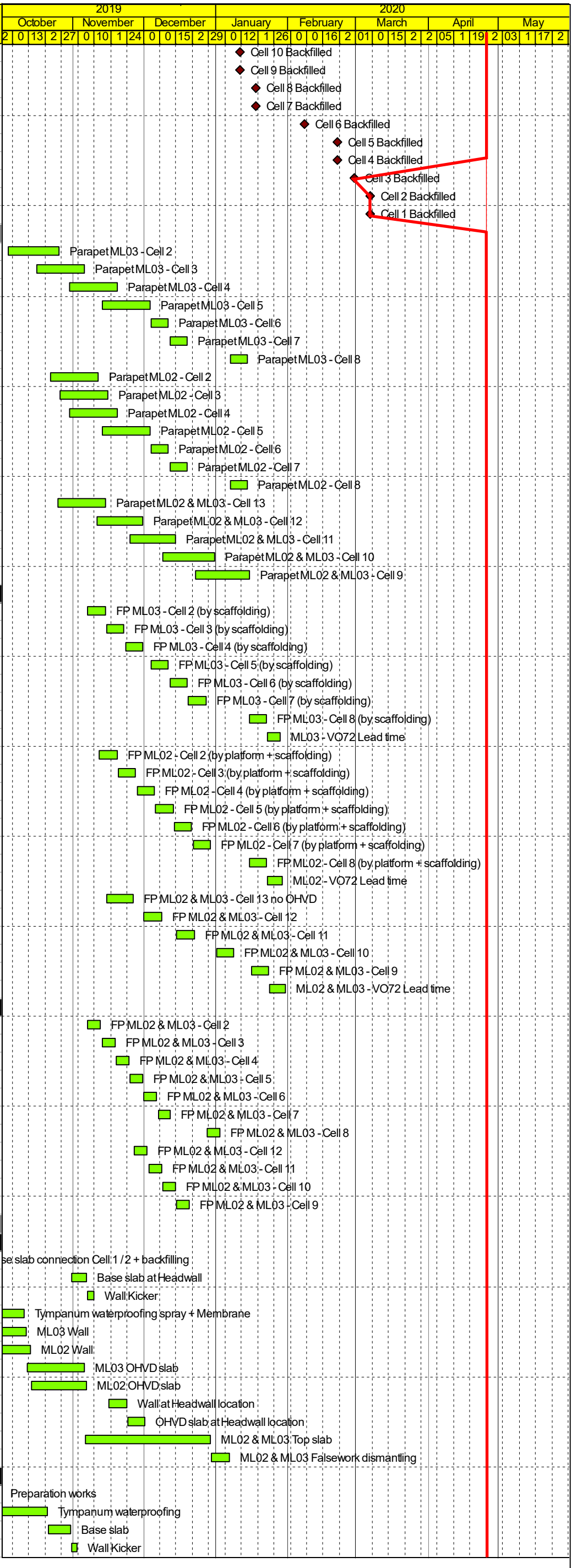
11-Nov-19	Rev.K	SPa	WYu
22-Jan-20	Rev.K1	SPa	WYu

#	Activity Name	Orig Dur	Start	Finish
412	Cell 10 Backfilled	0		11-Jan-20*
413	Cell 9 Backfilled	0		11-Jan-20*
414	Cell 8 Backfilled	0		18-Jan-20*
415	Cell 7 Backfilled	0		18-Jan-20*
416	Cell 6 Backfilled	0		08-Feb-20*
417	Cell 5 Backfilled	0		22-Feb-20*
418	Cell 4 Backfilled	0		22-Feb-20*
419	Cell 3 Backfilled	0		29-Feb-20*
420	Cell 2 Backfilled	0		07-Mar-20*
421	Cell 1 Backfilled	0		07-Mar-20*
422	**Parapet Installation**			
423	Parapet ML03 - Cell 2	18	04-Oct-19	25-Oct-19
424	Parapet ML03 - Cell 3	18	16-Oct-19	05-Nov-19
425	Parapet ML03 - Cell 4	18	30-Oct-19	19-Nov-19
426	Parapet ML03 - Cell 5	18	13-Nov-19	03-Dec-19
427	Parapet ML03 - Cell 6	7	04-Dec-19	11-Dec-19
428	Parapet ML03 - Cell 7	7	12-Dec-19	19-Dec-19
429	Parapet ML03 - Cell 8	7	07-Jan-20	14-Jan-20
430	Parapet ML02 - Cell 2	18	22-Oct-19	11-Nov-19
431	Parapet ML02 - Cell 3	18	26-Oct-19	15-Nov-19
432	Parapet ML02 - Cell 4	18	30-Oct-19	19-Nov-19
433	Parapet ML02 - Cell 5	18	13-Nov-19	03-Dec-19
434	Parapet ML02 - Cell 6	7	04-Dec-19	11-Dec-19
435	Parapet ML02 - Cell 7	7	12-Dec-19	19-Dec-19
436	Parapet ML02 - Cell 8	7	07-Jan-20	14-Jan-20
437	Parapet ML02 & ML03 - Cell 13	18	25-Oct-19	14-Nov-19
438	Parapet ML02 & ML03 - Cell 12	18	11-Nov-19	30-Nov-19
439	Parapet ML02 & ML03 - Cell 11	18	25-Nov-19	14-Dec-19
440	Parapet ML02 & ML03 - Cell 10	18	09-Dec-19	31-Dec-19
441	Parapet ML02 & ML03 - Cell 9	18	23-Dec-19	15-Jan-20
442	**Thermal Barrier (Wall + OHVD Soffit)**			
443	FP ML03 - Cell 2 (by scaffolding)	8	07-Nov-19	14-Nov-19
444	FP ML03 - Cell 3 (by scaffolding)	8	15-Nov-19	22-Nov-19
445	FP ML03 - Cell 4 (by scaffolding)	8	23-Nov-19	30-Nov-19
446	FP ML03 - Cell 5 (by scaffolding)	8	04-Dec-19	11-Dec-19
447	FP ML03 - Cell 6 (by scaffolding)	8	12-Dec-19	19-Dec-19
448	FP ML03 - Cell 7 (by scaffolding)	8	20-Dec-19	27-Dec-19
449	FP ML03 - Cell 8 (by scaffolding)	8	15-Jan-20	22-Jan-20
450	ML03 - VO72 Lead time	6	23-Jan-20	28-Jan-20*
451	FP ML02 - Cell 2 (by platform + scaffolding)	8	12-Nov-19	19-Nov-19
452	FP ML02 - Cell 3 (by platform + scaffolding)	8	20-Nov-19	27-Nov-19
453	FP ML02 - Cell 4 (by platform + scaffolding)	8	28-Nov-19	05-Dec-19
454	FP ML02 - Cell 5 (by platform + scaffolding)	8	06-Dec-19	13-Dec-19
455	FP ML02 - Cell 6 (by platform + scaffolding)	8	14-Dec-19	21-Dec-19
456	FP ML02 - Cell 7 (by platform + scaffolding)	8	22-Dec-19	29-Dec-19
457	FP ML02 - Cell 8 (by platform + scaffolding)	8	15-Jan-20	22-Jan-20
458	ML02 - VO72 Lead time	7	23-Jan-20	29-Jan-20*
459	FP ML02 & ML03 - Cell 13 no OHVD	12	15-Nov-19	26-Nov-19
460	FP ML02 & ML03 - Cell 12	8	01-Dec-19	08-Dec-19
461	FP ML02 & ML03 - Cell 11	8	15-Dec-19	22-Dec-19
462	FP ML02 & ML03 - Cell 10	8	01-Jan-20	08-Jan-20
463	FP ML02 & ML03 - Cell 9	8	16-Jan-20	23-Jan-20
464	ML02 & ML03 - VO72 Lead time	7	24-Jan-20	30-Jan-20*
465	**Thermal Barrier (above OHVD)**			
466	FP ML02 & ML03 - Cell 2	6	07-Nov-19	12-Nov-19
467	FP ML02 & ML03 - Cell 3	6	13-Nov-19	18-Nov-19
468	FP ML02 & ML03 - Cell 4	6	19-Nov-19	24-Nov-19
469	FP ML02 & ML03 - Cell 5	6	25-Nov-19	30-Nov-19
470	FP ML02 & ML03 - Cell 6	6	01-Dec-19	06-Dec-19
471	FP ML02 & ML03 - Cell 7	6	07-Dec-19	12-Dec-19
472	FP ML02 & ML03 - Cell 8	6	28-Dec-19	02-Jan-20
473	FP ML02 & ML03 - Cell 12	6	27-Nov-19	02-Dec-19
474	FP ML02 & ML03 - Cell 11	6	03-Dec-19	08-Dec-19
475	FP ML02 & ML03 - Cell 10	6	09-Dec-19	14-Dec-19
476	FP ML02 & ML03 - Cell 9	6	15-Dec-19	20-Dec-19
477	**Cell 1 Interface**			
478	**SCC Section + Headwall**			
479	Base slab connection Cell 1 /2 + backfilling	26	26-Aug-19A	20-Sep-19
480	Base slab at Headwall	7	31-Oct-19	06-Nov-19
481	Wall Kicker	3	07-Nov-19	09-Nov-19
482	Tympanum waterproofing spray + Membrane	15	26-Sep-19	10-Oct-19
483	ML03 Wall	21	21-Sep-19	11-Oct-19
484	ML02 Wall	17	27-Sep-19	13-Oct-19
485	ML03 OHVD slab	25	12-Oct-19	05-Nov-19
486	ML02 OHVD slab	24	14-Oct-19	06-Nov-19
487	Wall at Headwall location	8	16-Nov-19	23-Nov-19
488	OHVD slab at Headwall location	8	24-Nov-19	01-Dec-19
489	ML02 & ML03 Top slab	54	06-Nov-19	29-Dec-19
490	ML02 & ML03 Falsework dismantling	8	30-Dec-19	06-Jan-20
491	**Transition Structure**			
492	Preparation works	36	19-Aug-19A	30-Sep-19
493	Tympanum waterproofing	20	01-Oct-19	20-Oct-19
494	Base slab	10	21-Oct-19	30-Oct-19
495	Wall Kicker	3	31-Oct-19	02-Nov-19



Planned Bar
Planned Milestone
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TMCLKL Northern Connection Sub-sea Tunnel Section

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Three Months Rolling Programme

香寶嘉港 Dragages HongKong
A member of the Bouygues Construction group
BOUYGUES TRAVAUX PUBLICS
Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

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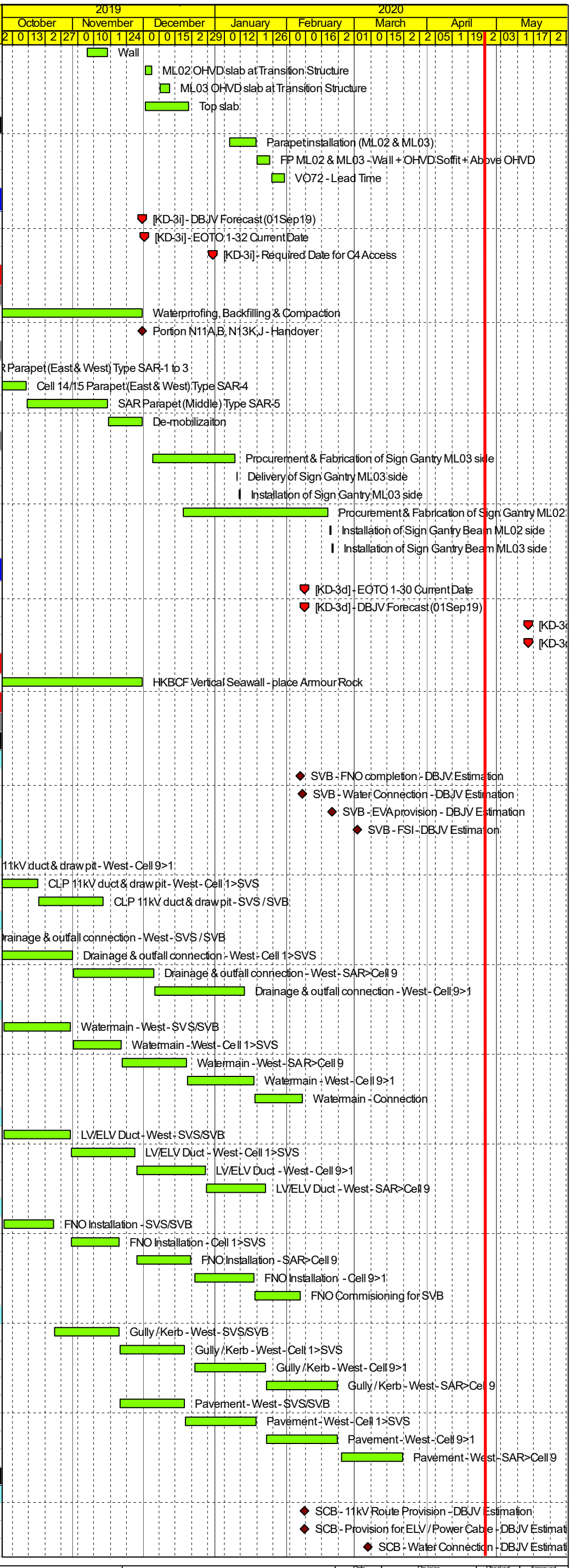
#	Activity Name	Orig Dur	Start	Finish
496	Wall	9	07-Nov-19	15-Nov-19
497	ML02 OHVD slab at Transition Structure	3	02-Dec-19	04-Dec-19
498	ML03 OHVD slab at Transition Structure	5	08-Dec-19	12-Dec-19
499	Top slab	19	02-Dec-19	20-Dec-19
500	**Internal Structure**			
501	Parapet installation (ML02 & ML03)	12	07-Jan-20	18-Jan-20
502	FP ML02 & ML03 - Wall + OHVD Soffit + Above OHVD	6	19-Jan-20	24-Jan-20
503	VO72 - Lead Time	6	25-Jan-20	30-Jan-20*
504	**MHS Approach Ramp KD-3i**			
505	[KD-3i] - DBJV Forecast (01Sep19)	0		30-Nov-19
506	[KD-3i] - EOTO 1-32 Current Date	0		01-Dec-19*
507	[KD-3i] - Required Date for C4 Access	0		31-Dec-19*
508	**South Approach Ramp**			
509	**RC Structure**			
510	Waterprrofing, Backfilling & Compaction	217	11-Mar-19A	30-Nov-19
511	Portion N11A,B, N13K,J - Handover	0		30-Nov-19
512	**Internal Structure**			
513	SAR Parapet (East & West) Type SAR-1 to 3	40	02-Aug-19A	18-Sep-19
514	Cell 14/15 Parapet (East & West) Type SAR-4	18	19-Sep-19	11-Oct-19
515	SAR Parapet (Middle) Type SAR-5	30	12-Oct-19	15-Nov-19
516	De-mobilizaiton	13	16-Nov-19	30-Nov-19
517	**Sign Gantry**			
518	Procurement & Fabrication of Sign Gantry ML03 side	28	05-Dec-19*	09-Jan-20
519	Delivery of Sign Gantry ML03 side	1	10-Jan-20	10-Jan-20
520	Installation of Sign Gantry ML03 side	1	11-Jan-20	11-Jan-20
521	Procurement & Fabrication of Sign Gantry ML02 side	48	18-Dec-19*	18-Feb-20
522	Installation of Sign Gantry Beam ML02 side	1	19-Feb-20	19-Feb-20
523	Installation of Sign Gantry Beam ML03 side	1	20-Feb-20	20-Feb-20
524	**Southern Landfall - Surface**			
525	[KD-3d] - EOTO 1-30 Current Date	0		08-Feb-20*
526	[KD-3d] - DBJV Forecast (01Sep19)	0		08-Feb-20
527	[KD-3c] - EOTO 1-30 Current Date	0		14-May-20*
528	[KD-3c] - DBJV Forecast (01Sep19)	0		14-May-20
529	**HKBCF Seawall Modification (schedule TBC)**			
530	HKBCF Vertical Seawall - place Armour Rock	81	26-Aug-19A	30-Nov-19
531	**UU / At-grade works**			
532	**South Road & Drain**			
533	**South Ventilation Building - Provision for FSI**			
534	**Requirement**			
535	SVB - FNO completion - DBJV Estimation	0		06-Feb-20
536	SVB - Water Connection - DBJV Estimation	0		07-Feb-20
537	SVB - EVA provision - DBJV Estimation	0		20-Feb-20
538	SVB - FSI - DBJV Estimation	0		02-Mar-20
539	**CLP 11kV**			
540	CLP 11kV duct & draw pit - West - Cell 9>1	51	18-Jul-19A	16-Sep-19
541	CLP 11kV duct & draw pit - West - Cell 1>SVS	24	17-Sep-19	16-Oct-19
542	CLP 11kV duct & draw pit - SVS / SVB	24	17-Oct-19	13-Nov-19
543	**Drainage**			
544	Drainage & outfall connection - West - SVS / SVB	30	20-Aug-19A	24-Sep-19
545	Drainage & outfall connection - West - Cell 1>SVS	30	25-Sep-19	31-Oct-19
546	Drainage & outfall connection - West - SAR>Cell 9	30	01-Nov-19	05-Dec-19
547	Drainage & outfall connection - West - Cell 9>1	30	06-Dec-19	13-Jan-20
548	**Watermain**			
549	Watermain - West - SVS/SVB	24	02-Oct-19*	30-Oct-19
550	Watermain - West - Cell 1>SVS	18	01-Nov-19	21-Nov-19
551	Watermain - West - SAR>Cell 9	24	22-Nov-19	19-Dec-19
552	Watermain - West - Cell 9>1	22	20-Dec-19	17-Jan-20
553	Watermain - Connection	15	18-Jan-20	07-Feb-20
554	**LV/ELV**			
555	LV/ELV Duct - West - SVS/SVB	24	02-Oct-19*	30-Oct-19
556	LV/ELV Duct - West - Cell 1>SVS	24	31-Oct-19	27-Nov-19
557	LV/ELV Duct - West - Cell 9>1	24	28-Nov-19	27-Dec-19
558	LV/ELV Duct - West - SAR>Cell 9	21	28-Dec-19	22-Jan-20
559	**Provision for FNO**			
560	FNO Installation - SVS/SVB	18	02-Oct-19	23-Oct-19
561	FNO Installation - Cell 1>SVS	18	31-Oct-19	20-Nov-19
562	FNO Installation - SAR>Cell 9	21	28-Nov-19	21-Dec-19
563	FNO Installation - Cell 9>1	20	23-Dec-19	17-Jan-20
564	FNO Commisioning for SVB	14	18-Jan-20	06-Feb-20
565	**Gully / Kerb / Pavement**			
566	Gully / Kerb - West - SVS/SVB	24	24-Oct-19*	20-Nov-19
567	Gully / Kerb - West - Cell 1>SVS	24	21-Nov-19	18-Dec-19
568	Gully / Kerb - West - Cell 9>1	24	23-Dec-19	22-Jan-20
569	Gully / Kerb - West - SAR>Cell 9	24	23-Jan-20	22-Feb-20
570	Pavement - West - SVS/SVB	24	21-Nov-19	18-Dec-19
571	Pavement - West - Cell 1>SVS	24	19-Dec-19	18-Jan-20
572	Pavement - West - Cell 9>1	24	23-Jan-20	22-Feb-20
573	Pavement - West - SAR>Cell 9	24	24-Feb-20	21-Mar-20
574	**Satellite Control Building and Kiosk - Provision for FSI**			
575	**Requirement**			
576	SCB - 11kV Route Provision - DBJV Estimation	0		08-Feb-20
577	SCB - Provision for ELV / Power Cable - DBJV Estimation	0		08-Feb-20
578	SCB - Water Connection - DBJV Estimation	0		06-Mar-20



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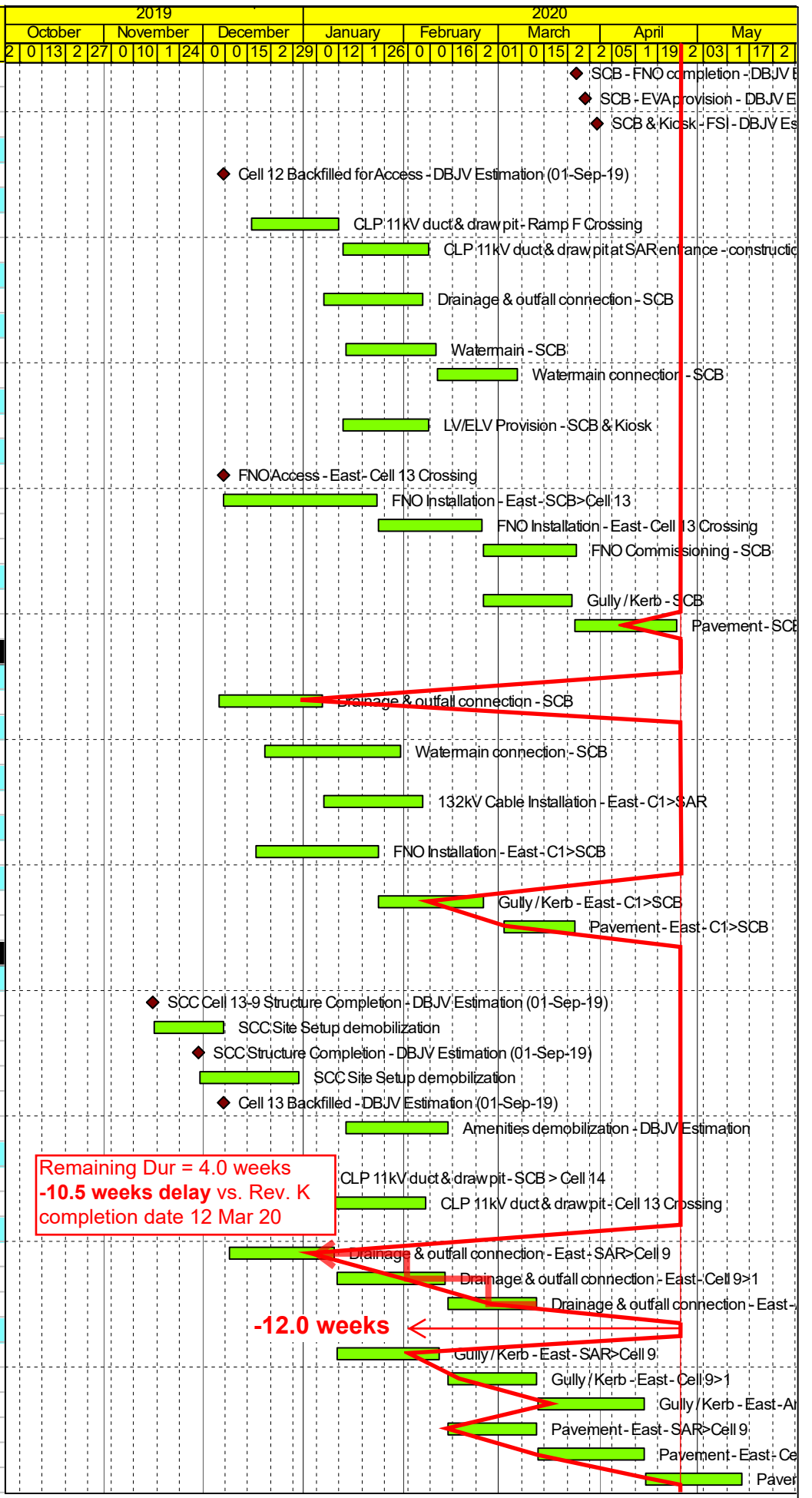
#	Activity Name	Orig Dur	Start	Finish
579	SCB - FNO completion - DBJV Estimation	0		24-Mar-20
580	SCB - EVA provision - DBJV Estimation	0		27-Mar-20
581	SCB & Kiosk - FSI - DBJV Estimation	0		31-Mar-20
582	**Interface Activities**			
583	Cell 12 Backfilled for Access - DBJV Estimation (01-Sep-19)	0		07-Dec-19*
584	**CLP 11kV**			
585	CLP 11kV duct & draw pit - Ramp F Crossing	21	16-Dec-19*	11-Jan-20
586	CLP 11kV duct & draw pit at SAR entrance - construction	21	13-Jan-20	08-Feb-20
587	**Drainage**			
588	Drainage & outfall connection - SCB	24	07-Jan-20	06-Feb-20
589	**Watermain**			
590	Watermain - SCB	21	14-Jan-20	10-Feb-20
591	Watermain connection - SCB	22	11-Feb-20	06-Mar-20
592	**LV/ELV**			
593	LV/ELV Provision - SCB & Kiosk	21	13-Jan-20	08-Feb-20
594	**Provision for FNO**			
595	FNO Access - East - Cell 13 Crossing	0	07-Dec-19	
596	FNO Installation - East - SCB>Cell 13	38	07-Dec-19	23-Jan-20
597	FNO Installation - East - Cell 13 Crossing	24	24-Jan-20	24-Feb-20
598	FNO Commissioning - SCB	25	25-Feb-20	24-Mar-20
599	**Gully / Kerb / Pavement**			
600	Gully / Kerb - SCB	24	25-Feb-20	23-Mar-20
601	Pavement - SCB	24	24-Mar-20	24-Apr-20
602	**Remaining - East - SCB to C1**			
603	**Drainage**			
604	Drainage & outfall connection - SCB	24	06-Dec-19	06-Jan-20
605	**Watermain**			
606	Watermain connection - SCB	30	20-Dec-19	30-Jan-20
607	**CLP 132kV**			
608	132kV Cable Installation - East - C1>SAR	24	07-Jan-20	06-Feb-20
609	**Provision for FNO**			
610	FNO Installation - East - C1>SCB	30	17-Dec-19	24-Jan-20
611	**Gully / Kerb / Pavement**			
612	Gully / Kerb - East - C1>SCB	24	24-Jan-20	25-Feb-20
613	Pavement - East - C1>SCB	18	02-Mar-20	24-Mar-20
614	**Remaining - East - Cell 13 to SVB**			
615	**Interface Activities**			
616	SCC Cell 13-9 Structure Completion - DBJV Estimation (01-Sep	0		15-Nov-19
617	SCC Site Setup demobilization	19	16-Nov-19	07-Dec-19
618	SCC Structure Completion - DBJV Estimation (01-Sep-19)	0		29-Nov-19
619	SCC Site Setup demobilization	24	30-Nov-19	30-Dec-19
620	Cell 13 Backfilled - DBJV Estimation (01-Sep-19)	0		07-Dec-19*
621	Amenities demobilization - DBJV Estimation	24	14-Jan-20	14-Feb-20
622	**CLP 11kV**			
623	CLP 11kV duct & draw pit - SCB > Cell 14	24	07-Dec-19	07-Jan-20
624	CLP 11kV duct & draw pit - Cell 13 Crossing	24	08-Jan-20	07-Feb-20
625	**Drainage**			
626	Drainage & outfall connection - East - SAR>Cell 9	26	09-Dec-19	10-Jan-20
627	Drainage & outfall connection - East - Cell 9>1	26	11-Jan-20	13-Feb-20
628	Drainage & outfall connection - East - Amenities	24	14-Feb-20	12-Mar-20
629	**Gully / Kerb / Pavement**			
630	Gully / Kerb - East - SAR>Cell 9	24	11-Jan-20	11-Feb-20
631	Gully / Kerb - East - Cell 9>1	24	14-Feb-20	12-Mar-20
632	Gully / Kerb - East - Amenities	24	13-Mar-20	14-Apr-20
633	Pavement - East - SAR>Cell 9	24	14-Feb-20	12-Mar-20
634	Pavement - East - Cell 9>1	24	13-Mar-20	14-Apr-20
635	Pavement - East - Amenities	24	15-Apr-20	14-May-20



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Appendix C

Environmental Mitigation and Enhancement Measure Implementation Schedules

Contract No. HY/2012/08
Tuen Mun – Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Environmental Mitigation and Enhancement Measure Implementation Schedule

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
Air Quality									
4.8.1	3.8	An effective watering programme of twice daily watering with complete coverage, is estimated to reduce by 50%. This is recommended for all areas in order to reduce dust levels to a minimum;	All areas / throughout construction period	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		✓
4.8.1	3.8	Watering of the construction sites in Lantau for 8 times/day and in Tuen Mun for 12 times/day to reduce dust emissions by 87.5% and 91.7% respectively and shall be undertaken.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	The Contractor shall, to the satisfaction of the Engineer, install effective dust suppression measures and take such other measures as may be necessary to ensure that at the Site boundary and any nearby sensitive receiver, dust levels are kept to acceptable levels.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	The Contractor shall not burn debris or other materials on the works areas.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8. 1	3.8	In hot, dry or windy weather, the watering programme shall maintain all exposed road surfaces and dust sources wet.	All unpaved haul roads / throughout construction period in hot, dry or windy weather	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		✓
4.8.1	3.8	Where breaking of oversize rock/concrete is required, watering shall be implemented to control dust. Water spray shall be used during the handling of fill material at the site and at active cuts, excavation and fill sites where dust is likely to be created.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8. 1	3.8	Open dropping heights for excavated materials shall be controlled to a maximum height of 2m to minimise the fugitive dust arising from unloading.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	During transportation by truck, materials shall not be loaded to a level higher than the side and tail boards, and shall be dampened or covered before transport.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. The tarpaulin shall be properly secured and shall extend at least 300mm over the edges of the side and tail boards.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
4.8.1	3.8	No earth, mud, debris, dust and the like shall be deposited on public roads. Wheel washing facility shall be usable prior to any earthworks excavation activity on the site.	All site exits / throughout construction period	Contractor	TMEIA Avoid dust		Y		✓
4.8.1	3.8	Areas of exposed soil shall be minimised to areas in which works have been completed shall be restored as soon as is practicable.	All exposed surfaces / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	All stockpiles of aggregate or spoil shall be enclosed or covered and water applied in dry or windy condition.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		<>
4.11	Section 3	EM&A in the form of 1 hour and 24 hour dust monitoring and site audit.	All representative existing ASRs / throughout construction period	Contractor	EM&A Manual		Y		✓
WATER QUALITY									
Marine Works (Sequence A)									
6.1 Figure 6.2a Appendix D6a	Annex A	Construction of seawalls to be advanced by at least 200m before the main reclamation dredging and filling can commence. The protection by advanced seawall is a dynamic process depending on the progress of the construction activities and the stage when such protection could be realised is illustrated in Figure 6.2a and detailed in Appendix D6a. The part of the works where such measures can be undertaken for the majority of the time includes the following locations: - TM-CLKL northern reclamation;	All areas/ prior to dredging and backfilling works	Contractor	TM-EIAO		Y		N/A
6.1	-	a maximum of 50% public fill to be used for all seawall filling below +2.5mPD for TM-CLKL southern and northern landfalls.	TM-CLKL seawall filling	Contractor	TM-EIAO		Y		N/A
6.1	-	a maximum of 30% public fill to be used for reclamation filling below +2.5mPD for TM-CLKL southern landfall	TM-CLKL southern landfall reclamation filling	Contractor	TM-EIAO		Y		N/A
6.1	-	a maximum of 100% public fill to be used for reclamation filling below +2.5mPD for TM-CLKL northern landfall	TM-CLKL northern landfall reclamation filling	Contractor	TM-EIAO		Y		N/A
6.1	-	Use of cage type silt curtains round allgrab dredgers during the HKBCF, HKLR and TM-CLKL southern reclamation works.	All areas dredging works	Contractor	TM-EIAO		Y		N/A
	Figure 1.1 of Annex C	A layer of floating type silt curtain will be applied when dredging and reclamation works are being undertaken at Portion N-a as shown in Figure 1.1 of Annex C of the EM&A Manual.	All areas/ through out marine works	Contractor	TM-EIAO		Y		N/A

Legend: D=Design, C=Construction, O=Operation

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
6.1	-	Trailer suction hopper dredgers shall not allow mud to overflow.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	The use of Lean Material Overboard (LMOB) systems shall be prohibited.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1 Figure 6.2b Appendix D6b	Annex A	For other parts of the reclamation works construction of seawalls to be advanced by at least 200m before the main reclamation dredging and filling can commence. It should be noted that the protection by advanced seawall is a dynamic process depending on the progress of the construction activities and the stage when such protection could be realised is illustrated in Figure 6.2b and detailed in Appendices D6b. The part of the works where such measures can be undertaken for the majority of the time includes the following locations: - TM-CLKL northern reclamation; - Reclamation filling for Portion D of HKBCF; Reclamation filling for FSD berth of HKBCF; and - Reclamation dredging and filling for Portion 1 of HKLR;	TM-CLKL northern landfall, Portion D of HKBCF and HKLR	Contractor	TM-EIAO		Y		N/A
6.1	-	The filling material for the other parts of the works are the same as Sequence A;	All other areas/backfilling works	Contractor	TM-EIAO		Y		N/A
6.1	5.7	Cage type silt curtain (with steel enclosure) shall be used for grab dredgers working in the site of HKBCF and TM- CLKL southern reclamation. Cage type silt curtains will be applied round all grab dredgers at other works area.	HKBCF, HKLR and TM-CLKL grab dredging	Contractor	TM-EIAO		Y		N/A
6.1	Annex A	A layer of floating type silt curtain will be applied around all works as defined in Appendix D6b.	All areas/ through out marine works	Contractor	TM-EIAO		Y		N/A
6.1	-	TM-CLKL northern landfall:	All areas/ through out marine	Contractor	TM-EIAO		Y		N/A

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
		- Reclamation filling shall not proceed until at least 200m section of leading seawall at both the east and west sides of the reclamation are formed above +2.5 mPD, except for 100m gaps for marine access;	works						
General Marine Works									
6.1	-	Use of TBM for the construction of the submarine tunnel.	Tunnel works / Construction phase	Contractor	TM-EIAO		Y		N/A
6.1	-	Export dredged spoils from NWWCZ.	All areas as much as possible / dredging activities	Contractor	DASO Permit conditions		Y		N/A
6.1	-	Where public fill is proposed for filling below +2.5mPD, the fine content in the public fill will be controlled to 25%	All areas/ backfilling works	Contractor	TM-EIAO		Y		N/A
6.1	-	Where sand fill is proposed for filling below +2.5mPD, the fine content in the sand fill will be controlled to 5%.	All areas/ backfilling works	Contractor	TM-EIAO		Y		N/A
6.1	-	Mechanical grabs shall be designed and maintained to avoid spillage and should seal tightly while being lifted.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	Barges and hopper dredgers shall have tight fitting seals to their bottom openings to prevent leakage of material.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	Any pipe leakages shall be repaired quickly. Plant should not be operated with leaking pipes.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	Loading of barges and hoppers shall be controlled to prevent splashing of dredged material to the surrounding water. Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.	All areas/ throughout construction period	Contractor	Marine Fill Committee		Y		N/A

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
					Guidelines. DASO permit conditions.				
6.1	-	Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action;	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	5.2	Silt curtain shall have proved effectiveness from the producer and shall be fully maintained throughout the works by the contractor.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.1	-	The daily maximum production rates shall not exceed those assumed in the water quality assessment.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.1	-	The dredging and filling works shall be scheduled to spread the works evenly over a working day.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
Land Works									
6.1	-	Wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Sewage effluent and discharges from on- site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
6.1	-	Storm drainage shall be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	5.8	Manholes (including any 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.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	All vehicles and plant should be cleaned before they leave the construction site to ensure that no earth, mud or debris is deposited by them on roads. A wheel washing bay should be provided at every site exit.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
6.1	-	Section of construction road between the wheel washing bay and the public road should be surfaced with crushed stone or coarse gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities, shall be screened to remove large objects.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Vehicle and plant servicing areas, vehicle wash bays and lubrication facilities shall be located under roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor in accordance with the requirements of the WPCO or collected for off site disposal.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.1	-	The Contractor shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance.	All areas/ throughout construction period	Contractor	TM-EIAO Waste Disposal Ordinance		Y		✓
6.1	-	All fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the stormwater system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Roadside gullies to trap silt and grit shall be provided prior to discharging the stormwater into the marine environment. The sumps will be maintained and cleaned at regular intervals.	Roadside/design and operation	Design Consultant/ Contractor	TM-EIAO	Y		Y	✓
6.1	Section 5	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good working practice.	All areas/ throughout construction period	Contractor	EM&A Manual		Y		✓

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
Water Quality Monitoring									
6.1	Section 5	Water quality monitoring shall be undertaken for suspended solids, turbidity, and dissolved oxygen. Nutrients and metal parameters shall also be measured for Mf sediment operations (only HKBCF and HKLR required handling of Mf sediment) during baseline, backfilling and post construction period. One year operation phase water quality monitoring at designated stations.	Designated monitoring stations as defined in EM&A Manual, Section 5/ Before, through-out marine construction period, post construction and monthly operational phase water quality monitoring for a year.	Contractor	EM&A Manual		Y	Y	Post-construction water quality monitoring was undertaken in the reporting period.
ECOLOGY									
8.14	6.3	Specification for and implement pre, during and post construction dolphin abundance monitoring.	All Areas/Detailed Design/ during construction works/post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y	✓
8.14	6.3,6.5	Specification and implementation of 250m dolphin exclusion zone.	All dredging and reclamation areas/Detailed Design/during all reclamation and dredging works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.3, 6.5	Specification and deployment of an artificial reef of an area of 3,600m2 in an area where fishing activities are prohibited.	Area of prohibited fishing activities/Detailed Design/towards end of construction period	TM-CLKL/ HKBCF Design Consultant/TM-CLKL/ HKBCF Contractor	TMEIA	Y		Y	N/A. To be implemented by AFCD.
8.14	6.3, 6.5	Specification and implementation of marine vessel control specifications	All areas/Detailed Design/during construction works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.14	6.3, 6.5	Design and implementation of acoustic decoupling methods for dredging and reclamation works	All areas/ Detailed Design/during dredging and reclamation works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.3, 6.4	Pre-construction phase survey and coral translocation	Detailed Design/Prior to construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.5	Audit coral translocation success	Post translocation	Contractor	TMEIA		Y		✓
7.13	6.5	The loss of habitat shall be supplemented by enhancement planting in accordance with the landscape mitigation schedule.	All areas / As soon as accessible	Contractor	TMEIA		Y		N/A
7.13	6.5	Spoil heaps shall be covered at all times.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
7.13	6.5	Avoid damage and disturbance to the remaining and surrounding natural habitat	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Placement of equipment in designated areas within the existing disturbed land	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Disturbed areas to be reinstated immediately after completion of the works.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Construction activities should be restricted to the proposed works boundary.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
LANDSCAPE AND VISUAL									
10.9	7.6	The colour and shape of the toll control buildings, ventilation building and administration building shall adopt a design which could blend it into the vicinity elements, and the details will be developed in detailed design stage (DM2)	All areas/detailed design	Design Consultant	TMEIA	Y			N/A
10.9	7.6	Aesthetic design of the viaduct, retaining wall and other structures will be developed under ACABAS submission (DM5)	All areas/detailed design	Design Consultant	TMEIA	Y			N/A
10.9	7.6	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works (CM5)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Control night-time lighting and glare by hooding all lights (CM6)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and finishes shall be incorporated to all buildings, engineering structures and associated infrastructure facilities (OM5)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (OM6)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A
WASTE									
12.6		The Contractor shall identify a coordinator for the management of waste.	Contract mobilisation	Contractor	TMEIA		Y		✓

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
12.6		The Contractor shall prepare and implement a Waste Management Plan which specifies procedures such as a ticketing system, to facilitate tracking of loads and to ensure that illegal disposal of wastes does not occur, and protocols for the maintenance of records of the quantities of wastes generated, recycled and disposed. A recording system for the amount of waste generated, recycled and disposed (locations) should be established.	Contract mobilisation	Contractor	TMEIA, Works Branch Technical Circular No. 5/99 for the Trip-ticket System for Disposal of Construction and Demolition Material		Y		✓
12.6		The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges.	Contract mobilisation	Contractor	TMEIA, Land (Miscellaneous Provisions) Ordinance (Cap 28); Waste Disposal Ordinance (Cap 354); Dumping at Sea Ordinance (Cap 466); Water Pollution Control Ordinance.		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures including waste reduction, reuse and recycling.	Contract Mobilisation	Contractor	TMEIA		Y		✓
12.6	8.1	The extent of cutting operation should be optimised where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The surplus surcharge should be transferred to a fill bank	Reclamation areas / after surcharge works	Contractor	TMEIA		Y		N/A
12.6	8.1	Rock armour from the existing seawall should be reused on the new sloping seawall as far as possible	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		<>
12.6	8.1	No waste shall be burnt on site.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Provisions to be made in contract documents to allow and promote the use of recycled aggregates where appropriate.	Detailed Design	Design Consultant	TMEIA	Y			✓

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
12.6	8.1	The Contractor shall be prohibited from disposing of C&D materials at any sensitive locations. The Contractor should propose the final disposal sites in the EMP and WMP for approval before implementation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Stockpiled material shall be covered by tarpaulin and /or watered as appropriate to prevent windblown dust/ surface run off.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Excavated material in trucks shall be covered by tarpaulins to reduce the potential for spillage and dust generation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Dredged marine mud shall be disposed of in a gazetted marine disposal ground under the requirements of the Dumping at Seas Ordinance.	Reclamation areas / throughout dredging works	Contractor	TMEIA		Y		✓
12.6	8.1	Standard formwork or pre-fabrication should be used as far as practicable so as to minimise the C&D materials arising. The use of more durable formwork/plastic facing for construction works should be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction materials should avoid over-ordering and wastage.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The Contractor should recycle as many C&D materials (this is a waste section) as possible on-site. The public fill and C&D waste should be segregated and stored in separate containers or skips to facilitate the reuse or recycling of materials and proper disposal. Where practicable, the concrete and masonry should be crushed and used as fill materials. Steel reinforcement bar should be collected for use by scrap steel mills. Different areas of the sites should be considered for segregation and storage activities.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	All falsework will be steel instead of wood.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Chemical waste producers should register with the EPD. Chemical waste should be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows:	All areas / throughout construction period	Contractor	TMEIA		Y		<>

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
		ƒ suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; ƒ Having a capacity of <450L unless the specifications have been approved by the EPD; and w Chinese according to the instructions prescribed in Schedule 2 of the Regulations. ƒ Clearly labelled and used solely for the storage of chemical wastes; ƒ Enclosed with at least 3 sides; ƒ Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest; ƒ Adequate ventilation; ƒ Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and ƒ Incompatible materials are adequately separated.						
12.6	8.1	Waste oils, chemicals or solvents shall not be disposed of to drain,	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Adequate numbers of portable toilets should be provided for on-site workers. Portable toilets should be maintained in reasonable states, which will not deter the workers from utilising them.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Night soil should be regularly collected by licensed collectors.	All areas / throughout construction period	Contractor	TMEIA		Y		N/A
12.6	8.1	General refuse arising on-site should be stored in enclosed bins or compaction units separately from C&D and chemical wastes. Sufficient dustbins shall be provided for storage of waste as required under the Public Cleansing and Prevention of Nuisances By-laws. In addition, general refuse shall be cleared daily and shall be disposed of to the nearest licensed landfill or refuse transfer station. Burning of refuse on construction sites is prohibited.	All areas / throughout construction period	Contractor	TMEIA		Y		<>

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
12.6	8.1	All waste containers shall be in a secure area on hardstanding;	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including waste reduction, reuse and recycling.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local collection scheme by the Contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site.	Site Offices/ throughout construction period	Contractor	TMEIA		Y		✓
12.6	Section 8	EM&A of waste handling, storage, transportation, disposal procedures and documentation through the site audit programme shall be undertaken.	All areas / throughout construction period	Contractor	EM&A Manual		Y		✓
CULTURAL HERITAGE									
11.8	Section 9	EM&A in the form of audit of the mitigation measures	All areas / throughout construction period	Highways Department	EIAO-TM		Y		N/A

*** Remarks:**

✓	Compliance of Mitigation Measures
<>	Compliance of Mitigation but need improvement
x	Non-compliance of Mitigation Measures
▲	Non-compliance of Mitigation Measures but rectified by Contractor
Δ	Deficiency of Mitigation Measures but rectified by Contractor
N/A	Not Applicable in Reporting Period

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Appendix D

Summary of Action and Limit Levels

Table D1 Action and Limit Levels for 1-hour and 24-hour TSP

Parameters	Action	Limit
24 Hour TSP Level in μg/m³	ASR1 = 213 ASR5 = 238 AQMS1 = 213 ASR6 = 238 ASR10 = 214	260
1 Hour TSP Level in μg /m³	ASR1 = 331 ASR5 = 340 AQMS1 = 335 ASR6 = 338 ASR10 = 337	500

Table D2 Action and Limit Levels for Impact Dolphin Monitoring

	North Lantau Social Cluster	
	NEL	**NWL**
Action Level	STG < 70% of baseline & ANI < 70% of baseline	STG < 70% of baseline & ANI < 70% of baseline
Limit Level	[STG < 40% of baseline & ANI < 40% of baseline] and STG < 40% of baseline & ANI < 40% of baseline	

Notes:

1. STG means quarterly encounter rate of number of dolphin sightings, which is **6.00 in NEL** and **9.85 in NWL** during the baseline monitoring period
2. ANI means quarterly encounter rate of total number of dolphins, which is **22.19 in NEL** and **44.66 in NWL** during the baseline monitoring period
3. For North Lantau Social Cluster, AL will be trigger if NEL or NWL fall below the criteria; LL will be triggered if both NEL and NWL fall below the criteria.

Table D3 Derived Value of Action Level (AL) and Limit Level (LL)

	North Lantau Social Cluster	
	NEL	**NWL**
Action Level	STG < 4.2 & ANI< 15.5	STG < 6.9 & ANI < 31.3
Limit Level	NEL = [STG < 2.4 & ANI <8.9] and NWL = [STG < 3.9 & ANI <17.9]	

Appendix E

Copies of Calibration Certificates for Air Quality Monitoring and Post-Construction Water Quality Monitoring

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	ASR 5
Calibrated by	:	P.F.Yeung
Date	:	08/02/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 0816

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	25 February 2019
Slope (m)	:	2.07076
Intercept (b)	:	-0.02917
Correlation Coefficient(r)	:	1.00000

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1020
Ta(K)	:	292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.2	3.541	1.724	56	56.77
2	13 holes	9.6	3.141	1.531	51	51.70
3	10 holes	7.2	2.720	1.328	45	45.62
4	7 holes	4.7	2.198	1.075	38	38.52
5	5 holes	2.5	1.603	0.788	30	30.41

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):28.320 Intercept(b):8.093 Correlation Coefficient(r): 0.9999

Checked by: Magnum Fan Date: 12/02/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	ASR10
Calibrated by	:	P.F.Yeung
Date	:	08/02/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 8162

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	25 February 2019
Slope (m)	:	2.07076
Intercept (b)	:	-0.02917
Correlation Coefficient(r)	:	1.00000

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1020
Ta(K)	:	292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.0	3.362	1.638	52	52.71
2	13 holes	9.0	3.041	1.483	48	48.66
3	10 holes	6.2	2.524	1.233	44	44.60
4	7 holes	4.2	2.077	1.017	37	37.51
5	5 holes	2.2	1.504	0.740	28	28.38

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):26.601 Intercept(b): 9.862 Correlation Coefficient(r): 0.9913

Checked by: Magnum Fan Date: 12/02/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	AQMS1
Calibrated by	:	P.F.Yeung
Date	:	08/02/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 1253

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	25 February 2019
Slope (m)	:	2.07076
Intercept (b)	:	-0.02917
Correlation Coefficient(r)	:	1.00000

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1020
Ta(K)	:	292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.0	3.512	1.710	55	55.75
2	13 holes	9.4	3.108	1.515	50	50.69
3	10 holes	6.6	2.604	1.272	45	45.62
4	7 holes	4.5	2.150	1.053	38	38.52
5	5 holes	2.4	1.570	0.772	29	29.40

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):27.851 Intercept(b):8.782 Correlation Coefficient(r): 0.9959

Checked by: Magnum Fan Date: 12/02/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	ASR 1
Calibrated by	:	P.F.Yeung
Date	:	08/02/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 0146

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	25 February 2019
Slope (m)	:	2.07076
Intercept (b)	:	-0.02917
Correlation Coefficient(r)	:	1.00000

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1020
Ta(K)	:	292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.2	3.393	1.652	54	54.74
2	13 holes	9.0	3.041	1.483	50	50.69
3	10 holes	6.5	2.584	1.262	44	44.60
4	7 holes	4.2	2.077	1.017	36	36.49
5	5 holes	2.2	1.504	0.740	25	25.34

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):32.148 Intercept(b):2.801 Correlation Coefficient(r): 0.9950

Checked by: Magnum Fan Date: 12/02/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	ASR 6
Calibrated by	:	P.F.Yeung
Date	:	08/02/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 3957

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	25 February 2019
Slope (m)	:	2.07076
Intercept (b)	:	-0.02917
Correlation Coefficient(r)	:	1.00000

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1020
Ta(K)	:	292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.0	3.512	1.710	54	54.74
2	13 holes	9.2	3.075	1.499	50	50.69
3	10 holes	6.6	2.604	1.272	45	45.62
4	7 holes	4.4	2.126	1.041	37	37.51
5	5 holes	2.3	1.537	0.757	27	27.37

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):28.922 Intercept(b): 6.870 Correlation Coefficient(r): 0.9908

Checked by: Magnum Fan Date: 12/02/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	ASR 5
Calibrated by	:	P.F.Yeung
Date	:	08/04/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 0816

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	18 February 2020
Slope (m)	:	2.07134
Intercept (b)	:	-0.04091
Correlation Coefficient(r)	:	0.99999

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1016
Ta(K)	:	298

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.0	3.469	1.695	55	55.08
2	13 holes	9.5	3.087	1.510	50	50.07
3	10 holes	6.8	2.612	1.281	44	44.07
4	7 holes	4.6	2.148	1.057	37	37.05
5	5 holes	2.5	1.583	0.784	28	28.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):29.595 Intercept(b):5.420 Correlation Coefficient(r): 0.9986

Checked by: Magnum Fan Date: 14/04/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	ASR10
Calibrated by	:	P.F.Yeung
Date	:	08/04/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 8162

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	18 February 2020
Slope (m)	:	2.07134
Intercept (b)	:	-0.04091
Correlation Coefficient(r)	:	0.99999

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1016
Ta(K)	:	298

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.4	3.381	1.652	54	54.08
2	13 holes	9.2	3.038	1.486	50	50.07
3	10 holes	6.5	2.553	1.252	45	45.07
4	7 holes	4.4	2.101	1.034	37	37.05
5	5 holes	2.2	1.485	0.737	27	27.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):29.613 Intercept(b): 6.169 Correlation Coefficient(r): 0.9943

Checked by: Magnum Fan Date: 14/04/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	AQMS1
Calibrated by	:	P.F.Yeung
Date	:	08/04/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 1253

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	18 February 2020
Slope (m)	:	2.07134
Intercept (b)	:	-0.04091
Correlation Coefficient(r)	:	0.99999

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1016
Ta(K)	:	298

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.0	3.469	1.695	54	54.08
2	13 holes	9.2	3.038	1.486	50	50.07
3	10 holes	6.6	2.573	1.262	44	44.07
4	7 holes	4.4	2.101	1.034	36	36.05
5	5 holes	2.4	1.551	0.769	28	28.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):28.778 Intercept(b):6.516 Correlation Coefficient(r): 0.9955

Checked by: Magnum Fan Date: 14/04/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	ASR 1
Calibrated by	:	P.F.Yeung
Date	:	08/04/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 0146

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	18 February 2020
Slope (m)	:	2.07134
Intercept (b)	:	-0.04091
Correlation Coefficient(r)	:	0.99999

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1016
Ta(K)	:	298

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.6	3.411	1.666	52	52.08
2	13 holes	9.0	3.004	1.470	48	48.07
3	10 holes	6.7	2.592	1.271	43	43.06
4	7 holes	4.4	2.101	1.034	35	35.05
5	5 holes	2.2	1.485	0.737	27	27.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):27.603 Intercept(b):6.950 Correlation Coefficient(r): 0.9971

Checked by: Magnum Fan Date: 14/04/2020

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	ASR 6
Calibrated by	:	P.F.Yeung
Date	:	08/04/2020

Sampler

Model	:	TE-5170
Serial Number	:	S/N 3957

Calibration Orifice and Standard Calibration Relationship

Serial Number	:	2454
Service Date	:	18 February 2020
Slope (m)	:	2.07134
Intercept (b)	:	-0.04091
Correlation Coefficient(r)	:	0.99999

Standard Condition

Pstd (hpa)	:	1013
Tstd (K)	:	298.18

Calibration Condition

Pa (hpa)	:	1016
Ta(K)	:	298

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.8	3.440	1.681	54	54.08
2	13 holes	9.2	3.038	1.486	49	49.07
3	10 holes	6.4	2.534	1.243	45	45.07
4	7 holes	4.5	2.124	1.045	38	38.06
5	5 holes	2.4	1.551	0.769	30	30.04

Notes:Z=SQRT{dH(Pa/Pstd)(Tstd/Ta)}, X=Z/m-b ,Y(Corrected Flow)=IC*{SQRT(Pa/Pstd)(Tstd/Ta)}

Sampler Calibration Relationship (Linear Regression)

Slope(m):26.126 Intercept(b): 10.743 Correlation Coefficient(r): 0.9935

Checked by: Magnum Fan Date: 14/04/2020

TISCH Environmental

RECALIBRATION DUE DATE:
February 18, 2021

Certificate of Calibration

Calibration Certification Information					
Cal. Date:	February 18, 2020	**Rootsmeter S/N:** 438320	**Ta:** 294	°K	
Operator:	Jim Tisch		**Pa:** 753.1	mm Hg	
Calibration Model #:	TE-5025A	**Calibrator S/N:** **2454**			

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4190	3.2	2.00
2	3	4	1	1.0100	6.4	4.00
3	5	6	1	0.9020	7.9	5.00
4	7	8	1	0.8600	8.8	5.50
5	9	10	1	0.7110	12.7	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
1.0001	0.7048	1.4173	0.9958	0.7017	0.8836
0.9959	0.9860	2.0044	0.9915	0.9817	1.2496
0.9939	1.1019	2.2410	0.9895	1.0970	1.3971
0.9927	1.1543	2.3504	0.9883	1.1492	1.4653
0.9875	1.3889	2.8347	0.9831	1.3828	1.7672
QSTD	**m=**	**2.07134**	**QA**	**m=**	**1.29704**
	b=	**-0.04091**		**b=**	**-0.02551**
	r=	**0.99999**		**r=**	**0.99999**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime

For subsequent flow rate calculations:

Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$

Qa= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg

Key
ΔH: calibrator manometer reading (in H2O)
ΔP: rootsmeter manometer reading (mm Hg)
Ta: actual absolute temperature (°K)
Pa: actual barometric pressure (mm Hg)
b: intercept
m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

www.tisch-env.com
TOLL FREE: (877)263-7610
FAX: (513)467-9009

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C193443
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC19-1283) Date of Receipt / 收件日期 : 21 June 2019

Description / 儀器名稱 : Anemometer
Manufacturer / 製造商 : Lutron
Model No. / 型號 : AM-4201
Serial No. / 編號 : AF.27513
Supplied By / 委託者 : Envirotech Services Co.
Room 113, 1/F, My Loft, 9 Hoi Wing Road, Tuen Mun,
New Territories, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 2 July 2019

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- Testo Industrial Services GmbH, Germany

Tested By 測試 : T F Lee
Assistant Engineer

Certified By 核證 : H C Chan
Engineer

Date of Issue 簽發日期 : 5 July 2019

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C193443
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

2. The results presented are the mean of 10 measurements at each calibration point.

3. Test equipment :

Equipment ID	Description	Certificate No.
CL386	Multi-function Measuring Instrument	S16493

4. Test procedure : MA130N.

5. Results :

Air Velocity

Applied Value (m/s)	UUT Reading (m/s)	Measured Correction		
		Value (m/s)	Measurement Uncertainty	
			Expanded Uncertainty (m/s)	Coverage Factor
2.0	1.8	+0.2	0.2	2.0
4.0	3.8	+0.2	0.3	2.0
6.0	5.8	+0.2	0.3	2.0
8.1	7.9	+0.2	0.3	2.0
10.1	10.0	+0.1	0.4	2.0

Remarks : - The Measured Corrections are defined as :
Value = Applied Value - UUT Reading

- The expanded uncertainties are for a level of confidence of 95 %.

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

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

Sun Creation Engineering Limited - Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 — 校正及檢測實驗所
c/o 香港新界屯門興安里 1號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

ENVIROTECH SERVICES CO.

Calibration Report of Wind Meter

Date of Calibration : 30 December 2019

Brand of Test Meter: Davis

Model: Vantage Pro 2 (s/n: AS160104014)

Location : Roof of Tuen Mun Firestation

Procedures :

1. Wind Still Test: The wind speed sensor was hold by hand until it keep still

2.Wind Speed Test: The wind meter was on-site calibrated against the Anemometer

3.Wind Direction Test : The wind meter was on-site calibrated against the marine compass at four directions

Results:

Wind Still Test

Wind Speed (m/s)
0.00

Wind Speed Test

Davis (m/s)	Anemometer (m/s)
3.1	3.3
2.6	2.8
1.4	1.2

Wind Direction Test

Davis (o)	Marine Compass (o)
271	270
0	0
89	90
179	180

Calibrated by: Ho

Yeung Ping Fai
(Technical Officer)

Checked by : Fat

Ho Kam Fat
(Senior Technical Officer)

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030056
Date of Issue : 12 March 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	18A104824
Date of Received	:	Mar 11, 2020
Date of Calibration	:	Mar 11, 2020
Date of Next Calibration[a]	:	Jun 10, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.06	0.06	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	10.10	0.09	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.5	0.5	Satisfactory
26.0	26.1	0.1	Satisfactory
47.0	46.2	-0.8	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030056
Date of Issue : 12 March 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.38	0.42	0.04	Satisfactory
4.44	4.51	0.07	Satisfactory
6.78	6.78	0.00	Satisfactory
8.54	8.72	0.18	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	145.8	-0.75	Satisfactory
0.01	1412	1356	-3.97	Satisfactory
0.1	12890	12176	-5.54	Satisfactory
0.5	58670	56438	-3.80	Satisfactory
1.0	111900	110819	-0.97	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.00	0.00	Satisfactory
20	20.54	2.70	Satisfactory
30	30.72	2.40	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.02	--	Satisfactory
10	10.36	3.6	Satisfactory
20	20.82	4.1	Satisfactory
100	106.4	6.4	Satisfactory
800	812.4	1.6	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030055
Date of Issue : 12 March 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104234
Date of Received	:	Mar 11, 2020
Date of Calibration	:	Mar 11, 2020
Date of Next Calibration[a]	:	Jun 10, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	10.02	0.01	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.4	0.4	Satisfactory
26.0	26.0	0.0	Satisfactory
47.0	47.4	0.4	Satisfactory

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

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Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

專業化驗有限公司
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030055
Date of Issue : 12 March 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.38	0.39	0.01	Satisfactory
4.44	4.53	0.09	Satisfactory
6.78	6.70	-0.08	Satisfactory
8.54	8.74	0.20	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	151.0	2.79	Satisfactory
0.01	1412	1357	-3.90	Satisfactory
0.1	12890	11982	-7.04	Satisfactory
0.5	58670	56432	-3.81	Satisfactory
1.0	111900	110782	-1.00	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.00	0.00	Satisfactory
20	20.36	1.80	Satisfactory
30	30.56	1.87	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.00	--	Satisfactory
10	10.24	2.4	Satisfactory
20	21.20	6.0	Satisfactory
100	94.6	-5.4	Satisfactory
800	792.4	-1.0	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030054
Date of Issue : 12 March 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Mar 11, 2020
Date of Calibration	:	Mar 11, 2020
Date of Next Calibration[a]	:	Jun 10, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.04	0.04	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	10.04	0.03	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.2	0.2	Satisfactory
26.0	26.6	0.6	Satisfactory
47.0	47.4	0.4	Satisfactory

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

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Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030054
Date of Issue : 12 March 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.38	0.48	0.10	Satisfactory
4.44	4.50	0.06	Satisfactory
6.78	6.68	-0.10	Satisfactory
8.54	8.62	0.08	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	148.2	0.88	Satisfactory
0.01	1412	1386	-1.84	Satisfactory
0.1	12890	12436	-3.52	Satisfactory
0.5	58670	57314	-2.31	Satisfactory
1.0	111900	111048	-0.76	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.99	-0.10	Satisfactory
20	20.16	0.80	Satisfactory
30	30.28	0.93	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.06	--	Satisfactory
10	10.34	3.4	Satisfactory
20	20.32	1.6	Satisfactory
100	92.4	-7.6	Satisfactory
800	801.6	0.2	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030057
Date of Issue : 12 March 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17H105557
Date of Received	:	Mar 11, 2020
Date of Calibration	:	Mar 11, 2020
Date of Next Calibration[a]	:	Jun 10, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.00	0.00	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	10.09	0.08	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.2	0.2	Satisfactory
26.0	26.6	0.6	Satisfactory
47.0	47.6	0.6	Satisfactory

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

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Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030057
Date of Issue : 12 March 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.38	0.41	0.03	Satisfactory
4.44	4.50	0.06	Satisfactory
6.78	6.75	-0.03	Satisfactory
8.54	8.69	0.15	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	147.7	0.54	Satisfactory
0.01	1412	1467	3.90	Satisfactory
0.1	12890	12767	-0.95	Satisfactory
0.5	58670	59526	1.46	Satisfactory
1.0	111900	110742	-1.03	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.98	-0.20	Satisfactory
20	20.48	2.40	Satisfactory
30	30.84	2.80	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.18	--	Satisfactory
10	10.14	1.4	Satisfactory
20	19.66	-1.7	Satisfactory
100	105.4	5.4	Satisfactory
800	792.6	-0.9	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ010131
Date of Issue : 24 January 2019

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920V2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	0001C6A7
Date of Received	:	Jan 20, 2020
Date of Calibration	:	Jan 20, 2020
Date of Next Calibration[a]	:	Apr 20, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	3.99	-0.01	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	10.06	0.05	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.04	0.0	Satisfactory
20.0	20.05	0.1	Satisfactory
45.0	44.90	-0.1	Satisfactory

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

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Remark(s): -

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ010131
Date of Issue : 24 January 2019

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.92	1.31	0.39	Satisfactory
4.68	4.68	0.00	Satisfactory
5.18	5.33	0.15	Satisfactory
8.84	8.98	0.14	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	153.4	4.42	Satisfactory
0.01	1412	1386	-1.84	Satisfactory
0.1	12890	12784	-0.82	Satisfactory
0.5	58670	57934	-1.25	Satisfactory
1.0	111900	110886	-0.91	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.98	-0.20	Satisfactory
20	20.20	1.00	Satisfactory
30	30.42	1.40	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.2	--	Satisfactory
10	10.1	1.0	Satisfactory
20	19.8	-1.0	Satisfactory
100	98.7	-1.3	Satisfactory
800	788.4	-1.5	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ010132
Date of Issue : 24 January 2019

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920V2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	00019CB2
Date of Received	:	Jan 20, 2020
Date of Calibration	:	Jan 20, 2020
Date of Next Calibration[a]	:	Apr 20, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.01	0.01	Satisfactory
7.42	7.36	-0.06	Satisfactory
10.01	9.96	-0.05	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.03	0.0	Satisfactory
20.0	20.06	0.1	Satisfactory
45.0	44.90	-0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ010132
Date of Issue : 24 January 2019

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.92	1.22	0.30	Satisfactory
4.68	4.66	-0.02	Satisfactory
5.18	5.34	0.16	Satisfactory
8.84	8.96	0.12	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	152.9	4.08	Satisfactory
0.01	1412	1391	-1.49	Satisfactory
0.1	12890	12796	-0.73	Satisfactory
0.5	58670	57862	-1.38	Satisfactory
1.0	111900	110894	-0.90	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.05	0.50	Satisfactory
20	19.96	-0.20	Satisfactory
30	30.38	1.27	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	Satisfactory
10	9.9	-1.0	Satisfactory
20	19.8	-1.0	Satisfactory
100	98.6	-1.4	Satisfactory
800	789.3	-1.3	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

Appendix F

EM&A Monitoring Schedules

HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Tentative Air Quality Impact Monitoring Schedule - April 2020

Air quality monitoring stations: ASR1, ASR5, ASR6, ASR10, AQMS1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Apr	02-Apr	03-Apr	04-Apr
				1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM		
05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM
12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
		1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM	
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr
	1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM		
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr		
1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			

HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Tentative Air Quality Impact Monitoring Schedule - May 2020

Air quality monitoring stations: ASR1, ASR5, ASR6, ASR10, AQMS1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01-May	02-May
						1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM
03-May	04-May	05-May	06-May	07-May	08-May	09-May
		1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM	
10-May	11-May	12-May	13-May	14-May	15-May	16-May
	1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM		
17-May	18-May	19-May	20-May	21-May	22-May	23-May
1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM
24-May	25-May	26-May	27-May	28-May	29-May	30-May
		1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM	
31-May						

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety,weather etc) conditions.

HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Tentative Impact Dolphin Monitoring Survey Monitoring Schedule - April 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Apr	02-Apr	03-Apr	04-Apr
05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
			Impact Dolphin Monitoring			
12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
		Impact Dolphin Monitoring				
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr
		Impact Dolphin Monitoring	**Impact Dolphin Monitoring**			
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr		

HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Tentative Impact Dolphin Monitoring Survey Monitoring Schedule - May 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01-May	02-May
03-May	04-May	05-May	06-May	07-May	08-May	09-May
		Impact Dolphin Monitoring				
10-May	11-May	12-May	13-May	14-May	15-May	16-May
		Impact Dolphin Monitoring				
17-May	18-May	19-May	20-May	21-May	22-May	23-May
		Impact Dolphin Monitoring				
24-May	25-May	26-May	27-May	28-May	29-May	30-May
		Impact Dolphin Monitoring				
31-May						

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse(safety,weather etc) conditions.

HY/2012/08 - Tuen Mun - Chek Lap Kok Link - Northern Landfall
Impact Marine Water Quality Monitoring (WQM) Schedule (Post Project Monitoring)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Apr	2-Apr	3-Apr	4-Apr
				ebb tide 18:04 - 21:05 flood tide 6:09 - 8:53		ebb tide 9:05 - 12:23 flood tide 13:50 - 17:20
5-Apr	6-Apr	7-Apr	8-Apr	9-Apr	10-Apr	11-Apr
		ebb tide 10:52 - 14:22 flood tide 4:58 - 8:28		ebb tide 12:08 - 15:38 flood tide 5:59 - 9:29		ebb tide 13:35 - 17:05 flood tide 7:02 - 10:32
12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr		

Appendix G

Impact Air Quality Monitoring Results

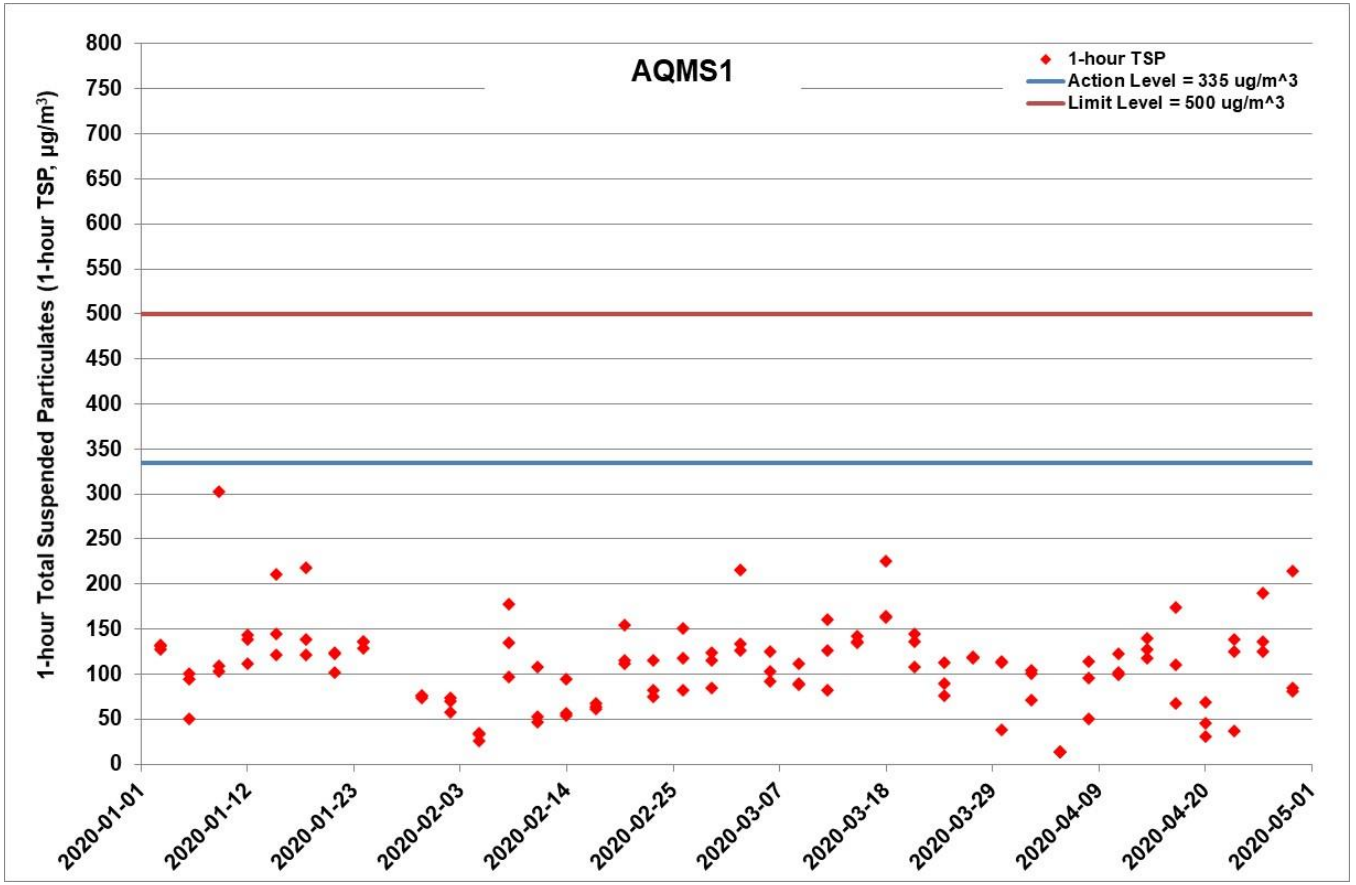


Figure G.1 Impact Monitoring – 1-hour Total Suspended Particulates (µg/m³) at AQMS1 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

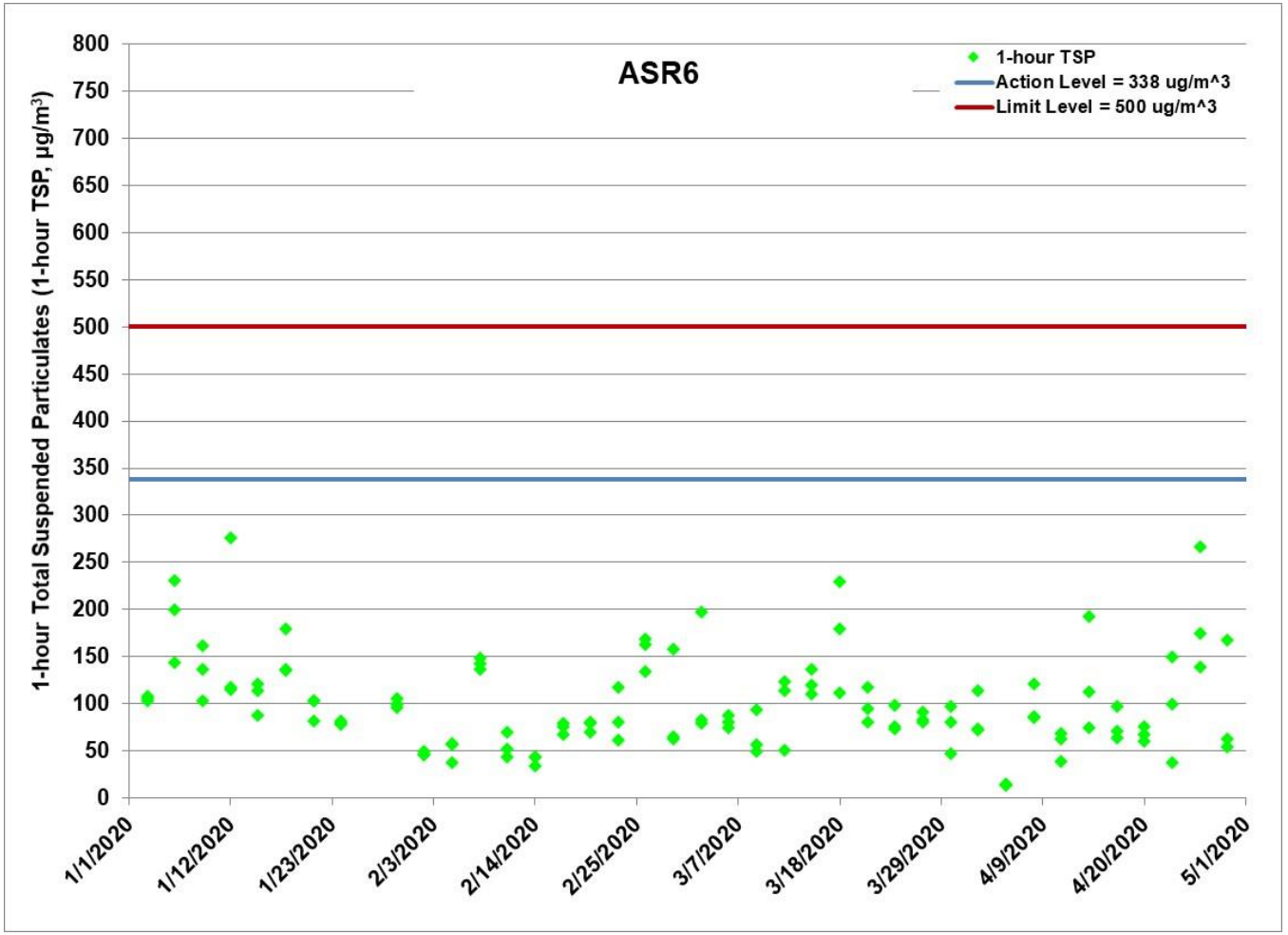


Figure G.2 Impact Monitoring – 1-hour Total Suspended Particulates (µg/m³) at ASR6 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

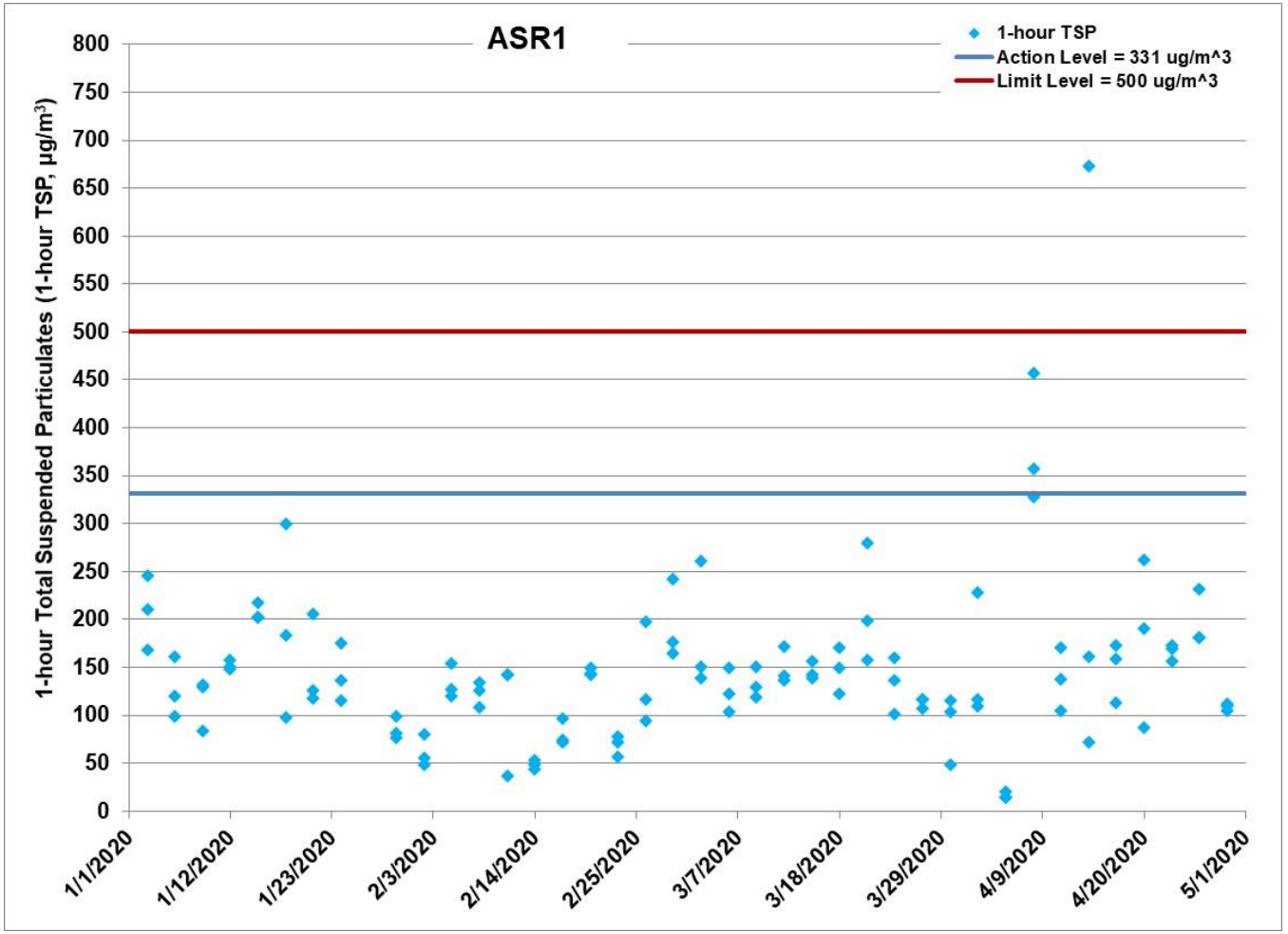


Figure G.3 Impact Monitoring – 1-hour Total Suspended Particulates (µg/m³) at ASR1 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

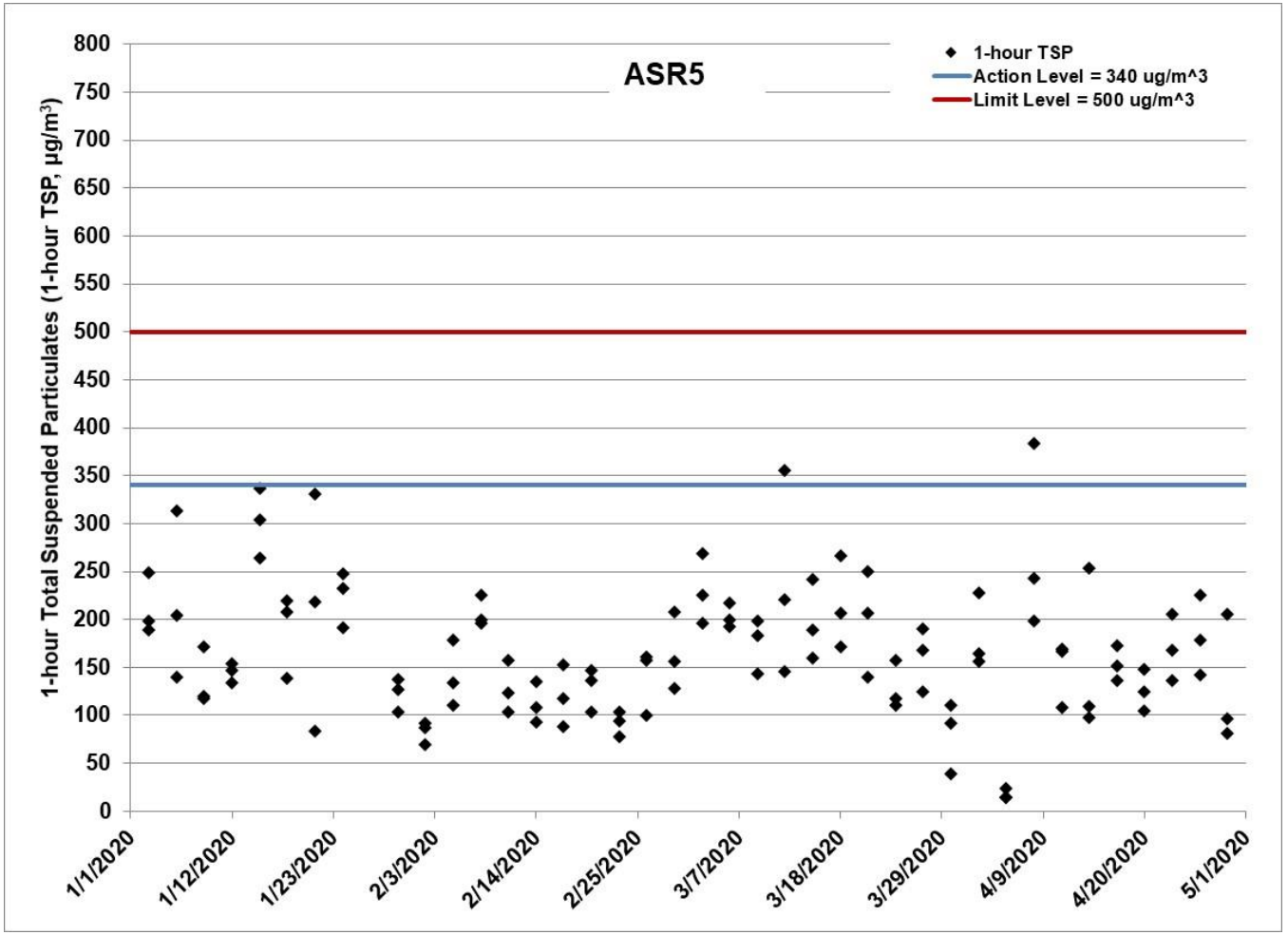


Figure G.4 Impact Monitoring – 1-hour Total Suspended Particulates (µg/m³) at ASR5 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

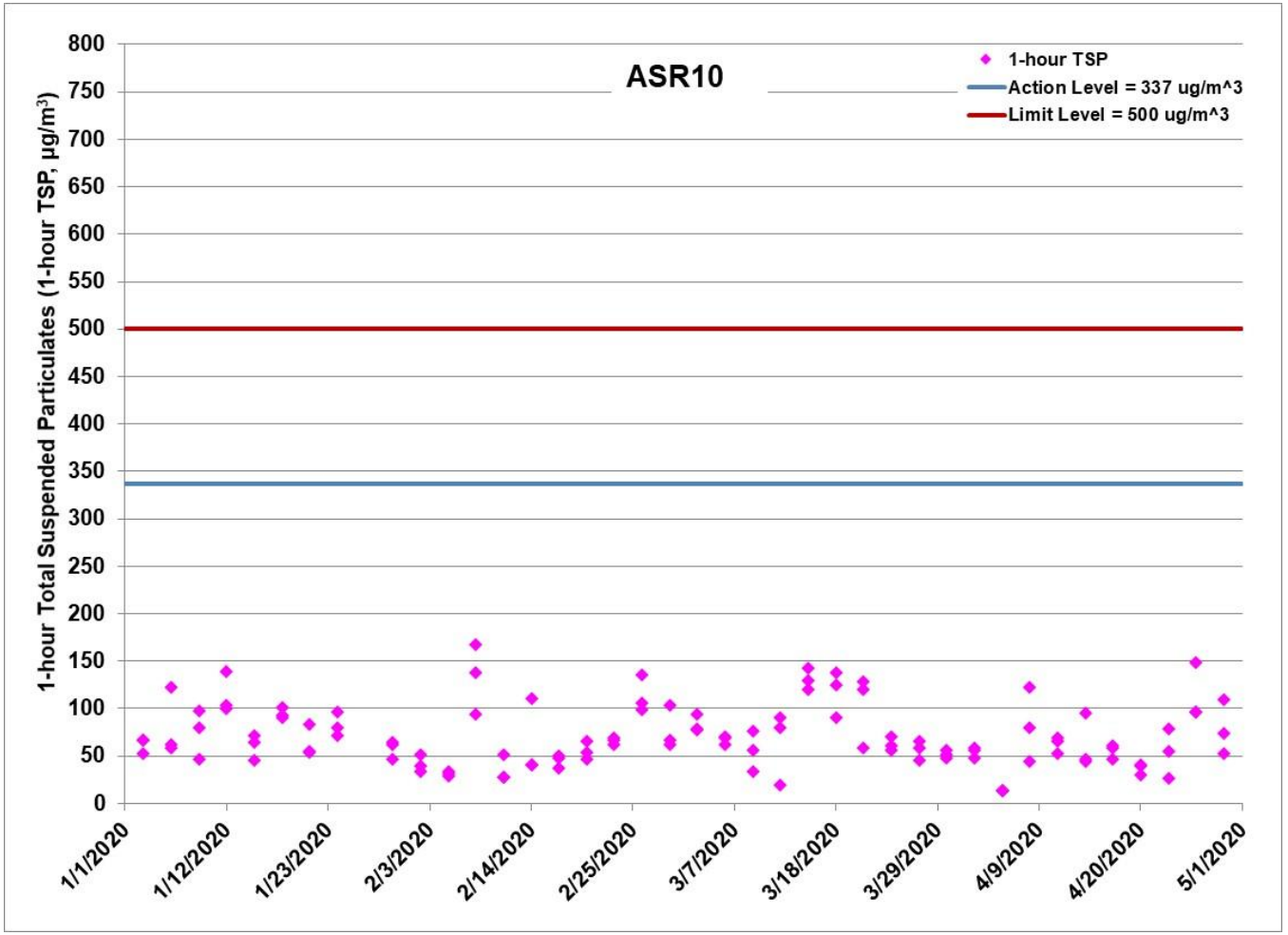


Figure G.5 Impact Monitoring – 1-hour Total Suspended Particulates (µg/m³) at ASR10 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

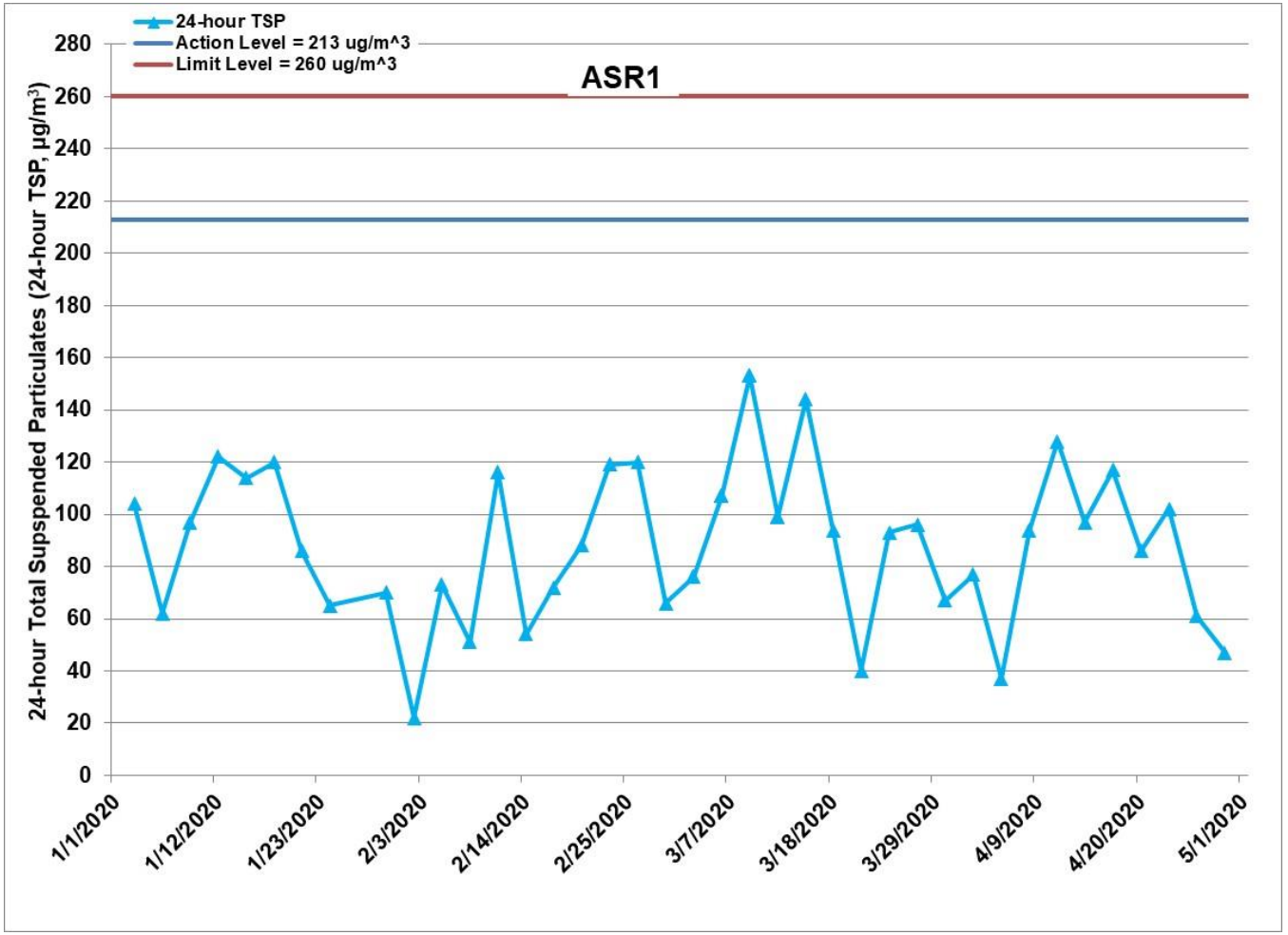


Figure G.6 Impact Monitoring – 24-hour Total Suspended Particulates (µg/m³) at ASR1 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

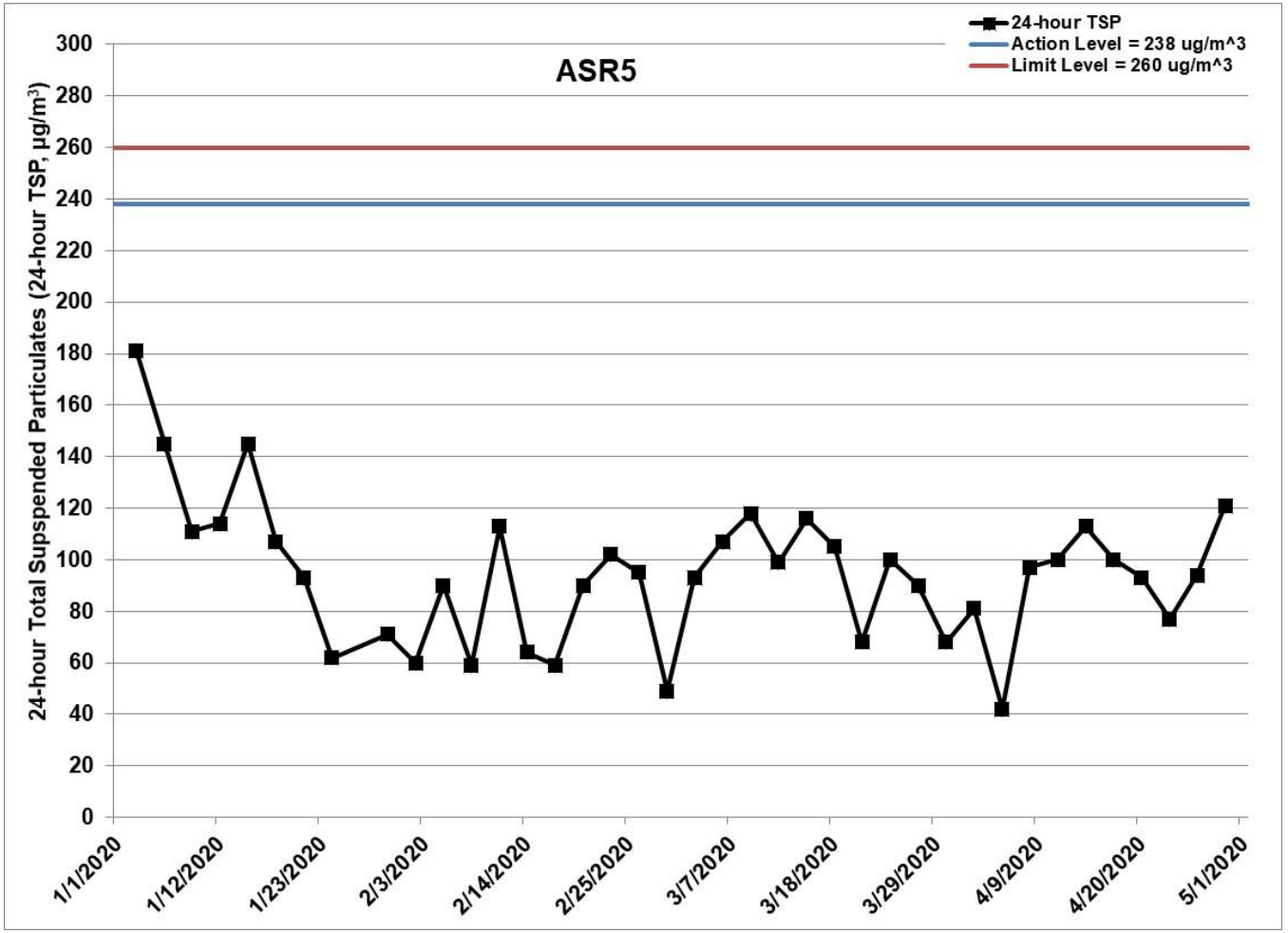


Figure G.7 Impact Monitoring – 24-hour Total Suspended Particulates (µg/m³) at ASR5 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

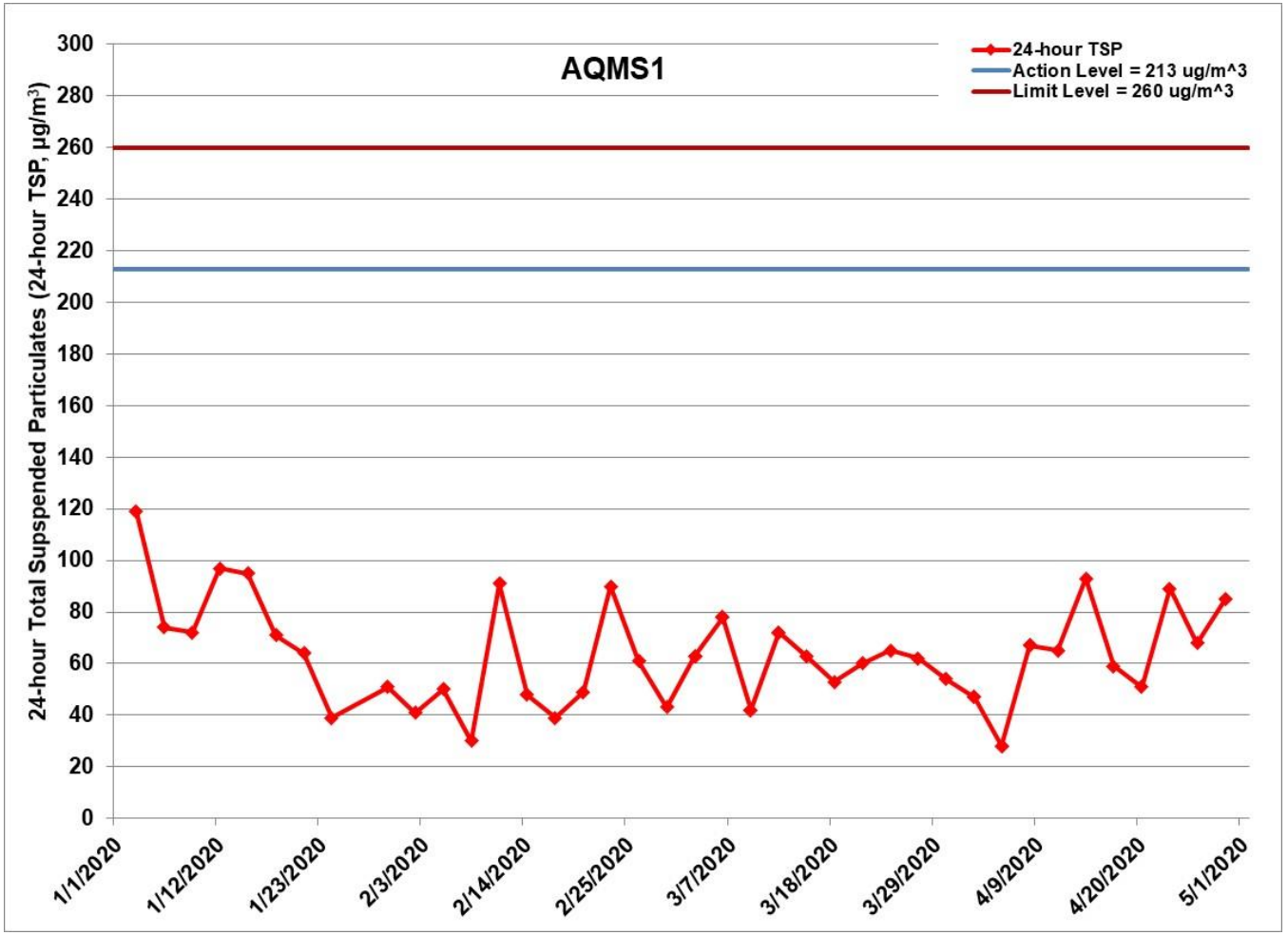


Figure G.8 Impact Monitoring – 24-hour Total Suspended Particulates (µg/m³) at AQMS1 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

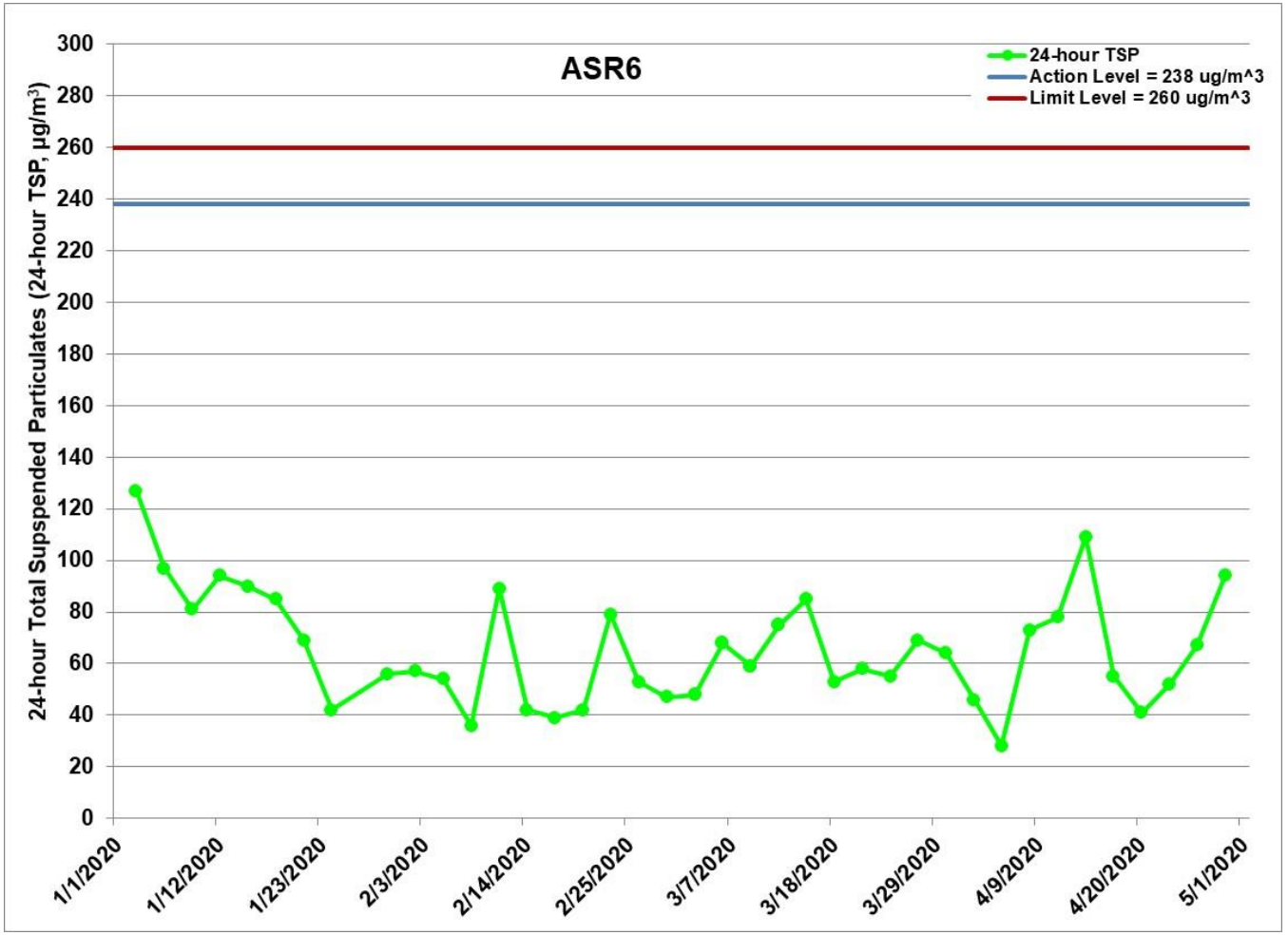


Figure G.9 Impact Monitoring – 24-hour Total Suspended Particulates (µg/m³) at ASR6 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

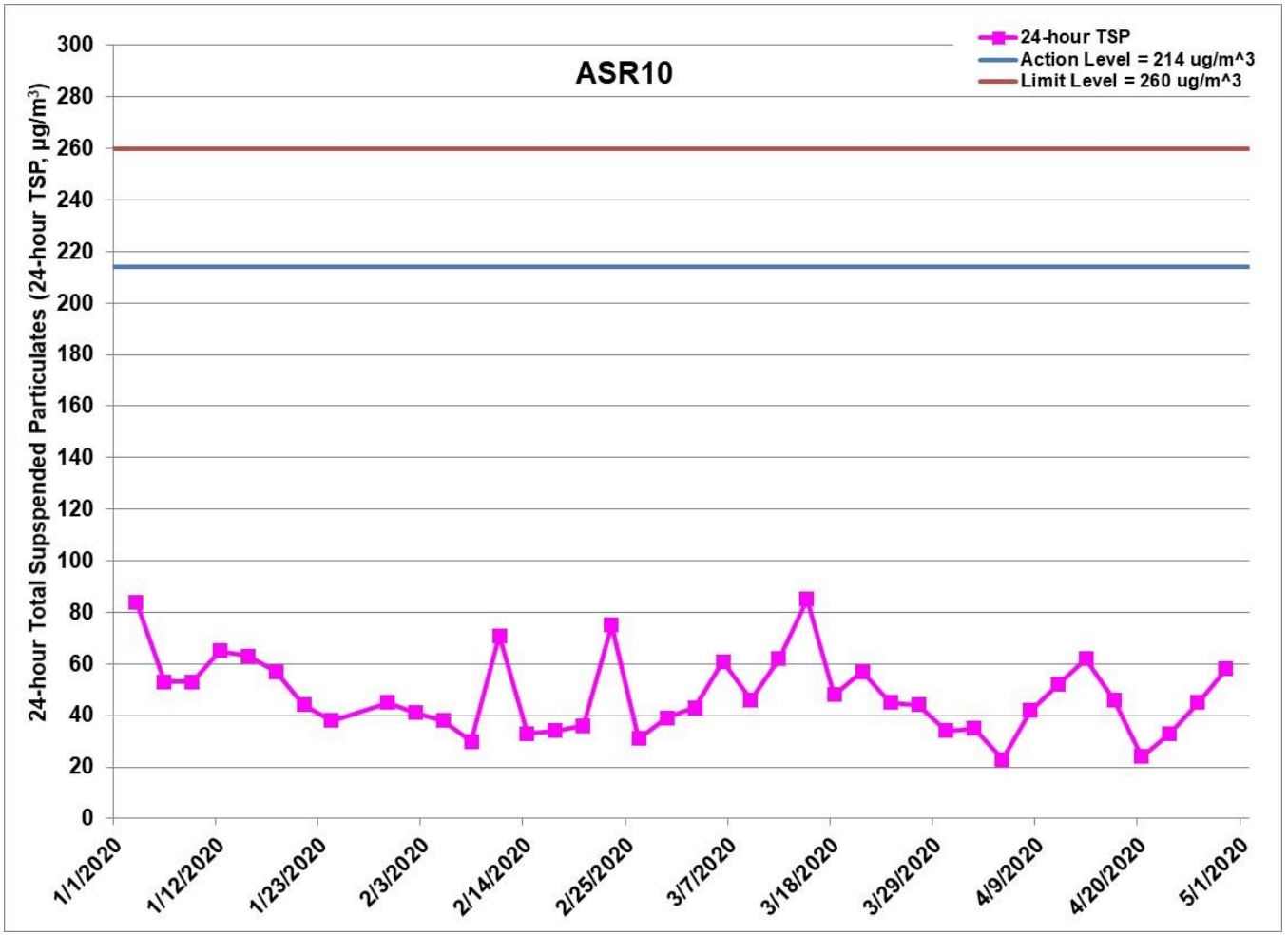


Figure G.10 Impact Monitoring – 24-hour Total Suspended Particulates (µg/m³) at ASR10 between 1 January 2020 and 30 April 2020 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Road and Drainage Works at Northern Landfall and Southern Landfall, UU installation at Northern Landfall and Southern Landfall and Fireboard installation in Tunnel (1/1/2020 – 30/4/2020)

Ref: 0212330_Impact AQM graphs_April 2020.xlsx

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-04-02	ASR10	Cloudy	08:00	1-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR10	Cloudy	09:02	1-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR10	Cloudy	10:04	1-hour TSP	48	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR6	Cloudy	08:12	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR6	Cloudy	09:14	1-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR6	Cloudy	10:16	1-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR5	Cloudy	08:25	1-hour TSP	228	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR5	Cloudy	09:27	1-hour TSP	165	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR5	Cloudy	10:29	1-hour TSP	156	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR1	Cloudy	08:37	1-hour TSP	228	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR1	Cloudy	09:39	1-hour TSP	109	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR1	Cloudy	10:41	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2020-04-02	AQMS1	Cloudy	08:48	1-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2020-04-02	AQMS1	Cloudy	09:50	1-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2020-04-02	AQMS1	Cloudy	10:52	1-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR10	Cloudy	08:04	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR10	Cloudy	09:06	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR10	Cloudy	10:08	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR6	Cloudy	08:15	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR6	Cloudy	09:17	1-hour TSP	15	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR6	Cloudy	10:19	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR5	Cloudy	08:27	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR5	Cloudy	09:29	1-hour TSP	24	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR5	Cloudy	10:31	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR1	Cloudy	08:40	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR1	Cloudy	09:42	1-hour TSP	20	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR1	Cloudy	10:44	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	AQMS1	Cloudy	08:52	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	AQMS1	Cloudy	09:54	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-05	AQMS1	Cloudy	10:56	1-hour TSP	14	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR10	Sunny	13:13	1-hour TSP	44	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-04-08	ASR10	Sunny	14:15	1-hour TSP	123	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR10	Sunny	15:17	1-hour TSP	80	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR6	Sunny	13:42	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR6	Sunny	14:26	1-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR6	Sunny	15:28	1-hour TSP	121	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR5	Sunny	13:36	1-hour TSP	198	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR5	Sunny	14:38	1-hour TSP	243	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR5	Sunny	15:40	1-hour TSP	384	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR1	Sunny	13:47	1-hour TSP	328	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR1	Sunny	14:49	1-hour TSP	357	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR1	Sunny	15:51	1-hour TSP	457	ug/m3
TMCLKL	HY/2012/08	2020-04-08	AQMS1	Sunny	13:58	1-hour TSP	50	ug/m3
TMCLKL	HY/2012/08	2020-04-08	AQMS1	Sunny	15:00	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2020-04-08	AQMS1	Sunny	16:02	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR10	Sunny	8:00	1-hour TSP	52	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR10	Sunny	9:02	1-hour TSP	66	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR10	Sunny	10:04	1-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR6	Sunny	8:13	1-hour TSP	63	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR6	Sunny	9:15	1-hour TSP	39	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR6	Sunny	10:17	1-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR5	Sunny	8:24	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR5	Sunny	9:26	1-hour TSP	167	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR5	Sunny	10:28	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR1	Sunny	8:36	1-hour TSP	171	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR1	Sunny	9:38	1-hour TSP	138	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR1	Sunny	10:40	1-hour TSP	105	ug/m3
TMCLKL	HY/2012/08	2020-04-11	AQMS1	Sunny	8:47	1-hour TSP	99	ug/m3
TMCLKL	HY/2012/08	2020-04-11	AQMS1	Sunny	9:49	1-hour TSP	123	ug/m3
TMCLKL	HY/2012/08	2020-04-11	AQMS1	Sunny	10:51	1-hour TSP	102	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR10	Sunny	13:27	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR10	Sunny	14:29	1-hour TSP	44	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-04-14	ASR10	Sunny	15:31	1-hour TSP	47	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR6	Sunny	13:38	1-hour TSP	193	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR6	Sunny	14:40	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR6	Sunny	15:42	1-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR5	Sunny	13:50	1-hour TSP	254	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR5	Sunny	14:52	1-hour TSP	109	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR5	Sunny	15:54	1-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR1	Sunny	14:00	1-hour TSP	673	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR1	Sunny	15:02	1-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR1	Sunny	16:04	1-hour TSP	161	ug/m3
TMCLKL	HY/2012/08	2020-04-14	AQMS1	Sunny	14:12	1-hour TSP	140	ug/m3
TMCLKL	HY/2012/08	2020-04-14	AQMS1	Sunny	15:14	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2020-04-14	AQMS1	Sunny	16:16	1-hour TSP	127	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR10	Sunny	13:11	1-hour TSP	47	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR10	Sunny	14:13	1-hour TSP	59	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR10	Sunny	15:15	1-hour TSP	61	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR6	Sunny	13:22	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR6	Sunny	14:24	1-hour TSP	64	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR6	Sunny	15:26	1-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR5	Sunny	13:34	1-hour TSP	136	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR5	Sunny	14:36	1-hour TSP	173	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR5	Sunny	15:38	1-hour TSP	151	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR1	Sunny	13:45	1-hour TSP	159	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR1	Sunny	14:47	1-hour TSP	173	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR1	Sunny	15:49	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2020-04-17	AQMS1	Sunny	13:57	1-hour TSP	174	ug/m3
TMCLKL	HY/2012/08	2020-04-17	AQMS1	Sunny	14:59	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2020-04-17	AQMS1	Sunny	16:01	1-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR10	Sunny	13:25	1-hour TSP	39	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR10	Sunny	14:27	1-hour TSP	41	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR10	Sunny	15:29	1-hour TSP	30	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-04-20	ASR6	Sunny	13:36	1-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR6	Sunny	14:38	1-hour TSP	76	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR6	Sunny	15:40	1-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR5	Sunny	13:48	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR5	Sunny	14:50	1-hour TSP	105	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR5	Sunny	15:52	1-hour TSP	148	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR1	Sunny	14:00	1-hour TSP	262	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR1	Sunny	15:02	1-hour TSP	190	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR1	Sunny	16:04	1-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2020-04-20	AQMS1	Sunny	14:12	1-hour TSP	31	ug/m3
TMCLKL	HY/2012/08	2020-04-20	AQMS1	Sunny	15:14	1-hour TSP	45	ug/m3
TMCLKL	HY/2012/08	2020-04-20	AQMS1	Sunny	16:16	1-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR10	Cloudy	13:01	1-hour TSP	26	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR10	Cloudy	14:03	1-hour TSP	55	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR10	Cloudy	15:05	1-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR6	Cloudy	13:13	1-hour TSP	38	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR6	Cloudy	14:15	1-hour TSP	100	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR6	Cloudy	15:17	1-hour TSP	150	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR5	Cloudy	13:24	1-hour TSP	136	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR5	Cloudy	14:26	1-hour TSP	206	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR5	Cloudy	15:28	1-hour TSP	168	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR1	Cloudy	13:35	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR1	Cloudy	14:37	1-hour TSP	173	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR1	Cloudy	15:39	1-hour TSP	157	ug/m3
TMCLKL	HY/2012/08	2020-04-23	AQMS1	Cloudy	13:47	1-hour TSP	37	ug/m3
TMCLKL	HY/2012/08	2020-04-23	AQMS1	Cloudy	14:49	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2020-04-23	AQMS1	Cloudy	15:51	1-hour TSP	138	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR10	Sunny	8:15	1-hour TSP	149	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR10	Sunny	9:17	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR10	Sunny	10:19	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR6	Sunny	8:26	1-hour TSP	267	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-04-26	ASR6	Sunny	9:28	1-hour TSP	175	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR6	Sunny	10:30	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR5	Sunny	8:37	1-hour TSP	226	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR5	Sunny	9:39	1-hour TSP	142	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR5	Sunny	10:41	1-hour TSP	179	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR1	Sunny	8:49	1-hour TSP	232	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR1	Sunny	9:51	1-hour TSP	181	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR1	Sunny	10:53	1-hour TSP	181	ug/m3
TMCLKL	HY/2012/08	2020-04-26	AQMS1	Sunny	9:00	1-hour TSP	190	ug/m3
TMCLKL	HY/2012/08	2020-04-26	AQMS1	Sunny	10:02	1-hour TSP	136	ug/m3
TMCLKL	HY/2012/08	2020-04-26	AQMS1	Sunny	11:04	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR10	Sunny	13:00	1-hour TSP	52	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR10	Sunny	14:02	1-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR10	Sunny	15:04	1-hour TSP	109	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR6	Sunny	13:11	1-hour TSP	167	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR6	Sunny	14:13	1-hour TSP	63	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR6	Sunny	15:15	1-hour TSP	54	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR5	Sunny	13:23	1-hour TSP	206	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR5	Sunny	14:25	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR5	Sunny	15:27	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR1	Sunny	13:35	1-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR1	Sunny	14:37	1-hour TSP	105	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR1	Sunny	15:39	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2020-04-29	AQMS1	Sunny	13:48	1-hour TSP	214	ug/m3
TMCLKL	HY/2012/08	2020-04-29	AQMS1	Sunny	14:50	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2020-04-29	AQMS1	Sunny	15:52	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR10	Cloudy	11:06	24-hour TSP	35	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR6	Cloudy	11:18	24-hour TSP	46	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR5	Cloudy	11:31	24-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2020-04-02	ASR1	Cloudy	11:43	24-hour TSP	77	ug/m3
TMCLKL	HY/2012/08	2020-04-02	AQMS1	Cloudy	11:54	24-hour TSP	47	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-04-05	ASR10	Sunny	11:10	24-hour TSP	23	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR6	Sunny	11:21	24-hour TSP	28	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR5	Sunny	11:33	24-hour TSP	42	ug/m3
TMCLKL	HY/2012/08	2020-04-05	ASR1	Sunny	11:46	24-hour TSP	37	ug/m3
TMCLKL	HY/2012/08	2020-04-05	AQMS1	Sunny	11:58	24-hour TSP	28	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR10	Sunny	16:19	24-hour TSP	42	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR6	Sunny	16:30	24-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR5	Sunny	16:42	24-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR1	Sunny	16:53	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2020-04-08	AQMS1	Sunny	17:04	24-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR10	Sunny	11:06	24-hour TSP	52	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR6	Sunny	11:19	24-hour TSP	78	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR5	Sunny	11:30	24-hour TSP	100	ug/m3
TMCLKL	HY/2012/08	2020-04-11	ASR1	Sunny	11:42	24-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2020-04-11	AQMS1	Sunny	11:53	24-hour TSP	65	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR10	Sunny	16:33	24-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR6	Sunny	16:44	24-hour TSP	109	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR5	Sunny	16:54	24-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR1	Sunny	17:06	24-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2020-04-14	AQMS1	Sunny	17:18	24-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR10	Sunny	16:17	24-hour TSP	46	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR6	Sunny	16:28	24-hour TSP	55	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR5	Sunny	16:40	24-hour TSP	100	ug/m3
TMCLKL	HY/2012/08	2020-04-17	ASR1	Sunny	16:51	24-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2020-04-17	AQMS1	Sunny	17:03	24-hour TSP	59	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR10	Sunny	16:31	24-hour TSP	24	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR6	Sunny	16:42	24-hour TSP	41	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR5	Sunny	16:54	24-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2020-04-20	ASR1	Sunny	17:06	24-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	2020-04-20	AQMS1	Sunny	17:18	24-hour TSP	51	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR10	Sunny	16:07	24-hour TSP	33	ug/m3

Project	Contract	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2020-04-23	ASR6	Sunny	16:19	24-hour TSP	52	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR5	Sunny	16:30	24-hour TSP	77	ug/m3
TMCLKL	HY/2012/08	2020-04-23	ASR1	Sunny	16:41	24-hour TSP	102	ug/m3
TMCLKL	HY/2012/08	2020-04-23	AQMS1	Sunny	16:53	24-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR10	Sunny	11:21	24-hour TSP	45	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR6	Sunny	11:32	24-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR5	Sunny	11:43	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2020-04-26	ASR1	Sunny	11:55	24-hour TSP	61	ug/m3
TMCLKL	HY/2012/08	2020-04-26	AQMS1	Sunny	12:06	24-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR10	Sunny	16:06	24-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR6	Sunny	16:17	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR5	Sunny	16:29	24-hour TSP	121	ug/m3
TMCLKL	HY/2012/08	2020-04-29	ASR1	Sunny	16:41	24-hour TSP	47	ug/m3
TMCLKL	HY/2012/08	2020-04-29	AQMS1	Cloudy	16:54	24-hour TSP	85	ug/m3

Appendix H

Meteorological Data

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	**Time (24hrs)**	**Average of Wind Speed (m/s)**	**Average of Wind Direction(degree)**
20/04/02	0:00	2.2	60
20/04/02	1:00	2.7	87
20/04/02	2:00	1.8	74
20/04/02	3:00	1.8	64
20/04/02	4:00	1.8	37
20/04/02	5:00	1.8	68
20/04/02	6:00	1.8	73
20/04/02	7:00	1.8	67
20/04/02	8:00	2.7	74
20/04/02	9:00	4	94
20/04/02	10:00	4.5	94
20/04/02	11:00	4.5	99
20/04/02	12:00	4	94
20/04/02	13:00	4	101
20/04/02	14:00	3.6	100
20/04/02	15:00	2.7	98
20/04/02	16:00	3.1	98
20/04/02	17:00	2.7	86
20/04/02	18:00	1.8	65
20/04/02	19:00	1.8	67
20/04/02	20:00	1.8	78
20/04/02	21:00	1.8	76
20/04/02	22:00	2.2	65
20/04/02	23:00	2.2	78
20/04/03	0:00	2.2	61
20/04/03	1:00	3.1	60
20/04/03	2:00	3.1	70
20/04/03	3:00	3.1	57
20/04/03	4:00	3.6	61
20/04/03	5:00	3.6	93
20/04/03	6:00	2.2	64
20/04/03	7:00	1.8	70
20/04/03	8:00	2.7	65
20/04/03	9:00	2.7	99
20/04/03	10:00	2.7	79
20/04/03	11:00	3.1	98
20/04/03	12:00	3.1	87
20/04/03	13:00	3.1	89
20/04/03	14:00	2.2	82
20/04/03	15:00	1.3	108
20/04/03	16:00	0.4	81
20/04/03	17:00	0.9	300
20/04/03	18:00	0.4	92
20/04/03	19:00	1.3	86
20/04/03	20:00	0.9	77
20/04/03	21:00	2.2	29
20/04/03	22:00	1.3	28
20/04/03	23:00	0.9	79
20/04/05	0:00	1.3	21
20/04/05	1:00	0.9	354
20/04/05	2:00	0.9	12
20/04/05	3:00	1.3	5
20/04/05	4:00	1.3	12
20/04/05	5:00	1.3	12
20/04/05	6:00	1.3	15
20/04/05	7:00	1.3	3

20/04/05	8:00	1.3	23
20/04/05	9:00	1.3	19
20/04/05	10:00	1.8	33
20/04/05	11:00	1.8	79
20/04/05	12:00	2.2	61
20/04/05	13:00	0.9	68
20/04/05	14:00	0.4	275
20/04/05	15:00	0.9	332
20/04/05	16:00	1.3	84
20/04/05	17:00	0.9	98
20/04/05	18:00	1.3	96
20/04/05	19:00	0	58
20/04/05	20:00	0.4	45
20/04/05	21:00	0.4	38
20/04/05	22:00	0.9	85
20/04/05	23:00	0	358
20/04/06	0:00	0.9	81
20/04/06	1:00	1.3	39
20/04/06	2:00	0.9	24
20/04/06	3:00	0.4	46
20/04/06	4:00	0.4	69
20/04/06	5:00	0.4	35
20/04/06	6:00	0.9	45
20/04/06	7:00	0.4	24
20/04/06	8:00	0.9	333
20/04/06	9:00	0.4	51
20/04/06	10:00	0.9	1
20/04/06	11:00	1.8	326
20/04/06	12:00	1.3	357
20/04/06	13:00	1.3	337
20/04/06	14:00	0.9	12
20/04/06	15:00	0.9	290
20/04/06	16:00	0.9	80
20/04/06	17:00	1.3	56
20/04/06	18:00	0.9	11
20/04/06	19:00	0.4	6
20/04/06	20:00	1.3	330
20/04/06	21:00	1.3	27
20/04/06	22:00	1.3	3
20/04/06	23:00	1.3	2
20/04/08	0:00	0	1
20/04/08	1:00	0	354
20/04/08	2:00	0	355
20/04/08	3:00	0	48
20/04/08	4:00	0	73
20/04/08	5:00	0.9	50
20/04/08	6:00	0.4	31
20/04/08	7:00	0.9	52
20/04/08	8:00	1.3	84
20/04/08	9:00	1.3	99
20/04/08	10:00	1.3	99
20/04/08	11:00	0.9	95
20/04/08	12:00	1.3	90
20/04/08	13:00	1.8	86
20/04/08	14:00	1.8	128
20/04/08	15:00	2.7	124
20/04/08	16:00	0.9	84
20/04/08	17:00	1.3	91

20/04/08	18:00	0.9	81
20/04/08	19:00	0.9	68
20/04/08	20:00	0.9	98
20/04/08	21:00	1.8	80
20/04/08	22:00	1.8	93
20/04/08	23:00	0.9	96
20/04/09	0:00	0.9	78
20/04/09	1:00	0.9	54
20/04/09	2:00	0.4	51
20/04/09	3:00	0.4	21
20/04/09	4:00	0.4	53
20/04/09	5:00	0.4	41
20/04/09	6:00	0.4	54
20/04/09	7:00	0	65
20/04/09	8:00	0.4	79
20/04/09	9:00	0.9	86
20/04/09	10:00	1.3	92
20/04/09	11:00	1.3	163
20/04/09	12:00	1.3	226
20/04/09	13:00	1.8	214
20/04/09	14:00	1.8	197
20/04/09	15:00	2.2	206
20/04/09	16:00	1.3	88
20/04/09	17:00	1.3	94
20/04/09	18:00	1.3	45
20/04/09	19:00	1.3	40
20/04/09	20:00	1.3	56
20/04/09	21:00	1.8	101
20/04/09	22:00	1.3	75
20/04/09	23:00	0.9	79
20/04/11	0:00	1.3	94
20/04/11	1:00	1.3	61
20/04/11	2:00	1.3	65
20/04/11	3:00	0.9	55
20/04/11	4:00	0.9	87
20/04/11	5:00	1.3	100
20/04/11	6:00	1.3	98
20/04/11	7:00	0.9	73
20/04/11	8:00	0.9	54
20/04/11	9:00	0.4	63
20/04/11	10:00	0.4	87
20/04/11	11:00	0.9	50
20/04/11	12:00	0.4	51
20/04/11	13:00	0.9	37
20/04/11	14:00	0.4	74
20/04/11	15:00	0.4	56
20/04/11	16:00	0.4	78
20/04/11	17:00	0.4	77
20/04/11	18:00	0.9	64
20/04/11	19:00	0.4	68
20/04/11	20:00	0.4	58
20/04/11	21:00	0	65
20/04/11	22:00	0.9	311
20/04/11	23:00	2.2	325
20/04/12	0:00	3.1	340
20/04/12	1:00	2.2	28
20/04/12	2:00	1.8	23
20/04/12	3:00	0.4	22

20/04/12	4:00	1.3	316
20/04/12	5:00	2.2	309
20/04/12	6:00	2.2	329
20/04/12	7:00	2.7	308
20/04/12	8:00	2.2	326
20/04/12	9:00	1.8	18
20/04/12	10:00	2.2	341
20/04/12	11:00	2.2	347
20/04/12	12:00	3.1	328
20/04/12	13:00	2.2	343
20/04/12	14:00	2.2	315
20/04/12	15:00	2.7	329
20/04/12	16:00	2.2	316
20/04/12	17:00	1.3	33
20/04/12	18:00	1.8	8
20/04/12	19:00	2.2	342
20/04/12	20:00	1.3	331
20/04/12	21:00	1.3	326
20/04/12	22:00	0.9	342
20/04/12	23:00	0.9	316
20/04/14	0:00	0	24
20/04/14	1:00	0	25
20/04/14	2:00	0	6
20/04/14	3:00	0	347
20/04/14	4:00	0	350
20/04/14	5:00	1.3	309
20/04/14	6:00	0.4	347
20/04/14	7:00	0	333
20/04/14	8:00	0	123
20/04/14	9:00	0	104
20/04/14	10:00	0	102
20/04/14	11:00	0.4	127
20/04/14	12:00	0.9	139
20/04/14	13:00	1.3	96
20/04/14	14:00	1.3	80
20/04/14	15:00	1.3	142
20/04/14	16:00	0.9	200
20/04/14	17:00	1.3	212
20/04/14	18:00	1.3	197
20/04/14	19:00	0.4	119
20/04/14	20:00	0.9	83
20/04/14	21:00	0.9	139
20/04/14	22:00	0.4	61
20/04/14	23:00	0.4	83
20/04/15	0:00	0	72
20/04/15	1:00	0.4	316
20/04/15	2:00	0.9	344
20/04/15	3:00	0.4	310
20/04/15	4:00	0.4	303
20/04/15	5:00	0	312
20/04/15	6:00	0.9	304
20/04/15	7:00	0.4	322
20/04/15	8:00	0	318
20/04/15	9:00	0.4	128
20/04/15	10:00	1.8	194
20/04/15	11:00	1.8	214
20/04/15	12:00	2.2	192
20/04/15	13:00	1.8	230

20/04/15	14:00	1.8	207
20/04/15	15:00	1.8	196
20/04/15	16:00	1.3	220
20/04/15	17:00	1.8	195
20/04/15	18:00	1.8	203
20/04/15	19:00	0.9	311
20/04/15	20:00	0.9	37
20/04/15	21:00	0.9	51
20/04/15	22:00	0.4	43
20/04/15	23:00	0.4	70
20/04/17	0:00	0.9	84
20/04/17	1:00	0.4	61
20/04/17	2:00	0.4	69
20/04/17	3:00	0	42
20/04/17	4:00	0.4	54
20/04/17	5:00	0.4	36
20/04/17	6:00	0.4	53
20/04/17	7:00	0.9	48
20/04/17	8:00	0.9	49
20/04/17	9:00	1.3	91
20/04/17	10:00	1.3	96
20/04/17	11:00	1.3	98
20/04/17	12:00	1.3	94
20/04/17	13:00	2.2	123
20/04/17	14:00	1.8	195
20/04/17	15:00	1.8	196
20/04/17	16:00	1.3	196
20/04/17	17:00	1.3	145
20/04/17	18:00	0.9	100
20/04/17	19:00	0.9	50
20/04/17	20:00	1.3	41
20/04/17	21:00	0.9	66
20/04/17	22:00	0.9	63
20/04/17	23:00	0.9	55
20/04/18	0:00	0.9	45
20/04/18	1:00	0.4	78
20/04/18	2:00	0.4	48
20/04/18	3:00	0.4	18
20/04/18	4:00	0.4	34
20/04/18	5:00	0.4	45
20/04/18	6:00	0.4	64
20/04/18	7:00	0.4	46
20/04/18	8:00	0.9	56
20/04/18	9:00	0.9	86
20/04/18	10:00	0.9	66
20/04/18	11:00	1.3	84
20/04/18	12:00	1.3	91
20/04/18	13:00	1.3	100
20/04/18	14:00	1.3	197
20/04/18	15:00	0.9	61
20/04/18	16:00	0.9	79
20/04/18	17:00	0.4	99
20/04/18	18:00	0.9	72
20/04/18	19:00	1.3	69
20/04/18	20:00	0.9	49
20/04/18	21:00	0.9	48
20/04/18	22:00	0.9	46
20/04/18	23:00	1.3	48

20/04/20	0:00	0	240
20/04/20	1:00	0	141
20/04/20	2:00	0	160
20/04/20	3:00	0.4	280
20/04/20	4:00	0.4	153
20/04/20	5:00	0	161
20/04/20	6:00	0	149
20/04/20	7:00	0	146
20/04/20	8:00	0	151
20/04/20	9:00	0.4	112
20/04/20	10:00	0.9	121
20/04/20	11:00	1.3	203
20/04/20	12:00	1.3	206
20/04/20	13:00	2.2	209
20/04/20	14:00	1.3	135
20/04/20	15:00	1.3	142
20/04/20	16:00	1.3	168
20/04/20	17:00	1.8	81
20/04/20	18:00	1.3	92
20/04/20	19:00	1.3	59
20/04/20	20:00	0.9	75
20/04/20	21:00	0.9	49
20/04/20	22:00	0.9	42
20/04/20	23:00	0.9	54
20/04/21	0:00	0.9	75
20/04/21	1:00	0.9	53
20/04/21	2:00	0.4	43
20/04/21	3:00	0.9	57
20/04/21	4:00	0.9	63
20/04/21	5:00	0.9	70
20/04/21	6:00	0.4	39
20/04/21	7:00	0.9	46
20/04/21	8:00	0.9	56
20/04/21	9:00	1.3	91
20/04/21	10:00	1.3	35
20/04/21	11:00	1.3	36
20/04/21	12:00	2.7	122
20/04/21	13:00	2.7	134
20/04/21	14:00	2.2	131
20/04/21	15:00	2.7	132
20/04/21	16:00	2.7	141
20/04/21	17:00	1.8	119
20/04/21	18:00	1.3	72
20/04/21	19:00	0.9	68
20/04/21	20:00	1.3	74
20/04/21	21:00	1.3	45
20/04/21	22:00	0.9	54
20/04/21	23:00	0.9	44
20/04/23	0:00	3.1	56
20/04/23	1:00	3.6	79
20/04/23	2:00	3.1	79
20/04/23	3:00	0.9	92
20/04/23	4:00	0	83
20/04/23	5:00	0.9	30
20/04/23	6:00	0.4	31
20/04/23	7:00	0	50
20/04/23	8:00	0.4	86
20/04/23	9:00	0.9	58

20/04/23	10:00	0.9	82
20/04/23	11:00	0	82
20/04/23	12:00	0.9	26
20/04/23	13:00	1.3	28
20/04/23	14:00	1.3	96
20/04/23	15:00	0.9	335
20/04/23	16:00	1.3	357
20/04/23	17:00	1.3	324
20/04/23	18:00	0.9	343
20/04/23	19:00	0.9	80
20/04/23	20:00	0.9	100
20/04/23	21:00	1.3	23
20/04/23	22:00	1.8	29
20/04/23	23:00	1.3	19
20/04/24	0:00	1.8	17
20/04/24	1:00	1.8	27
20/04/24	2:00	2.7	16
20/04/24	3:00	2.2	23
20/04/24	4:00	1.3	23
20/04/24	5:00	1.3	31
20/04/24	6:00	1.3	32
20/04/24	7:00	1.8	32
20/04/24	8:00	2.2	34
20/04/24	9:00	2.2	19
20/04/24	10:00	1.8	23
20/04/24	11:00	0.4	15
20/04/24	12:00	0.9	13
20/04/24	13:00	0.9	305
20/04/24	14:00	1.3	340
20/04/24	15:00	0.9	290
20/04/24	16:00	0.4	259
20/04/24	17:00	0	316
20/04/24	18:00	0.4	345
20/04/24	19:00	0.9	332
20/04/24	20:00	0.9	21
20/04/24	21:00	0.9	31
20/04/24	22:00	0.9	19
20/04/24	23:00	0.9	28
20/04/26	0:00	0.4	299
20/04/26	1:00	0	293
20/04/26	2:00	0	292
20/04/26	3:00	0.4	295
20/04/26	4:00	0	291
20/04/26	5:00	0.4	306
20/04/26	6:00	0.4	317
20/04/26	7:00	0	310
20/04/26	8:00	0	145
20/04/26	9:00	0.4	123
20/04/26	10:00	1.3	124
20/04/26	11:00	1.8	325
20/04/26	12:00	2.2	210
20/04/26	13:00	0.9	272
20/04/26	14:00	1.3	278
20/04/26	15:00	2.2	279
20/04/26	16:00	1.8	269
20/04/26	17:00	0.9	247
20/04/26	18:00	0.9	53
20/04/26	19:00	0.9	38

20/04/26	20:00	0.9	72
20/04/26	21:00	0	58
20/04/26	22:00	0.4	313
20/04/26	23:00	0.4	321
20/04/27	0:00	0	324
20/04/27	1:00	0	343
20/04/27	2:00	0	345
20/04/27	3:00	0.4	341
20/04/27	4:00	0	308
20/04/27	5:00	0	318
20/04/27	6:00	0	313
20/04/27	7:00	0	303
20/04/27	8:00	0	122
20/04/27	9:00	0.4	114
20/04/27	10:00	0.9	82
20/04/27	11:00	1.8	135
20/04/27	12:00	2.2	135
20/04/27	13:00	1.8	139
20/04/27	14:00	0.9	209
20/04/27	15:00	0.9	100
20/04/27	16:00	1.8	202
20/04/27	17:00	1.3	209
20/04/27	18:00	0.9	124
20/04/27	19:00	0.9	72
20/04/27	20:00	0.4	45
20/04/27	21:00	0.9	44
20/04/27	22:00	0.9	54
20/04/27	23:00	0.4	67
20/04/29	0:00	1.3	84
20/04/29	1:00	1.3	46
20/04/29	2:00	0.9	44
20/04/29	3:00	0.9	37
20/04/29	4:00	0.9	32
20/04/29	5:00	0.9	47
20/04/29	6:00	0.9	44
20/04/29	7:00	0.9	47
20/04/29	8:00	0.9	40
20/04/29	9:00	1.3	128
20/04/29	10:00	1.8	118
20/04/29	11:00	2.2	126
20/04/29	12:00	2.2	129
20/04/29	13:00	1.8	126
20/04/29	14:00	1.8	101
20/04/29	15:00	1.8	234
20/04/29	16:00	2.2	213
20/04/29	17:00	0.9	297
20/04/29	18:00	0.9	85
20/04/29	19:00	0.9	44
20/04/29	20:00	1.3	49
20/04/29	21:00	0.9	57
20/04/29	22:00	0.4	96
20/04/29	23:00	0	51
20/04/30	0:00	0.4	50
20/04/30	1:00	0	65
20/04/30	2:00	0	355
20/04/30	3:00	0	2
20/04/30	4:00	0	7
20/04/30	5:00	0.4	23

20/04/30	6:00	0	22
20/04/30	7:00	0.4	51
20/04/30	8:00	0.9	96
20/04/30	9:00	1.3	100
20/04/30	10:00	1.3	84
20/04/30	11:00	0.9	86
20/04/30	12:00	1.3	123
20/04/30	13:00	2.2	199
20/04/30	14:00	1.8	210
20/04/30	15:00	1.3	201
20/04/30	16:00	1.3	220
20/04/30	17:00	0.9	87
20/04/30	18:00	1.3	84
20/04/30	19:00	0.9	64
20/04/30	20:00	0.9	60
20/04/30	21:00	1.3	70
20/04/30	22:00	1.3	54
20/04/30	23:00	1.3	42

Appendix I

Impact Dolphin Monitoring Survey

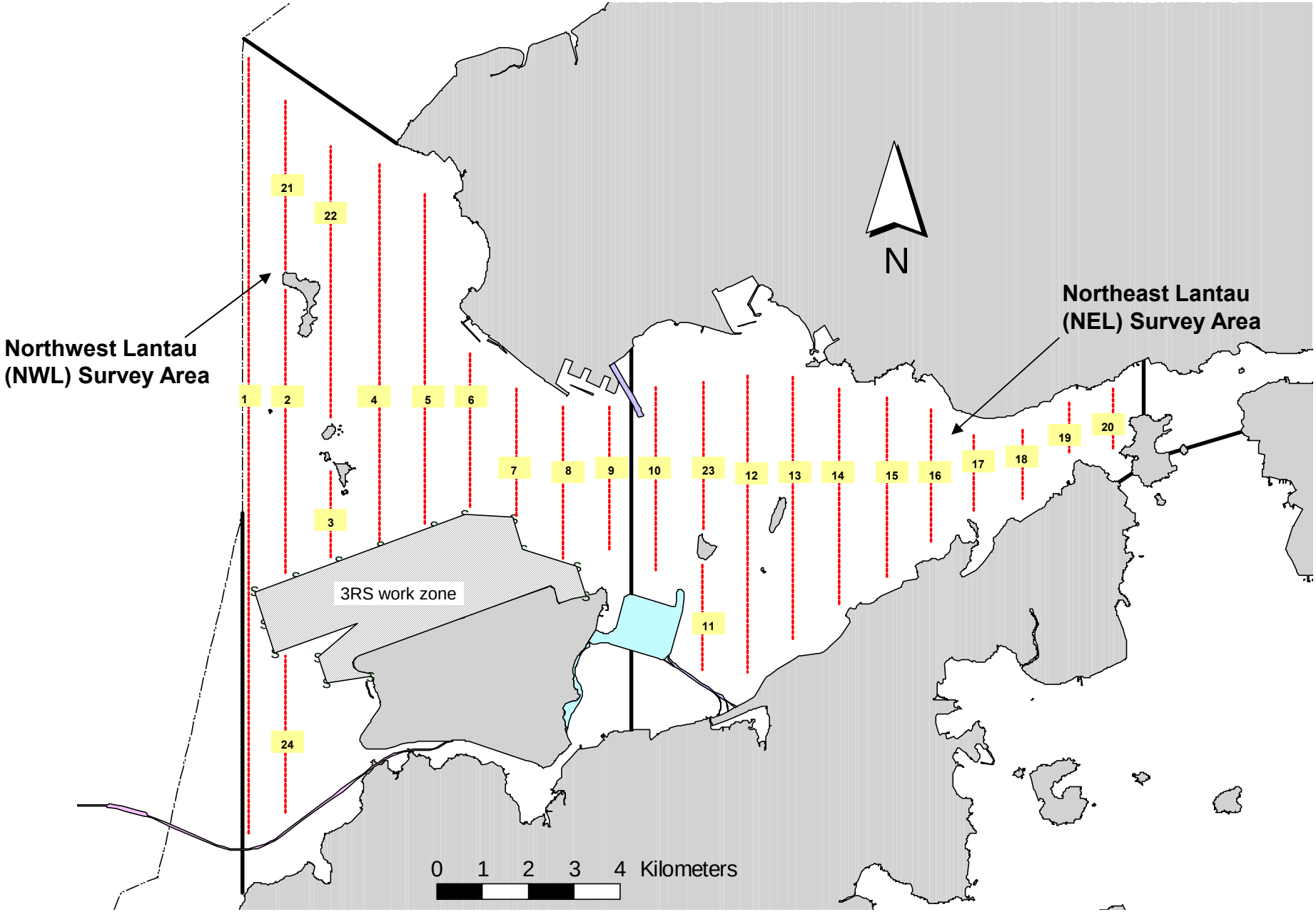


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas

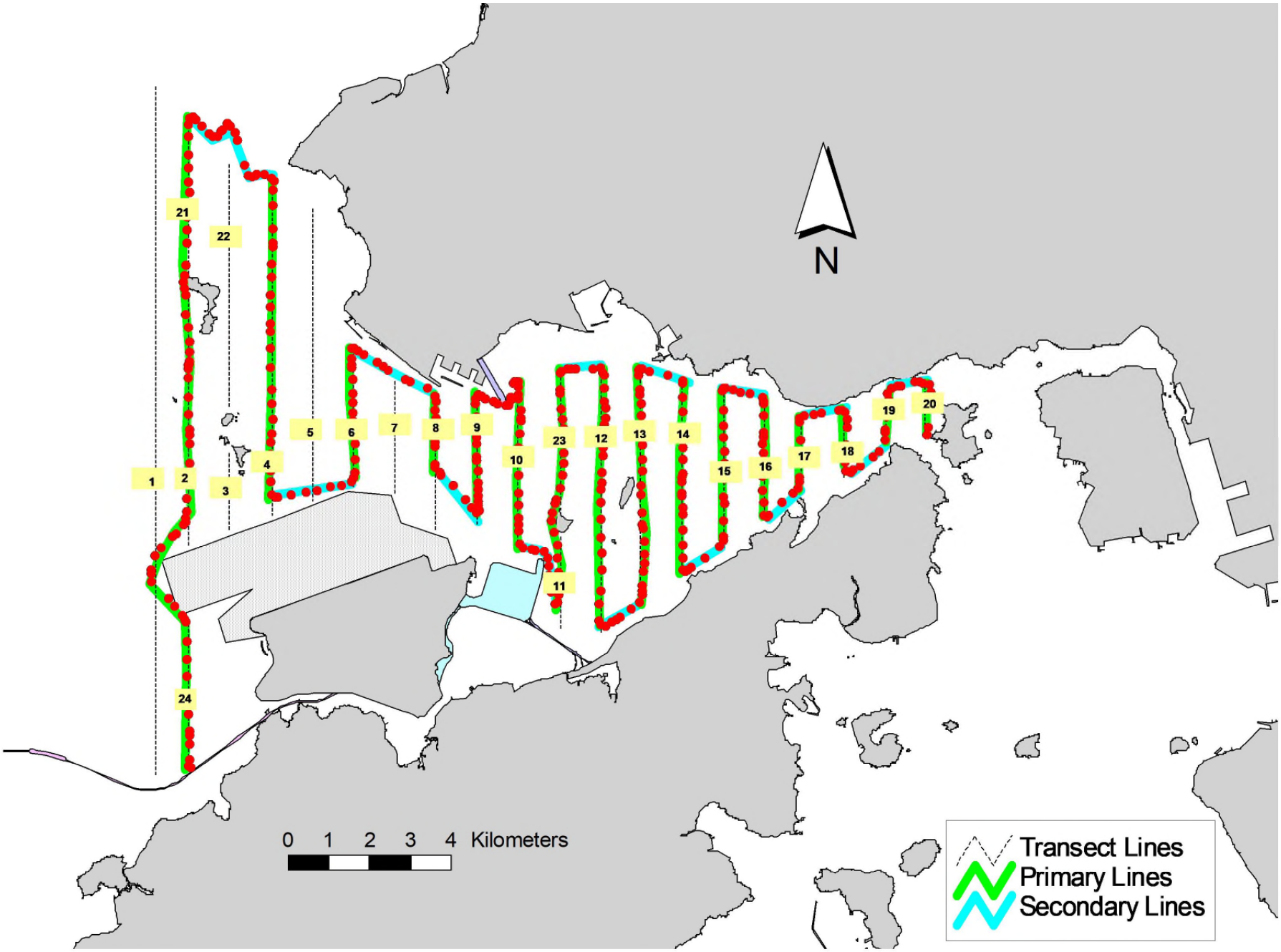


Figure 2. Survey Route on April 8th, 2020

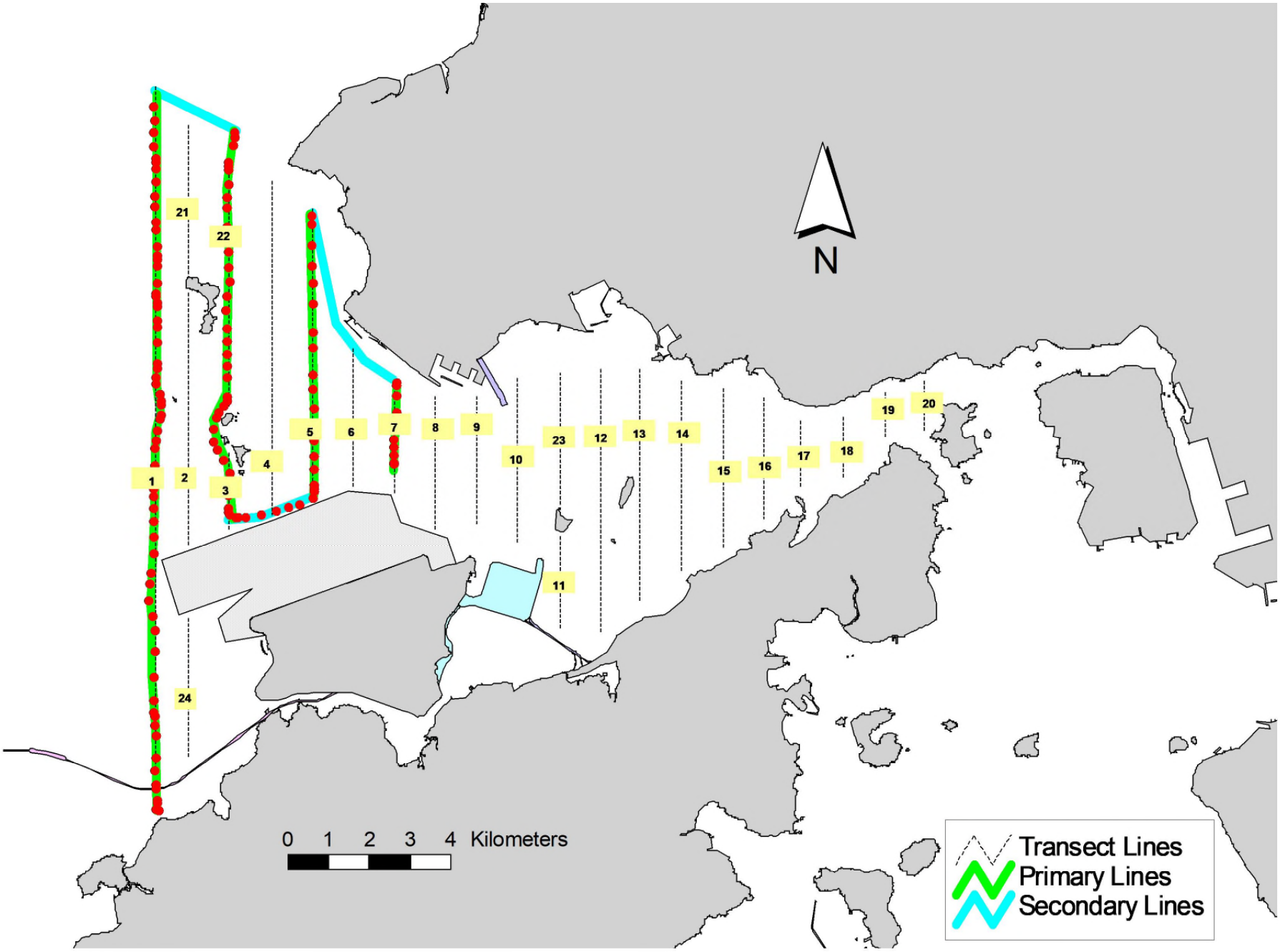


Figure 3. Survey Route on April 14th, 2020

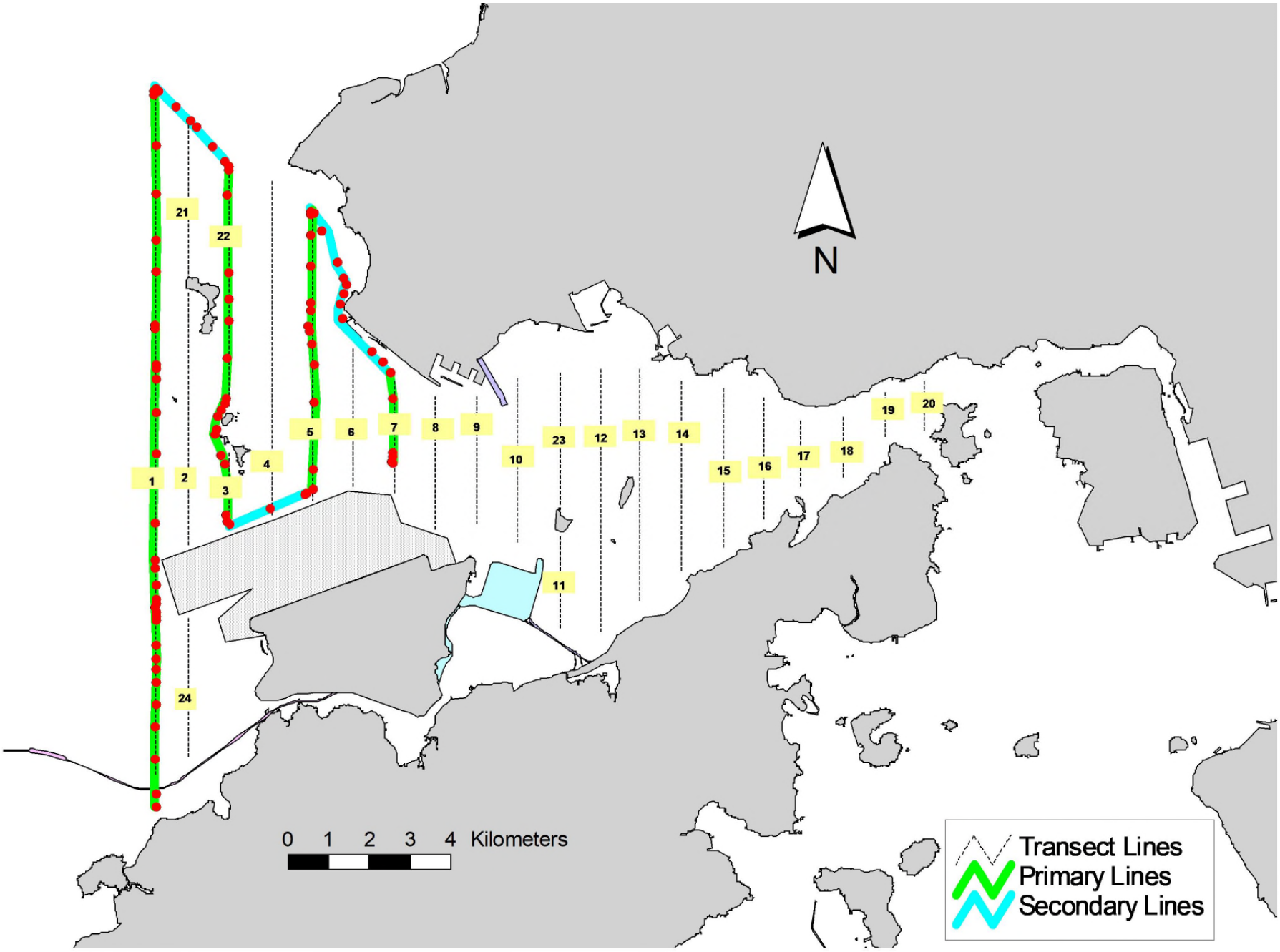


Figure 4. Survey Route on April 21st, 2020

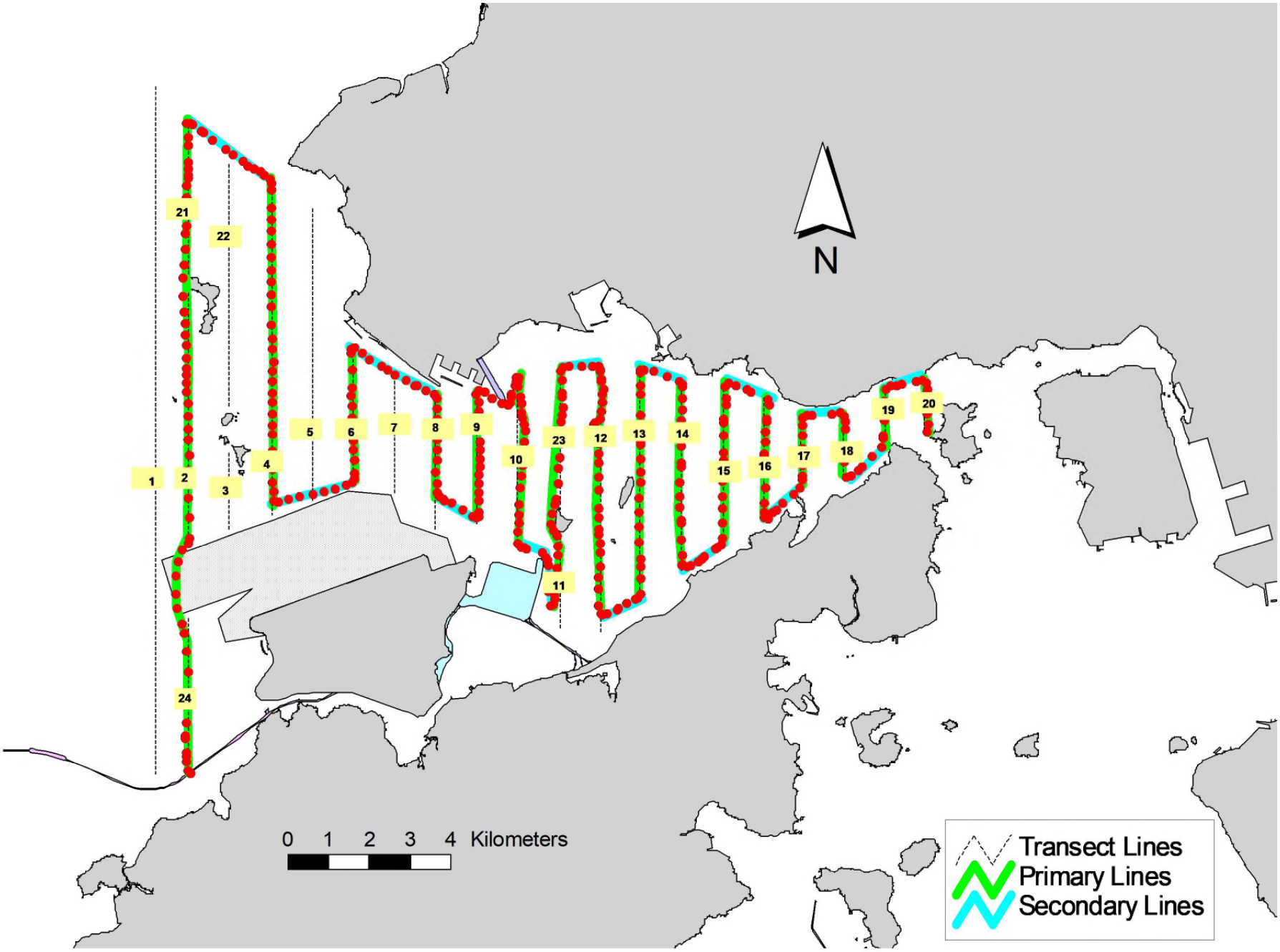


Figure 5. Survey Route on April 22nd, 2020

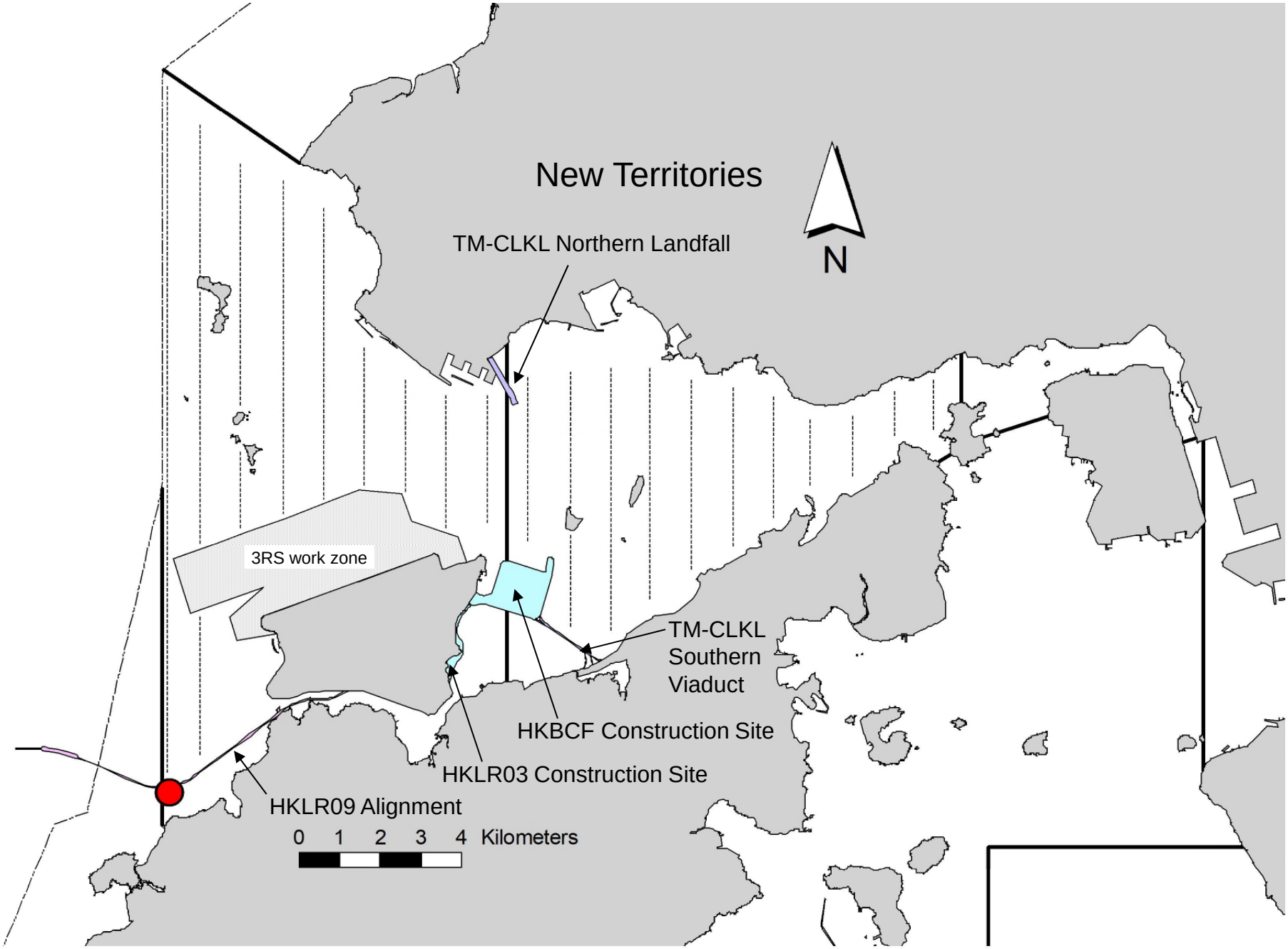


Figure 6. Distribution of Chinese White Dolphin Sightings during April 2020 Monitoring Surveys

Appendix I. TMCLKL Survey Effort Database (April 2020)

(Abbreviations: BEAU = Beaufort Sea State; P = Primary Line Effort; S = Secondary Line Effort)

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
8-Apr-20	NW LANTAU	1	10.88	SPRING	STANDARD36826	TMCLKL	P
8-Apr-20	NW LANTAU	2	11.06	SPRING	STANDARD36826	TMCLKL	P
8-Apr-20	NW LANTAU	3	4.40	SPRING	STANDARD36826	TMCLKL	P
8-Apr-20	NW LANTAU	2	12.06	SPRING	STANDARD36826	TMCLKL	S
8-Apr-20	NW LANTAU	3	1.50	SPRING	STANDARD36826	TMCLKL	S
8-Apr-20	NE LANTAU	1	1.70	SPRING	STANDARD36826	TMCLKL	P
8-Apr-20	NE LANTAU	2	18.30	SPRING	STANDARD36826	TMCLKL	P
8-Apr-20	NE LANTAU	3	15.66	SPRING	STANDARD36826	TMCLKL	P
8-Apr-20	NE LANTAU	1	1.10	SPRING	STANDARD36826	TMCLKL	S
8-Apr-20	NE LANTAU	2	7.05	SPRING	STANDARD36826	TMCLKL	S
8-Apr-20	NE LANTAU	3	5.19	SPRING	STANDARD36826	TMCLKL	S
14-Apr-20	NW LANTAU	1	1.46	SPRING	STANDARD36826	TMCLKL	P
14-Apr-20	NW LANTAU	2	31.85	SPRING	STANDARD36826	TMCLKL	P
14-Apr-20	NW LANTAU	2	3.95	SPRING	STANDARD36826	TMCLKL	S
21-Apr-20	NW LANTAU	1	1.20	SPRING	STANDARD36826	TMCLKL	P
21-Apr-20	NW LANTAU	2	19.06	SPRING	STANDARD36826	TMCLKL	P
21-Apr-20	NW LANTAU	3	11.81	SPRING	STANDARD36826	TMCLKL	P
21-Apr-20	NW LANTAU	1	1.80	SPRING	STANDARD36826	TMCLKL	S
21-Apr-20	NW LANTAU	2	9.33	SPRING	STANDARD36826	TMCLKL	S
22-Apr-20	NW LANTAU	3	19.50	SPRING	STANDARD36826	TMCLKL	P
22-Apr-20	NW LANTAU	4	8.95	SPRING	STANDARD36826	TMCLKL	P
22-Apr-20	NW LANTAU	3	7.42	SPRING	STANDARD36826	TMCLKL	S
22-Apr-20	NW LANTAU	4	3.33	SPRING	STANDARD36826	TMCLKL	S
22-Apr-20	NE LANTAU	2	4.00	SPRING	STANDARD36826	TMCLKL	P
22-Apr-20	NE LANTAU	3	31.97	SPRING	STANDARD36826	TMCLKL	P
22-Apr-20	NE LANTAU	2	3.50	SPRING	STANDARD36826	TMCLKL	S
22-Apr-20	NE LANTAU	3	9.53	SPRING	STANDARD36826	TMCLKL	S

Appendix II. TMCLKL Chinese White Dolphin Sighting Database (April 2020)

(Abberviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Association; P/S: Sighting Made on Primary/Secondary Lines)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
14-Apr-20	1	1002	1	NW LANTAU	2	210	ON	TMCLKL	815038	804702	SPRING	NONE	P

Appendix III. Individual dolphins identified during TMCLKL monitoring surveys in (April 2020)

ID#	DATE	STG#	AREA
WL268	14/04/20	1	NW LANTAU

Appendix IV. Photograph of Identified Individual Dolphin in April 2020 (TMCLKL)

Appendix J

Post-Construction Water Quality Monitoring Results

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
02-04-20	Mid-Ebb	CS4	Cloudy	Moderate	18:14	18.2	Surface	1.0	1	21.5	7.9	30.1	6.8	92.0	3.2	5.1	6.8	3.5	5.5
									2	21.6	8.0	30.1	6.8	92.0	3.6	5.7			
							Middle	9.1	1	21.5	7.9	30.4	6.8	91.8	3.2	5.1			
									2	21.5	8.0	30.4	6.7	90.5	3.6	5.1			
							Bottom	17.2	1	21.4	7.9	31.9	6.5	88.2	3.4	6.1	6.6		
									2	21.5	8.0	31.8	6.6	89.5	3.9	6.0			
		CS6	Cloudy	Moderate	19:15	9.2	Surface	1.0	1	21.5	8.0	30.6	6.7	90.5	8.4	5.0	6.7	5.5	4.4
									2	21.5	8.0	30.5	6.7	90.5	8.4	4.0			
							Middle	4.6	1	21.5	8.0	31.7	6.6	89.8	3.4	4.8			
									2	21.5	8.0	31.6	6.6	89.8	3.9	4.8			
							Bottom	8.2	1	21.4	8.0	32.1	6.6	90.4	4.3	4.2	6.7		
									2	21.5	8.0	32.1	6.7	90.9	4.4	3.8			
		CS(Mf)3(N)	Cloudy	Moderate	18:04	6.8	Surface	1.0	1	21.6	7.8	30.3	6.8	92.4	3.9	6.1	6.7	4.3	5.7
									2	21.6	8.0	30.3	6.8	92.4	3.4	5.2			
							Middle	3.4	1	21.5	7.8	30.4	6.7	90.8	4.0	5.2			
									2	21.6	8.0	30.4	6.5	88.7	3.5	5.9			
							Bottom	5.8	1	21.5	7.8	31.1	6.4	86.5	5.7	6.4	6.4		
									2	21.5	8.0	31.1	6.4	86.9	5.3	5.4			
		CS(Mf)5	Cloudy	Moderate	19:20	12.9	Surface	1.0	1	21.4	8.2	31.7	7.0	94.8	4.5	4.1	7.0	3.8	3.7
									2	21.2	8.2	32.1	7.1	95.3	4.1	4.7			
							Middle	6.5	1	21.3	8.2	32.4	6.9	94.3	3.7	3.4			
									2	21.2	8.2	32.8	7.1	94.8	3.7	4.0			
							Bottom	11.9	1	21.1	8.2	32.3	7.3	98.5	3.3	2.9	7.3		
									2	21.1	8.2	32.7	7.3	96.9	3.4	2.9			
		IS8(N)	Cloudy	Calm	18:11	4.1	Surface	1.0	1	21.4	8.2	29.7	7.0	93.7	13.2	20.6	7.1	12.2	18.4
									2	21.3	8.1	30.1	7.1	94.3	13.2	19.0			
							Bottom	3.1	1	21.4	8.2	29.7	6.9	93.3	11.1	17.8	7.0		
									2	21.2	8.1	30.1	7.1	94.2	11.1	16.1			
		IS12	Cloudy	Moderate	18:32	14.5	Surface	1.0	1	21.4	8.0	30.8	6.7	90.9	3.2	4.6	6.7	3.5	4.4
									2	21.5	8.0	30.7	6.7	90.9	3.7	5.3			
							Middle	7.3	1	21.5	8.0	31.1	6.6	90.1	3.1	4.4			
									2	21.5	8.0	31.1	6.6	89.9	3.6	4.3			
							Bottom	13.5	1	21.4	8.0	32.2	6.4	87.0	4.0	3.6	6.4		
									2	21.5	8.0	32.1	6.4	87.3	3.4	4.1			
		IS13	Cloudy	Moderate	18:38	10.8	Surface	1.0	1	21.4	8.0	30.1	6.8	91.2	3.4	4.3	6.6	7.4	3.9
									2	21.5	8.0	30.1	6.7	90.8	3.8	4.0			
							Middle	5.4	1	21.4	8.0	31.8	6.4	87.0	9.2	3.7			
									2	21.5	8.0	31.8	6.4	87.1	8.3	3.4			
							Bottom	9.8	1	21.4	8.0	31.9	6.4	87.5	10.3	3.3	6.4		
									2	21.5	8.0	31.9	6.4	87.7	9.2	4.4			
		IS14	Cloudy	Moderate	18:27	14.4	Surface	1.0	1	21.5	8.0	30.9	6.6	89.1	3.2	4.7	6.5	5.2	3.9
									2	21.6	8.0	30.9	6.6	89.0	2.8	4.1			
							Middle	7.2	1	21.4	8.0	31.6	6.4	87.1	3.8	4.0			
									2	21.5	8.0	31.5	6.4	87.1	3.3	3.6			
							Bottom	13.4	1	21.4	8.0	32.2	6.3	86.2	9.8	3.3	6.3		
									2	21.5	8.0	32.1	6.3	86.6	8.4	3.6			
		IS15	Cloudy	Moderate	18:43	10.6	Surface	1.0	1	21.4	8.0	30.9	6.6	89.3	3.6	5.8	6.6	4.4	5.2
									2	21.5	8.0	30.9	6.6	89.1	3.0	5.2			
							Middle	5.3	1	21.4	8.0	31.6	6.5	88.6	4.2	4.7			
									2	21.5	8.0	31.6	6.5	88.6	4.7	5.6			
							Bottom	9.6	1	21.4	8.0	31.9	6.5	88.8	6.0	4.7	6.5		
									2	21.5	8.0	31.9	6.5	89.2	5.0	5.3			
		IS17	Cloudy	Moderate	18:42	8.3	Surface	1.0	1	21.3	8.2	31.0	7.0	94.5	2.5	3.9	7.1	5.5	5.2
									2	21.1	8.1	31.4	7.2	95.1	2.3	3.5			
							Middle	4.2	1	21.2	8.2	30.9	7.0	94.4	5.1	6.0			
									2	21.1	8.1	31.3	7.2	94.8	5.5	5.7			
							Bottom	7.3	1	21.3	8.2	31.2	7.2	97.4	8.8	5.8	7.2		
									2	21.1	8.1	31.6	7.2	96.1	8.6	6.2			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		IS(Mf)9	Cloudy	Calm	18:05	3.5	Surface	1.0	1	21.3	8.2	28.2	7.2	96.3	5.7	5.6	7.3	8.6	7.6
									2	21.2	8.0	28.6	7.3	96.5	5.3	5.4			
							Bottom	2.5	1	21.3	8.1	29.2	7.2	96.0	11.9	9.9	7.2		
									2	21.2	7.9	29.6	7.2	96.2	11.5	9.3			
		IS(Mf)11	Cloudy	Moderate	18:50	11.0	Surface	1.0	1	21.3	8.2	30.8	7.0	95.1	2.6	2.9	7.1	3.5	3.9
									2	21.2	8.1	31.2	7.2	95.5	2.5	3.7			
							Middle	5.5	1	21.3	8.2	31.0	6.9	93.8	3.7	4.3			
									2	21.1	8.1	31.4	7.1	94.1	3.2	3.8			
							Bottom	10.0	1	21.0	8.2	31.8	7.0	95.1	4.8	4.2	7.1		
									2	21.1	8.1	32.1	7.2	95.2	4.1	4.2			
		IS(Mf)16	Cloudy	Moderate	18:35	5.8	Surface	1.0	1	21.3	8.2	30.0	7.1	94.7	6.6	8.3	7.2	9.9	11.7
									2	21.1	8.1	30.4	7.2	95.1	6.2	8.2			
							Bottom	4.8	1	21.3	8.2	31.0	7.0	93.9	13.3	14.7	7.1		
									2	21.1	8.1	31.5	7.1	94.4	13.4	15.4			
		SR4(N2)	Cloudy	Calm	18:17	3.9	Surface	1.0	1	21.4	8.2	29.3	7.0	93.6	11.4	15.7	7.1	11.3	15.1
									2	21.3	8.0	29.7	7.1	94.1	11.1	14.7			
							Bottom	2.9	1	21.4	8.2	29.1	7.1	95.6	11.4	15.0	7.2		
									2	21.3	8.0	29.5	7.2	94.4	11.1	14.8			
		SR4A	Cloudy	Calm	18:23	4.3	Surface	1.0	1	21.3	8.2	30.5	6.9	93.5	5.4	7.3	7.0	5.6	8.6
									2	21.2	8.1	30.9	7.1	93.9	5.8	8.6			
							Bottom	3.3	1	21.4	8.2	30.5	7.1	96.4	5.5	8.7	7.2		
									2	21.2	8.1	30.9	7.2	95.1	5.7	9.9			
		SR7	Cloudy	Moderate	19:00	4.2	Surface	1.0	1	21.3	8.2	30.8	7.1	96.0	3.5	3.0	7.2	4.5	4.0
									2	21.1	8.1	31.2	7.3	96.3	3.5	4.5			
							Bottom	3.2	1	21.3	8.2	30.8	7.3	98.3	5.9	4.7	7.4		
									2	21.2	8.1	31.2	7.4	97.6	5.1	3.8			
		SR8	Cloudy	Moderate	19:04	3.7	Surface	1.0	1	21.5	7.9	29.4	6.5	86.8	5.5	5.6	6.5	5.7	5.7
									2	21.6	8.0	29.4	6.5	87.2	5.8	4.6			
							Bottom	2.7	1	21.5	7.9	30.3	6.5	88.1	5.4	5.9	6.6		
									2	21.6	8.0	30.3	6.6	89.0	5.9	6.5			
		SR9	Cloudy	Moderate	18:50	3.2	Surface	1.0	1	21.4	7.9	30.8	6.7	91.0	3.6	3.4	6.7	3.5	3.9
									2	21.5	8.0	30.8	6.7	91.1	3.1	3.7			
							Bottom	2.2	1	21.4	7.9	31.4	6.8	92.1	3.4	4.4	6.8		
									2	21.5	8.0	31.4	6.8	92.3	3.9	4.2			
		SR10A(N)	Cloudy	Moderate	19:50	15.8	Surface	1.0	1	21.4	8.2	32.9	6.9	95.0	3.9	3.0	7.0	4.2	3.1
									2	21.3	8.2	33.3	7.1	95.4	3.9	3.6			
							Middle	7.9	1	21.3	8.2	32.9	6.9	95.0	4.3	2.4			
									2	21.2	8.2	33.3	7.1	95.7	4.4	3.3			
							Bottom	14.8	1	21.1	8.2	33.2	7.0	95.5	4.3	3.1	7.1		
									2	21.1	8.2	33.6	7.1	95.2	4.2	3.4			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
02-04-20	Mid-Flood	CS4	Cloudy	Moderate	8:06	18.2	Surface	1.0	1	21.4	8.0	28.0	6.8	89.9	3.9	4.2	6.6	3.9	4.9
									2	21.3	8.0	28.0	6.8	90.1	4.3	4.2			
							Middle	9.1	1	21.6	8.0	30.6	6.3	85.6	3.5	5.4			
									2	21.5	8.0	30.6	6.3	85.6	3.8	5.0			
							Bottom	17.2	1	21.5	8.0	31.3	6.3	85.2	3.7	5.0	6.3		
									2	21.5	7.9	31.3	6.3	85.2	4.0	5.4			
		CS6	Cloudy	Moderate	6:49	9.5	Surface	1.0	1	21.4	8.0	29.5	6.6	88.2	3.2	3.6	6.6	3.6	4.6
									2	21.4	7.8	29.4	6.6	88.2	3.9	3.2			
							Middle	4.8	1	21.5	8.0	31.8	6.5	88.0	3.9	5.1			
									2	21.4	7.9	31.8	6.5	87.9	3.5	4.8			
							Bottom	8.5	1	21.5	8.0	32.3	6.4	87.8	3.3	5.1	6.4		
									2	21.4	8.0	32.2	6.4	87.7	3.9	5.5			
		CS(Mf)3(N)	Cloudy	Moderate	8:19	7.0	Surface	1.0	1	21.4	8.0	27.7	6.8	90.0	5.2	5.2	6.7	6.5	5.4
									2	21.3	8.0	27.6	6.8	90.1	5.6	5.6			
							Middle	3.5	1	21.5	8.1	28.2	6.6	88.5	6.8	5.0			
									2	21.4	8.0	28.1	6.6	88.4	7.1	5.4			
							Bottom	6.0	1	21.5	8.1	31.5	6.5	88.0	6.5	5.3	6.5		
									2	21.4	8.0	31.5	6.5	88.0	7.8	5.7			
		CS(Mf)5	Cloudy	Moderate	6:56	12.7	Surface	1.0	1	20.1	8.0	31.2	7.1	93.4	2.7	2.6	7.0	3.1	4.0
									2	21.2	8.1	30.9	6.9	93.1	2.9	2.7			
							Middle	6.4	1	20.1	8.0	33.1	7.0	94.0	3.0	3.0			
									2	21.2	8.1	32.6	6.9	94.0	2.9	4.2			
							Bottom	11.7	1	19.9	8.0	33.1	7.0	93.9	3.7	6.0	7.1		
									2	20.9	7.9	32.4	7.1	95.5	3.5	5.5			
		IS8(N)	Cloudy	Calm	8:05	4.0	Surface	1.0	1	19.8	8.1	28.8	7.2	93.8	5.3	6.8	7.2	5.0	6.6
									2	20.9	8.2	28.4	7.1	93.6	4.4	5.9			
							Bottom	3.0	1	19.8	8.1	28.7	7.2	93.8	5.4	7.0	7.2		
									2	21.0	8.2	28.4	7.1	94.2	5.0	6.7			
		IS12	Cloudy	Moderate	7:44	14.7	Surface	1.0	1	21.4	8.0	29.1	6.6	88.9	3.0	2.1	6.6	3.3	3.1
									2	21.3	7.9	29.1	6.7	89.1	3.4	2.5			
							Middle	7.4	1	21.4	8.1	30.1	6.5	87.5	3.1	2.9			
									2	21.4	7.9	30.1	6.5	87.6	3.5	2.9			
							Bottom	13.7	1	21.5	8.1	31.9	6.3	85.3	3.3	4.1	6.3		
									2	21.4	7.9	31.9	6.3	85.4	3.5	4.1			
		IS13	Cloudy	Moderate	7:37	11.4	Surface	1.0	1	21.3	8.0	28.4	6.7	89.1	3.2	3.7	6.6	3.5	3.4
									2	21.3	7.9	28.4	6.7	89.1	3.3	3.5			
							Middle	5.7	1	21.4	8.1	30.9	6.5	87.3	3.7	4.4			
									2	21.3	7.9	30.9	6.5	87.4	3.1	2.8			
							Bottom	10.4	1	21.4	8.1	31.1	6.4	86.7	3.5	3.5	6.4		
									2	21.4	7.9	31.6	6.3	86.1	3.9	2.6			
		IS14	Cloudy	Moderate	7:51	14.0	Surface	1.0	1	21.4	8.0	29.2	6.6	88.9	3.3	4.3	6.5	4.9	3.7
									2	21.4	7.9	29.2	6.7	89.1	3.7	4.0			
							Middle	7.0	1	21.5	8.1	30.5	6.4	86.3	3.9	3.0			
									2	21.5	7.9	30.5	6.4	86.4	4.2	3.0			
							Bottom	13.0	1	21.5	8.1	32.2	6.2	84.1	6.6	4.0	6.2		
									2	21.4	8.0	32.2	6.2	84.1	7.7	3.8			
		IS15	Cloudy	Moderate	7:30	10.3	Surface	1.0	1	21.4	8.0	28.8	6.5	87.4	3.4	2.3	6.4	5.2	3.5
									2	21.3	7.9	28.8	6.6	87.7	3.5	2.5			
							Middle	5.2	1	21.5	8.0	30.5	6.3	85.4	4.2	3.2			
									2	21.4	7.9	30.5	6.3	85.6	5.0	3.5			
							Bottom	9.3	1	21.5	8.0	31.4	6.2	84.9	7.6	4.5	6.3		
									2	21.4	7.9	31.4	6.3	84.8	7.2	4.9			
		IS17	Cloudy	Moderate	7:35	8.5	Surface	1.0	1	20.0	8.1	30.9	7.1	94.0	3.4	3.7	7.1	2.9	3.3
									2	21.1	8.2	30.5	7.0	93.9	3.4	4.6			
							Middle	4.3	1	20.0	8.1	31.3	7.1	94.0	2.6	4.3			
									2	21.1	8.2	30.9	7.0	94.0	3.0	3.7			
							Bottom	7.5	1	20.1	8.1	31.8	7.2	95.4	2.5	1.8	7.2		
									2	21.0	8.2	31.4	7.2	96.9	2.7	1.5			
		IS(Mf)9	Cloudy	Calm	8:13	3.6	Surface	1.0	1	19.9	8.2	28.1	7.4	95.5	6.7	2.8	7.4	5.9	3.2
									2	20.9	8.2	27.9	7.3	96.0	5.5	2.7			
							Bottom	2.6	1	19.8	8.2	28.1	7.5	96.8	5.2	3.2	7.5		
									2	20.9	8.2	27.8	7.5	98.3	6.0	4.0			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		IS(Mf)11	Cloudy	Moderate	7:27	10.8	Surface	1.0	1	20.2	8.1	30.3	7.0	92.6	3.8	4.4	6.9	6.3	6.5
									2	21.3	8.2	29.9	6.9	92.1	3.4	3.8			
							Middle	5.4	1	20.2	8.1	31.1	6.9	91.5	4.5	6.0			
									2	21.3	8.2	30.7	6.9	92.6	4.4	5.7			
							Bottom	9.8	1	20.0	8.1	31.1	7.2	94.7	10.6	9.7	7.2		
									2	21.3	8.2	30.8	7.1	95.7	10.8	9.2			
		IS(Mf)16	Cloudy	Moderate	7:43	5.6	Surface	1.0	1	20.0	8.1	29.1	7.2	94.3	4.6	3.6	7.2	6.1	4.0
									2	21.1	8.2	28.7	7.1	94.1	3.9	4.8			
							Bottom	4.6	1	20.0	8.1	30.2	7.3	95.4	8.1	3.5	7.3		
									2	21.1	8.2	29.8	7.3	97.2	7.7	4.0			
		SR4(N2)	Cloudy	Calm	7:59	3.7	Surface	1.0	1	19.9	8.1	28.9	7.2	93.3	6.3	3.0	7.1	5.4	3.7
									2	21.0	8.2	28.5	7.0	92.8	6.9	3.6			
							Bottom	2.7	1	19.9	8.1	29.4	7.2	94.5	4.1	3.9	7.2		
									2	21.1	8.2	29.0	7.2	96.3	4.3	4.1			
		SR4A	Cloudy	Calm	7:53	4.2	Surface	1.0	1	19.9	8.1	29.0	7.2	93.6	4.2	3.4	7.2	4.7	3.5
									2	20.9	8.2	28.7	7.1	94.1	4.4	3.0			
							Bottom	3.2	1	19.8	8.1	29.4	7.3	95.3	5.2	3.3	7.3		
									2	21.0	8.2	29.1	7.3	96.8	5.1	4.2			
		SR7	Cloudy	Moderate	7:20	3.9	Surface	1.0	1	20.1	8.1	31.0	7.1	94.0	4.0	4.4	7.1	4.2	4.8
									2	21.2	8.2	30.6	7.0	93.5	4.8	3.5			
							Bottom	2.9	1	19.9	8.1	31.3	7.2	94.3	3.7	5.6	7.2		
									2	21.1	8.2	30.8	7.1	94.9	4.1	5.7			
		SR8	Cloudy	Moderate	7:05	3.7	Surface	1.0	1	21.4	8.0	29.2	6.4	85.4	3.6	4.2	6.4	4.1	4.1
									2	21.4	7.8	29.3	6.4	85.4	4.2	3.3			
							Bottom	2.7	1	21.5	8.0	29.6	6.3	85.0	4.6	4.7	6.3		
									2	21.4	7.8	29.7	6.3	85.0	4.1	4.0			
		SR9	Cloudy	Moderate	7:21	3.1	Surface	1.0	1	21.4	8.0	28.3	6.7	89.6	3.3	2.8	6.7	4.0	3.2
									2	21.3	7.9	28.3	6.7	89.5	3.7	2.7			
							Bottom	2.1	1	21.4	8.0	28.8	6.7	89.4	4.3	3.2	6.7		
									2	21.4	7.9	28.8	6.7	89.0	4.8	4.0			
		SR10A(N)	Cloudy	Moderate	6:24	16.1	Surface	1.0	1	20.1	8.1	32.5	7.0	93.2	2.5	2.8	7.0	2.4	4.4
									2	21.2	8.1	32.0	6.9	93.6	2.3	2.6			
							Middle	8.1	1	20.1	8.0	33.2	7.0	93.1	2.7	3.7			
									2	21.3	8.1	32.8	6.9	93.6	2.5	4.0			
							Bottom	15.1	1	20.1	8.0	33.3	7.0	93.7	2.5	6.8	7.0		
									2	21.2	8.0	33.0	7.0	94.9	2.1	6.5			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
04-04-20	Mid-Ebb	CS4	Cloudy	Moderate	10:34	18.4	Surface	1.0	1	21.5	8.1	27.5	7.2	95.1	5.8	3.2	7.3	6.5	3.1
									2	21.5	8.1	28.0	7.2	96.0	6.3	3.2			
							Middle	9.2	1	21.4	8.1	27.5	7.3	96.3	6.3	3.0			
									2	21.4	8.1	28.0	7.3	97.3	6.7	3.1			
							Bottom	17.4	1	21.3	8.1	27.8	7.5	98.8	7.7	3.0	7.6		
									2	21.1	8.1	28.4	7.6	100.3	6.4	3.0			
		CS6	Cloudy	Moderate	9:14	9.2	Surface	1.0	1	21.4	8.0	31.5	6.7	91.5	3.8	4.0	6.8	3.5	3.6
									2	21.4	8.1	32.0	6.8	92.3	3.4	3.7			
							Middle	4.6	1	21.4	8.0	31.5	6.8	92.1	3.9	3.5			
									2	21.4	8.1	32.0	6.8	92.9	3.3	3.8			
							Bottom	8.2	1	21.4	8.0	31.4	6.8	92.0	3.2	3.4	6.8		
									2	21.4	8.1	31.9	6.8	92.7	3.3	3.3			
		CS(Mf)3(N)	Cloudy	Moderate	10:45	7.0	Surface	1.0	1	21.5	8.1	26.0	7.2	94.3	5.7	3.0	7.2	6.7	2.9
									2	21.5	8.1	26.5	7.2	95.4	5.2	3.0			
							Middle	3.5	1	21.4	8.1	26.0	7.2	94.3	8.3	2.8			
									2	21.5	8.1	26.4	7.2	95.3	7.2	2.9			
							Bottom	6.0	1	21.4	8.1	26.9	7.1	94.1	7.0	2.9	7.2		
									2	21.4	8.1	27.3	7.2	94.9	6.7	2.8			
		CS(Mf)5	Cloudy	Moderate	9:36	12.7	Surface	1.0	1	21.4	8.1	30.6	6.6	89.8	2.5	1.9	6.6	3.4	2.5
									2	21.4	8.0	30.6	6.7	89.9	2.8	2.1			
							Middle	6.4	1	21.4	8.1	32.2	6.5	88.4	3.4	2.6			
									2	21.3	8.0	32.2	6.5	88.1	3.9	2.4			
							Bottom	11.7	1	21.4	8.1	32.2	6.5	88.9	3.6	3.1	6.5		
									2	21.3	8.0	32.2	6.5	88.5	3.9	2.8			
		IS8(N)	Rainy	Calm	10:44	4.1	Surface	1.0	1	21.4	8.1	29.2	6.8	90.7	3.8	4.5	6.8	5.6	5.5
									2	21.4	8.0	29.2	6.8	90.6	4.1	4.5			
							Bottom	3.1	1	21.3	8.1	29.9	6.8	91.5	6.9	6.6	6.8		
									2	21.3	8.0	29.9	6.8	91.0	7.5	6.2			
		IS12	Cloudy	Moderate	10:09	14.5	Surface	1.0	1	21.5	8.1	28.7	6.9	92.8	2.9	3.1	7.0	6.9	3.8
									2	21.5	8.1	29.2	7.0	94.0	3.2	2.8			
							Middle	7.3	1	21.4	8.1	28.2	6.9	92.0	9.7	3.6			
									2	21.4	8.2	28.7	7.0	93.3	10.3	3.4			
							Bottom	13.5	1	21.3	8.1	30.7	6.8	91.1	7.5	4.7	6.8		
									2	21.3	8.2	31.2	6.8	92.6	7.7	5.1			
		IS13	Cloudy	Moderate	10:01	100.5	Surface	1.0	1	21.4	8.1	31.6	6.9	93.2	5.8	2.9	6.9	4.6	4.0
									2	21.4	8.1	32.1	6.9	94.2	5.6	2.9			
							Middle	50.3	1	21.3	8.1	31.6	6.9	93.6	4.8	3.6			
									2	21.3	8.1	32.1	7.0	94.7	4.2	4.2			
							Bottom	99.5	1	21.2	8.1	31.0	7.0	94.0	3.6	4.8	7.0		
									2	21.2	8.1	31.5	7.0	94.9	3.4	5.3			
		IS14	Cloudy	Moderate	10:16	14.6	Surface	1.0	1	21.4	8.1	28.5	7.2	96.6	6.3	2.6	7.1	6.2	2.9
									2	21.4	8.1	28.9	7.3	97.4	6.4	2.7			
							Middle	7.3	1	21.4	8.1	28.4	7.0	93.3	7.6	2.8			
									2	21.4	8.1	29.0	7.0	94.3	7.3	2.8			
							Bottom	13.6	1	21.4	8.1	28.7	7.0	92.9	5.0	3.5	7.0		
									2	21.4	8.1	29.2	7.0	94.0	4.8	3.2			
		IS15	Cloudy	Moderate	9:55	10.1	Surface	1.0	1	21.4	8.1	30.9	6.9	92.9	3.1	2.3	6.9	4.7	2.7
									2	21.4	8.1	31.4	6.9	93.6	3.4	2.6			
							Middle	5.1	1	21.3	8.1	30.5	6.9	93.4	8.7	2.7			
									2	21.4	8.1	31.0	7.0	94.2	7.6	2.7			
							Bottom	9.1	1	21.0	8.1	30.5	6.9	92.6	2.9	2.7	6.9		
									2	21.1	8.1	31.0	6.9	93.3	2.7	2.9			
		IS17	Cloudy	Moderate	10:15	7.8	Surface	1.0	1	21.5	8.0	30.9	6.5	88.6	8.4	6.7	6.6	8.2	10.1
									2	21.4	7.9	30.9	6.5	88.5	8.5	7.0			
							Middle	3.9	1	21.4	8.0	31.2	6.6	89.0	9.6	11.2			
									2	21.4	7.9	31.2	6.6	88.7	9.1	11.8			
							Bottom	6.8	1	21.4	8.0	31.4	6.7	91.5	7.4	11.6	6.7		
									2	21.4	7.9	31.4	6.7	90.9	6.3	12.5			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		IS(Mf)9	Rainy	Calm	10:54	3.3	Surface	1.0	1	21.4	8.1	29.5	6.8	91.4	5.0	3.4	6.8	5.6	2.9
									2	21.4	7.9	29.5	6.8	91.3	5.2	3.3			
							Bottom	2.3	1	21.4	8.1	29.6	6.8	91.6	6.1	2.6	6.8		
									2	21.4	8.0	29.6	6.8	91.4	6.2	2.4			
		IS(Mf)11	Cloudy	Moderate	10:08	10.7	Surface	1.0	1	21.5	8.0	26.9	6.9	91.4	3.4	3.6	6.8	4.6	4.6
									2	21.4	7.9	26.9	6.9	91.3	3.8	3.8			
							Middle	5.4	1	21.5	8.0	30.3	6.6	89.1	5.0	4.7			
									2	21.4	7.9	30.3	6.6	89.0	5.2	5.0			
							Bottom	9.7	1	21.5	8.0	31.1	6.6	89.2	4.9	5.1	6.6		
									2	21.4	7.9	31.1	6.6	88.8	5.2	5.5			
		IS(Mf)16	Cloudy	Moderate	10:22	5.8	Surface	1.0	1	21.5	8.0	30.0	6.7	90.7	3.6	4.2	6.7	3.5	4.1
									2	21.4	7.9	30.0	6.7	90.5	4.0	4.1			
							Bottom	4.8	1	21.5	8.0	30.5	6.8	91.7	3.1	4.0	6.8		
									2	21.4	7.9	30.5	6.8	91.1	3.1	4.1			
		SR4(N2)	Rainy	Calm	10:38	4.6	Surface	1.0	1	21.5	8.0	29.5	6.6	88.1	6.4	4.9	6.6	7.1	5.3
									2	21.4	7.9	29.5	6.6	87.9	6.6	4.3			
							Bottom	3.6	1	21.4	8.0	29.9	6.6	89.4	7.5	6.2	6.6		
									2	21.4	7.9	29.9	6.6	89.1	7.7	5.8			
		SR4A	Rainy	Calm	10:32	4.8	Surface	1.0	1	21.5	8.0	29.2	6.7	89.3	3.4	2.7	6.7	4.7	3.4
									2	21.4	7.9	29.2	6.7	89.3	4.1	3.0			
							Bottom	3.8	1	21.4	8.0	30.0	6.5	87.0	5.9	4.0	6.5		
									2	21.4	7.9	30.1	6.4	86.5	5.5	3.9			
		SR7	Cloudy	Moderate	10:01	4.3	Surface	1.0	1	21.5	8.0	30.4	6.7	90.0	4.3	2.7	6.7	4.7	3.3
									2	21.4	7.8	30.4	6.6	89.5	4.4	2.4			
							Bottom	3.3	1	21.5	8.0	30.7	6.8	91.6	5.1	4.0	6.8		
									2	21.4	7.9	30.7	6.7	90.7	5.1	3.9			
		SR8	Cloudy	Moderate	9:33	3.6	Surface	1.0	1	21.3	8.1	30.6	7.0	94.9	4.0	2.9	7.1	4.2	3.3
									2	21.3	8.1	31.1	7.1	96.1	4.0	3.3			
							Bottom	2.6	1	21.2	8.1	30.6	7.2	96.6	4.4	3.5	7.2		
									2	21.2	8.1	31.1	7.2	97.5	4.3	3.5			
		SR9	Cloudy	Moderate	9:49	3.3	Surface	1.0	1	21.1	8.1	30.5	6.9	92.5	3.6	2.0	6.9	3.1	2.7
									2	21.1	8.1	30.5	6.9	92.5	3.8	2.3			
							Bottom	2.3	1	21.1	8.1	30.6	6.9	92.3	2.6	3.2	6.9		
									2	21.2	8.1	31.0	6.9	93.5	2.4	3.2			
		SR10A(N)	Cloudy	Moderate	9:05	15.6	Surface	1.0	1	21.4	7.9	32.3	6.5	88.0	2.1	3.8	6.5	2.4	3.2
									2	21.3	7.7	32.3	6.5	87.9	2.5	3.9			
							Middle	7.8	1	21.4	7.9	32.3	6.4	87.4	2.2	2.9			
									2	21.3	7.7	32.3	6.4	87.3	2.4	3.0			
							Bottom	14.6	1	21.4	7.9	32.7	6.4	87.2	2.5	2.8	6.4		
									2	21.3	7.7	32.6	6.4	87.1	2.6	2.6			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
04-04-20	Mid-Flood	CS4	Cloudy	Moderate	14:03	18.4	Surface	1.0	1	22.0	8.1	28.4	7.1	96.0	3.9	3.2	7.2	4.3	3.6
									2	22.0	8.1	28.9	7.2	97.1	3.4	3.3			
							Middle	9.2	1	22.1	8.1	28.0	7.2	96.4	5.0	3.6			
									2	22.2	8.1	28.5	7.2	97.5	4.6	3.9			
							Bottom	17.4	1	22.1	8.1	28.1	7.2	96.5	4.9	3.7	7.2		
									2	22.2	8.1	28.5	7.2	97.5	4.1	4.0			
		CS6	Cloudy	Moderate	15:14	9.4	Surface	1.0	1	22.5	8.1	30.0	6.9	95.3	5.9	3.0	7.0	4.5	3.1
									2	22.5	8.1	30.5	7.0	96.4	5.1	2.8			
							Middle	4.7	1	22.8	8.1	29.8	6.9	95.8	4.0	3.1			
									2	22.8	8.1	30.3	7.0	96.8	4.4	3.2			
							Bottom	8.4	1	22.9	8.1	30.8	6.9	96.1	3.6	3.1	7.0		
									2	22.9	8.1	31.3	7.0	97.2	3.7	3.2			
		CS(Mf)3(N)	Cloudy	Moderate	13:50	7.2	Surface	1.0	1	21.8	8.2	27.2	7.2	96.2	4.9	4.2	7.3	3.7	4.1
									2	21.8	8.2	27.7	7.3	97.0	4.3	4.0			
							Middle	3.6	1	22.2	8.2	27.0	7.3	97.8	3.7	4.0			
									2	22.2	8.2	27.5	7.3	98.6	3.0	4.2			
							Bottom	6.2	1	22.6	8.2	26.7	7.4	99.3	3.1	4.0	7.4		
									2	22.7	8.2	27.2	7.4	100.4	3.1	4.0			
		CS(Mf)5	Fine	Moderate	15:20	13.4	Surface	1.0	1	21.7	8.0	29.4	6.9	93.6	2.3	2.3	6.7	5.6	2.8
									2	21.6	8.0	29.3	7.0	93.6	2.7	2.4			
							Middle	6.7	1	21.4	8.0	31.9	6.4	87.5	3.9	2.8			
									2	21.4	8.0	31.8	6.4	87.5	3.8	2.6			
							Bottom	12.4	1	21.4	8.0	32.3	6.4	87.4	10.3	3.4	6.4		
									2	21.3	8.1	32.4	6.4	87.4	10.7	3.1			
		IS8(N)	Fine	Calm	14:07	4.3	Surface	1.0	1	21.6	8.1	28.9	6.9	93.0	5.3	3.1	6.9	5.0	3.6
									2	21.5	7.9	28.9	6.9	92.8	5.5	2.8			
							Bottom	3.3	1	21.6	8.1	28.9	6.9	93.1	4.8	4.2	6.9		
									2	21.5	7.9	28.9	6.9	92.9	4.5	4.2			
		IS12	Cloudy	Moderate	14:25	14.3	Surface	1.0	1	22.4	8.1	29.5	7.1	96.9	4.5	2.4	7.1	3.8	3.1
									2	22.4	8.2	30.0	7.1	97.9	5.4	2.8			
							Middle	7.2	1	22.4	8.1	29.7	7.1	97.4	2.7	3.0			
									2	22.5	8.2	30.1	7.2	98.4	2.5	2.8			
							Bottom	13.3	1	22.5	8.1	29.7	7.1	97.4	3.9	4.0	7.1		
									2	22.6	8.2	30.0	7.1	98.3	3.6	3.6			
		IS13	Cloudy	Moderate	14:33	10.7	Surface	1.0	1	22.4	8.1	30.6	7.0	96.0	2.8	3.8	7.1	4.7	3.5
									2	22.4	8.1	31.1	7.0	96.8	2.3	4.0			
							Middle	5.4	1	22.3	8.1	29.9	7.1	96.5	2.5	3.4			
									2	22.4	8.1	30.4	7.1	97.4	2.0	3.6			
							Bottom	9.7	1	22.3	8.1	30.7	6.9	95.3	9.4	2.9	7.0		
									2	22.2	8.1	31.3	7.0	96.2	9.0	3.1			
		IS14	Cloudy	Moderate	14:19	14.2	Surface	1.0	1	22.0	8.1	30.0	7.0	95.4	9.6	3.1	7.1	6.5	2.7
									2	22.0	8.2	30.4	7.1	96.5	9.9	3.2			
							Middle	7.1	1	22.3	8.1	29.9	7.0	95.9	4.0	2.6			
									2	22.3	8.2	30.3	7.1	96.9	4.0	2.7			
							Bottom	13.2	1	22.3	8.1	29.8	7.0	96.2	5.8	2.6	7.1		
									2	22.3	8.2	30.3	7.1	97.1	5.4	2.2			
		IS15	Cloudy	Moderate	14:40	10.3	Surface	1.0	1	21.8	8.1	31.1	6.9	94.1	3.6	4.4	6.9	6.4	3.3
									2	21.9	8.2	31.6	6.9	95.1	3.3	4.4			
							Middle	5.2	1	22.0	8.1	31.0	6.9	94.9	6.8	3.4			
									2	22.1	8.2	31.4	7.0	96.0	7.3	3.0			
							Bottom	9.3	1	22.1	8.1	31.1	7.0	96.1	8.6	2.3	7.0		
									2	22.2	8.2	31.6	7.0	96.7	8.5	2.3			
		IS17	Fine	Moderate	14:40	7.9	Surface	1.0	1	21.6	8.1	29.0	6.8	91.2	7.6	11.6	6.8	9.8	14.4
									2	21.5	8.0	29.0	6.8	91.3	7.6	11.5			
							Middle	4.0	1	21.5	8.1	30.1	6.7	89.8	13.1	12.5			
									2	21.4	8.0	30.1	6.7	89.7	13.0	12.0			
							Bottom	6.9	1	21.5	8.0	30.5	6.7	90.7	8.6	19.0	6.7		
									2	21.4	7.9	30.5	6.7	90.2	8.6	19.6			
		IS(Mf)9	Fine	Calm	13:56	3.5	Surface	1.0	1	21.6	8.1	29.6	6.8	91.9	6.1	3.5	6.8	7.7	4.2
									2	21.5	8.0	29.6	6.7	90.0	5.8	3.8			
							Bottom	2.5	1	21.5	8.1	29.7	6.6	89.4	9.1	4.8	6.6		
									2	21.5	8.0	29.7	6.5	88.1	9.9	4.6			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		IS(Mf)11	Fine	Moderate	14:49	11.2	Surface	1.0	1	21.7	8.0	27.2	6.9	91.6	3.2	3.2	6.8	6.5	3.8
									2	21.6	8.0	27.1	6.9	91.7	3.5	3.3			
							Middle	5.6	1	21.5	8.0	30.3	6.6	88.6	6.8	3.9			
									2	21.4	8.0	30.2	6.6	88.6	6.8	3.8			
							Bottom	10.2	1	21.5	8.0	31.3	6.6	89.2	9.3	4.5	6.6		
									2	21.4	8.0	31.3	6.5	88.5	9.6	4.1			
		IS(Mf)16	Fine	Moderate	14:33	5.7	Surface	1.0	1	21.6	8.1	29.4	6.8	92.1	11.1	11.0	6.9	11.4	13.1
									2	21.5	8.0	29.4	6.9	92.0	11.0	11.7			
							Bottom	4.7	1	21.5	8.1	29.9	6.9	92.4	12.0	15.1	6.9		
									2	21.4	8.0	29.9	6.8	91.9	11.6	14.4			
		SR4(N2)	Fine	Calm	14:14	3.7	Surface	1.0	1	21.6	8.0	29.0	6.8	91.5	5.5	6.2	6.8	4.9	5.2
									2	21.5	7.9	29.0	6.8	91.5	5.6	5.9			
							Bottom	2.7	1	21.5	8.0	29.7	6.8	91.9	4.5	4.0	6.8		
									2	21.4	7.9	29.7	6.8	91.3	4.1	4.8			
		SR4A	Fine	Calm	14:21	4.6	Surface	1.0	1	21.6	8.0	29.1	6.8	91.5	3.2	2.7	6.8	5.0	3.6
									2	21.5	7.9	29.1	6.8	91.5	3.3	2.7			
							Bottom	3.6	1	21.5	8.0	29.8	6.6	89.5	7.1	4.7	6.6		
									2	21.5	8.0	29.8	6.6	89.3	6.4	4.2			
		SR7	Fine	Moderate	14:57	4.3	Surface	1.0	1	21.8	8.0	27.5	6.9	92.1	3.6	4.0	6.9	4.2	3.6
									2	21.7	8.0	27.5	6.9	91.9	3.9	3.8			
							Bottom	3.3	1	21.5	8.0	30.3	6.8	92.2	4.6	3.3	6.8		
									2	21.5	8.0	30.2	6.8	91.7	4.8	3.4			
		SR8	Cloudy	Moderate	15:02	3.4	Surface	1.0	1	22.5	8.1	30.5	6.8	94.1	5.5	3.4	6.9	4.3	3.3
									2	22.5	8.1	31.1	6.9	95.0	5.0	3.5			
							Bottom	2.4	1	22.7	8.1	31.1	6.8	94.4	3.1	3.0	6.9		
									2	22.8	8.1	31.6	6.9	95.4	3.5	3.3			
		SR9	Cloudy	Moderate	14:46	3.1	Surface	1.0	1	22.1	8.1	31.1	6.9	94.0	4.5	3.3	6.9	4.2	3.7
									2	22.1	8.1	31.6	6.9	94.9	4.4	3.1			
							Bottom	2.1	1	22.1	8.1	31.1	6.9	94.1	3.9	4.2	6.9		
									2	22.1	8.1	31.6	6.9	95.0	3.8	4.2			
		SR10A(N)	Fine	Moderate	15:51	15.7	Surface	1.0	1	21.5	8.0	32.4	6.4	87.8	2.4	3.5	6.4	4.5	2.9
									2	21.4	8.0	32.4	6.4	87.6	2.2	3.6			
							Middle	7.9	1	21.4	8.0	32.5	6.4	87.5	2.9	2.6			
									2	21.3	8.0	32.5	6.4	87.4	3.6	2.7			
							Bottom	14.7	1	21.4	8.0	32.5	6.4	88.1	7.7	2.3	6.4		
									2	21.3	8.0	32.5	6.4	87.7	7.9	2.5			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
07-04-20	Mid-Ebb	CS4	Cloudy	Moderate	11:02	18.3	Surface	1.0	1	20.9	8.2	27.9	7.1	93.7	5.9	7.2	7.1	7.6	7.2
									2	20.8	8.1	27.4	7.1	92.6	6.3	6.2			
							Middle	9.2	1	20.9	8.2	27.9	7.2	94.2	8.8	6.3			
									2	20.8	8.1	27.4	7.1	93.1	9.1	7.4			
							Bottom	17.3	1	20.8	8.2	27.2	7.3	95.9	7.2	7.8	7.3		
									2	20.8	8.1	26.8	7.3	94.8	8.5	8.5			
		CS6	Cloudy	Moderate	12:07	9.6	Surface	1.0	1	21.2	8.2	31.1	6.9	92.9	5.9	9.3	6.9	6.3	7.8
									2	21.2	8.2	30.5	6.9	92.5	5.5	9.4			
							Middle	4.8	1	21.2	8.2	31.3	6.9	93.6	5.1	7.5			
									2	21.1	8.1	30.7	6.9	93.2	6.1	6.6			
							Bottom	8.6	1	21.2	8.2	31.0	7.0	93.8	8.0	6.8	7.0		
									2	21.1	8.1	30.5	7.0	93.4	7.3	7.0			
		CS(Mf)3(N)	Cloudy	Moderate	10:52	6.8	Surface	1.0	1	20.9	8.2	26.1	7.1	92.0	5.7	9.5	7.1	7.0	10.4
									2	20.9	8.1	25.6	7.0	91.2	7.0	9.1			
							Middle	3.4	1	20.9	8.2	26.1	7.1	92.4	6.7	10.5			
									2	20.9	8.1	25.7	7.1	91.8	7.8	11.0			
							Bottom	5.8	1	20.9	8.2	26.4	7.1	92.8	7.3	10.6	7.1		
									2	20.9	8.2	25.9	7.1	92.3	7.6	11.6			
		CS(Mf)5	Cloudy	Moderate	12:10	12.6	Surface	1.0	1	21.0	7.9	30.1	6.6	87.9	5.1	7.7	6.6	5.5	7.8
									2	21.1	8.0	30.2	6.6	88.0	5.0	7.6			
							Middle	6.3	1	21.0	7.9	30.9	6.5	86.7	4.8	7.6			
									2	21.1	8.0	31.0	6.5	87.0	4.4	7.9			
							Bottom	11.6	1	21.0	7.9	31.3	6.5	87.5	6.8	8.3	6.5		
									2	21.1	8.0	31.3	6.5	87.9	6.6	7.8			
		IS8(N)	Cloudy	Calm	11:03	4.5	Surface	1.0	1	20.7	8.0	29.5	6.7	88.4	7.8	10.5	6.7	7.4	11.4
									2	20.8	8.1	29.5	6.7	88.8	7.8	11.5			
							Bottom	3.5	1	20.7	7.9	29.5	6.7	88.7	7.2	11.4	6.7		
									2	20.8	8.1	29.5	6.7	89.0	6.8	12.2			
		IS12	Cloudy	Moderate	11:21	14.4	Surface	1.0	1	20.9	8.1	27.5	7.4	96.6	5.3	6.1	7.3	5.2	6.3
									2	20.9	8.1	27.5	7.4	96.6	5.3	5.9			
							Middle	7.2	1	21.0	8.2	28.3	7.2	94.7	4.6	5.7			
									2	20.9	8.1	28.1	7.2	94.6	5.4	6.0			
							Bottom	13.4	1	21.0	8.2	28.6	7.2	96.1	5.2	7.3	7.2		
									2	20.9	8.1	28.1	7.2	95.2	5.5	6.6			
		IS13	Cloudy	Moderate	11:27	10.5	Surface	1.0	1	21.1	8.2	31.0	6.9	93.3	9.6	9.0	6.9	8.6	9.7
									2	21.1	8.1	30.4	6.9	92.2	9.5	9.9			
							Middle	5.3	1	21.1	8.2	30.9	7.0	94.1	8.8	10.0			
									2	21.1	8.1	30.3	6.9	92.8	9.9	9.2			
							Bottom	9.5	1	21.0	8.2	29.7	7.3	96.7	6.5	9.5	7.3		
									2	20.9	8.1	29.2	7.2	95.3	7.1	10.5			
		IS14	Cloudy	Moderate	11:16	14.2	Surface	1.0	1	21.0	8.2	27.8	7.1	93.4	6.6	6.1	7.1	6.9	6.4
									2	20.9	8.1	27.3	7.0	92.1	6.2	5.9			
							Middle	7.1	1	21.0	8.2	27.5	7.2	94.5	8.8	6.3			
									2	20.9	8.1	27.1	7.1	92.8	8.1	5.8			
							Bottom	13.2	1	20.9	8.2	27.4	7.3	96.0	5.6	7.5	7.3		
									2	20.8	8.1	27.0	7.3	95.5	5.8	6.6			
		IS15	Cloudy	Moderate	11:34	10.2	Surface	1.0	1	21.2	8.2	31.0	7.1	95.3	7.3	11.4	7.1	6.5	7.0
									2	21.2	8.2	30.5	7.0	94.7	6.4	12.5			
							Middle	5.1	1	21.2	8.2	30.5	7.1	95.0	6.9	4.0			
									2	21.1	8.2	30.0	7.1	95.1	7.0	4.7			
							Bottom	9.2	1	21.3	8.2	30.5	7.0	94.4	5.9	4.5	7.1		
									2	21.1	8.2	30.0	7.2	95.9	5.3	4.7			
		IS17	Cloudy	Moderate	11:35	7.5	Surface	1.0	1	21.0	7.9	30.2	6.6	87.6	9.7	9.0	6.6	10.4	9.3
									2	21.0	8.0	30.2	6.6	87.9	9.6	10.0			
							Middle	3.8	1	21.0	7.9	30.3	6.6	88.1	10.6	10.5			
									2	21.0	8.0	30.3	6.6	88.5	10.4	9.9			
							Bottom	6.5	1	21.0	7.9	30.3	6.7	90.0	11.2	7.9	6.8		
									2	21.0	8.0	30.3	6.8	91.1	11.0	8.6			
		IS(Mf)9	Cloudy	Calm	10:55	2.7	Middle	1.4	1	20.8	7.9	29.5	6.7	89.1	4.7	4.9	6.7	4.5	4.8
									2	20.8	8.1	29.5	6.7	89.1	4.3	4.7			
		IS(Mf)11	Cloudy	Moderate	11:45	10.5	Surface	1.0	1	20.9	7.9	28.9	6.7	89.1	6.5	4.5	6.6	7.5	7.1
									2	21.0	8.0	28.9	6.7	89.2	6.1	4.8			
							Middle	5.3	1	21.0	7.9	30.3	6.5	87.1	7.3	8.0			
									2	21.1	8.0	30.3	6.5	87.4	7.3	8.6			
							Bottom	9.5	1	21.0	7.9	30.6	6.5	87.3	8.7	8.9	6.6		
									2	21.1	8.0	30.6	6.6	88.3	8.8	7.9			
		IS(Mf)16	Cloudy	Moderate	11:27	5.5	Surface	1.0	1	20.8	7.9	29.7	6.6	88.2	10.2	9.9	6.7	11.3	11.8
									2	20.9	8.0	29.7	6.7	88.6	10.7	10.8			
							Bottom	4.5	1	20.9	7.9	30.0	6.7	89.1	12.4	13.9	6.7		
									2	21.0	8.0	30.1	6.7	89.8	12.0	12.6			
		SR4(N2)	Cloudy	Calm	11:09	4.4	Surface	1.0	1	20.8	7.8	29.3	6.7	88.6	9.0	7.9	6.7	9.7	8.3
									2	20.9	8.0	29.4	6.7	88.9	8.5	7.9			
							Bottom	3.4	1	20.8	7.9	29.5	6.9	91.9	10.9	8.4	7.0		
									2	20.8	8.0	29.5	7.0	93.4	10.4	9.0			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		SR4A	Cloudy	Calm	11:16	4.7	Surface	1.0	1	20.8	7.8	29.5	6.7	89.2	12.7	9.1	6.7	13.0	11.1
									2	20.9	8.0	29.5	6.7	89.4	12.6	8.9			
							Bottom	3.7	1	20.8	7.9	29.5	6.8	90.5	13.2	13.1	6.9		
									2	20.9	8.0	29.5	6.9	91.5	13.4	13.2			
		SR7	Cloudy	Moderate	11:52	4.2	Surface	1.0	1	21.0	7.9	27.4	6.8	88.8	7.7	6.4	6.8	8.0	7.3
									2	21.0	8.0	27.4	6.8	89.3	6.8	6.9			
							Bottom	3.2	1	20.9	7.9	28.3	6.9	91.5	8.8	7.7	7.0		
									2	21.0	8.0	28.3	7.0	92.6	8.8	8.1			
		SR8	Cloudy	Moderate	11:56	3.4	Surface	1.0	1	21.1	8.2	30.8	7.0	94.2	5.3	4.8	7.0	5.7	6.1
									2	21.0	8.1	30.2	7.0	93.1	6.5	5.8			
							Bottom	2.4	1	21.0	8.2	30.7	7.2	96.0	5.2	7.4	7.2		
									2	21.0	8.2	30.2	7.1	95.0	5.8	6.5			
		SR9	Cloudy	Moderate	11:41	3.1	Surface	1.0	1	21.1	8.2	30.4	7.2	96.9	3.9	3.9	7.2	4.3	4.9
									2	21.1	8.1	29.9	7.2	95.8	4.7	4.8			
							Bottom	2.1	1	21.0	8.2	30.5	7.3	98.3	4.2	6.0	7.3		
									2	21.0	8.2	30.1	7.3	97.0	4.2	5.0			
		SR10A(N)	Cloudy	Moderate	12:35	15.3	Surface	1.0	1	21.2	8.0	30.6	6.6	88.6	4.0	5.4	6.6	4.5	5.2
									2	21.2	8.0	30.6	6.6	88.7	3.5	4.9			
							Middle	7.7	1	21.1	8.0	31.2	6.5	87.8	4.8	5.7			
									2	21.1	8.0	31.3	6.5	87.8	4.6	5.4			
							Bottom	14.3	1	21.0	8.0	31.4	6.7	89.8	5.3	4.4	6.6		
									2	21.1	8.0	31.5	6.5	88.4	4.6	5.4			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
07-04-20	Mid-Flood	CS4	Cloudy	Moderate	6:50	18.5	Surface	1.0	1	20.6	8.2	28.6	7.1	93.6	8.5	8.4	7.2	7.2	8.3
									2	20.6	8.1	28.1	7.1	92.7	9.2	7.3			
							Middle	9.3	1	20.1	8.2	28.9	7.3	95.4	5.7	8.6			
									2	20.1	8.1	28.4	7.3	94.7	6.5	7.6			
							Bottom	17.5	1	19.9	8.2	30.2	7.4	96.7	6.6	8.7	7.4		
									2	19.9	8.1	29.6	7.4	96.3	6.9	9.3			
		CS6	Cloudy	Moderate	5:43	9.2	Surface	1.0	1	20.7	8.2	30.3	7.0	93.8	6.3	7.7	7.1	6.8	8.1
									2	20.6	8.0	29.8	7.0	93.0	7.3	6.9			
							Middle	4.6	1	20.6	8.2	30.3	7.1	93.8	6.8	8.9			
									2	20.5	8.1	29.7	7.1	93.6	7.0	8.1			
							Bottom	8.2	1	20.3	8.2	29.8	7.1	93.8	6.1	8.4	7.2		
									2	20.2	8.1	28.8	7.2	94.3	7.0	8.5			
		CS(Mf)3(N)	Cloudy	Moderate	7:03	6.5	Surface	1.0	1	20.5	8.2	26.9	7.2	93.4	12.1	10.1	7.3	9.7	11.2
									2	20.4	8.1	26.5	7.1	92.5	12.2	9.9			
							Middle	3.3	1	20.1	8.2	26.8	7.4	95.0	8.9	11.5			
									2	20.0	8.1	26.4	7.3	94.2	8.2	12.6			
							Bottom	5.5	1	20.0	8.2	28.0	7.4	96.3	8.9	11.9	7.4		
									2	20.0	8.1	27.6	7.4	95.2	7.8	11.2			
		CS(Mf)5	Cloudy	Moderate	5:46	10.3	Surface	1.0	1	20.9	7.8	29.8	6.6	88.5	6.4	8.9	6.6	8.4	8.8
									2	21.0	8.0	29.9	6.6	88.6	6.1	8.6			
							Middle	5.2	1	20.9	7.8	29.9	6.6	88.2	6.6	8.3			
									2	21.0	8.0	30.0	6.6	88.4	6.3	8.1			
							Bottom	9.3	1	21.0	7.8	30.5	6.6	88.1	12.3	9.2	6.6		
									2	21.1	8.0	30.5	6.6	88.5	12.7	9.4			
		IS8(N)	Cloudy	Calm	7:00	4.1	Surface	1.0	1	20.8	7.9	29.5	6.7	88.9	9.2	12.9	6.7	8.9	12.4
									2	20.9	8.0	29.6	6.7	89.0	9.1	14.2			
							Bottom	3.1	1	20.8	8.0	29.6	6.7	89.3	8.8	12.2	6.7		
									2	20.9	8.0	29.6	6.7	89.7	8.5	10.4			
		IS12	Cloudy	Moderate	6:30	14.4	Surface	1.0	1	20.7	8.2	30.4	7.2	95.4	8.6	10.1	7.2	7.7	9.1
									2	20.7	8.1	29.8	7.1	94.1	8.1	9.2			
							Middle	7.2	1	20.5	8.2	30.2	7.2	95.7	6.8	8.2			
									2	20.5	8.1	29.7	7.2	95.3	7.2	9.0			
							Bottom	13.4	1	20.6	8.2	29.8	7.3	97.3	7.3	8.6	7.3		
									2	20.6	8.1	29.3	7.3	96.5	8.0	9.2			
		IS13	Cloudy	Moderate	6:25	10.5	Surface	1.0	1	20.9	8.2	30.4	7.0	93.9	9.5	10.1	7.1	10.6	9.9
									2	20.9	8.1	29.9	7.0	92.9	9.8	11.0			
							Middle	5.3	1	20.8	8.2	30.3	7.2	95.7	13.7	10.9			
									2	20.8	8.1	29.8	7.1	94.9	13.0	10.1			
							Bottom	9.5	1	20.2	8.2	30.2	7.4	98.1	9.1	8.6	7.4		
									2	20.3	8.1	29.6	7.4	97.1	8.5	8.6			
		IS14	Cloudy	Moderate	6:36	14.7	Surface	1.0	1	20.8	8.2	30.3	6.9	92.7	6.4	10.7	6.9	7.6	9.4
									2	20.8	8.1	29.8	6.9	91.6	7.2	11.0			
							Middle	7.4	1	20.8	8.2	30.3	7.0	93.1	7.5	9.8			
									2	20.8	8.1	29.7	6.9	92.2	7.5	8.8			
							Bottom	13.7	1	20.5	8.2	30.3	7.2	95.4	8.2	8.4	7.2		
									2	20.5	8.1	29.7	7.2	95.2	8.7	7.6			
		IS15	Cloudy	Moderate	6:18	10.2	Surface	1.0	1	20.7	8.2	30.1	7.1	93.9	4.3	6.1	7.1	3.9	5.3
									2	20.3	8.1	29.8	7.1	93.0	4.5	5.2			
							Middle	5.1	1	20.3	8.2	30.3	7.1	94.0	3.5	5.8			
									2	20.2	8.1	31.1	7.1	94.3	3.6	6.5			
							Bottom	9.2	1	20.2	8.2	31.5	7.2	95.0	3.9	4.4	7.2		
									2	20.2	8.1	31.1	7.2	95.3	3.6	3.8			
		IS17	Cloudy	Moderate	6:29	7.5	Surface	1.0	1	20.8	7.9	29.4	6.8	89.8	9.5	15.3	6.8	10.3	14.2
									2	20.9	8.1	29.4	6.8	89.9	8.9	14.6			
							Middle	3.8	1	20.8	7.9	29.4	6.8	90.0	10.9	14.7			
									2	20.9	8.0	29.4	6.8	90.2	10.8	13.5			
							Bottom	6.5	1	20.8	7.9	29.4	6.8	90.6	11.0	12.9	6.9		
									2	20.9	8.0	29.5	6.9	91.2	10.4	13.9			
		IS(Mf)9	Cloudy	Calm	7:09	2.5	Middle	1.3	1	20.8	7.9	29.7	6.7	89.4	10.5	10.4	6.7	10.7	11.0
									2	20.9	8.0	29.7	6.7	89.7	10.8	11.5			
		IS(Mf)11	Cloudy	Moderate	6:15	10.8	Surface	1.0	1	20.8	7.9	29.2	6.7	89.3	9.3	11.0	6.8	8.8	11.4
									2	20.8	8.1	29.2	6.7	89.5	8.2	11.5			
							Middle	5.4	1	20.8	7.9	29.2	6.8	89.7	8.6	11.1			
									2	20.8	8.0	29.2	6.8	89.8	8.3	11.9			
							Bottom	9.8	1	20.8	7.9	29.3	6.8	90.5	9.2	11.1	6.9		
									2	20.8	8.0	29.3	6.9	90.9	9.1	11.8			
		IS(Mf)16	Cloudy	Moderate	6:37	5.9	Surface	1.0	1	20.8	7.9	29.6	6.7	89.4	8.6	13.8	6.7	7.3	13.5
									2	20.9	8.0	29.6	6.7	89.5	8.1	12.6			
							Bottom	4.9	1	20.8	7.9	29.7	6.8	90.6	6.3	13.4	6.9		
									2	20.9	8.0	29.7	6.9	91.4	6.0	14.1			
		SR4(N2)	Cloudy	Calm	6:54	4.2	Surface	1.0	1	20.8	7.9	29.5	6.6	87.8	5.4	6.6	6.6	5.8	5.8
									2	20.9	8.0	29.6	6.6	88.2	5.6	6.7			
							Bottom	3.2	1	20.8	7.9	29.6	6.6	88.2	6.1	4.3	6.7		
									2	20.9	8.0	29.7	6.7	88.7	5.9	5.4			
		SR4A	Cloudy	Calm	6:48	4.3	Surface	1.0	1	20.7	7.9	29.5	6.7	89.2	7.5	6.7	6.8	7.6	6.4
									2	20.8	8.0	29.5	6.8	89.6	7.3	5.8			
							Bottom	3.3	1	20.8	8.0	29.6	6.9	91.5	7.9	7.1	7.0		
									2	20.8	8.0	29.6	7.0	92.6	7.6	6.1			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		SR7	Cloudy	Moderate	6:07	4.2	Surface	1.0	1	20.9	7.9	29.1	6.8	89.5	8.2	11.4	6.8	9.3	10.9
									2	20.9	8.0	29.1	6.8	89.9	8.5	11.3			
							Bottom	3.2	1	20.9	7.9	29.5	6.8	90.4	10.0	10.0	6.9		
									2	21.0	8.0	29.5	6.9	91.3	10.5	11.0			
		SR8	Cloudy	Moderate	5:56	3.5	Surface	1.0	1	20.3	8.2	30.4	7.3	97.0	7.4	8.1	7.3	7.0	6.9
									2	20.3	8.1	29.9	7.3	96.3	7.1	7.2			
							Bottom	2.5	1	20.3	8.2	30.1	7.5	98.8	6.8	5.6	7.5		
									2	20.2	8.1	29.7	7.5	98.4	6.5	6.6			
		SR9	Cloudy	Moderate	6:10	3.3	Surface	1.0	1	20.7	8.2	31.7	7.0	93.4	6.9	4.2	7.0	6.8	5.1
									2	20.7	8.1	31.2	6.9	92.4	7.4	3.6			
							Bottom	2.3	1	20.5	8.2	31.5	7.2	95.8	6.3	5.8	7.2		
									2	20.4	8.1	31.0	7.1	94.3	6.4	6.9			
		SR10A(N)	Cloudy	Moderate	5:18	16.2	Surface	1.0	1	21.0	8.0	30.6	6.5	87.3	6.3	9.8	6.5	8.6	9.7
									2	21.1	8.0	30.6	6.5	87.4	6.6	10.1			
							Middle	8.1	1	21.0	8.0	30.6	6.5	86.9	8.0	9.7			
									2	21.1	8.0	30.6	6.5	87.0	7.7	9.1			
							Bottom	15.2	1	21.1	7.7	31.0	6.4	86.5	11.2	9.6	6.4		
									2	21.1	7.9	31.0	6.4	86.6	11.7	9.9			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
09-04-20	Mid-Ebb	CS4	Cloudy	Moderate	12:26	18.5	Surface	1.0	1	22.4	8.0	21.8	7.1	92.8	7.4	6.3	7.2	6.7	5.7
									2	22.5	8.1	22.2	7.2	94.0	8.1	6.4			
							Middle	9.3	1	22.3	8.0	21.6	7.1	92.4	6.6	5.6			
									2	22.3	8.1	22.0	7.2	93.8	6.0	5.1			
							Bottom	17.5	1	22.7	8.0	21.6	7.1	93.7	5.9	5.3	7.2		
									2	22.8	8.1	22.1	7.2	94.9	5.9	5.6			
		CS6	Cloudy	Moderate	13:36	9.7	Surface	1.0	1	21.7	8.1	25.3	7.0	92.4	5.0	7.5	7.1	6.0	7.7
									2	21.7	8.2	26.1	7.1	93.7	5.4	6.5			
							Middle	4.9	1	21.5	8.1	25.1	7.0	91.8	5.5	7.2			
									2	21.5	8.2	25.5	7.1	93.2	5.2	8.2			
							Bottom	8.7	1	21.4	8.1	27.0	7.0	92.4	7.7	8.9	7.0		
									2	21.4	8.2	27.6	7.0	93.3	7.1	7.8			
		CS(Mf)3(N)	Cloudy	Moderate	12:13	6.9	Surface	1.0	1	21.8	8.0	22.1	6.9	89.8	8.8	7.7	7.0	7.6	8.7
									2	21.9	8.1	22.5	7.0	90.8	7.2	7.0			
							Middle	3.5	1	22.2	8.0	21.9	6.9	90.1	7.2	7.5			
									2	22.3	8.1	22.3	7.0	91.2	6.5	8.4			
							Bottom	5.9	1	22.5	8.0	22.1	6.9	90.6	8.9	10.5	7.0		
									2	22.5	8.1	22.5	7.0	91.6	7.2	11.0			
		CS(Mf)5	Cloudy	Moderate	13:40	11.6	Surface	1.0	1	21.2	7.9	25.3	6.6	86.3	10.3	14.2	6.6	12.3	13.9
									2	21.3	8.0	25.4	6.6	86.5	10.0	13.3			
							Middle	5.8	1	21.1	7.9	27.5	6.5	85.6	12.0	13.6			
									2	21.1	8.0	27.5	6.5	85.8	11.8	14.8			
							Bottom	10.6	1	21.1	7.9	27.5	6.5	86.1	14.7	13.5	6.5		
									2	21.1	8.0	27.6	6.5	86.4	14.9	13.8			
		IS8(N)	Cloudy	Calm	12:35	4.5	Surface	1.0	1	21.4	7.8	25.6	6.8	89.8	6.1	7.2	6.9	8.2	7.7
									2	21.5	8.0	25.6	6.9	90.0	5.9	7.5			
							Bottom	3.5	1	21.2	7.9	26.2	6.9	90.1	10.6	8.5	6.9		
									2	21.3	8.0	26.2	6.9	90.7	10.3	7.7			
		IS12	Cloudy	Moderate	12:44	14.6	Surface	1.0	1	21.9	8.0	23.8	7.1	93.6	8.0	7.5	7.2	7.6	6.8
									2	21.8	8.1	24.4	7.2	94.7	6.7	7.0			
							Middle	7.3	1	22.0	8.0	23.3	7.1	92.8	9.2	6.0			
									2	22.1	8.1	23.7	7.2	94.0	9.7	6.5			
							Bottom	13.6	1	22.4	8.0	23.1	7.2	94.7	6.4	6.7	7.2		
									2	22.4	8.1	23.5	7.2	95.2	5.6	6.9			
		IS13	Cloudy	Moderate	12:50	10.6	Surface	1.0	1	21.8	8.0	25.5	7.0	93.0	7.2	10.5	7.1	8.0	10.1
									2	21.8	8.1	26.1	7.1	93.8	7.5	11.4			
							Middle	5.3	1	21.8	8.0	25.9	7.0	93.3	8.9	10.0			
									2	21.9	8.1	26.3	7.1	94.4	8.6	10.2			
							Bottom	9.6	1	22.1	8.0	25.4	7.1	94.0	8.6	9.2	7.1		
									2	22.2	8.1	25.8	7.1	95.0	7.4	9.1			
		IS14	Cloudy	Moderate	12:39	14.7	Surface	1.0	1	23.6	8.0	22.2	7.0	94.3	7.9	8.8	7.1	7.0	8.2
									2	23.6	8.1	22.7	7.1	95.5	6.4	7.9			
							Middle	7.4	1	21.6	8.0	24.1	7.1	93.1	7.4	8.9			
									2	21.7	8.1	24.5	7.2	93.7	6.5	8.0			
							Bottom	13.7	1	21.8	8.0	24.2	7.0	92.3	7.4	8.0	7.1		
									2	21.8	8.1	24.7	7.1	93.3	6.5	7.7			
		IS15	Cloudy	Moderate	12:55	10.1	Surface	1.0	1	22.0	8.0	26.5	7.2	95.3	8.8	7.9	7.1	7.3	8.0
									2	22.0	8.1	27.0	7.3	97.6	8.7	7.3			
							Middle	5.1	1	21.8	8.1	26.7	6.9	92.1	6.6	7.2			
									2	21.8	8.1	27.2	7.0	93.2	5.5	8.2			
							Bottom	9.1	1	22.0	8.1	26.4	7.0	92.7	7.5	9.0	7.0		
									2	22.0	8.1	27.1	7.0	93.8	6.8	8.1			
		IS17	Cloudy	Moderate	13:02	7.5	Surface	1.0	1	21.3	7.8	24.7	6.6	86.4	11.5	10.6	6.6	11.9	9.7
									2	21.3	8.0	24.8	6.6	86.5	11.8	10.1			
							Middle	3.8	1	21.2	7.8	26.3	6.6	85.9	11.1	10.8			
									2	21.2	8.0	26.2	6.6	86.1	11.5	9.7			
							Bottom	6.5	1	21.1	7.8	28.0	6.5	85.8	12.8	7.8	6.5		
									2	21.1	8.0	28.0	6.5	86.0	12.4	8.9			
		IS(Mf)9	Cloudy	Calm	12:25	3.3	Surface	1.0	1	21.3	7.9	26.6	6.7	87.8	5.3	16.1	6.7	9.1	16.1
									2	21.4	8.0	26.7	6.7	87.9	5.4	15.5			
							Bottom	2.3	1	21.4	7.8	26.6	6.7	88.5	13.0	16.4	6.7		
									2	21.5	8.0	26.6	6.7	88.6	12.5	16.2			
		IS(Mf)11	Cloudy	Moderate	13:14	10.6	Surface	1.0	1	21.1	7.8	23.4	6.6	85.6	11.7	10.4	6.6	12.9	9.7
									2	21.2	7.9	23.5	6.7	85.8	11.2	10.3			
							Middle	5.3	1	21.1	7.9	25.2	6.6	85.6	14.7	10.2			
									2	21.1	8.0	25.3	6.6	85.7	14.5	9.3			
							Bottom	9.6	1	21.0	7.9	27.7	6.5	85.1	12.9	8.5	6.5		
									2	21.1	8.0	27.7	6.5	85.4	12.4	9.3			
		IS(Mf)16	Cloudy	Moderate	12:57	5.5	Surface	1.0	1	21.2	7.8	26.8	6.7	87.7	8.4	10.6	6.7	8.4	11.1
									2	21.3	8.0	26.9	6.7	87.9	7.9	11.7			
							Bottom	4.5	1	21.0	7.8	27.2	6.6	87.3	8.8	10.6	6.7		
									2	21.1	8.0	27.3	6.7	87.9	8.5	11.3			
		SR4(N2)	Cloudy	Calm	12:41	4.3	Surface	1.0	1	21.5	7.9	25.7	6.9	90.3	8.0	10.7	6.9	8.1	11.2
									2	21.6	8.0	25.8	6.8	90.2	7.7	11.8			
							Bottom	3.3	1	21.4	7.9	26.1	6.8	90.0	8.4	11.4	6.9		
									2	21.4	8.0	26.2	6.9	90.3	8.3	10.7			
		SR4A	Cloudy	Calm	12:46	4.1	Surface	1.0	1	21.2	7.9	25.7	6.7	87.8	6.6	6.8	6.7	7.2	7.3
									2	21.2	8.0	25.8	6.7	87.4	6.5	7.8			
							Bottom	3.1	1	21.0	7.9	26.0	6.6	86.5	8.0	7.5	6.6		
									2	21.1	8.0	26.0	6.6	86.7	7.8	7.1			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		SR7	Cloudy	Moderate	13:22	4.4	Surface	1.0	1	21.1	7.9	24.5	6.7	86.9	11.7	10.9	6.7	12.0	12.7
									2	21.2	8.0	24.5	6.7	87.2	11.8	11.7			
							Bottom	3.4	1	21.1	7.9	24.8	6.7	87.5	12.2	14.9	6.8		
									2	21.1	8.0	24.9	6.8	87.9	12.1	13.3			
		SR8	Cloudy	Moderate	13:26	3.5	Surface	1.0	1	22.6	8.1	24.4	7.1	94.7	7.2	6.4	7.2	6.2	6.6
									2	22.7	8.2	24.8	7.2	96.3	5.8	6.5			
							Bottom	2.5	1	22.6	8.1	24.3	7.1	94.8	6.4	6.5	7.2		
									2	22.7	8.2	24.8	7.2	96.6	5.2	7.1			
		SR9	Cloudy	Moderate	13:02	3.3	Surface	1.0	1	22.3	8.1	25.9	7.0	94.0	4.1	7.7	7.1	4.3	7.5
									2	22.3	8.2	26.4	7.1	95.2	4.3	6.9			
							Bottom	2.3	1	22.7	8.1	26.5	7.0	94.6	4.3	8.1	7.1		
									2	22.7	8.2	27.0	7.1	96.0	4.3	7.4			
		SR10A(N)	Cloudy	Moderate	14:05	15.4	Surface	1.0	1	21.5	7.9	26.9	6.7	88.2	5.8	5.4	6.7	6.1	6.0
									2	21.6	8.0	26.9	6.7	88.3	5.5	5.8			
							Middle	7.7	1	21.5	7.9	27.5	6.6	88.2	6.1	6.5			
									2	21.5	8.0	27.5	6.6	88.3	5.9	6.7			
							Bottom	14.4	1	21.4	7.9	27.9	6.7	88.7	6.9	5.3	6.7		
									2	21.5	8.0	27.9	6.7	89.1	6.6	6.0			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
09-04-20	Mid-Flood	CS4	Cloudy	Moderate	8:13	18.6	Surface	1.0	1	20.8	8.1	24.6	7.1	91.3	7.9	6.0	7.1	5.7	7.0
									2	20.8	8.1	24.6	7.1	91.3	8.2	6.9			
							Middle	9.3	1	20.8	8.1	24.1	7.0	90.3	4.4	7.4			
									2	20.8	8.1	24.6	7.1	90.9	4.9	7.1			
							Bottom	17.6	1	20.7	8.1	24.1	7.0	89.9	4.0	6.8	7.1		
									2	20.7	8.1	25.0	7.1	91.7	4.7	7.5			
		CS6	Cloudy	Moderate	7:04	9.8	Surface	1.0	1	20.8	7.9	25.7	7.0	91.1	9.1	10.2	7.1	9.0	10.4
									2	20.9	8.1	26.2	7.1	91.9	8.5	9.5			
							Middle	4.9	1	20.8	7.9	25.5	7.1	92.5	10.7	11.7			
									2	20.8	8.1	25.9	7.2	93.4	8.8	10.7			
							Bottom	8.8	1	20.9	7.9	26.1	7.0	90.9	8.8	10.2	7.0		
									2	20.9	8.1	26.6	7.0	91.7	8.1	10.3			
		CS(Mf)3(N)	Cloudy	Moderate	8:27	7.1	Surface	1.0	1	20.5	8.1	19.9	7.2	89.4	6.7	7.5	7.2	6.7	6.9
									2	20.6	8.1	20.0	7.3	90.8	6.4	8.6			
							Middle	3.6	1	20.6	8.1	22.4	7.1	89.9	6.8	6.1			
									2	20.7	8.2	23.2	7.1	90.9	5.5	7.0			
							Bottom	6.1	1	21.0	8.1	24.1	7.1	92.2	7.4	5.7	7.2		
									2	21.1	8.1	24.6	7.2	93.1	7.5	6.4			
		CS(Mf)5	Cloudy	Moderate	7:03	12.3	Surface	1.0	1	20.9	7.8	26.1	6.7	86.8	6.0	7.6	6.6	6.7	8.0
									2	21.0	8.0	26.2	6.7	86.9	5.7	7.2			
							Middle	6.2	1	21.0	7.9	27.8	6.5	86.0	7.0	8.6			
									2	21.1	8.0	27.9	6.5	86.2	6.6	8.2			
							Bottom	11.3	1	21.0	7.8	29.1	6.5	86.0	6.8	8.4	6.5		
									2	21.1	8.0	29.1	6.5	86.7	7.8	7.7			
		IS8(N)	Cloudy	Calm	8:13	4.0	Surface	1.0	1	20.8	7.9	25.4	6.8	87.8	8.1	8.0	6.8	8.3	8.9
									2	20.9	8.0	25.4	6.8	87.9	7.9	9.0			
							Bottom	3.0	1	20.8	7.9	25.5	6.8	88.1	8.6	9.7	6.8		
									2	20.9	8.0	25.5	6.8	88.7	8.4	8.8			
		IS12	Cloudy	Moderate	7:55	14.7	Surface	1.0	1	20.8	8.1	25.9	7.0	91.1	7.6	7.9	7.0	6.7	7.8
									2	20.9	8.2	26.4	7.0	92.0	7.4	8.9			
							Middle	7.4	1	20.8	8.1	25.3	7.0	90.7	7.6	7.9			
									2	20.8	8.2	25.8	7.1	92.1	6.9	8.5			
							Bottom	13.7	1	20.8	8.1	25.2	7.0	91.1	5.2	6.8	7.1		
									2	20.8	8.2	25.6	7.1	92.2	5.7	6.7			
		IS13	Cloudy	Moderate	7:49	10.7	Surface	1.0	1	20.8	8.1	25.1	7.1	91.4	6.9	7.5	7.1	6.6	6.2
									2	20.9	8.1	25.6	7.1	92.1	6.2	6.1			
							Middle	5.4	1	20.7	8.1	25.1	7.1	92.2	9.1	6.7			
									2	20.7	8.1	25.5	7.2	93.0	9.4	6.4			
							Bottom	9.7	1	20.6	8.1	24.9	7.1	91.3	3.9	5.5	7.1		
									2	20.7	8.1	25.3	7.1	92.3	3.9	4.7			
		IS14	Cloudy	Moderate	8:00	14.6	Surface	1.0	1	20.9	8.1	24.5	7.1	91.2	7.6	7.2	7.1	8.0	7.8
									2	20.9	8.1	25.0	7.0	91.2	6.2	6.6			
							Middle	7.3	1	20.7	8.1	25.0	7.1	91.1	10.9	7.4			
									2	20.8	8.2	25.5	7.1	92.0	10.2	7.8			
							Bottom	13.6	1	20.8	8.1	26.0	7.0	91.1	6.8	9.5	7.0		
									2	20.8	8.2	26.5	7.0	92.0	6.5	8.4			
		IS15	Cloudy	Moderate	7:41	10.4	Surface	1.0	1	20.7	8.1	24.9	7.1	91.7	4.1	6.5	7.1	4.4	5.9
									2	20.7	8.1	25.3	7.2	92.9	4.5	6.2			
							Middle	5.2	1	20.6	8.1	24.9	7.1	91.4	5.2	5.9			
									2	20.7	8.2	25.3	7.1	92.4	4.2	5.9			
							Bottom	9.4	1	20.7	8.1	25.1	7.1	91.0	4.1	5.5	7.1		
									2	20.7	8.1	25.6	7.1	91.4	4.1	5.2			
		IS17	Cloudy	Moderate	7:42	7.6	Surface	1.0	1	21.0	7.8	25.8	6.7	86.9	9.9	11.1	6.7	10.5	9.7
									2	21.0	8.0	25.9	6.7	87.0	9.6	10.2			
							Middle	3.8	1	21.0	7.8	26.2	6.7	86.9	11.3	8.6			
									2	21.0	8.0	26.2	6.7	87.3	11.8	9.5			
							Bottom	6.6	1	21.0	7.8	26.3	6.7	87.8	10.1	9.6	6.7		
									2	21.0	8.0	26.3	6.7	88.1	10.4	9.1			
		IS(Mf)9	Cloudy	Calm	8:20	3.5	Surface	1.0	1	20.9	7.9	25.8	6.7	87.5	11.8	14.9	6.7	12.5	13.8
									2	21.0	8.0	25.9	6.7	87.7	11.3	13.6			
							Bottom	2.5	1	20.9	7.9	26.0	6.8	88.1	13.8	13.5	6.8		
									2	21.0	8.0	26.0	6.8	88.4	13.2	13.0			
		IS(Mf)11	Cloudy	Moderate	7:30	10.9	Surface	1.0	1	20.8	7.9	25.1	6.8	87.5	8.9	15.0	6.7	9.0	14.3
									2	20.9	8.0	25.1	6.7	87.5	8.7	15.1			
							Middle	5.5	1	20.9	7.9	25.6	6.7	87.4	8.8	15.0			
									2	20.9	8.0	25.7	6.7	87.4	8.7	15.7			
							Bottom	9.9	1	20.9	7.9	25.8	6.9	89.6	9.9	11.9	6.9		
									2	21.0	8.0	25.9	6.9	89.4	9.2	12.9			
		IS(Mf)16	Cloudy	Moderate	7:48	5.9	Surface	1.0	1	20.9	7.8	25.4	6.8	87.7	7.0	8.6	6.8	8.6	8.8
									2	21.0	8.0	25.4	6.8	87.8	6.8	9.5			
							Bottom	4.9	1	20.9	7.8	26.0	6.7	87.9	10.2	8.6	6.8		
									2	21.0	8.0	26.1	6.8	88.5	10.3	8.6			
		SR4(N2)	Cloudy	Calm	8:06	4.3	Surface	1.0	1	20.9	7.9	25.8	6.7	87.8	7.8	9.2	6.7	7.9	8.6
									2	20.9	8.0	25.9	6.7	87.9	7.4	9.4			
							Bottom	3.3	1	20.8	7.9	26.3	6.8	88.4	8.3	7.5	6.8		
									2	20.8	8.0	26.3	6.8	88.5	7.9	8.3			
		SR4A	Cloudy	Calm	8:00	4.4	Surface	1.0	1	20.9	7.8	25.6	6.7	86.9	9.5	11.2	6.7	8.9	12.4
									2	20.9	8.0	25.7	6.7	87.0	9.2	12.1			
							Bottom	3.4	1	21.0	7.8	26.9	6.7	87.4	8.6	12.6	6.7		
									2	21.0	8.0	26.9	6.7	87.5	8.3	13.8			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		SR7	Cloudy	Moderate	7:23	4.5	Surface	1.0	1	20.9	7.9	25.5	6.7	87.2	14.6	10.7	6.7	15.4	11.7
									2	20.9	8.0	25.6	6.7	87.4	14.9	11.8			
							Bottom	3.5	1	20.9	7.9	25.8	6.8	88.5	16.0	12.1	6.8		
									2	20.9	8.0	25.8	6.8	88.4	16.1	12.3			
		SR8	Cloudy	Moderate	7:18	3.6	Surface	1.0	1	20.3	8.1	23.9	7.1	91.0	3.9	4.5	7.2	5.7	4.8
									2	20.4	8.2	24.4	7.2	92.1	3.3	5.5			
							Bottom	2.6	1	20.5	8.1	26.2	7.0	90.0	8.5	4.7	7.1		
									2	20.5	8.1	26.6	7.1	91.8	7.2	4.3			
		SR9	Cloudy	Moderate	7:34	3.3	Surface	1.0	1	20.7	8.1	25.1	7.0	90.9	5.6	7.9	7.1	4.5	6.1
									2	20.7	8.1	25.5	7.1	92.1	5.2	6.9			
							Bottom	2.3	1	20.7	8.1	24.9	7.1	91.4	3.3	4.4	7.2		
									2	20.7	8.2	25.3	7.2	92.7	3.7	5.2			
		SR10A(N)	Cloudy	Moderate	6:38	15.6	Surface	1.0	1	20.9	7.9	26.3	6.6	86.7	7.1	8.9	6.6	7.6	8.6
									2	21.0	7.9	26.3	6.6	86.7	6.8	9.9			
							Middle	7.8	1	21.0	7.9	27.3	6.5	86.1	8.2	8.7			
									2	21.1	7.9	27.4	6.5	86.2	7.6	8.0			
							Bottom	14.6	1	21.0	7.9	27.6	6.5	86.1	8.3	8.0	6.5		
									2	21.1	7.9	27.6	6.5	86.1	7.8	8.2			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
11-04-20	Mid-Ebb	CS4	Cloudy	Moderate	13:45	18.4	Surface	1.0	1	22.1	8.0	21.3	7.2	93.3	7.9	8.8	7.2	8.3	6.6
									2	22.2	8.1	21.6	7.2	93.5	6.9	8.4			
							Middle	9.2	1	22.5	8.0	20.9	7.3	94.5	8.6	6.3			
									2	22.6	8.1	21.2	7.1	93.3	7.0	5.4			
							Bottom	17.4	1	22.5	8.0	22.4	7.2	95.1	9.9	5.2	7.2		
									2	22.9	8.1	22.7	7.2	96.0	9.6	5.3			
		CS6	Cloudy	Moderate	14:56	9.7	Surface	1.0	1	21.4	8.1	24.3	7.1	92.8	4.9	5.5	7.1	6.0	4.7
									2	21.5	8.1	24.8	7.2	94.6	5.1	4.7			
							Middle	4.9	1	21.4	8.1	26.7	7.0	92.8	4.4	4.6			
									2	21.4	8.1	27.2	7.2	95.7	5.5	4.1			
							Bottom	8.7	1	21.3	8.1	27.4	7.0	91.9	7.5	4.2	7.0		
									2	21.4	8.1	27.8	7.0	92.7	8.5	4.9			
		CS(Mf)3(N)	Cloudy	Moderate	13:35	6.8	Surface	1.0	1	22.1	8.1	21.8	7.1	92.8	9.3	8.3	7.2	8.9	9.1
									2	22.1	8.1	22.2	7.2	93.6	9.3	9.0			
							Middle	3.4	1	21.9	8.1	22.5	7.1	92.8	9.3	9.1			
									2	21.9	8.1	22.9	7.2	93.5	9.7	8.6			
							Bottom	5.8	1	21.8	8.1	22.5	7.2	92.8	7.9	9.4	7.2		
									2	21.9	8.1	22.8	7.2	93.6	7.8	10.1			
		CS(Mf)5	Cloudy	Moderate	14:50	11.7	Surface	1.0	1	21.4	7.9	23.9	6.7	87.2	7.0	7.7	6.6	10.8	9.2
									2	21.4	7.9	23.7	6.7	87.0	6.8	8.6			
							Middle	5.9	1	21.3	8.0	26.3	6.5	85.7	10.3	9.6			
									2	21.3	8.0	26.4	6.5	85.6	10.0	9.9			
							Bottom	10.7	1	21.2	8.0	27.7	6.5	85.6	15.3	9.6	6.5		
									2	21.3	8.0	27.8	6.5	85.8	15.3	9.7			
		IS8(N)	Cloudy	Calm	13:45	4.5	Surface	1.0	1	21.4	7.8	23.5	7.0	90.2	6.4	4.9	7.0	7.3	4.7
									2	21.5	8.0	23.6	7.0	90.3	6.1	4.3			
							Bottom	3.5	1	21.5	7.8	24.0	7.0	91.1	8.5	5.5	7.0		
									2	21.5	8.0	24.1	7.0	91.7	8.2	4.2			
		IS12	Cloudy	Moderate	14:01	14.3	Surface	1.0	1	21.8	8.0	22.1	7.3	94.1	9.7	5.8	7.3	7.8	6.2
									2	21.9	8.1	22.5	7.3	94.8	9.3	5.5			
							Middle	7.2	1	21.6	8.0	22.9	7.2	93.3	6.5	5.5			
									2	21.7	8.1	23.3	7.2	94.2	6.4	6.7			
							Bottom	13.3	1	22.0	8.0	22.7	7.1	93.1	7.2	7.2	7.2		
									2	22.0	8.1	23.2	7.2	93.9	7.9	6.4			
		IS13	Cloudy	Moderate	14:06	10.6	Surface	1.0	1	21.7	8.1	24.5	7.2	93.7	6.8	4.7	7.2	5.5	5.1
									2	21.8	8.1	24.9	7.2	94.7	7.8	4.4			
							Middle	5.3	1	21.7	8.1	24.4	7.2	93.9	4.9	5.2			
									2	21.8	8.1	24.9	7.2	94.9	4.8	5.4			
							Bottom	9.6	1	21.8	8.1	22.9	7.2	94.0	4.6	5.3	7.3		
									2	21.8	8.1	23.3	7.3	95.0	3.8	5.3			
		IS14	Cloudy	Moderate	13:57	14.2	Surface	1.0	1	21.8	8.0	23.1	7.1	92.7	6.9	4.7	7.2	5.3	4.9
									2	21.9	8.1	23.5	7.2	93.7	6.9	5.3			
							Middle	7.1	1	22.1	8.0	22.8	7.1	92.8	4.7	4.9			
									2	22.1	8.1	23.2	7.2	93.8	4.3	5.0			
							Bottom	13.2	1	22.2	8.0	21.5	7.2	93.1	4.7	4.4	7.2		
									2	22.3	8.1	21.9	7.2	94.0	4.2	5.3			
		IS15	Cloudy	Moderate	14:11	10.1	Surface	1.0	1	21.9	8.1	23.0	7.3	95.6	6.7	5.2	7.3	8.6	5.0
									2	21.9	8.1	23.5	7.4	96.7	5.6	5.2			
							Middle	5.1	1	21.9	8.1	24.9	7.3	95.8	5.3	4.2			
									2	21.9	8.1	25.4	7.3	97.0	6.5	5.2			
							Bottom	9.1	1	22.1	8.1	24.8	7.3	97.0	13.9	5.4	7.4		
									2	22.0	8.1	25.4	7.4	98.3	13.5	4.5			
		IS17	Cloudy	Moderate	14:15	7.2	Surface	1.0	1	21.4	7.9	22.1	6.8	87.2	8.2	8.7	6.8	9.3	8.0
									2	21.4	7.9	22.1	6.8	87.0	7.9	7.8			
							Middle	3.6	1	21.3	7.9	24.4	6.7	87.1	8.9	7.5			
									2	21.4	7.9	24.4	6.7	86.9	8.7	8.2			
							Bottom	6.2	1	21.3	7.8	24.4	6.8	88.1	11.0	7.9	6.8		
									2	21.4	7.9	24.4	6.8	88.0	10.9	7.8			
		IS(Mf)9	Cloudy	Calm	13:37	3.6	Surface	1.0	1	21.6	7.8	23.9	7.0	91.2	6.0	5.0	7.0	7.4	4.6
									2	21.7	8.0	24.1	7.0	91.2	6.2	4.7			
							Bottom	2.6	1	21.6	7.8	24.5	7.0	91.6	8.2	4.3	7.0		
									2	21.6	7.9	24.6	7.0	91.9	9.0	4.2			
		IS(Mf)11	Cloudy	Moderate	14:26	10.9	Surface	1.0	1	21.3	7.9	23.5	6.7	87.2	9.0	11.1	6.7	11.1	11.0
									2	21.3	7.9	23.6	6.7	87.0	9.5	10.0			
							Middle	5.5	1	21.3	7.9	24.1	6.7	86.8	13.2	11.7			
									2	21.3	8.0	24.1	6.7	86.6	13.4	10.8			
							Bottom	9.9	1	21.2	7.9	27.6	6.5	86.4	10.4	11.9	6.5		
									2	21.3	7.9	27.7	6.5	86.7	10.8	10.3			
		IS(Mf)16	Cloudy	Moderate	14:10	5.5	Surface	1.0	1	21.4	7.9	25.0	6.7	88.2	11.3	5.1	6.8	12.5	6.4
									2	21.5	7.9	25.1	6.8	88.4	11.2	4.8			
							Bottom	4.5	1	21.4	7.9	25.1	6.7	88.1	13.9	8.2	6.8		
									2	21.4	8.0	25.1	6.8	88.5	13.7	7.4			
		SR4(N2)	Cloudy	Calm	13:52	4.2	Surface	1.0	1	21.6	7.8	23.6	6.8	88.9	6.3	6.2	6.8	6.9	5.6
									2	21.6	7.9	23.6	6.8	88.8	5.8	5.8			
							Bottom	3.2	1	21.5	7.8	24.2	6.8	89.0	7.9	5.3	6.9		
									2	21.5	7.9	24.3	6.9	89.7	7.6	5.0			
		SR4A	Cloudy	Calm	13:58	4.5	Surface	1.0	1	21.4	7.8	23.9	6.8	88.8	5.4	5.7	6.8	5.7	5.7
									2	21.5	8.0	24.0	6.8	88.8	5.2	6.3			
							Bottom	3.5	1	21.4	7.8	24.5	6.8	89.0	6.3	5.6	6.9		
									2	21.4	8.0	24.6	6.9	89.5	6.0	5.3			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		SR7	Cloudy	Moderate	14:32	4.4	Surface	1.0	1	21.4	7.9	22.5	6.8	88.1	7.7	3.7	6.8	9.7	4.4
									2	21.4	7.9	22.6	6.8	88.2	7.4	2.8			
							Bottom	3.4	1	21.3	7.9	23.9	6.9	89.1	11.8	5.9	7.0		
									2	21.3	8.0	24.0	7.0	90.8	11.7	5.0			
		SR8	Cloudy	Moderate	14:46	3.3	Surface	1.0	1	21.6	8.1	24.3	7.1	93.2	4.1	5.5	7.2	4.5	5.2
									2	21.6	8.2	24.8	7.2	93.9	4.7	5.0			
							Bottom	2.3	1	21.6	8.1	24.0	7.2	93.9	4.5	5.6	7.2		
									2	21.7	8.2	24.4	7.2	94.1	4.8	4.7			
		SR9	Cloudy	Moderate	14:17	3.1	Surface	1.0	1	22.0	8.1	23.1	7.3	95.1	8.0	5.1	7.3	6.1	4.6
									2	22.1	8.1	23.5	7.3	96.1	8.3	5.8			
							Bottom	2.1	1	21.9	8.1	24.5	7.2	94.5	4.1	3.2	7.2		
									2	21.9	8.1	24.9	7.2	95.5	3.8	4.1			
		SR10A(N)	Cloudy	Moderate	15:15	15.7	Surface	1.0	1	21.7	7.9	24.3	7.0	91.5	3.7	3.2	6.9	4.5	3.0
									2	21.7	8.0	24.4	7.0	91.1	3.3	3.7			
							Middle	7.9	1	21.4	8.0	26.5	6.7	88.1	5.6	2.8			
									2	21.4	8.0	26.6	6.7	87.8	5.2	2.8			
							Bottom	14.7	1	21.3	7.9	28.1	6.7	88.7	4.8	2.6	6.7		
									2	21.3	8.0	28.2	6.7	88.6	4.4	2.9			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
11-04-20	Mid-Flood	CS4	Cloudy	Moderate	8:47	18.6	Surface	1.0	1	21.3	8.0	22.4	7.1	91.8	6.6	15.2	7.2	7.5	11.3
									2	21.4	8.1	22.8	7.2	92.8	6.2	16.1			
							Middle	9.3	1	21.3	8.0	22.4	7.2	92.4	7.4	16.3			
									2	21.4	8.1	22.8	7.3	93.6	8.2	6.8			
							Bottom	17.6	1	21.4	8.0	24.9	7.2	93.9	8.2	5.5	7.2		
									2	21.5	8.1	25.4	7.2	95.0	8.4	7.9			
		CS6	Cloudy	Moderate	7:41	9.6	Surface	1.0	1	21.3	8.0	23.8	7.1	92.3	5.4	7.5	7.2	6.4	7.2
									2	21.4	8.0	24.2	7.2	93.1	5.8	8.6			
							Middle	4.8	1	21.3	8.1	23.7	7.1	92.3	7.4	6.9			
									2	21.4	7.9	24.1	7.2	93.1	7.9	6.8			
							Bottom	8.6	1	21.4	8.1	23.6	7.1	92.4	6.3	7.0	7.2		
									2	21.4	7.9	24.1	7.2	93.2	5.6	6.1			
		CS(Mf)3(N)	Cloudy	Moderate	9:01	7.0	Surface	1.0	1	21.3	8.0	20.9	7.2	91.8	11.6	7.6	7.3	9.8	12.8
									2	21.3	8.1	21.3	7.3	92.6	11.6	7.3			
							Middle	3.5	1	21.4	8.0	20.9	7.2	92.1	9.5	14.2			
									2	21.5	8.1	21.3	7.3	92.9	9.3	14.8			
							Bottom	6.0	1	21.5	8.0	22.4	7.2	92.2	8.0	16.4	7.2		
									2	21.5	8.1	22.9	7.2	93.0	8.6	16.2			
		CS(Mf)5	Cloudy	Moderate	7:42	11.5	Surface	1.0	1	21.3	7.8	23.2	6.8	87.2	6.1	7.1	6.7	8.0	6.5
									2	21.3	8.0	23.2	6.7	87.0	5.6	7.6			
							Middle	5.8	1	21.2	7.8	26.2	6.6	86.9	7.0	5.8			
									2	21.3	8.0	26.2	6.6	86.9	7.7	6.3			
							Bottom	10.5	1	21.2	7.8	28.0	6.6	87.9	10.6	6.3	6.7		
									2	21.3	8.0	28.1	6.7	88.6	10.8	6.0			
		IS8(N)	Cloudy	Calm	8:46	4.1	Surface	1.0	1	21.2	7.9	22.5	6.9	89.2	6.1	6.3	6.9	6.3	6.2
									2	21.3	7.9	22.6	6.9	89.4	6.0	6.4			
							Bottom	3.1	1	21.3	7.9	22.7	7.0	90.6	6.7	6.6	7.1		
									2	21.3	7.9	22.7	7.1	91.2	6.3	5.5			
		IS12	Cloudy	Moderate	8:27	14.7	Surface	1.0	1	21.3	8.0	23.5	7.1	92.3	5.9	4.2	7.2	7.7	5.2
									2	21.3	8.1	23.9	7.2	93.1	6.0	5.0			
							Middle	7.4	1	21.3	8.0	23.4	7.1	92.2	8.1	5.7			
									2	21.3	8.1	23.8	7.2	93.2	8.4	5.4			
							Bottom	13.7	1	21.3	8.0	23.6	7.1	91.9	9.1	5.4	7.1		
									2	21.4	8.1	24.0	7.1	92.8	8.9	5.4			
		IS13	Cloudy	Moderate	8:22	10.8	Surface	1.0	1	21.3	8.0	23.8	7.1	92.3	6.2	5.9	7.2	7.9	6.0
									2	21.4	8.1	24.2	7.2	93.3	7.3	5.7			
							Middle	5.4	1	21.3	8.0	25.1	7.1	93.4	7.5	5.7			
									2	21.3	8.1	25.6	7.2	94.3	7.1	5.9			
							Bottom	9.8	1	21.3	8.1	24.0	7.5	97.0	9.5	6.4	7.4		
									2	21.3	8.1	24.5	7.3	95.5	9.6	6.4			
		IS14	Cloudy	Moderate	8:32	14.6	Surface	1.0	1	21.3	8.0	24.9	7.0	91.0	7.2	14.8	7.1	8.9	15.3
									2	21.3	8.1	25.4	7.0	91.8	7.2	14.4			
							Middle	7.3	1	21.3	8.0	24.2	7.1	92.6	10.6	13.8			
									2	21.3	8.1	24.7	7.2	93.5	11.8	14.5			
							Bottom	13.6	1	21.3	8.0	24.1	7.1	92.8	8.4	14.2	7.2		
									2	21.3	8.1	24.7	7.2	93.5	8.3	19.8			
		IS15	Cloudy	Moderate	8:15	10.4	Surface	1.0	1	21.3	8.0	25.1	7.0	91.3	4.2	6.6	7.0	5.7	5.1
									2	21.4	8.1	25.6	7.1	92.5	4.3	6.4			
							Middle	5.2	1	21.3	8.0	25.9	7.0	91.3	4.4	5.4			
									2	21.4	8.1	26.4	7.0	92.4	4.3	4.4			
							Bottom	9.4	1	21.3	8.0	25.9	7.0	91.3	8.6	4.3	7.1		
									2	21.4	8.1	25.6	7.1	92.6	8.5	3.5			
		IS17	Cloudy	Moderate	8:17	7.5	Surface	1.0	1	21.2	7.8	23.1	6.7	86.8	5.8	7.0	6.7	7.2	7.2
									2	21.3	7.9	23.1	6.7	86.7	5.7	7.9			
							Middle	3.8	1	21.3	7.8	24.3	6.6	86.3	7.1	7.5			
									2	21.3	7.9	24.4	6.6	86.3	6.8	7.6			
							Bottom	6.5	1	21.3	7.8	25.6	6.6	86.9	8.6	7.3	6.7		
									2	21.3	7.9	25.6	6.7	87.3	8.9	6.1			
		IS(Mf)9	Cloudy	Calm	8:56	3.4	Surface	1.0	1	21.3	7.9	23.3	6.9	89.0	9.8	11.7	6.9	10.6	12.3
									2	21.3	7.9	23.4	6.9	89.0	9.5	12.3			
							Bottom	2.4	1	21.3	7.9	23.5	7.0	90.1	11.6	13.2	7.0		
									2	21.4	7.9	23.5	7.0	90.5	11.4	11.8			
		IS(Mf)11	Cloudy	Moderate	8:07	11.6	Surface	1.0	1	21.3	7.8	23.1	6.8	87.5	10.0	12.6	6.8	10.5	12.6
									2	21.3	7.9	23.2	6.8	87.4	9.6	13.9			
							Middle	5.8	1	21.3	7.8	23.7	6.8	87.6	11.9	12.4			
									2	21.3	7.9	23.8	6.8	87.6	11.6	13.7			
							Bottom	10.6	1	21.3	7.8	24.8	6.9	89.7	10.0	11.0	6.9		
									2	21.3	7.9	24.8	6.9	90.4	9.9	11.7			
		IS(Mf)16	Cloudy	Moderate	8:24	5.4	Surface	1.0	1	21.3	7.8	22.8	6.8	88.1	5.8	6.2	6.8	7.2	5.9
									2	21.3	7.9	22.8	6.8	88.0	5.4	6.1			
							Bottom	4.4	1	21.3	7.8	23.9	6.8	88.3	8.9	5.7	6.8		
									2	21.4	7.9	23.9	6.8	88.4	8.5	5.7			
		SR4(N2)	Cloudy	Calm	8:42	4.5	Surface	1.0	1	21.3	7.9	23.2	6.9	88.5	10.5	7.0	6.9	9.4	7.5
									2	21.3	7.9	23.3	6.9	88.7	10.5	6.5			
							Bottom	3.5	1	21.3	7.8	23.7	6.9	89.9	8.4	8.7	7.0		
									2	21.4	7.9	23.8	7.0	90.5	8.1	7.6			
		SR4A	Cloudy	Calm	8:36	4.3	Surface	1.0	1	21.2	7.9	22.7	6.9	88.4	6.9	5.7	6.9	6.9	6.5
									2	21.3	7.9	22.8	6.9	88.3	6.6	6.2			
							Bottom	3.3	1	21.3	7.9	23.0	7.0	89.6	7.1	6.8	7.0		
									2	21.3	7.9	23.0	7.0	90.2	6.9	7.3			

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
		SR7	Cloudy	Moderate	8:00	4.2	Surface	1.0	1	21.3	7.8	23.6	6.7	86.8	7.0	5.6	6.7	7.9	5.6
									2	21.3	7.9	23.7	6.7	86.6	7.0	6.4			
							Bottom	3.2	1	21.3	7.8	24.9	6.7	87.2	8.8	5.6	6.7		
									2	21.3	7.9	24.9	6.7	87.5	8.9	4.7			
		SR8	Cloudy	Moderate	7:54	3.5	Surface	1.0	1	21.4	8.0	23.8	7.1	92.4	6.5	7.6	7.2	6.1	7.1
									2	21.4	8.1	24.2	7.2	93.3	5.2	8.4			
							Bottom	2.5	1	21.4	8.0	24.0	7.1	92.5	7.0	6.7	7.2		
									2	21.4	8.1	24.4	7.2	93.7	5.6	5.7			
		SR9	Cloudy	Moderate	8:09	3.3	Surface	1.0	1	21.3	8.0	25.9	7.0	91.6	8.9	6.0	7.0	7.3	6.1
									2	21.3	8.1	26.4	7.0	92.4	8.7	6.5			
							Bottom	2.3	1	21.3	8.0	25.8	7.0	92.1	6.4	6.1	7.1		
									2	21.3	8.1	26.2	7.1	92.8	5.2	5.7			
		SR10A(N)	Cloudy	Moderate	7:17	15.3	Surface	1.0	1	21.2	7.9	23.6	6.8	88.2	4.5	5.3	6.7	4.8	4.9
									2	21.3	7.9	23.7	6.8	88.0	4.0	5.6			
							Middle	7.7	1	21.2	7.9	26.6	6.6	87.0	5.5	4.4			
									2	21.3	7.9	26.6	6.6	87.1	4.7	4.6			
							Bottom	14.3	1	21.2	7.9	27.2	6.6	87.4	5.5	4.9	6.6		
									2	21.3	7.9	27.3	6.6	87.7	4.8	4.5			

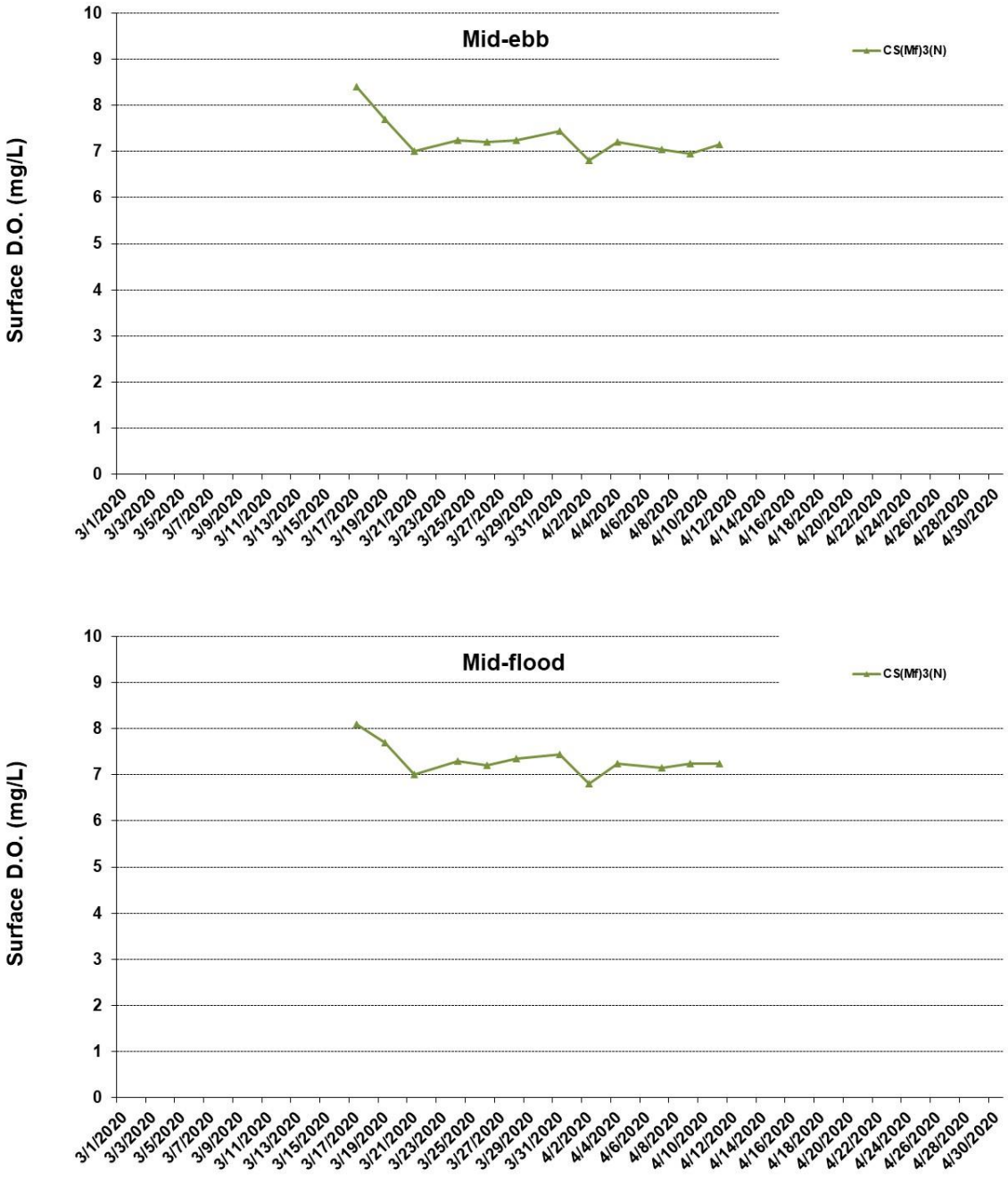
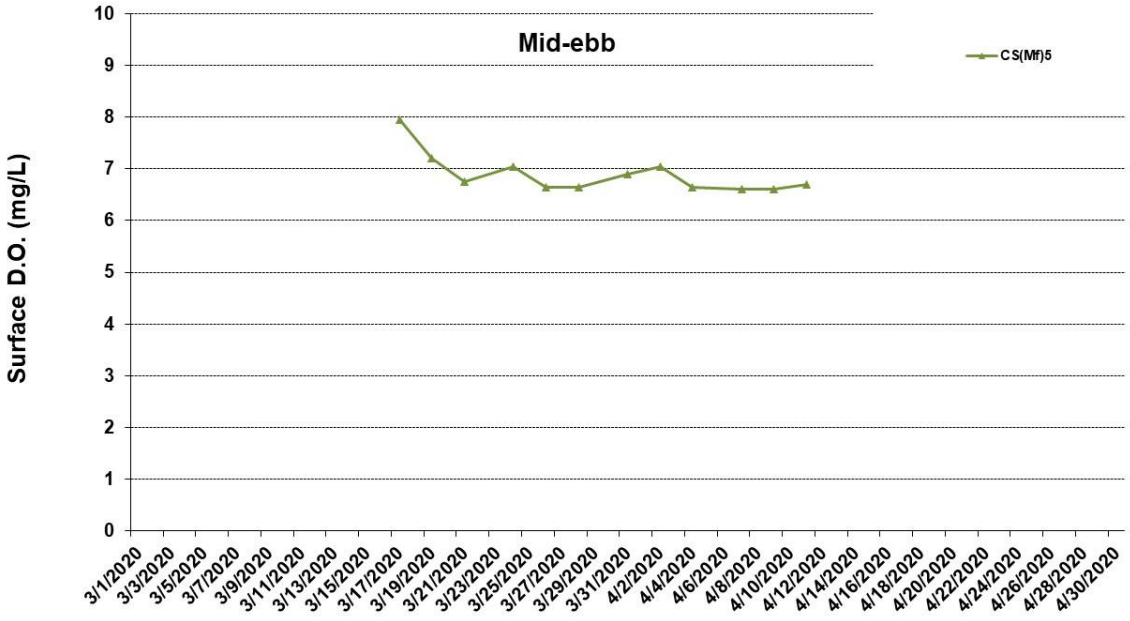


Figure J1 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at CS(Mf)3(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



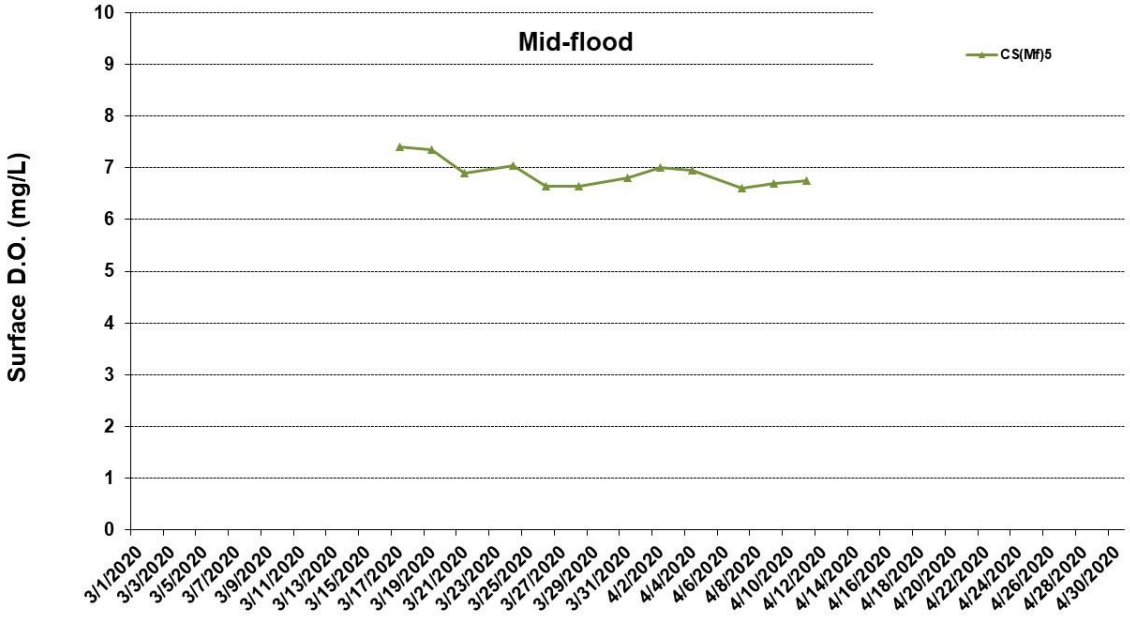


Figure J2 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at CS(Mf)5. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

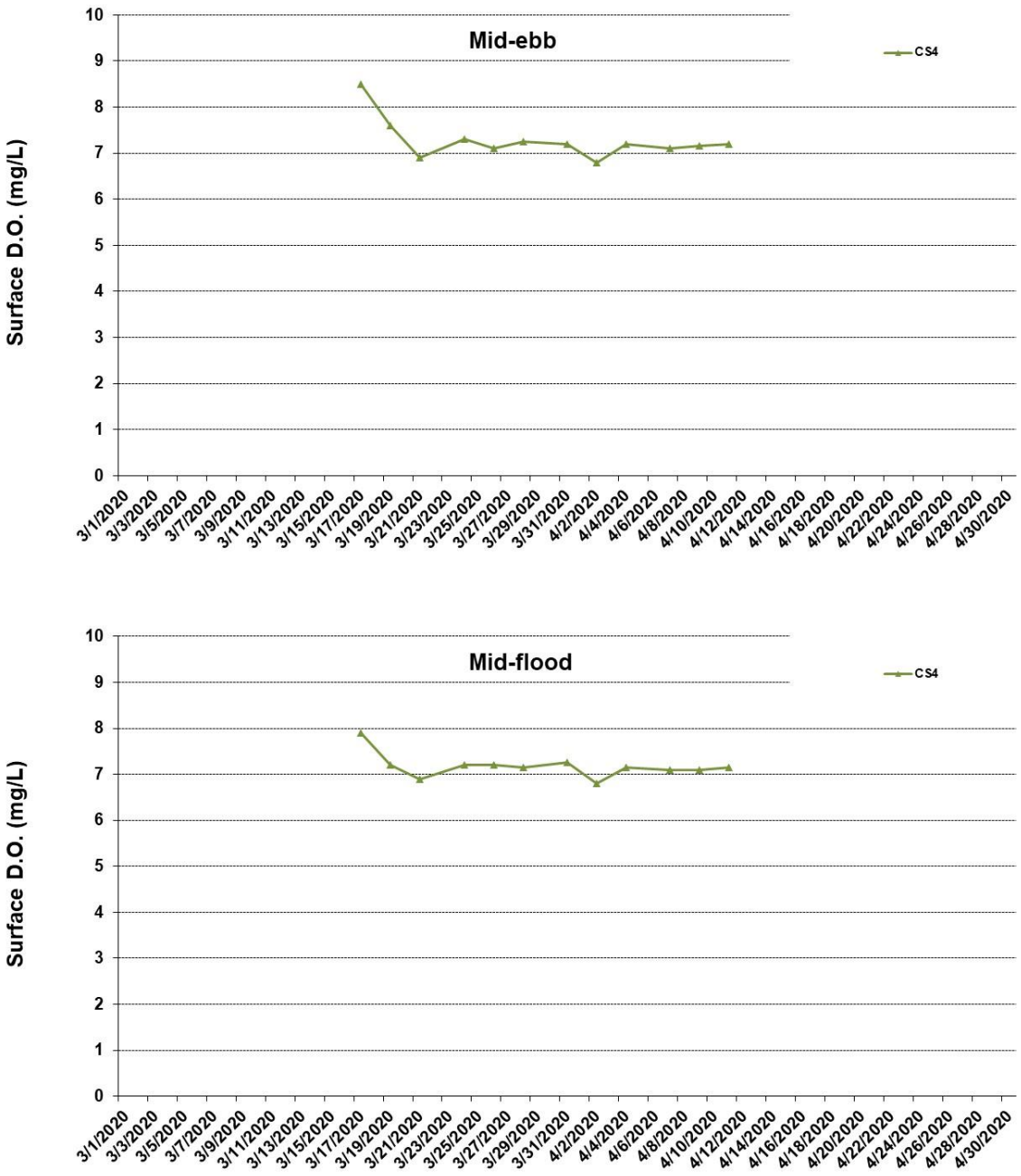


Figure J3 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at CS4. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

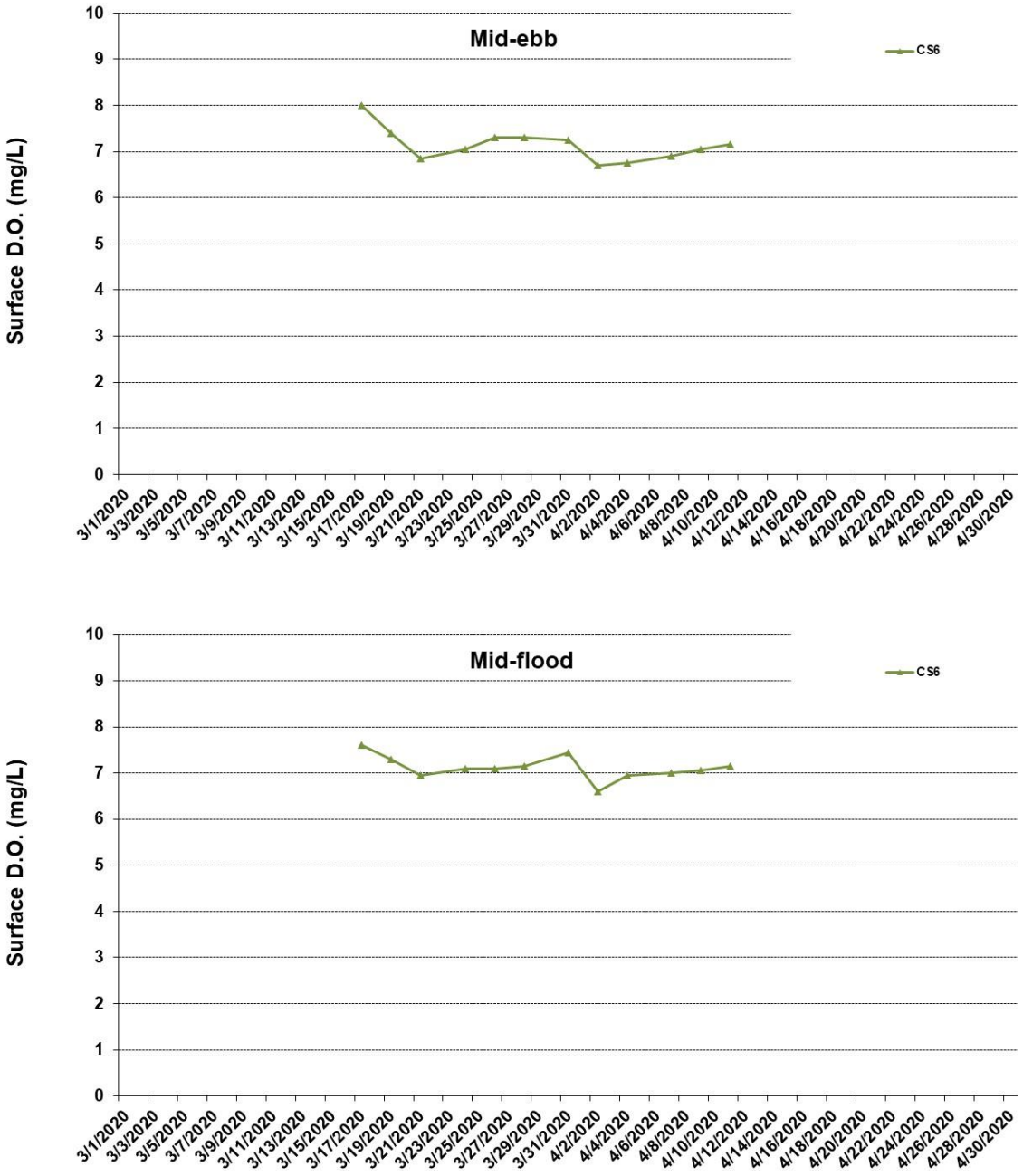


Figure J4 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at CS6. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

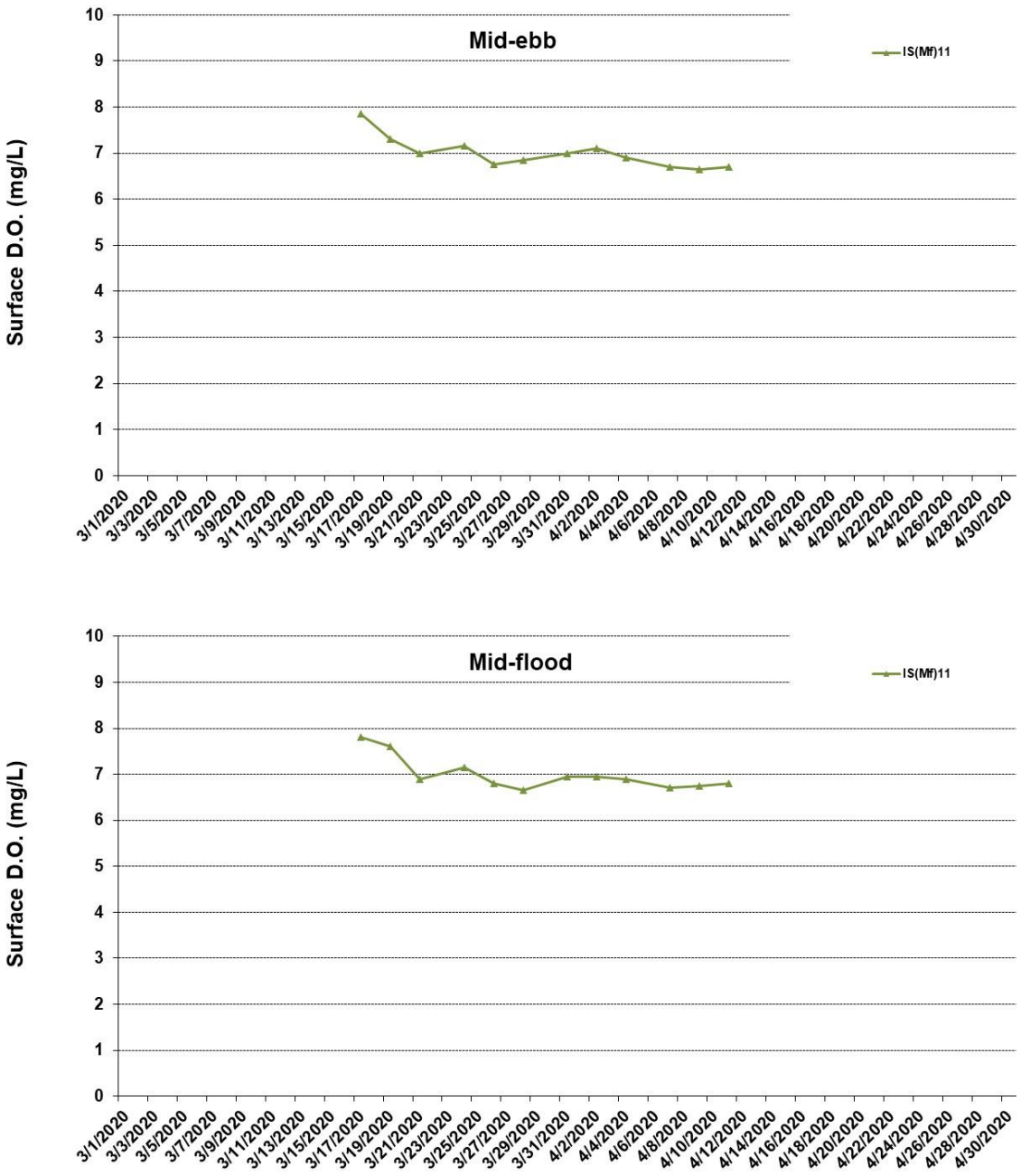


Figure J5 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at IS(Mf)11. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

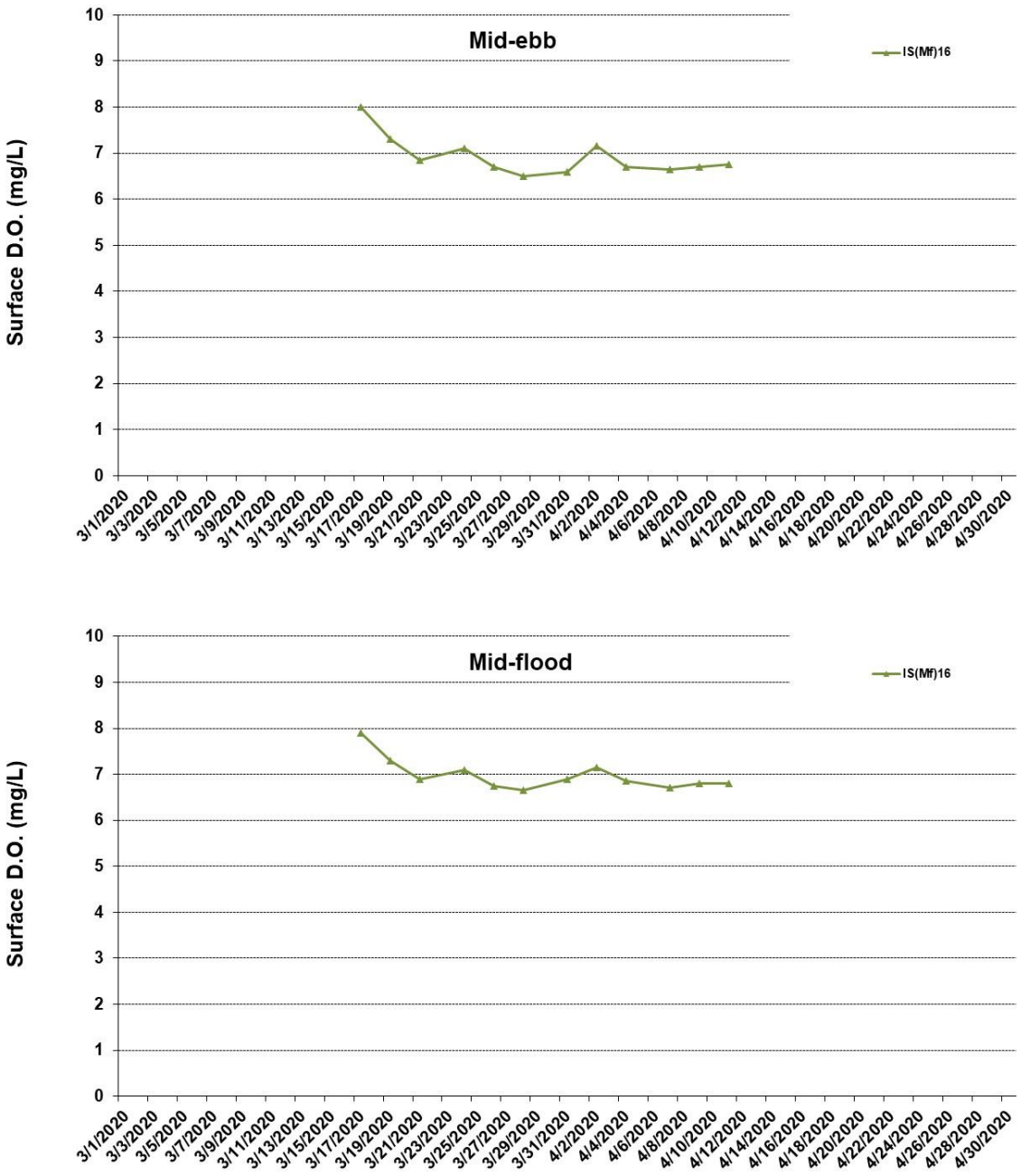
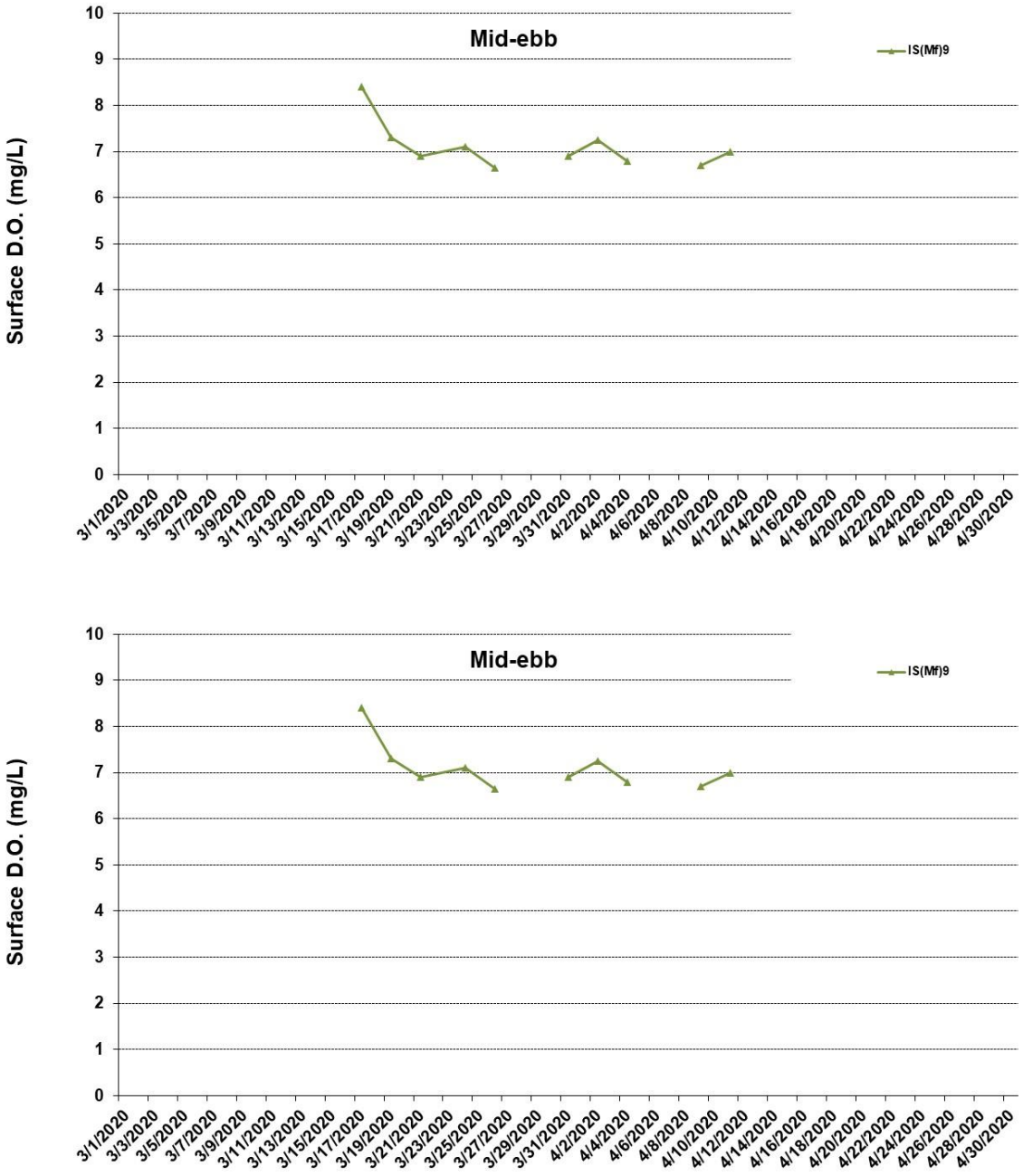


Figure J6 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at IS(Mf)16. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



Mid-ebb
IS(Mf)9
Surface D.O. (mg/L)

Figure J7 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at IS(Mf)9. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

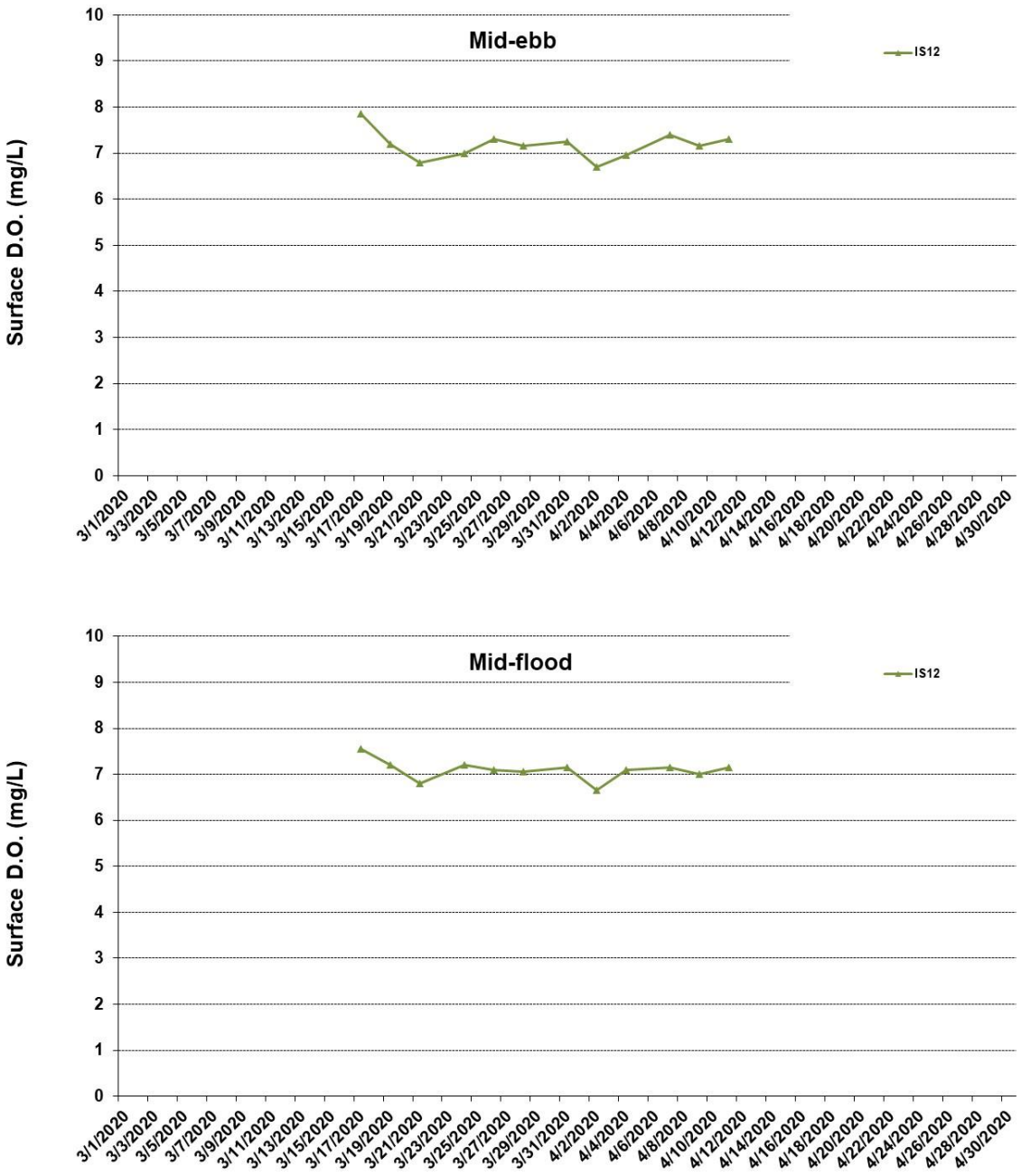


Figure J8 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at IS12. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

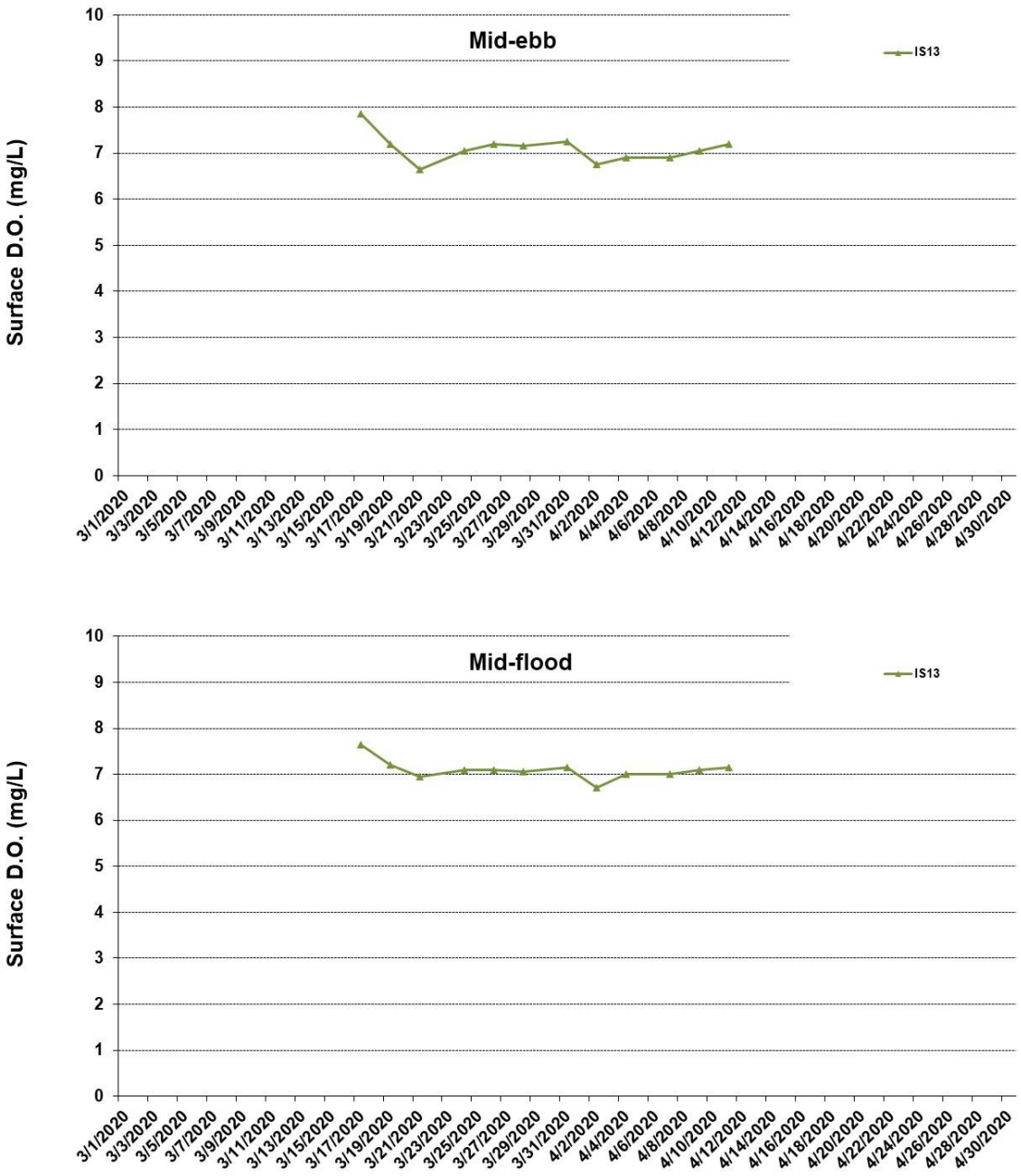


Figure J9 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at IS13. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

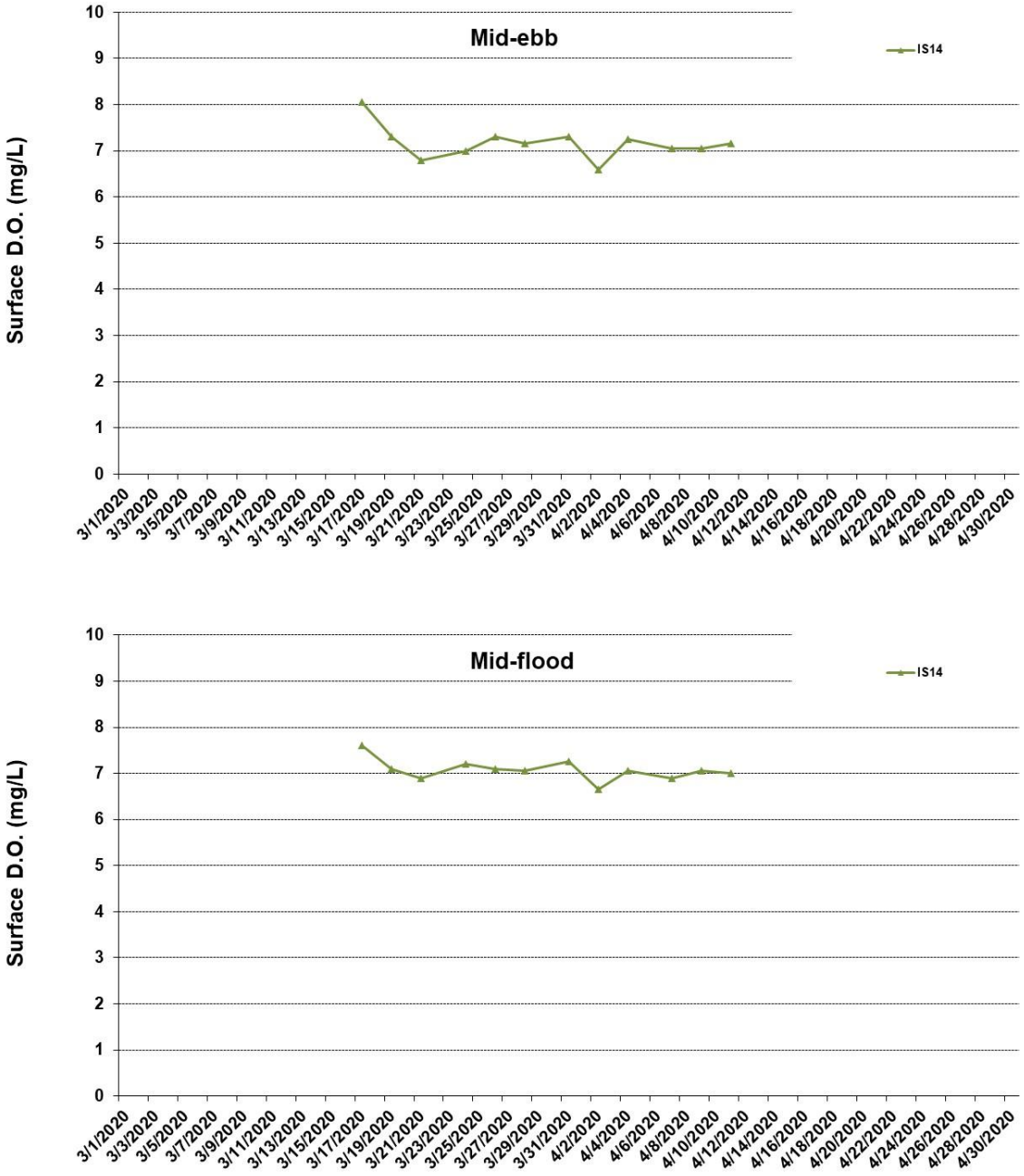
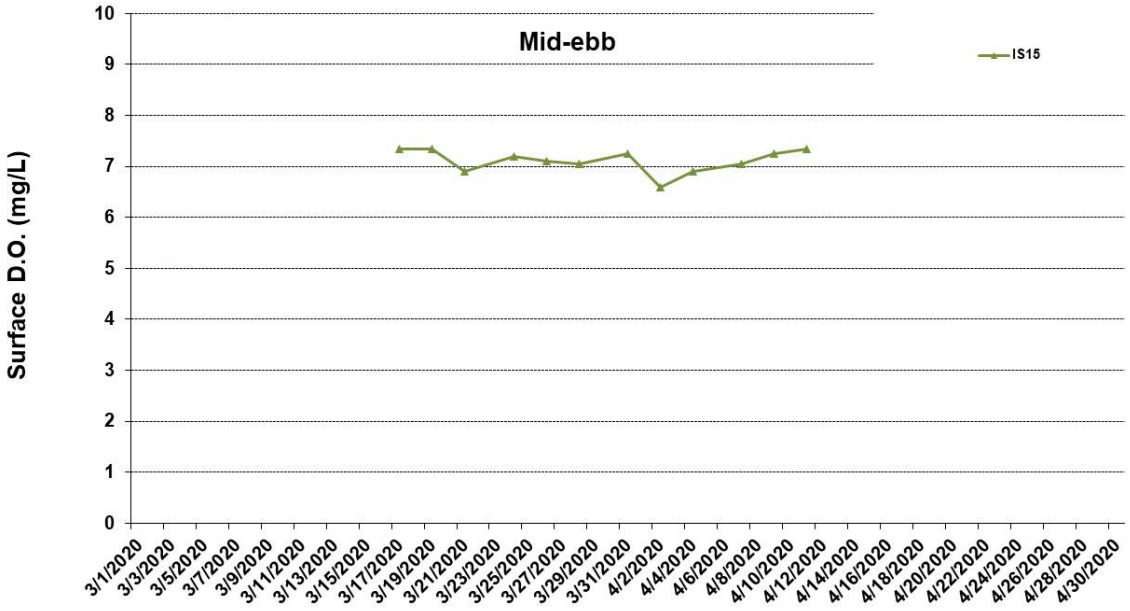


Figure J10 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at IS14. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



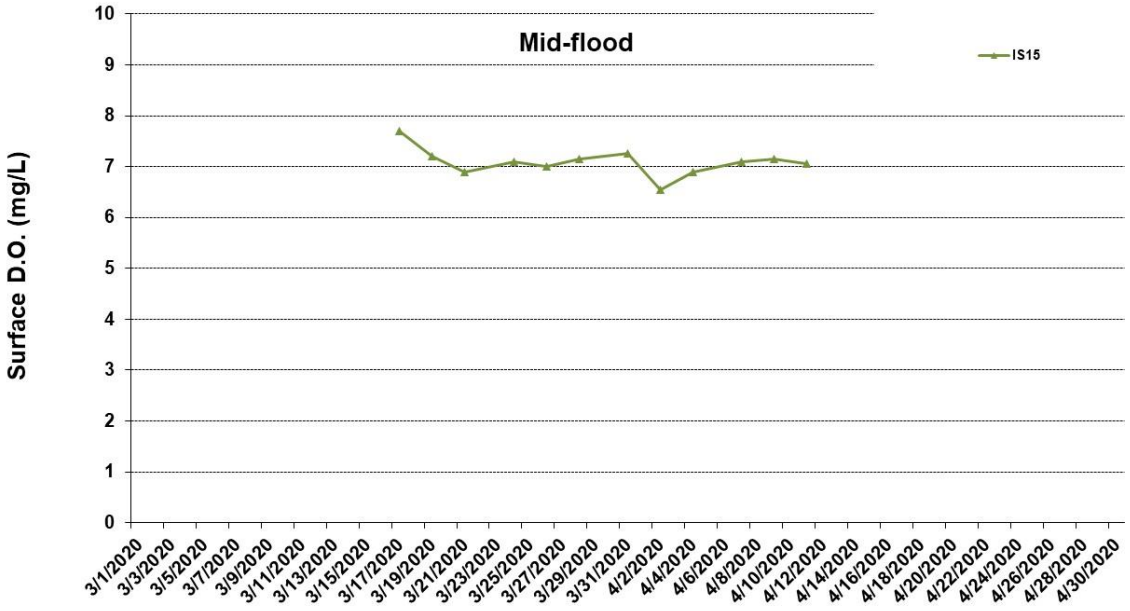


Figure J11 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at IS15. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

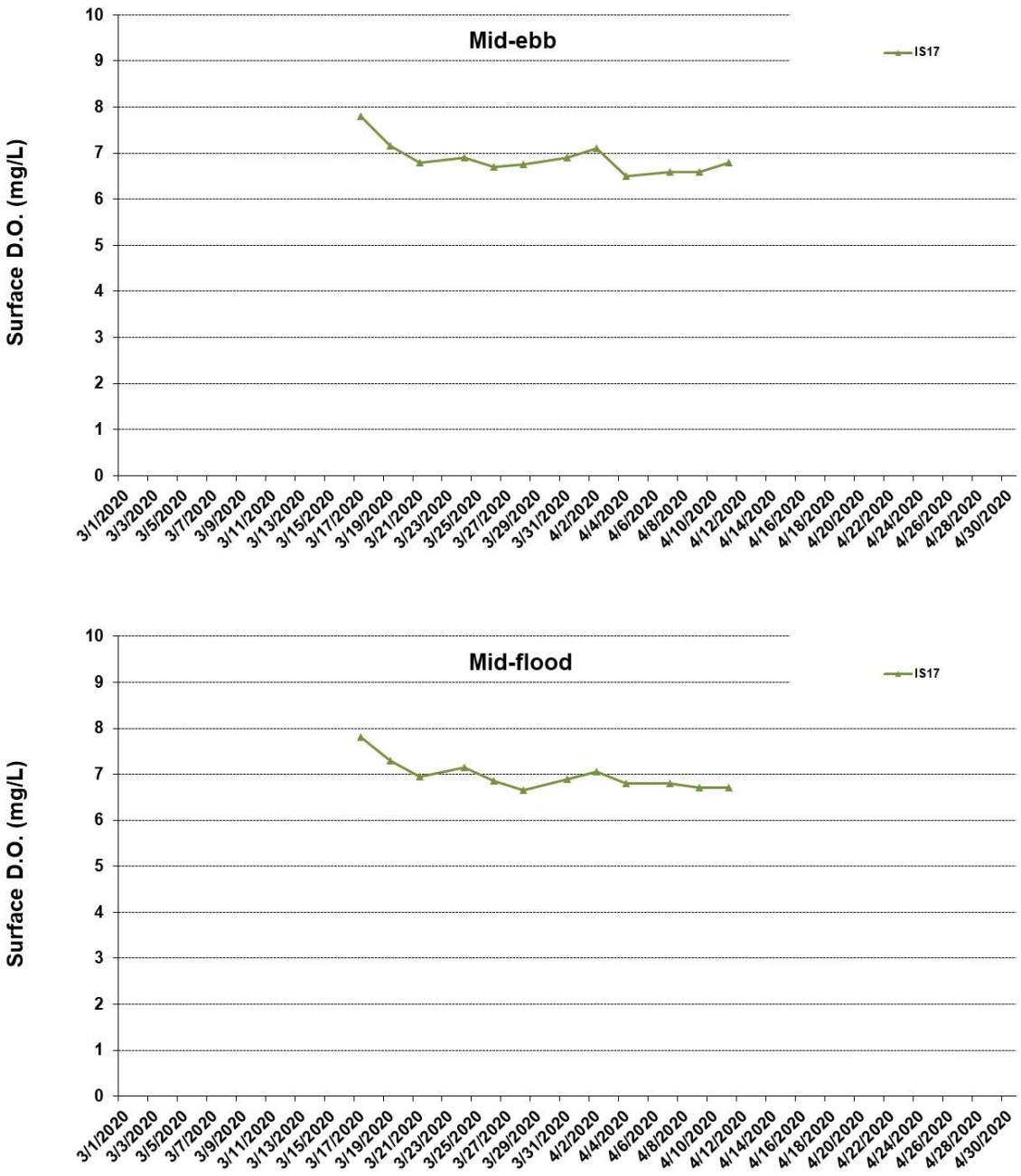
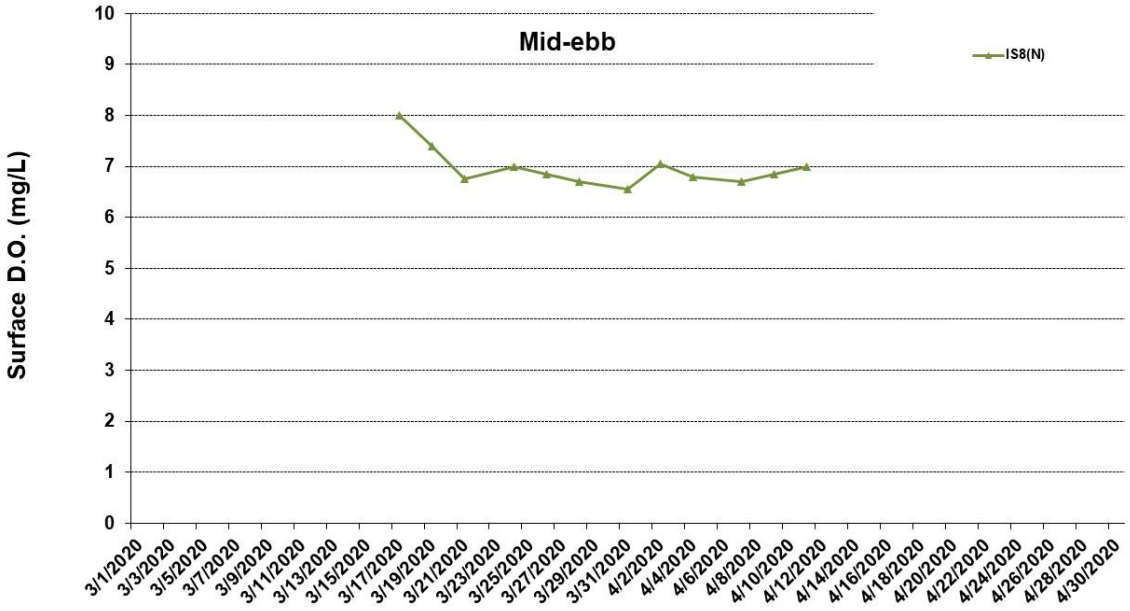


Figure J12 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at IS17. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



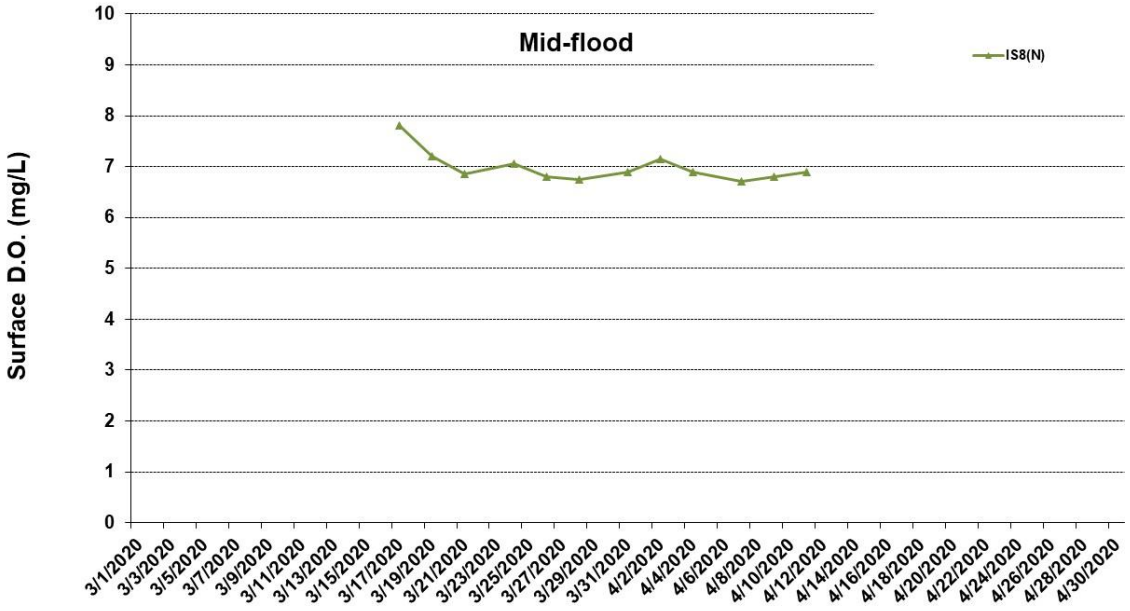
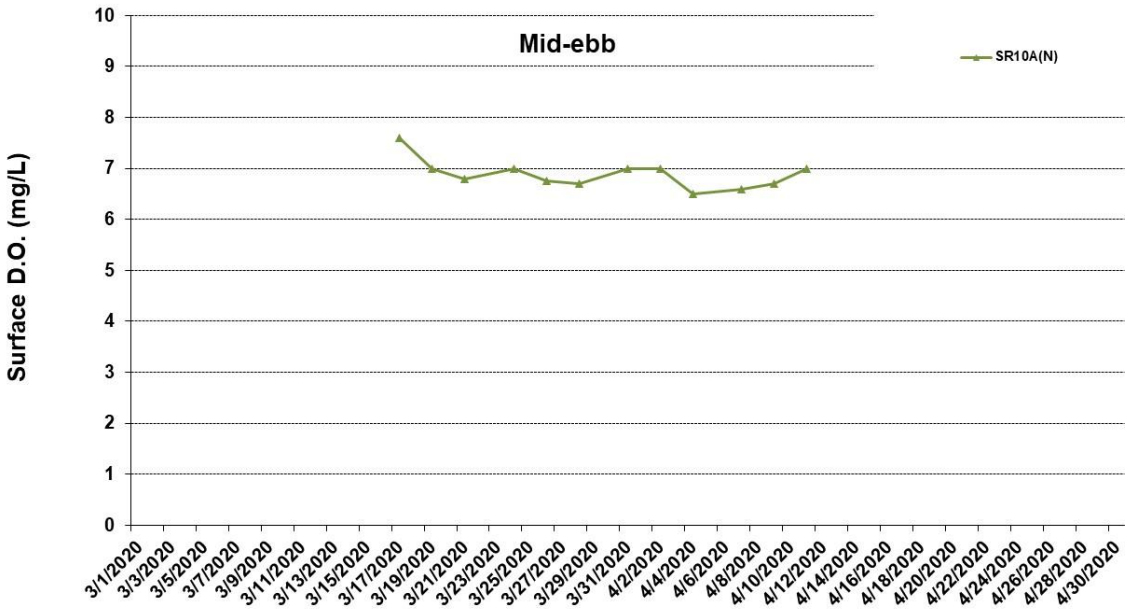


Figure J13 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at IS8(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



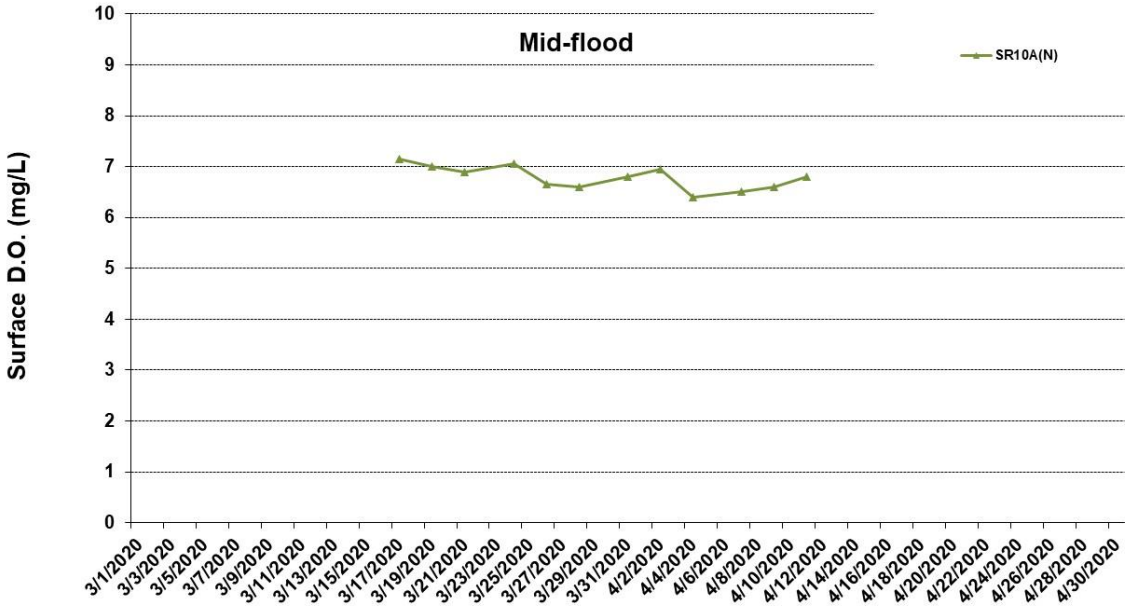
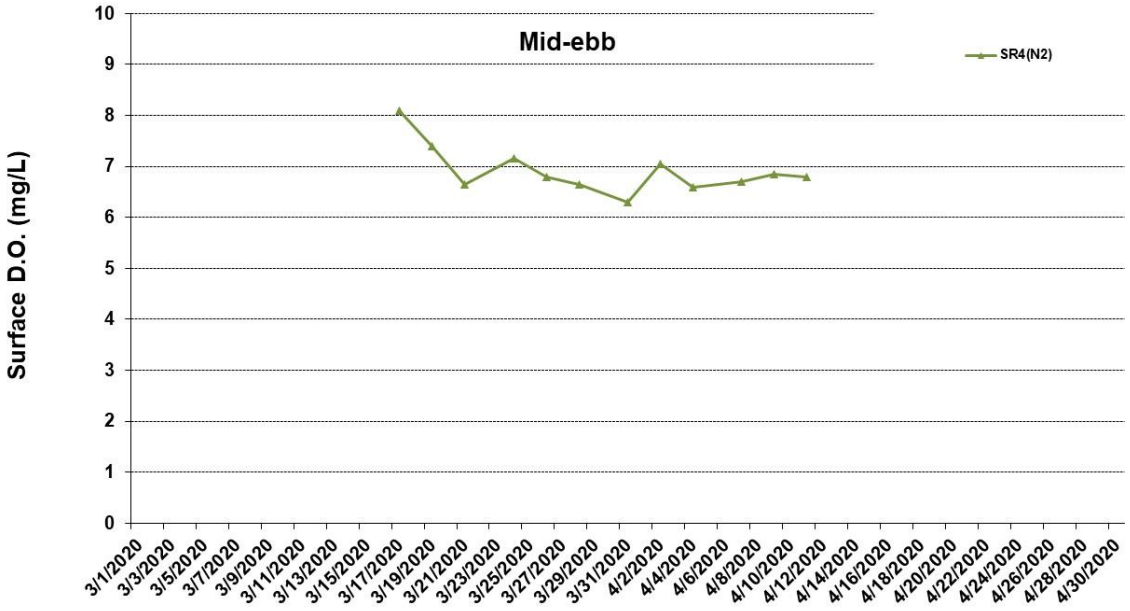


Figure J14 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at SR10A(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



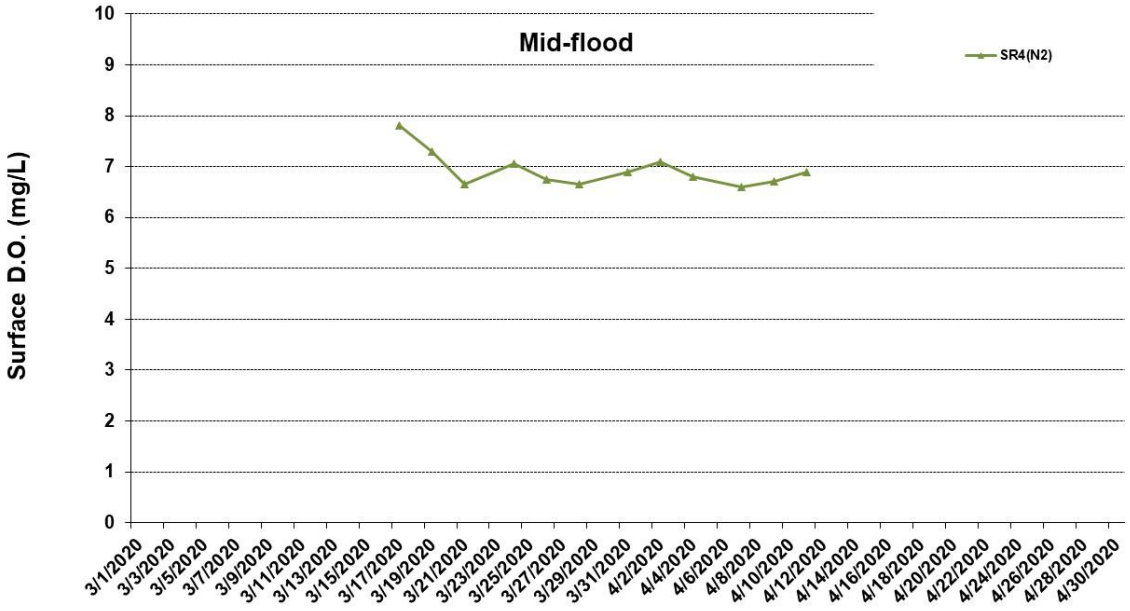


Figure J15 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at SR4(N2). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

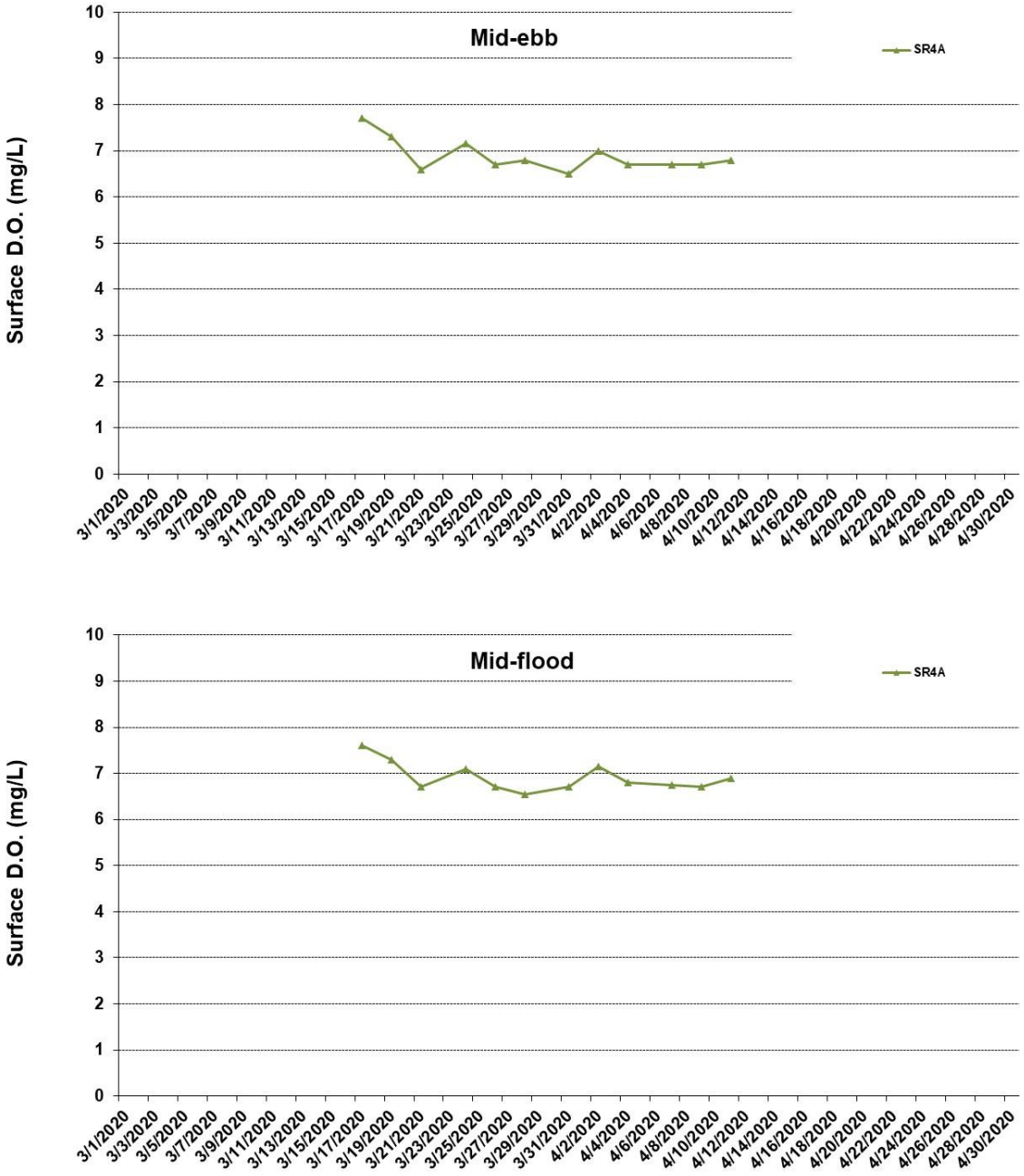
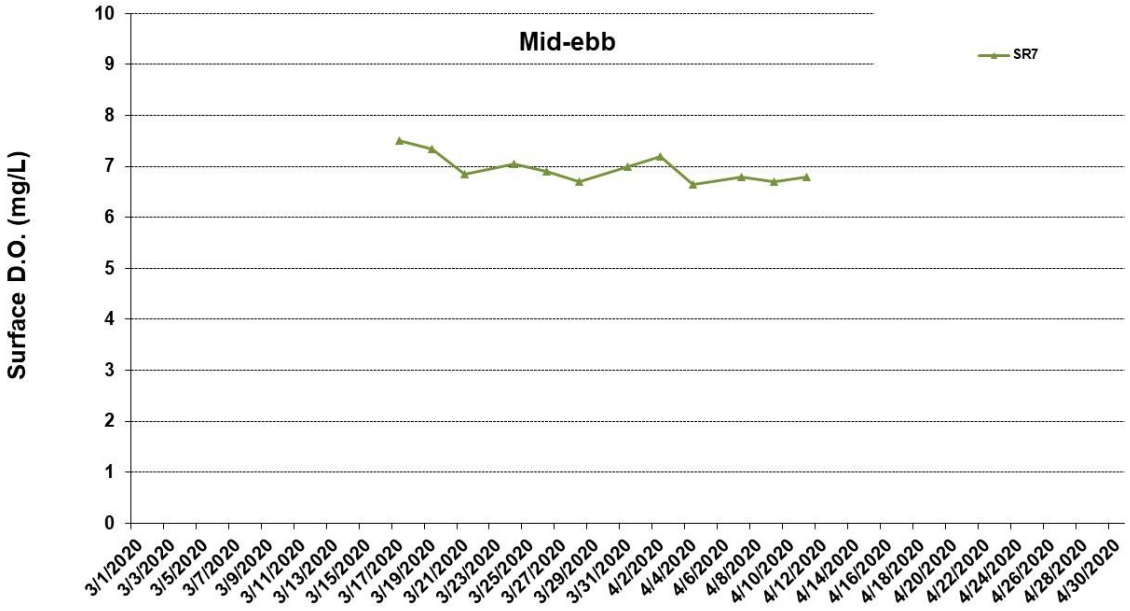


Figure J16 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at SR4A. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



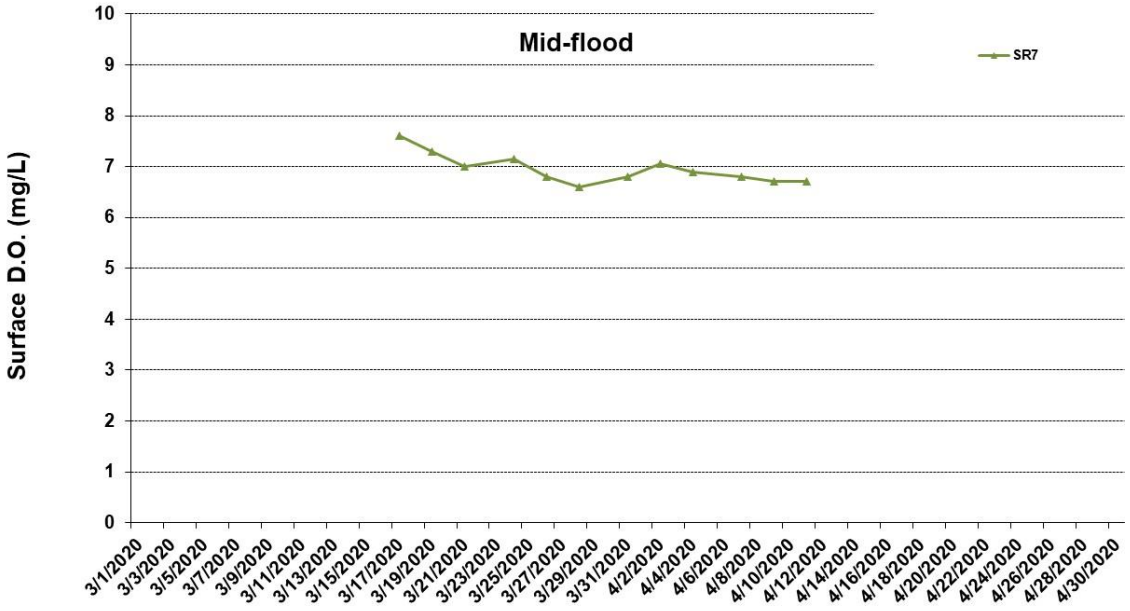
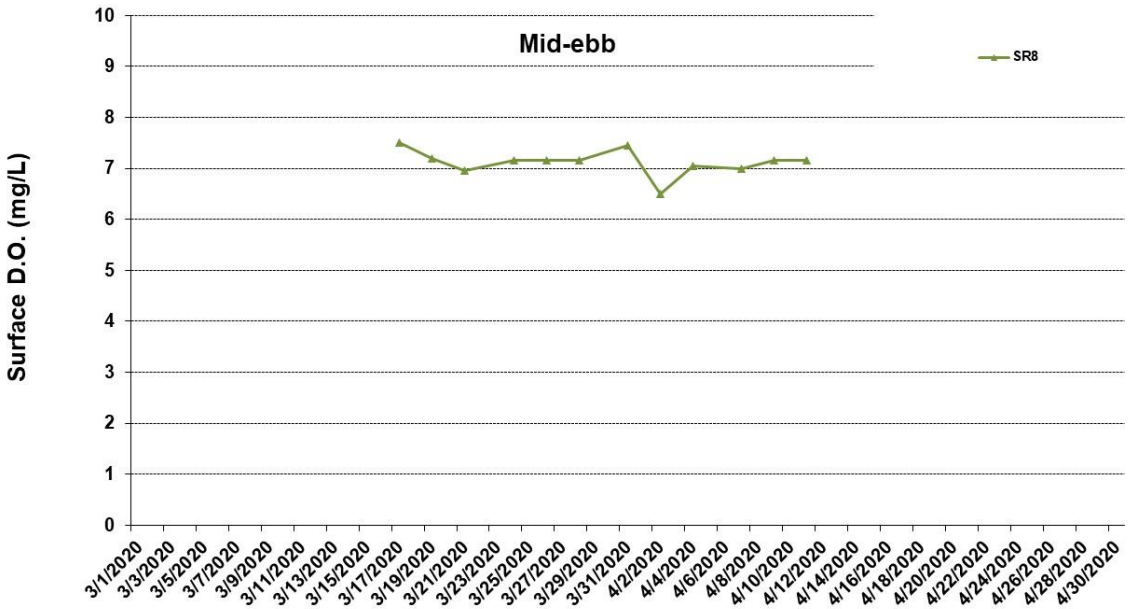


Figure J17 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at SR7. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



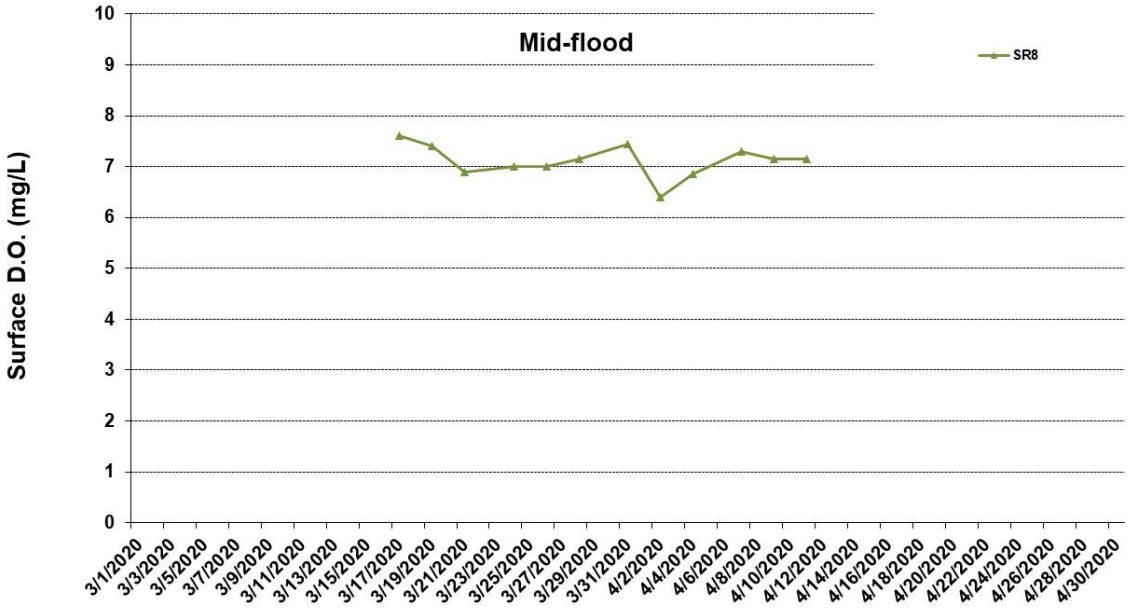
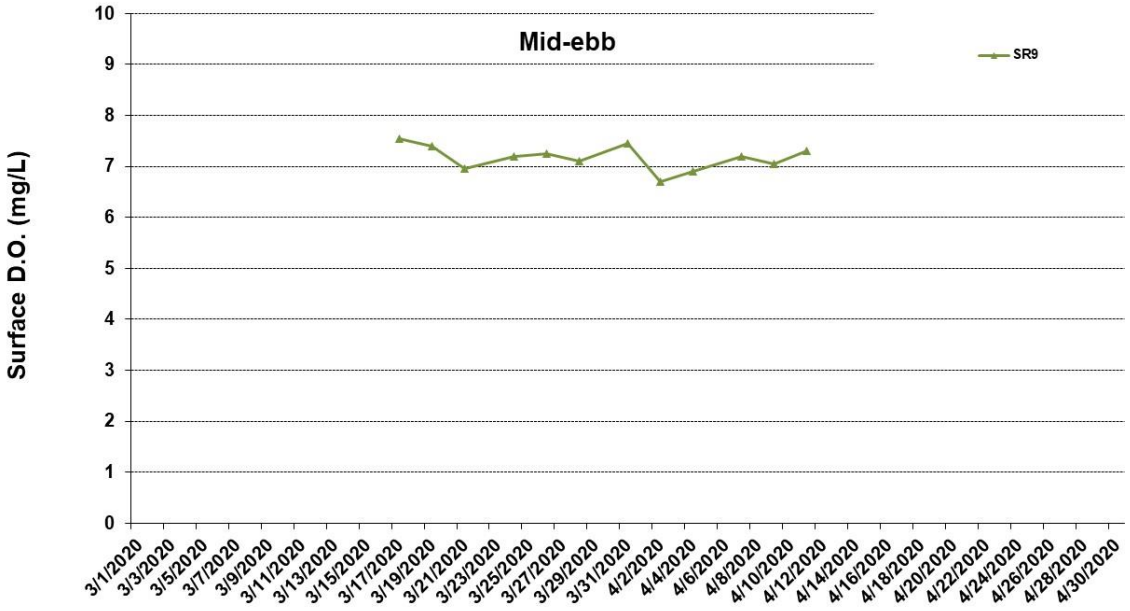


Figure J18 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at SR8. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



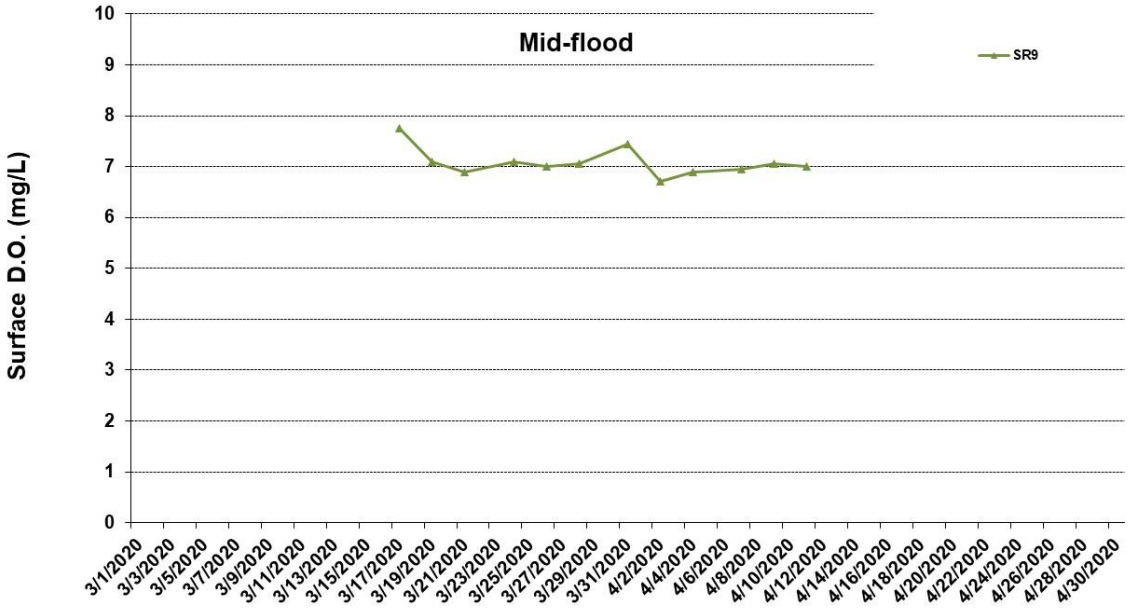


Figure J19 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 17 March 2020 and 11 April 2020 at SR4A. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

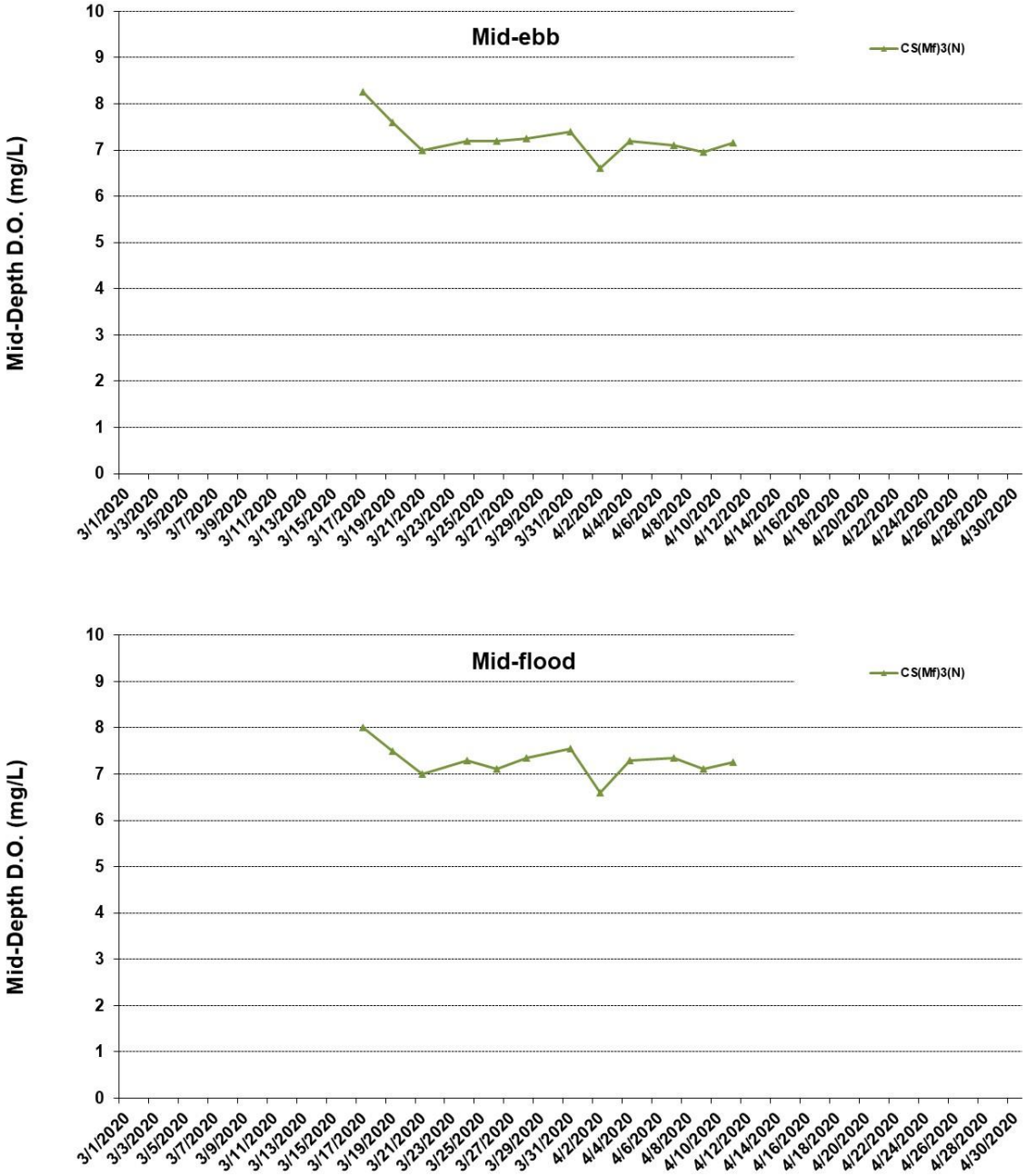
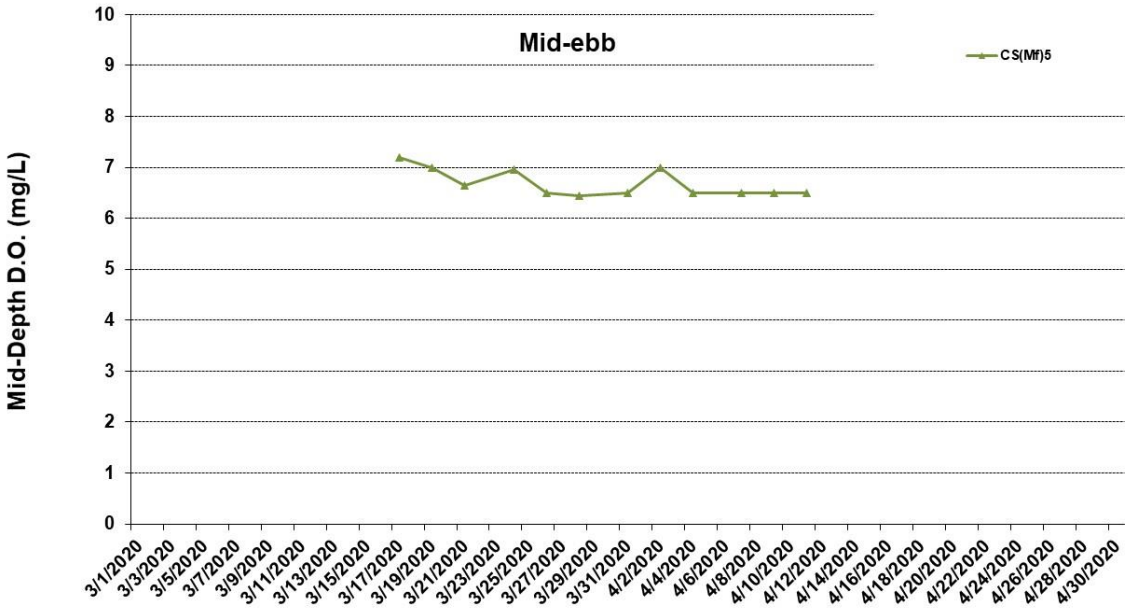


Figure J20 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 17 March 2020 and 11 April 2020 at CS(Mf)3(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



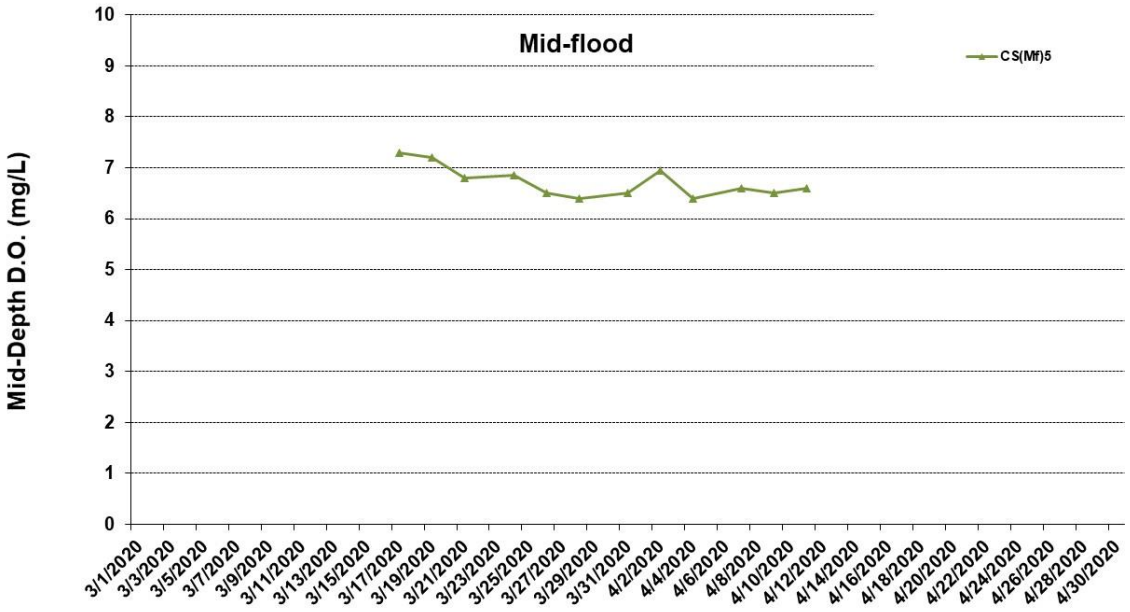
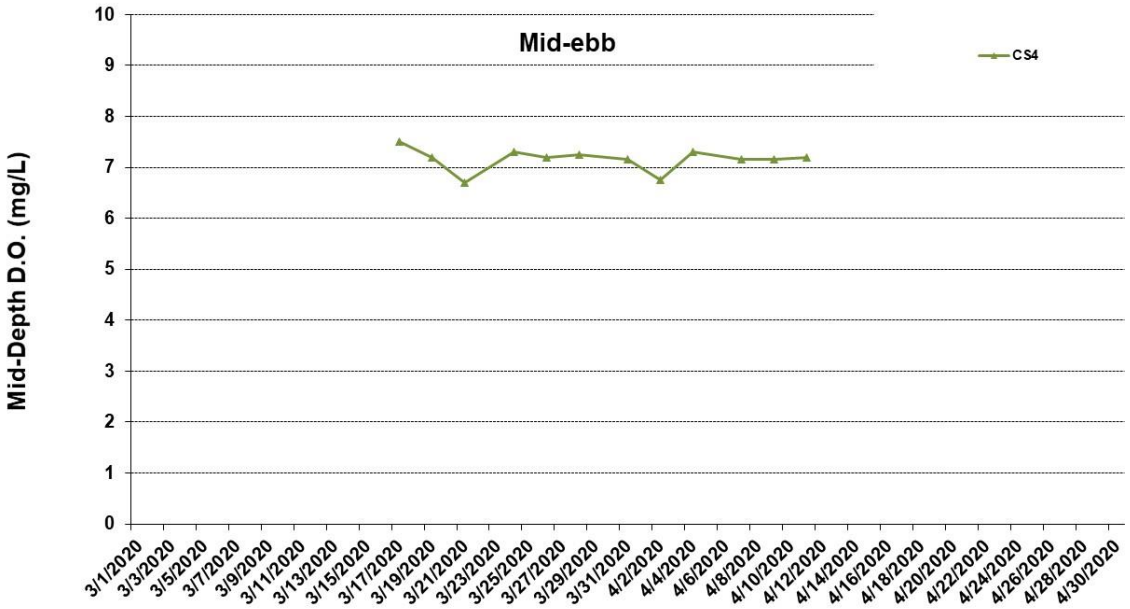


Figure J21 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 17 March 2020 and 11 April 2020 at CS(Mf)5. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



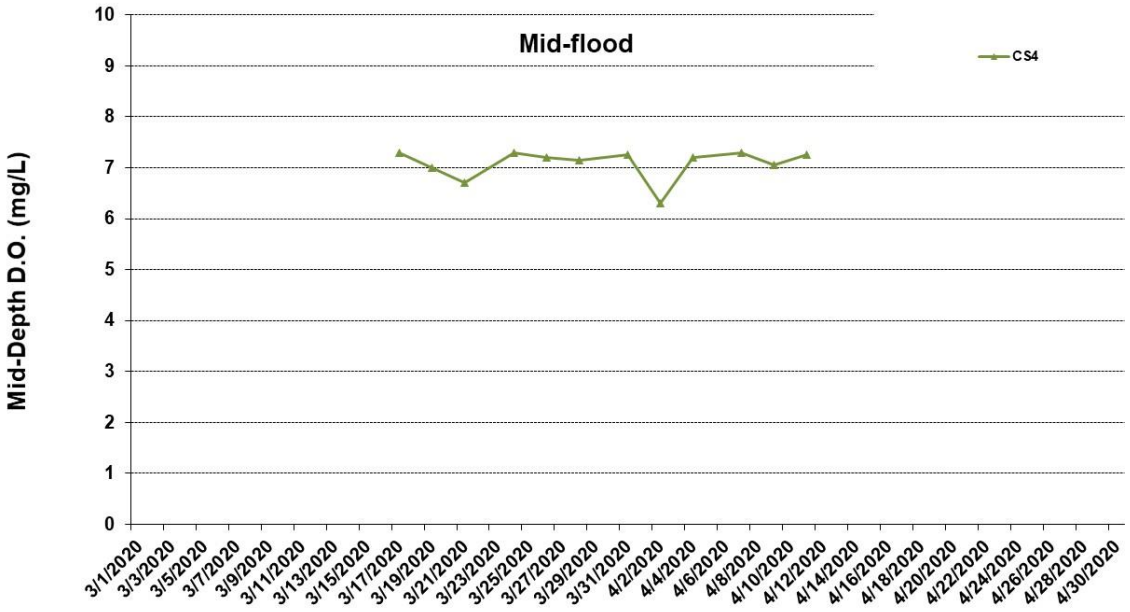


Figure J22 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 17 March 2020 and 11 April 2020 at CS4. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

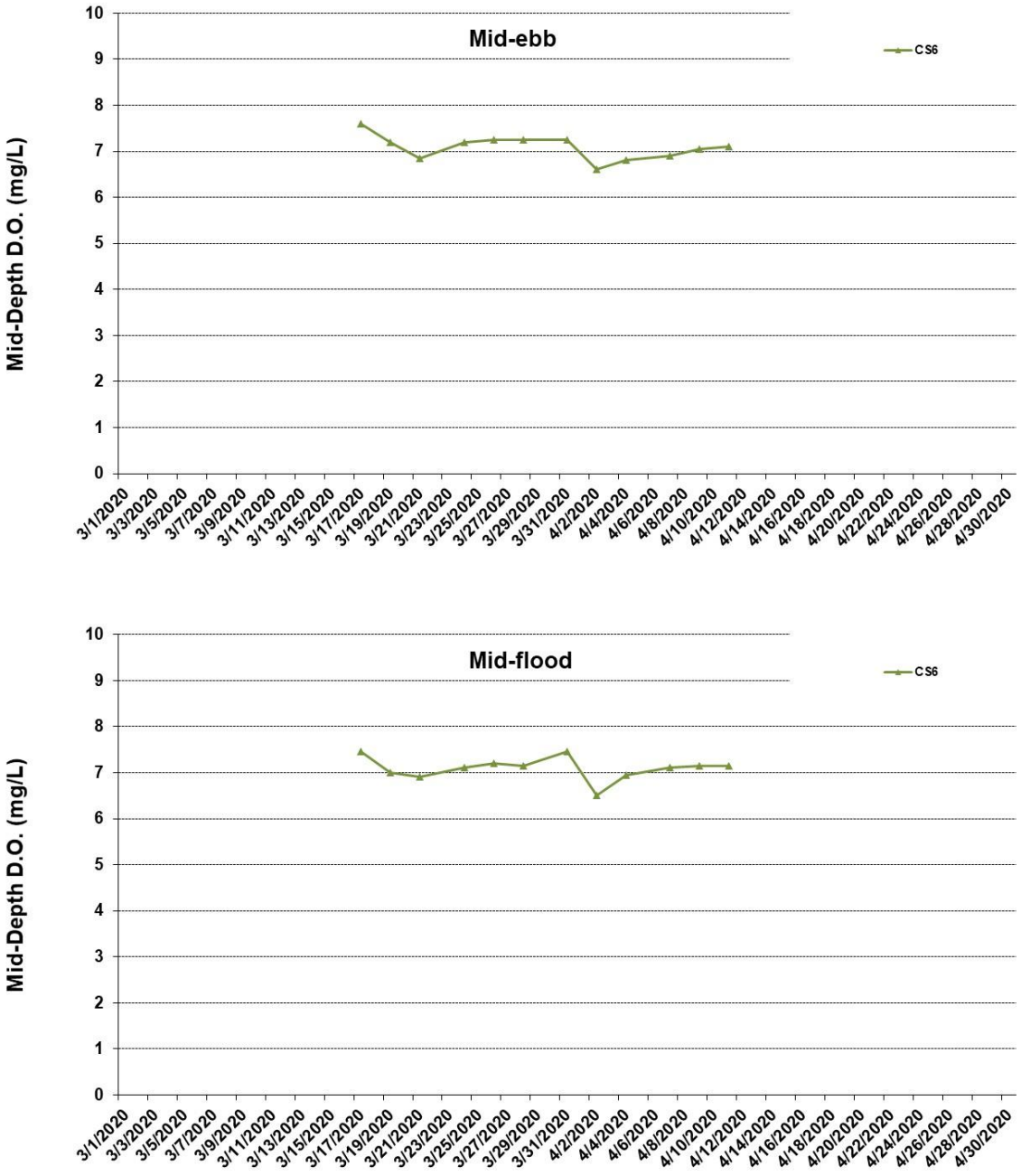
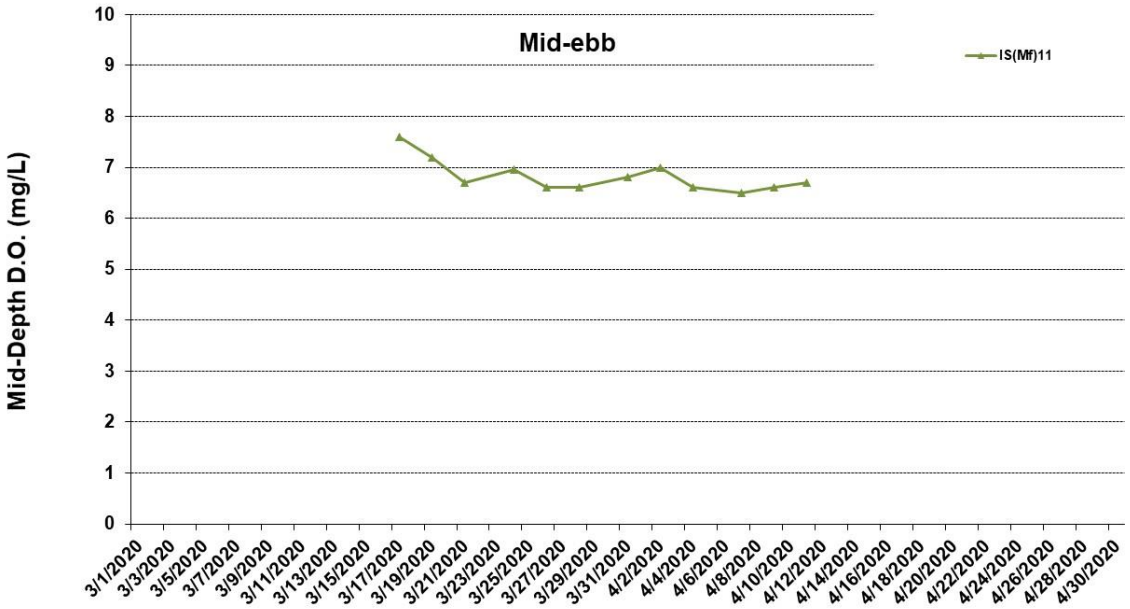


Figure J23 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 17 March 2020 and 11 April 2020 at CS6. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



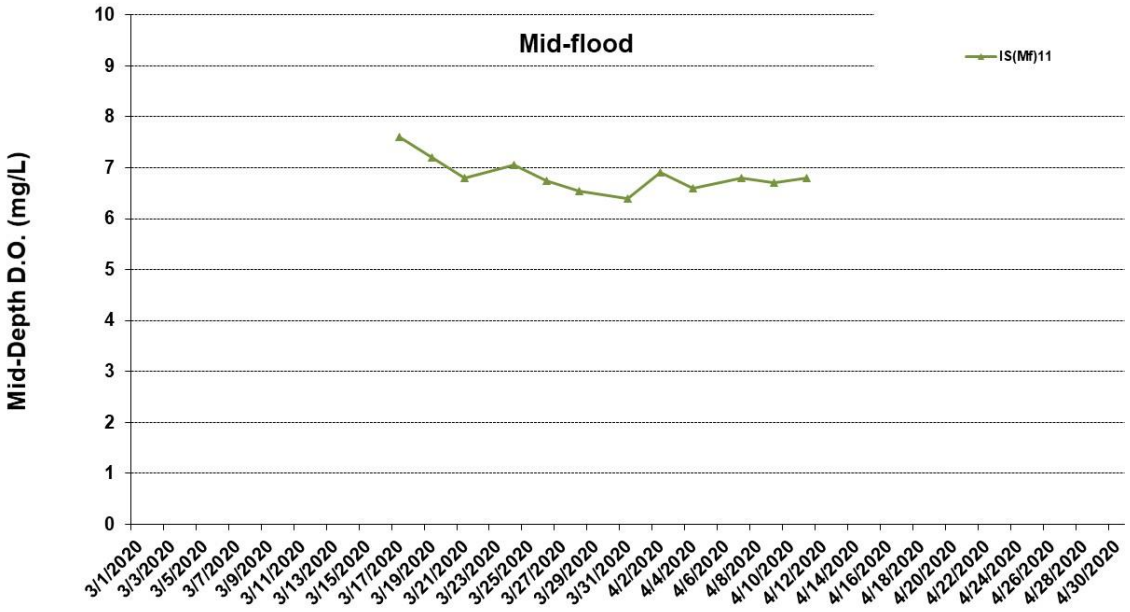
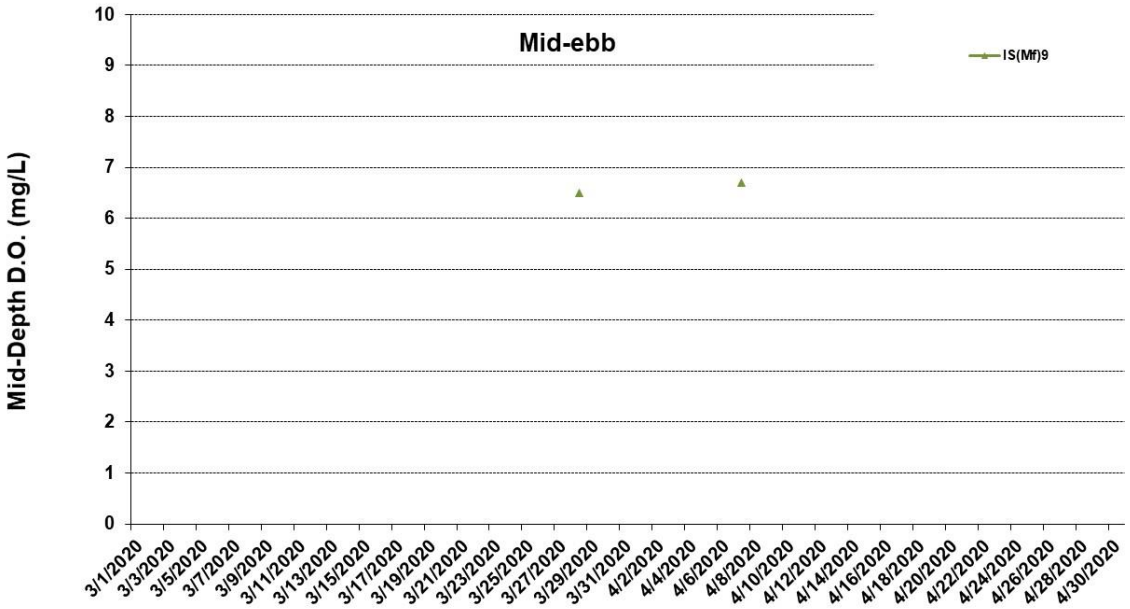


Figure J24 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth water between 17 March 2020 and 11 April 2020 at IS(Mf)11. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



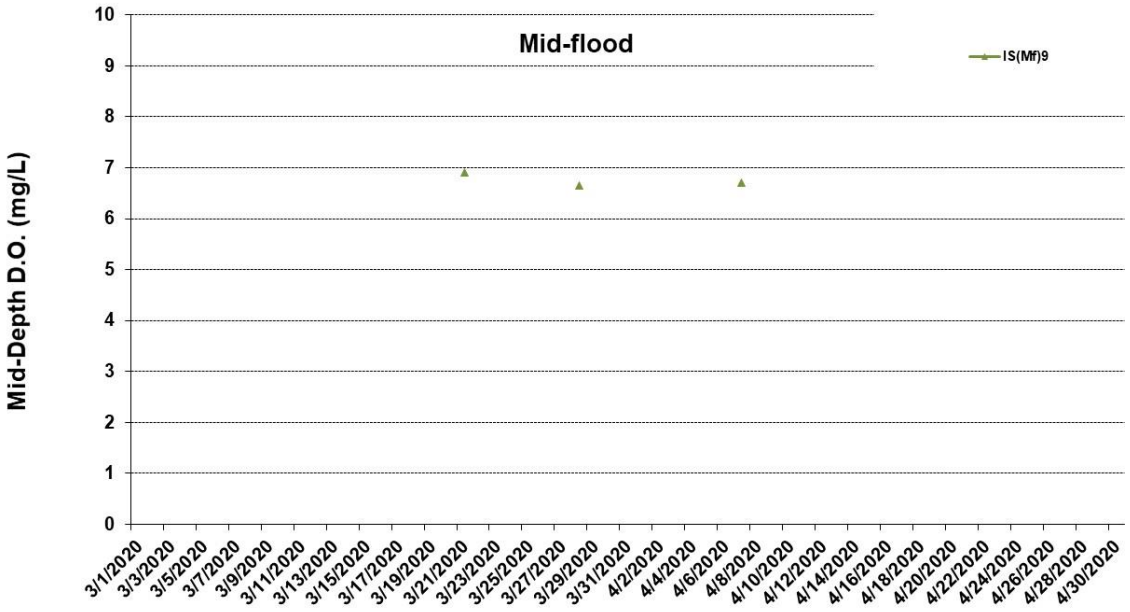


Figure J25 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth water between 17 March 2020 and 11 April 2020 at IS(Mf)9. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

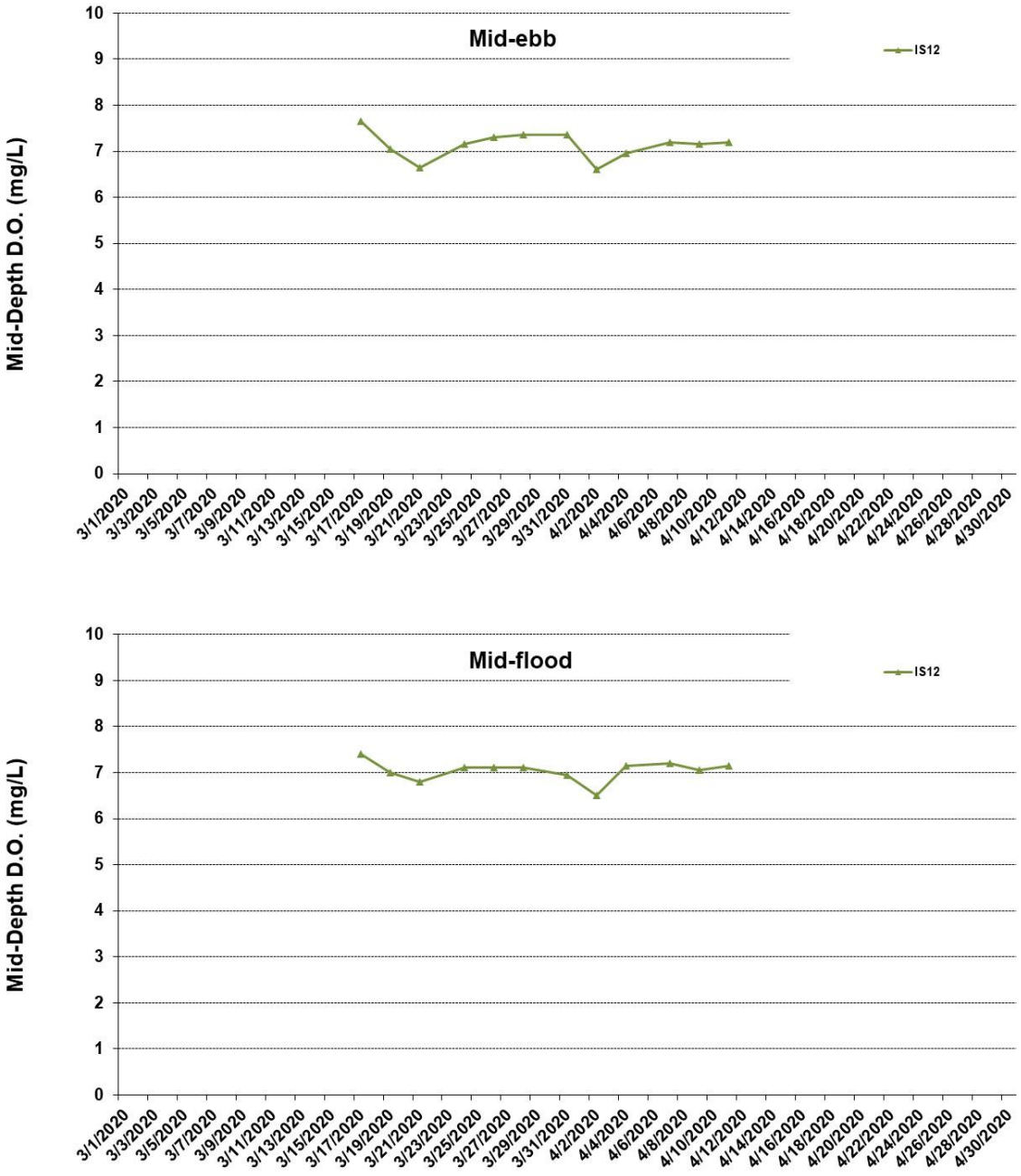
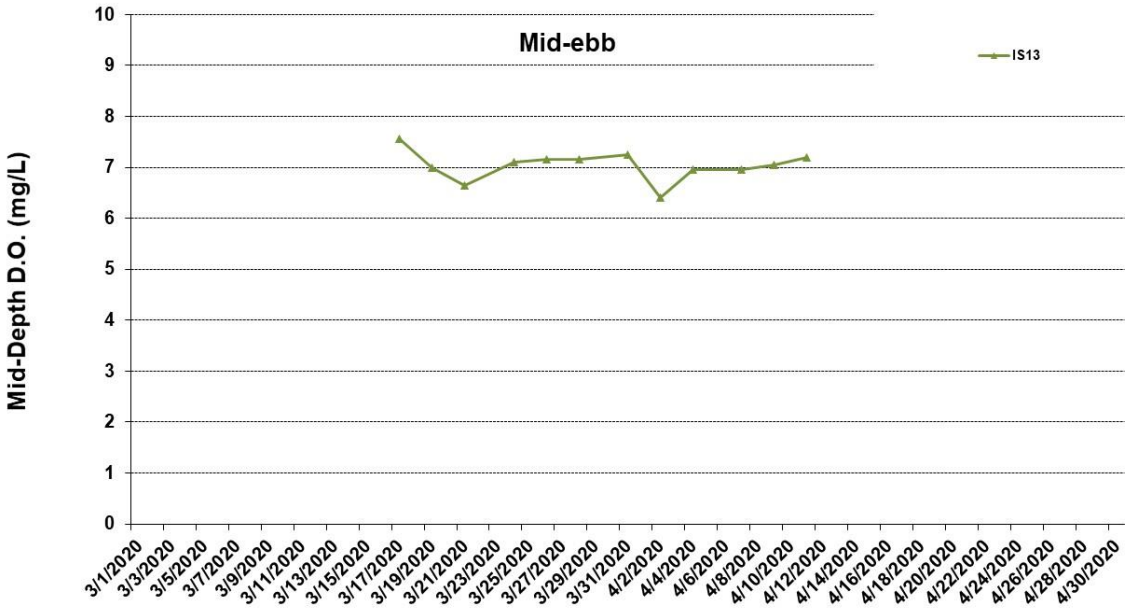


Figure J26 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth water between 17 March 2020 and 11 April 2020 at IS12. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



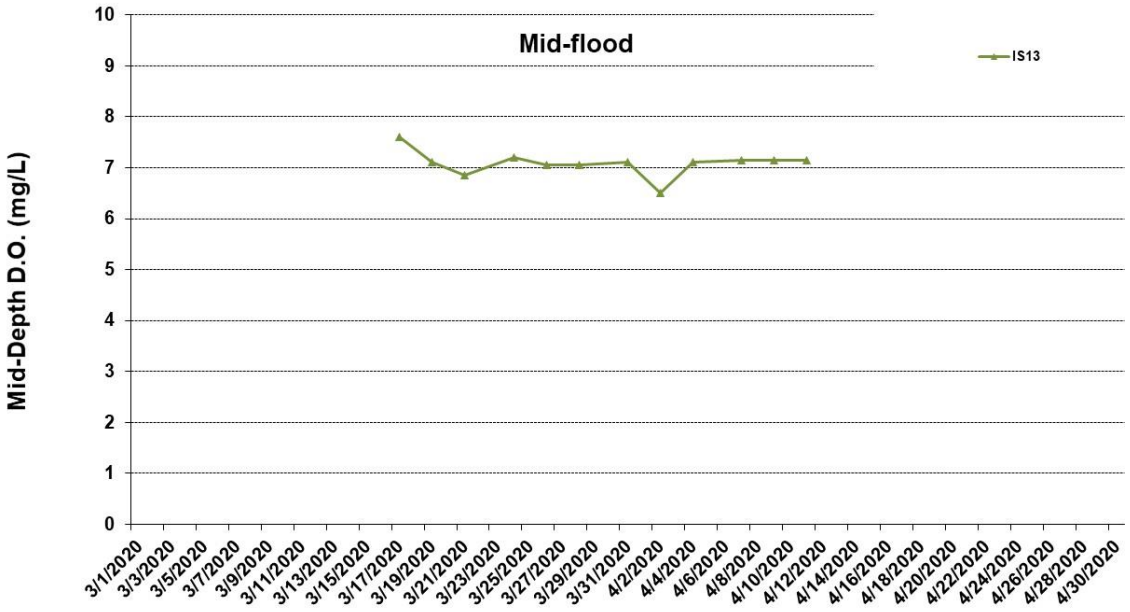
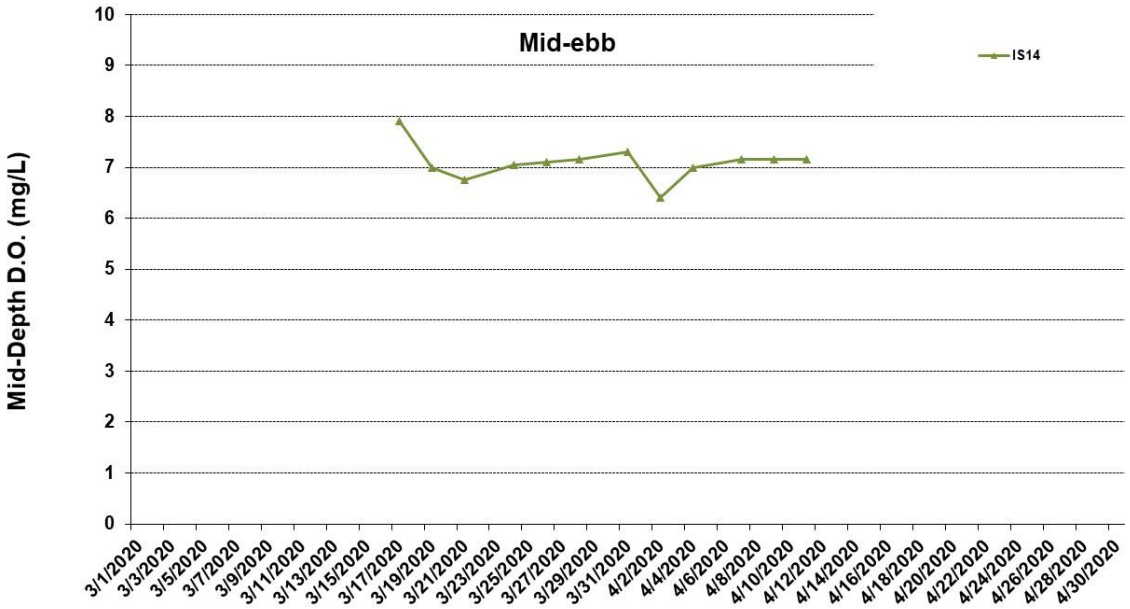


Figure J27 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth water between 17 March 2020 and 11 April 2020 at IS13. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



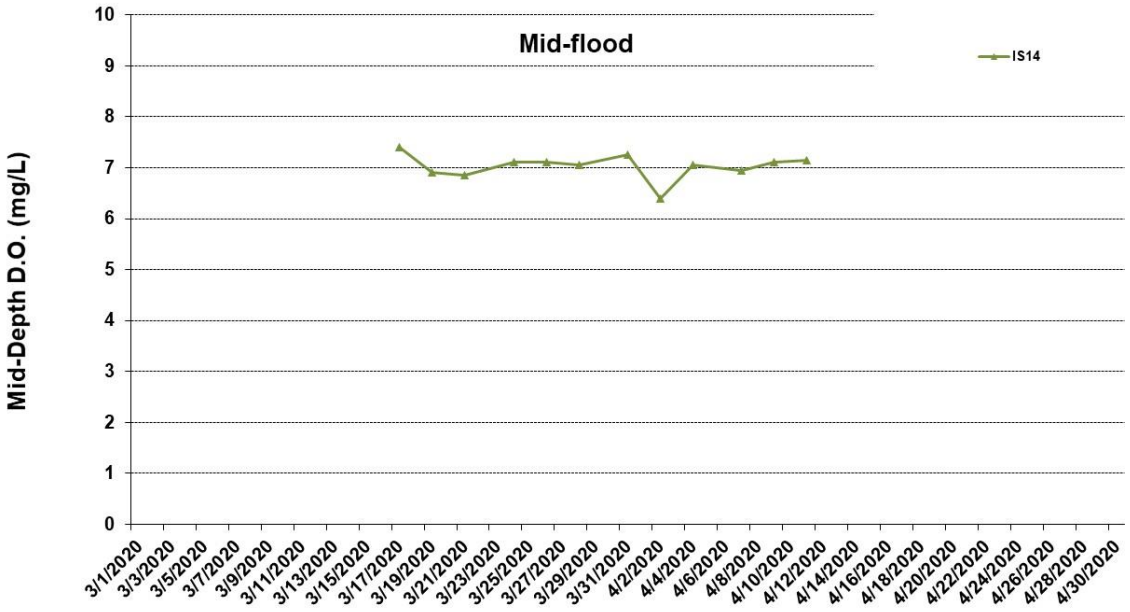
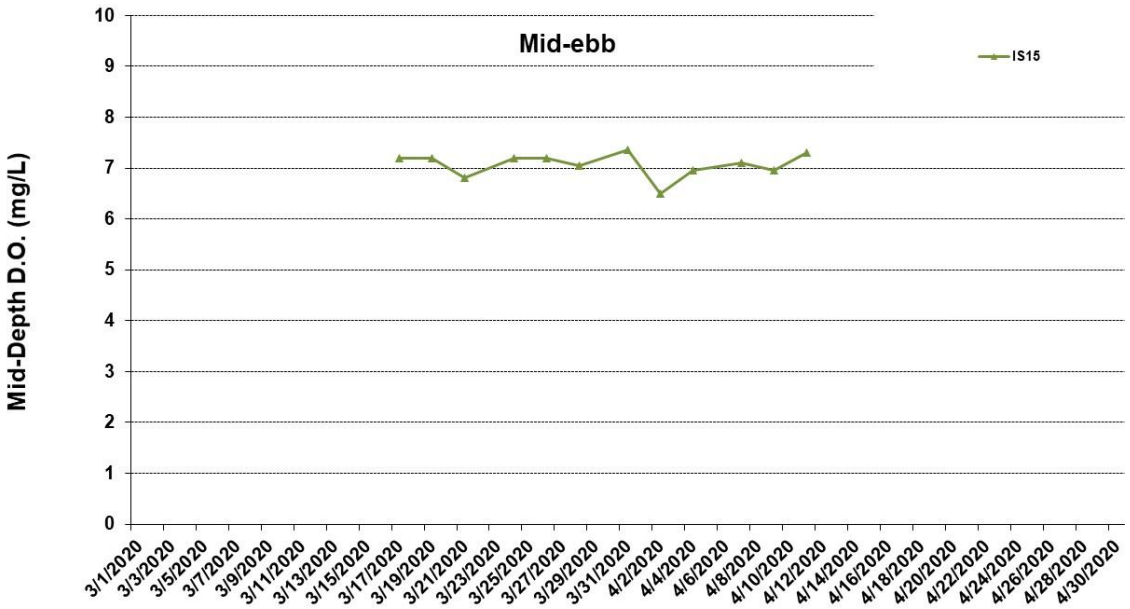


Figure J28 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth water between 17 March 2020 and 11 April 2020 at IS14. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



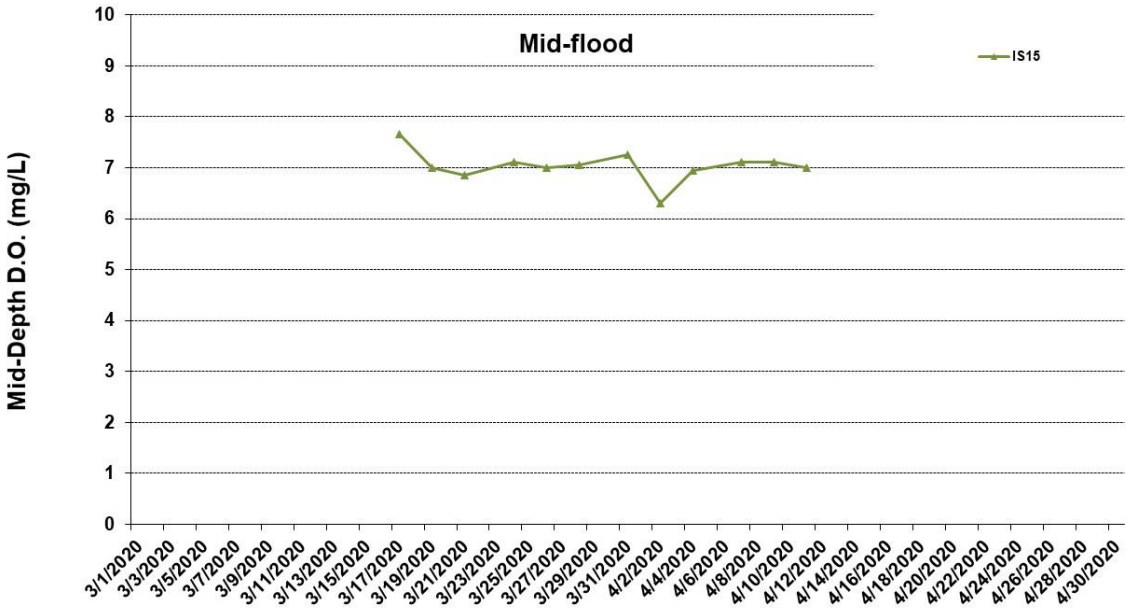
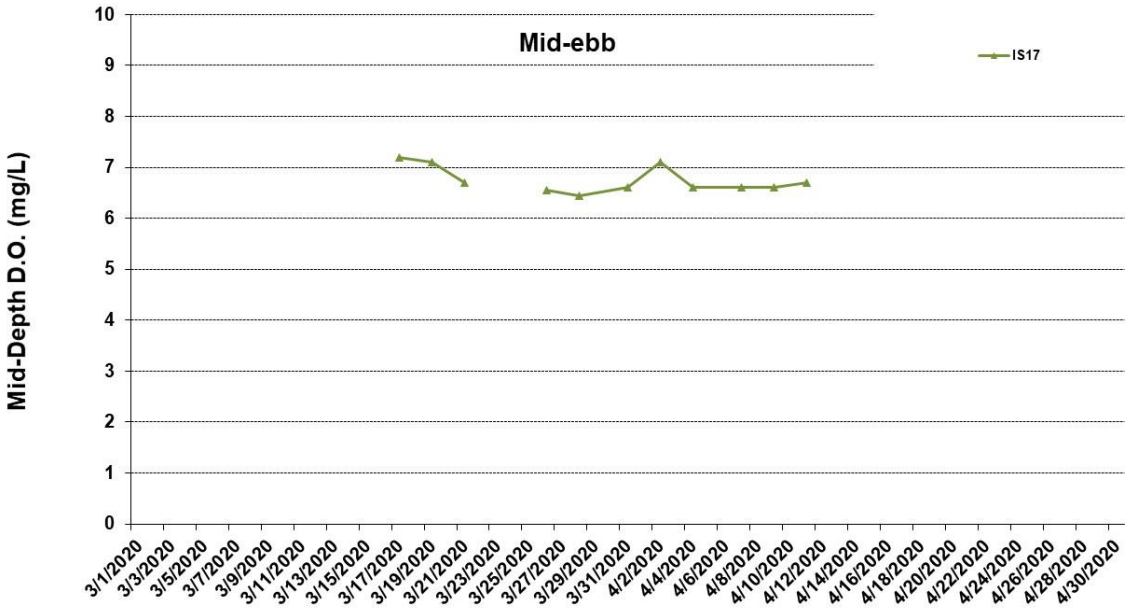


Figure J29 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth water between 17 March 2020 and 11 April 2020 at IS15. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



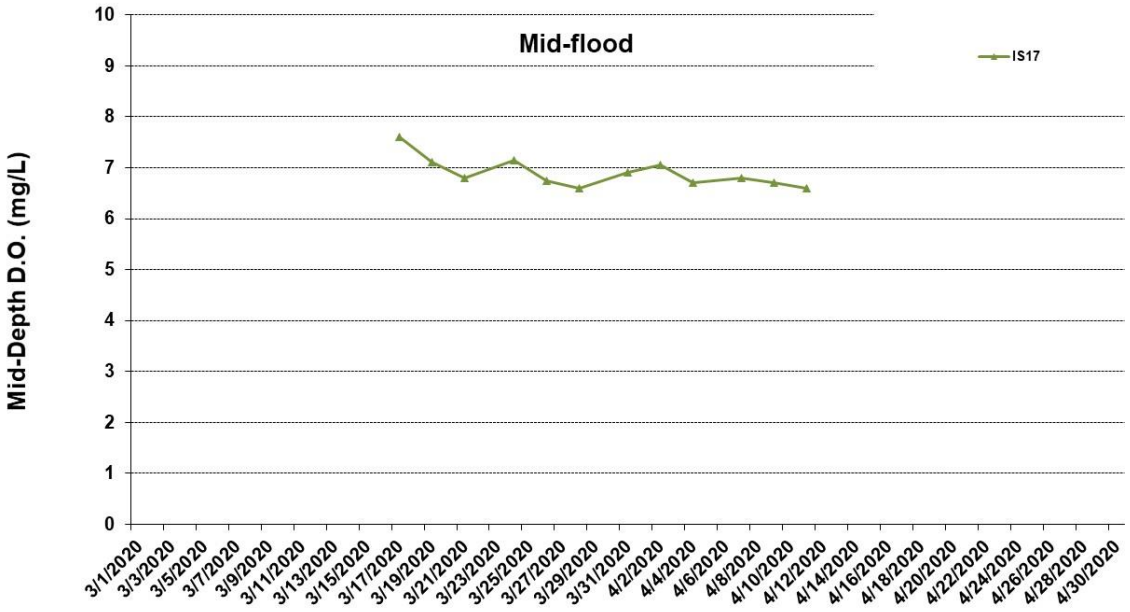
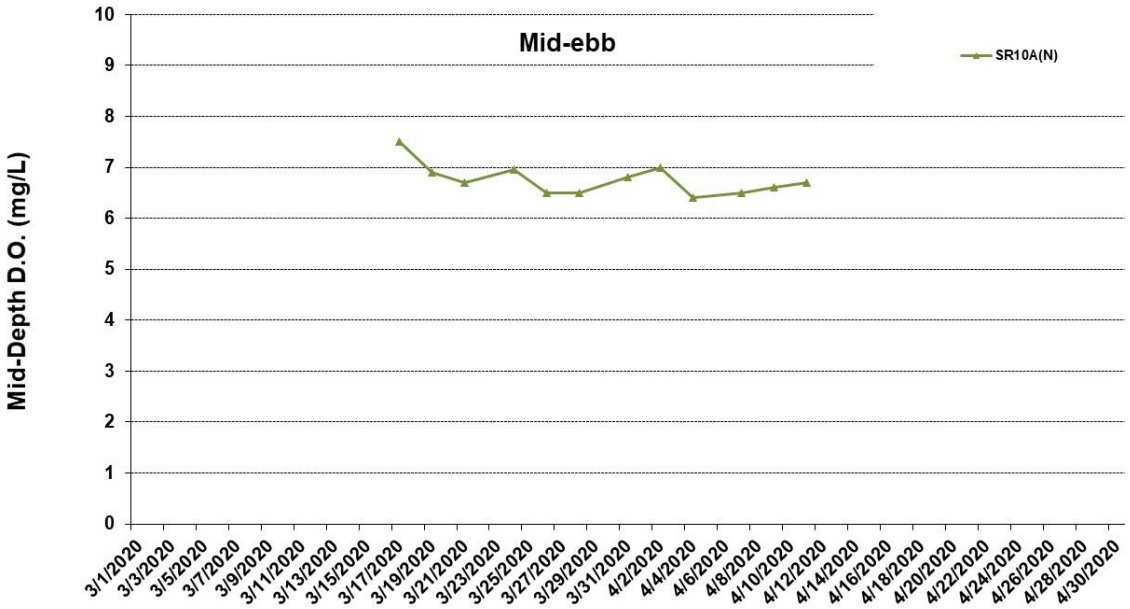


Figure J30 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth water between 17 March 2020 and 11 April 2020 at IS17. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



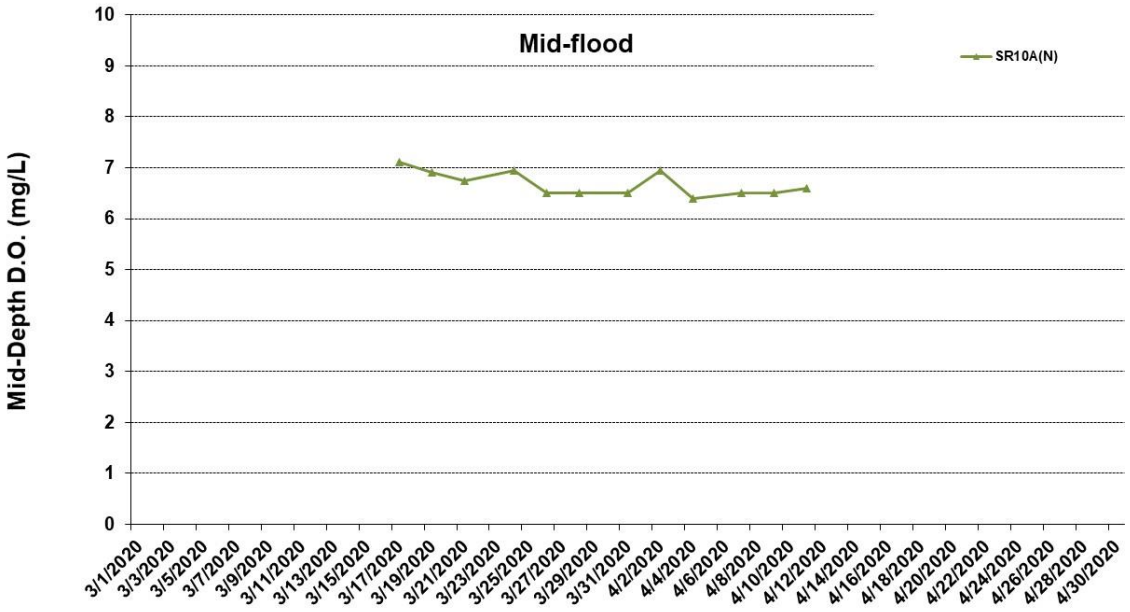


Figure J31 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth water between 17 March 2020 and 11 April 2020 at SR10A(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

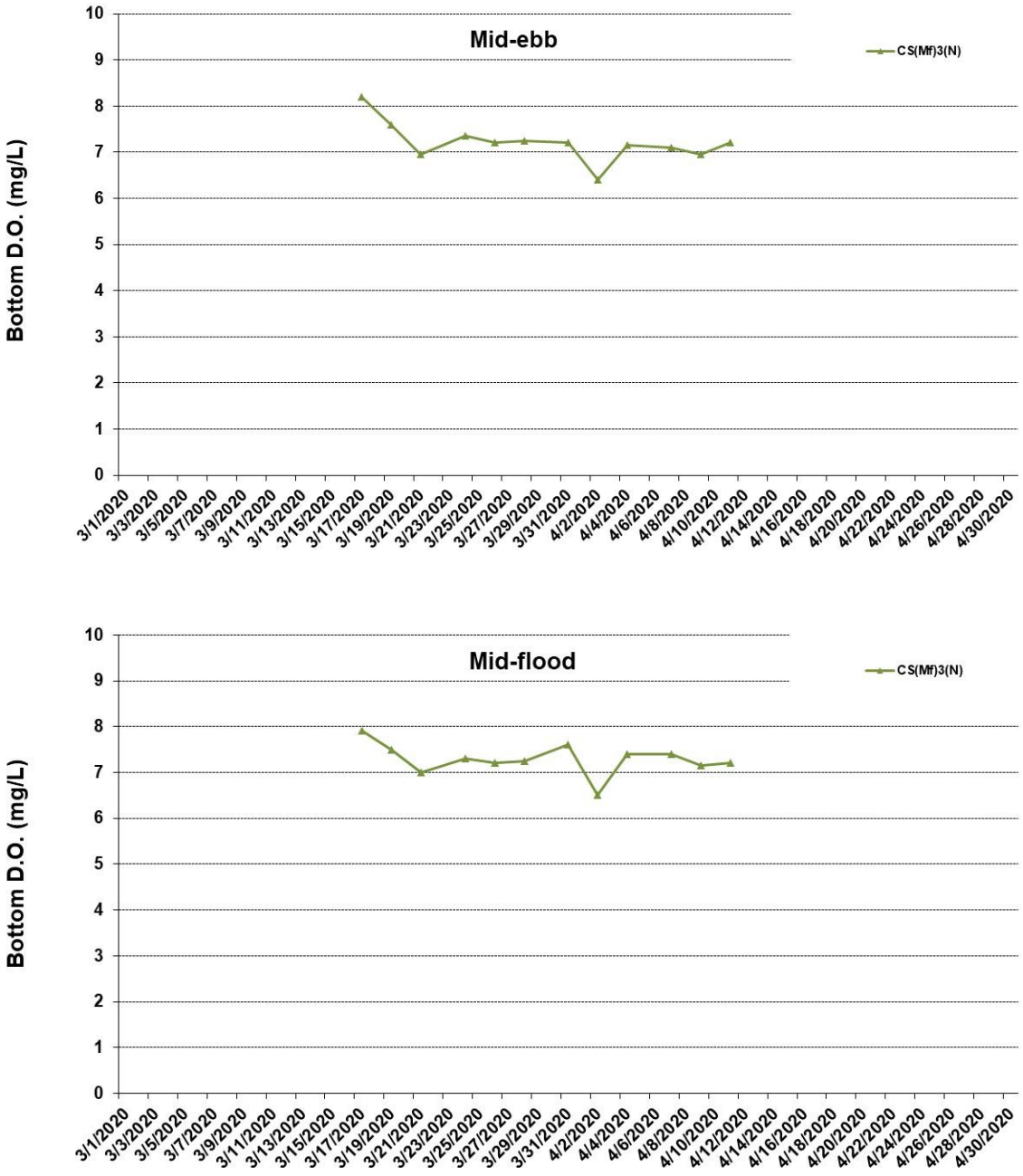
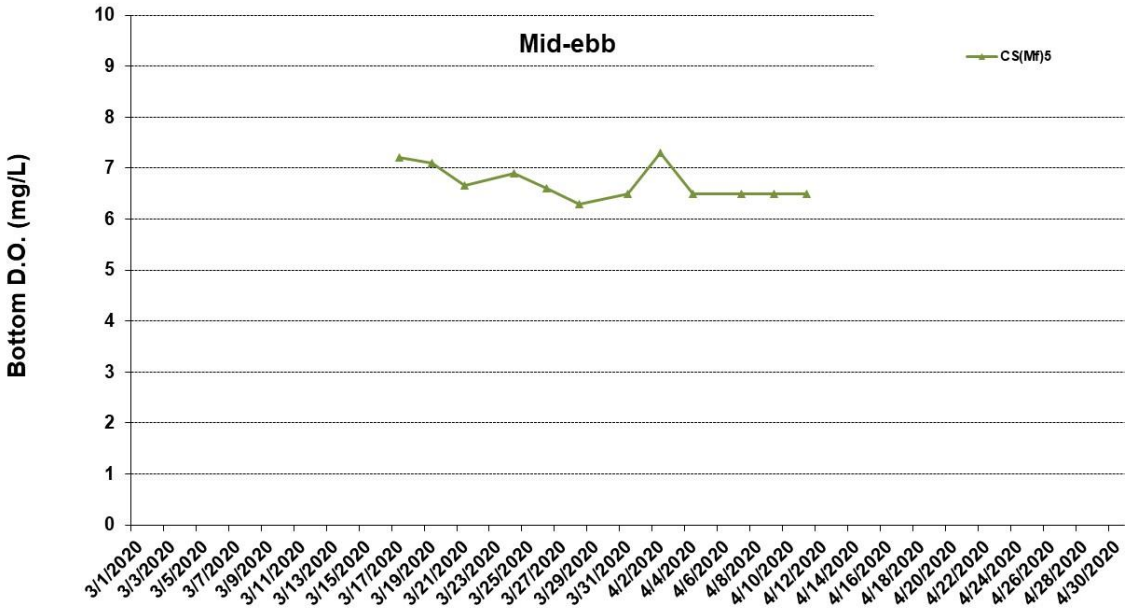


Figure J32 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at CS(Mf)3(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



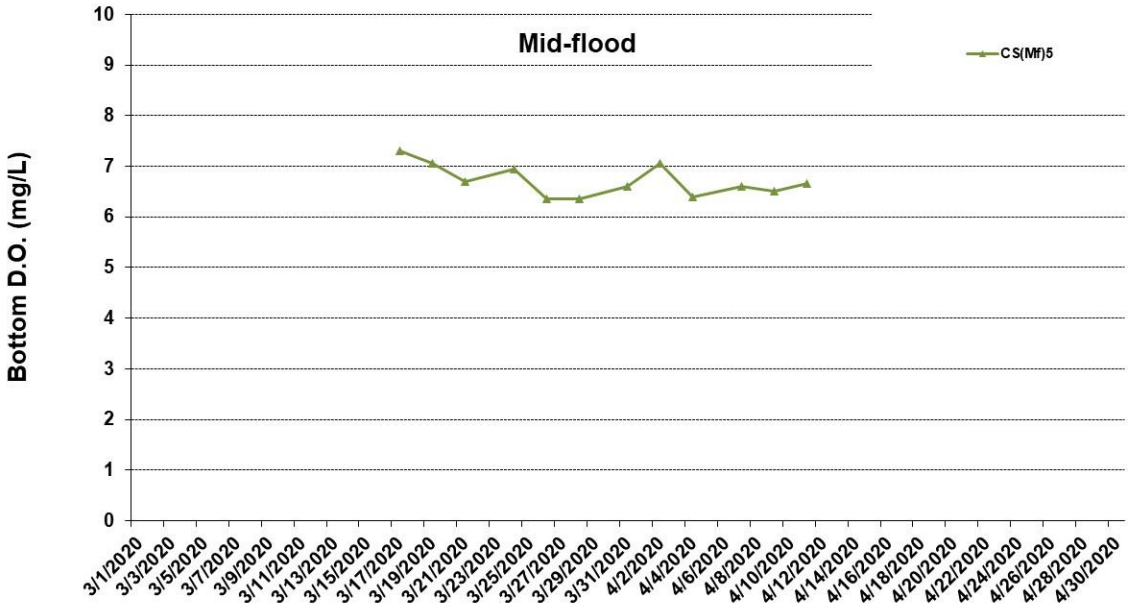


Figure J33 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at CS(Mf)5. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

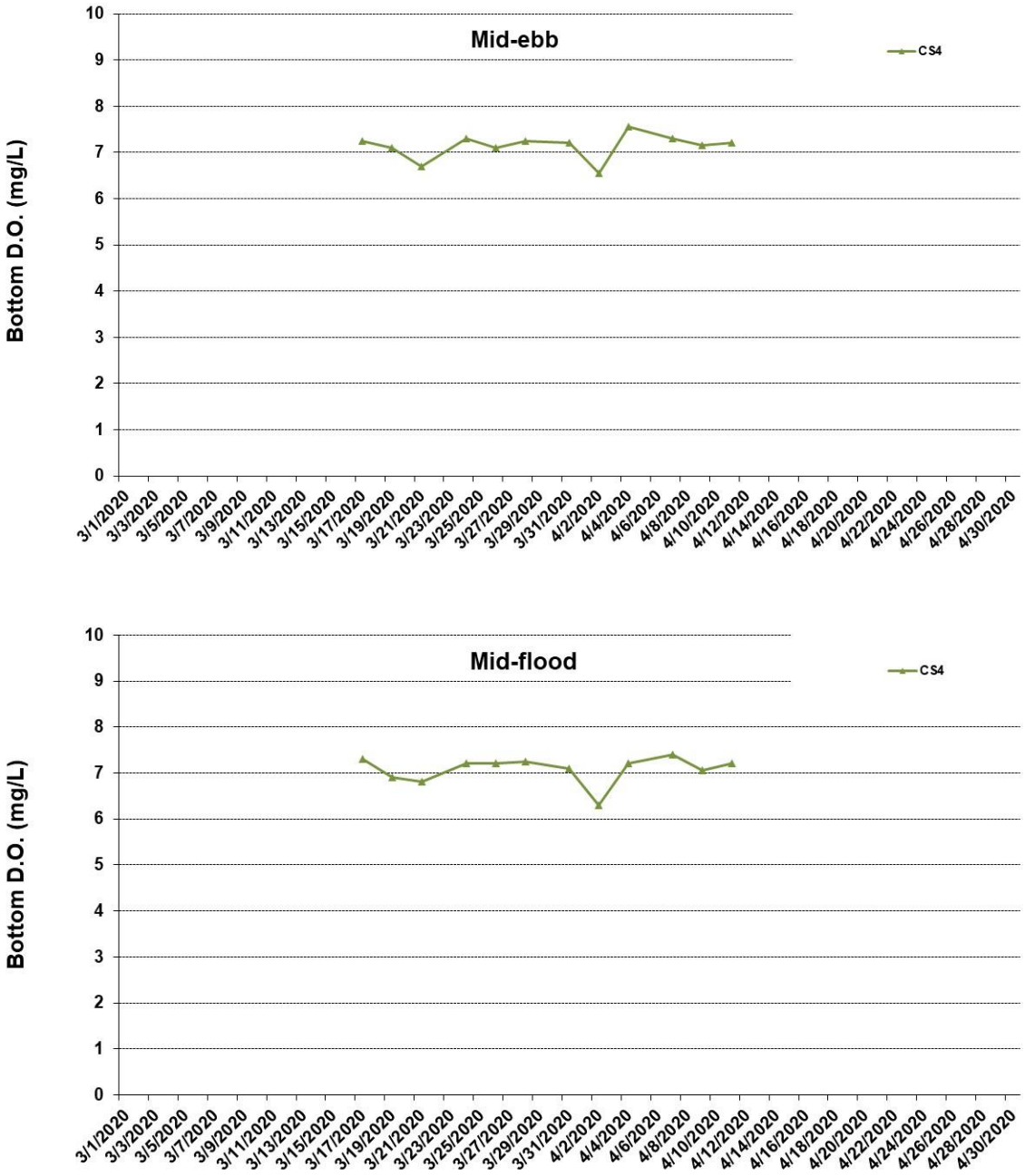


Figure J34 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at CS4. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

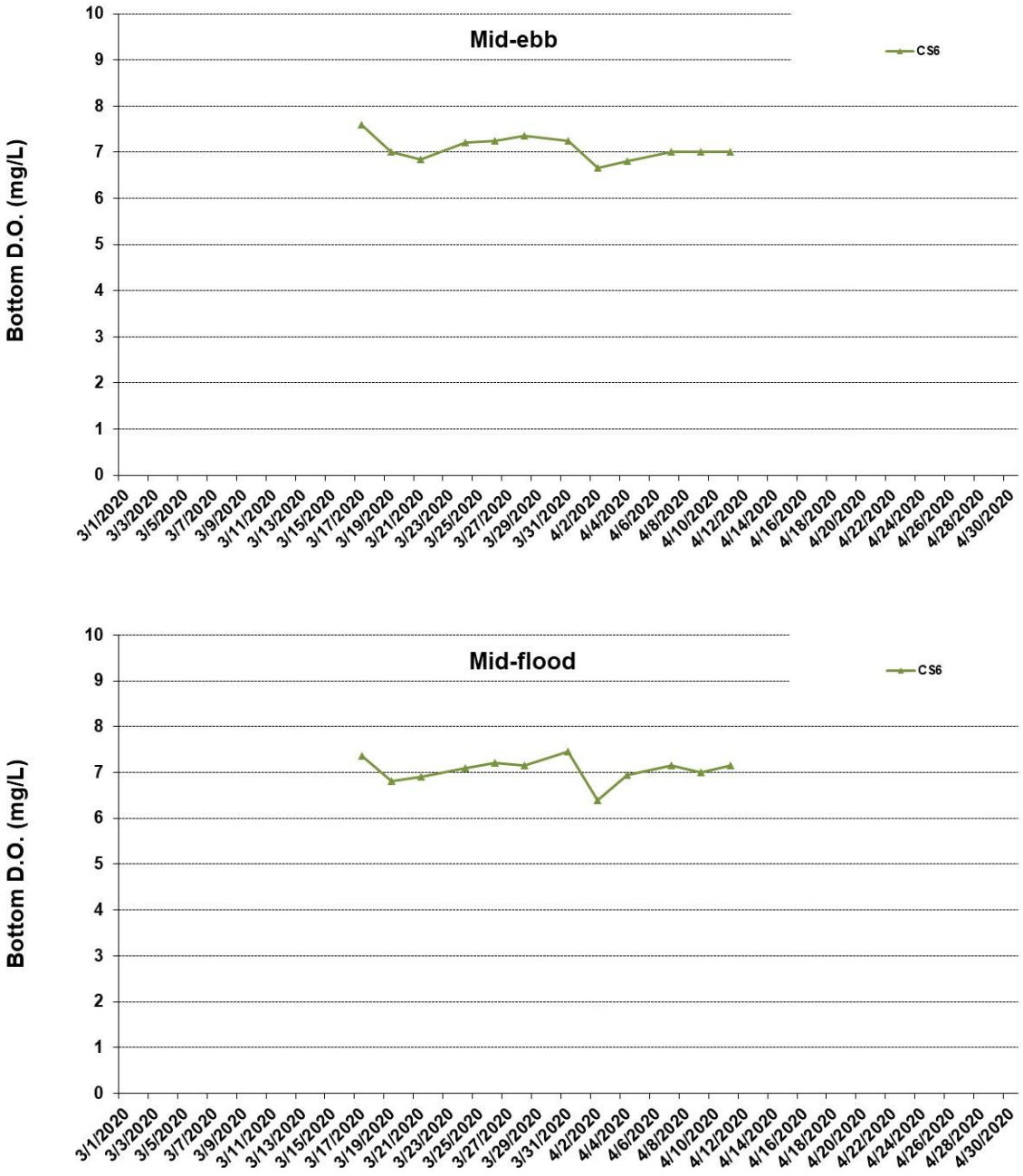


Figure J35 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at CS6. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

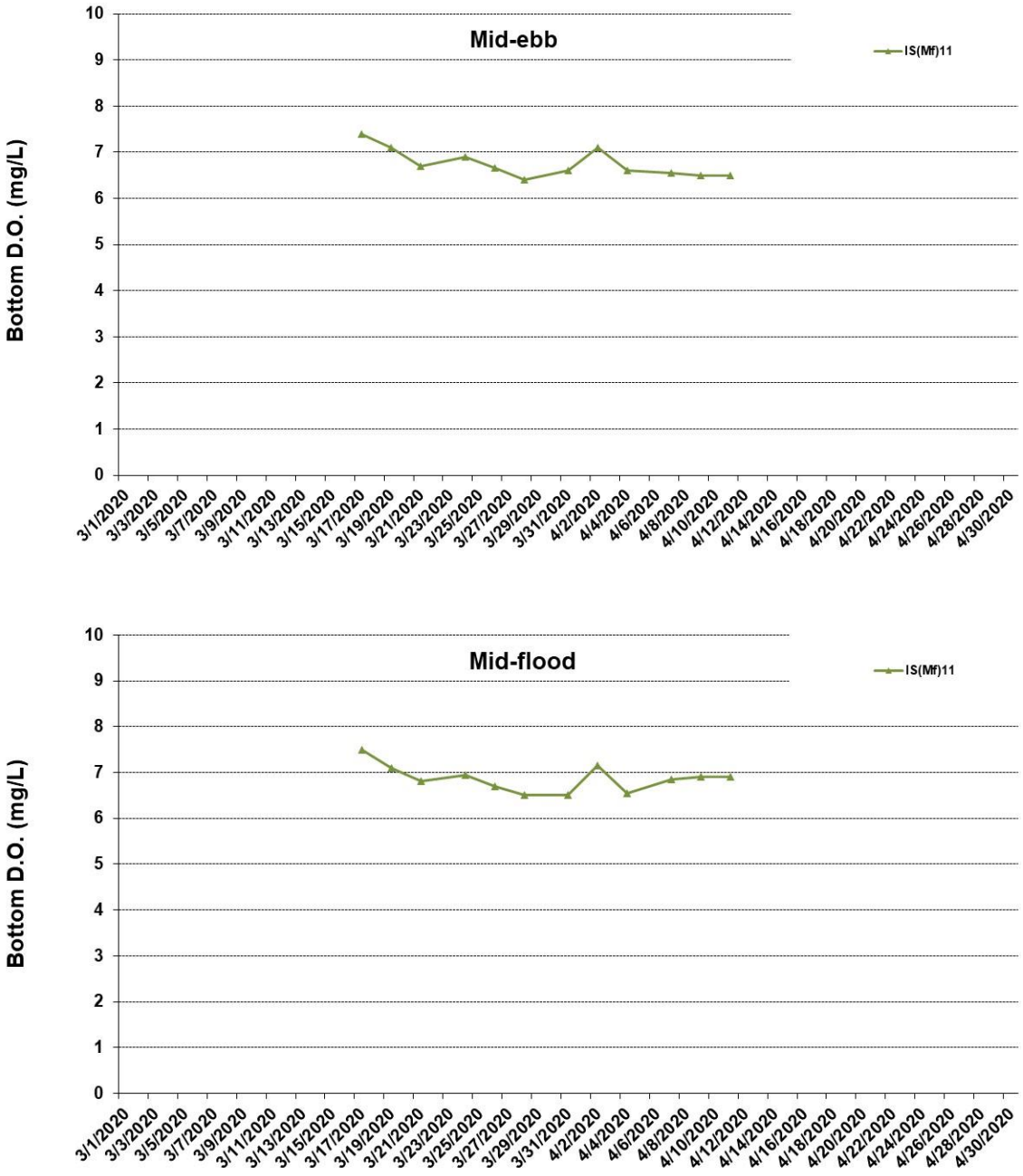
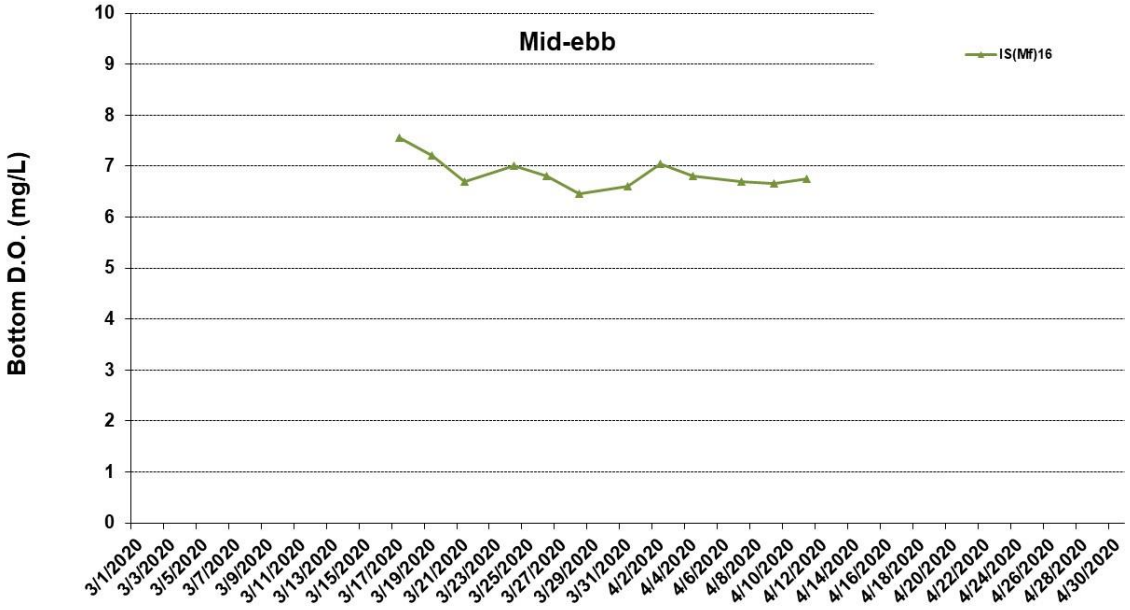


Figure J36 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at SR4a. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



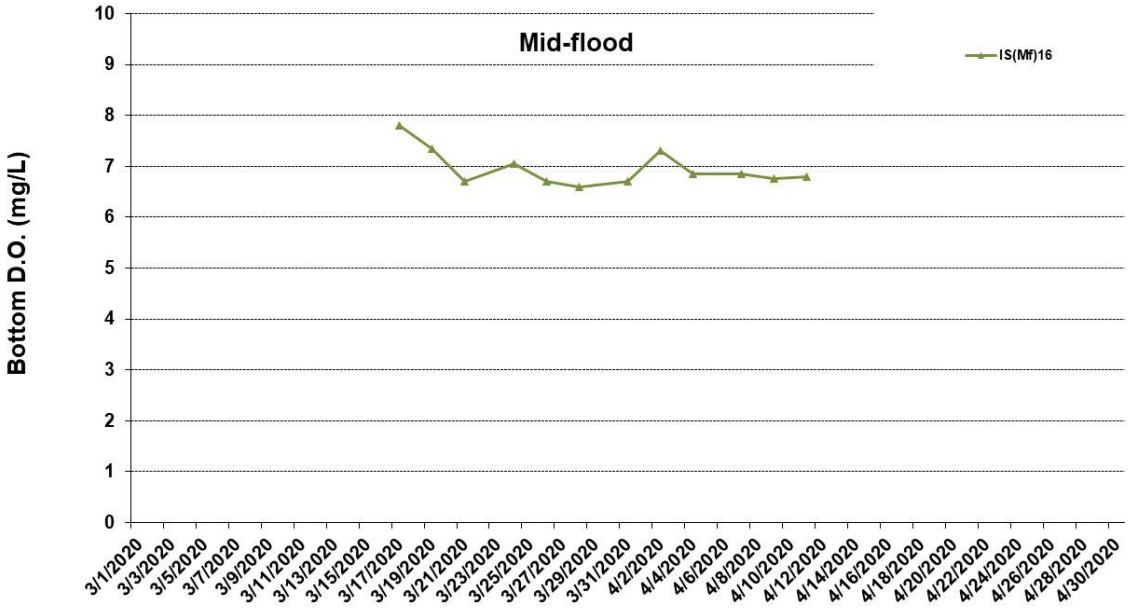


Figure J37 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at IS(Mf)16. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

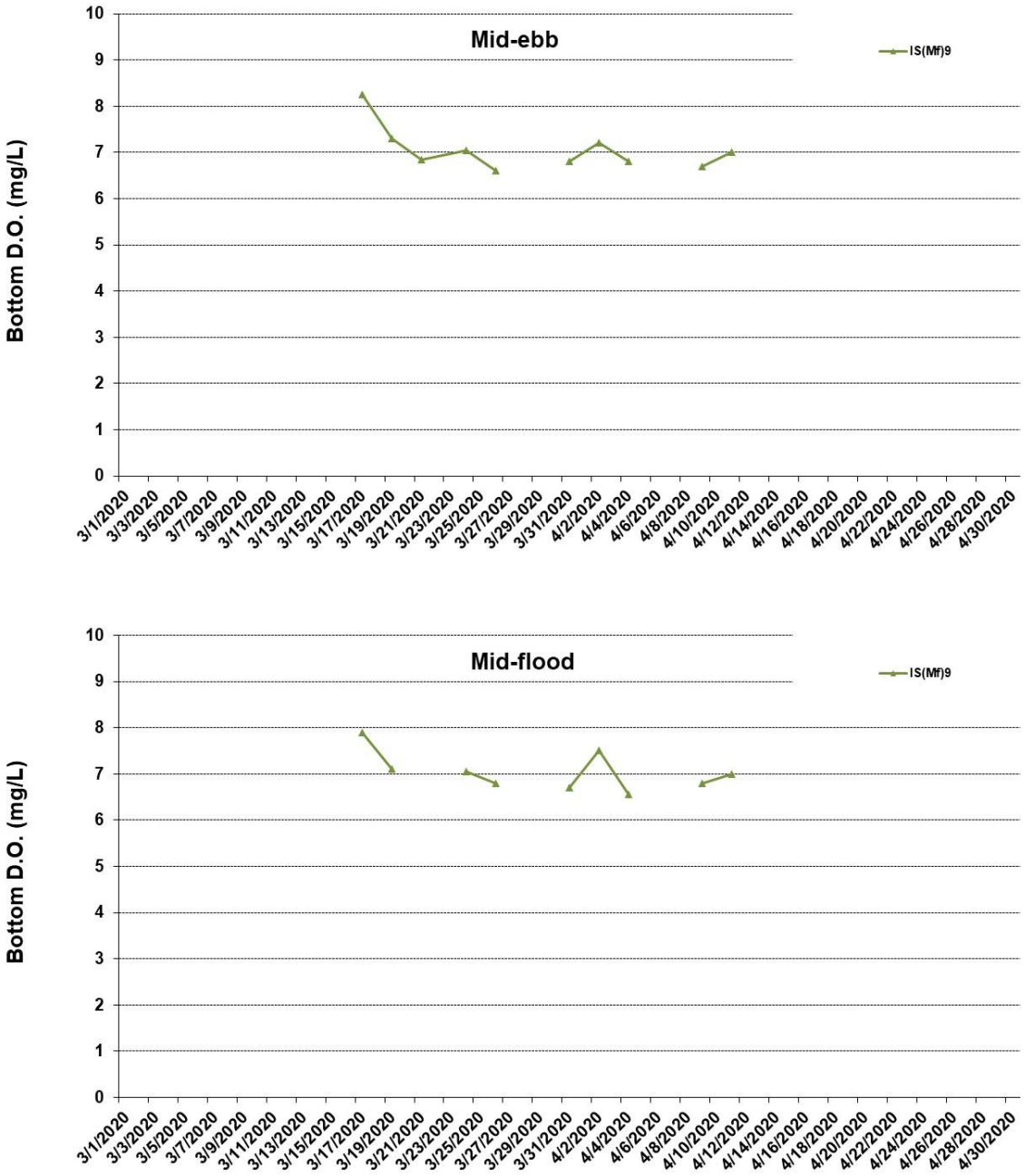


Figure J38 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at IS(Mf)9. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

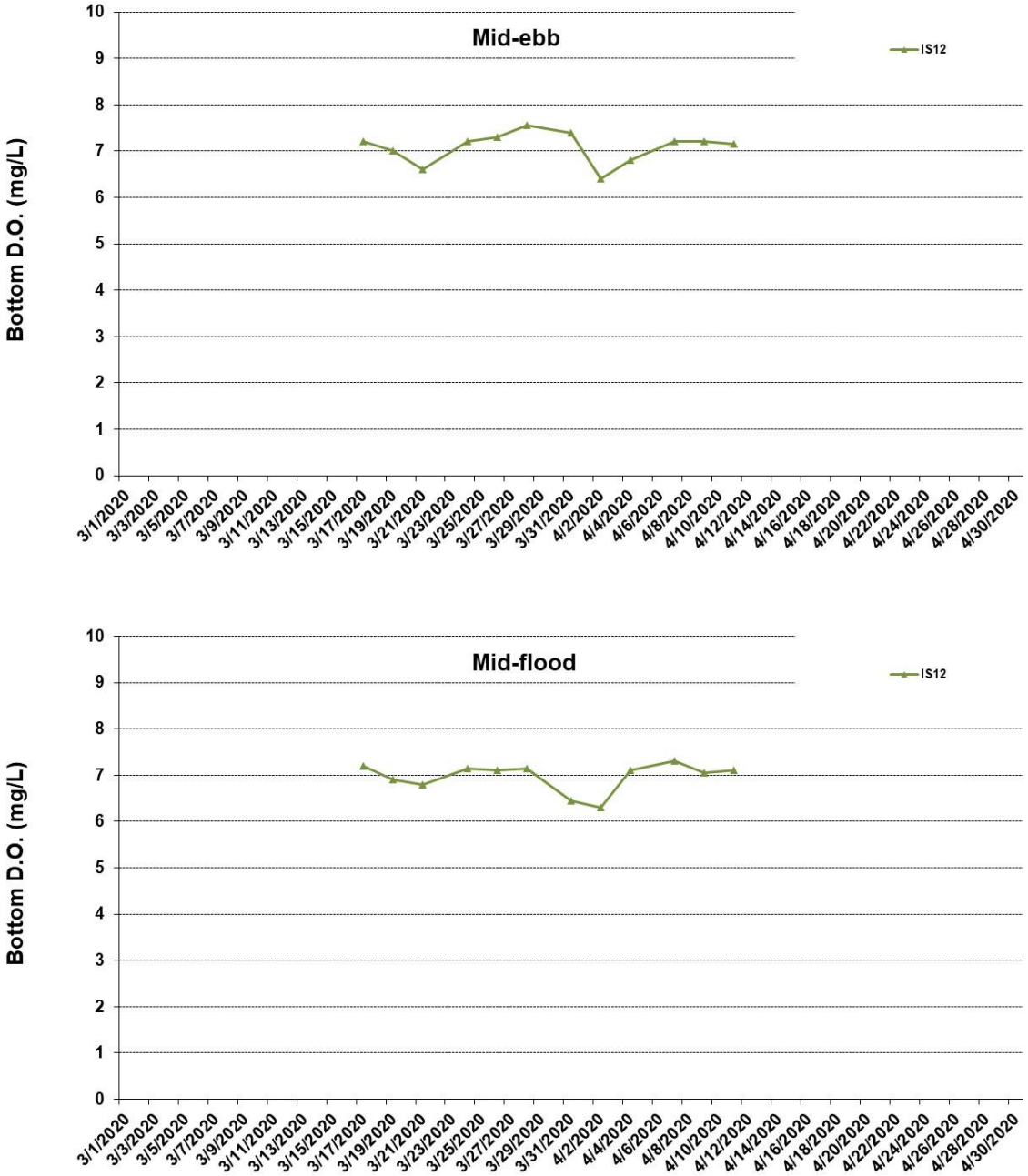


Figure J39 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at IS12. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

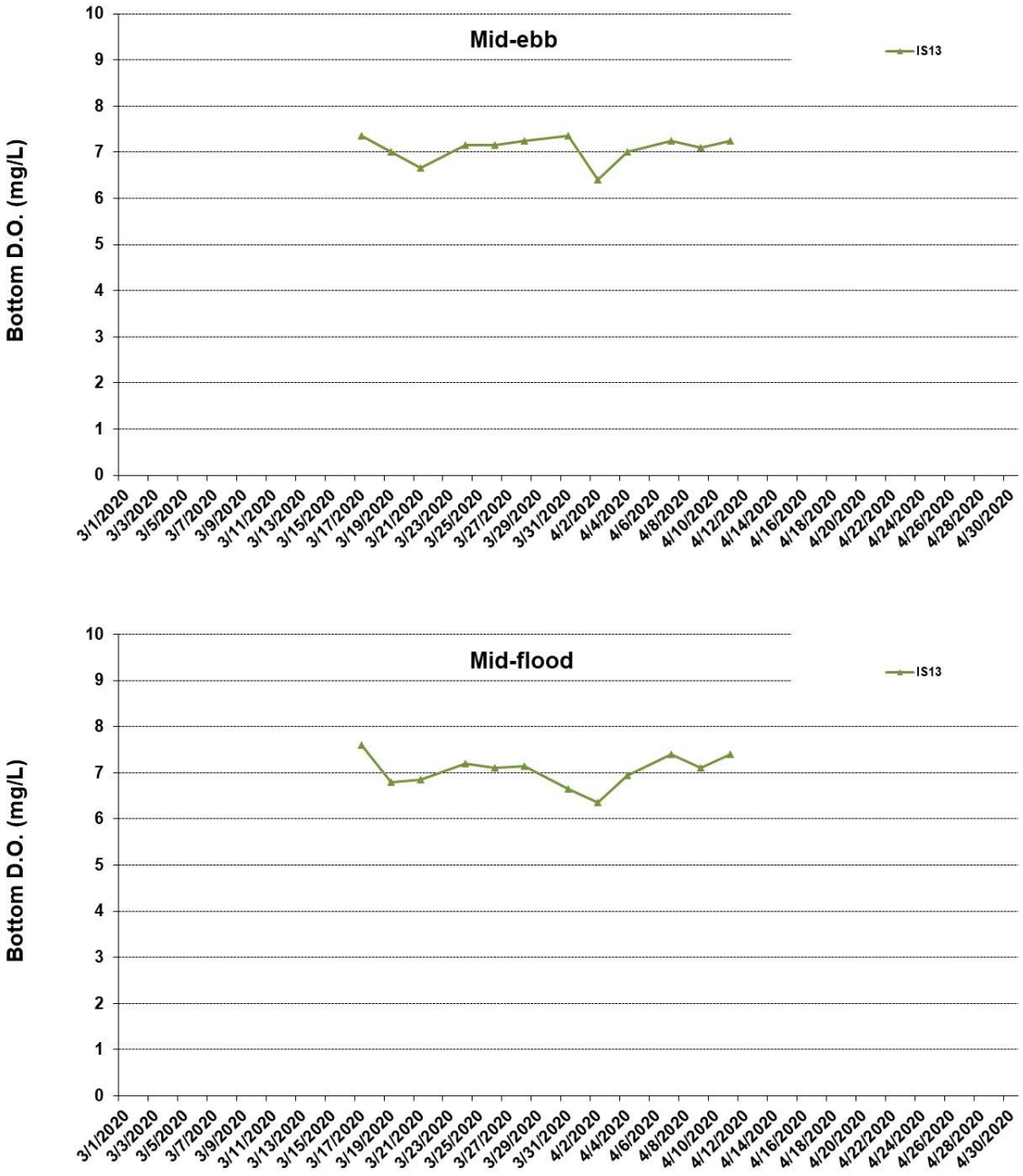


Figure J40 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at IS13. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

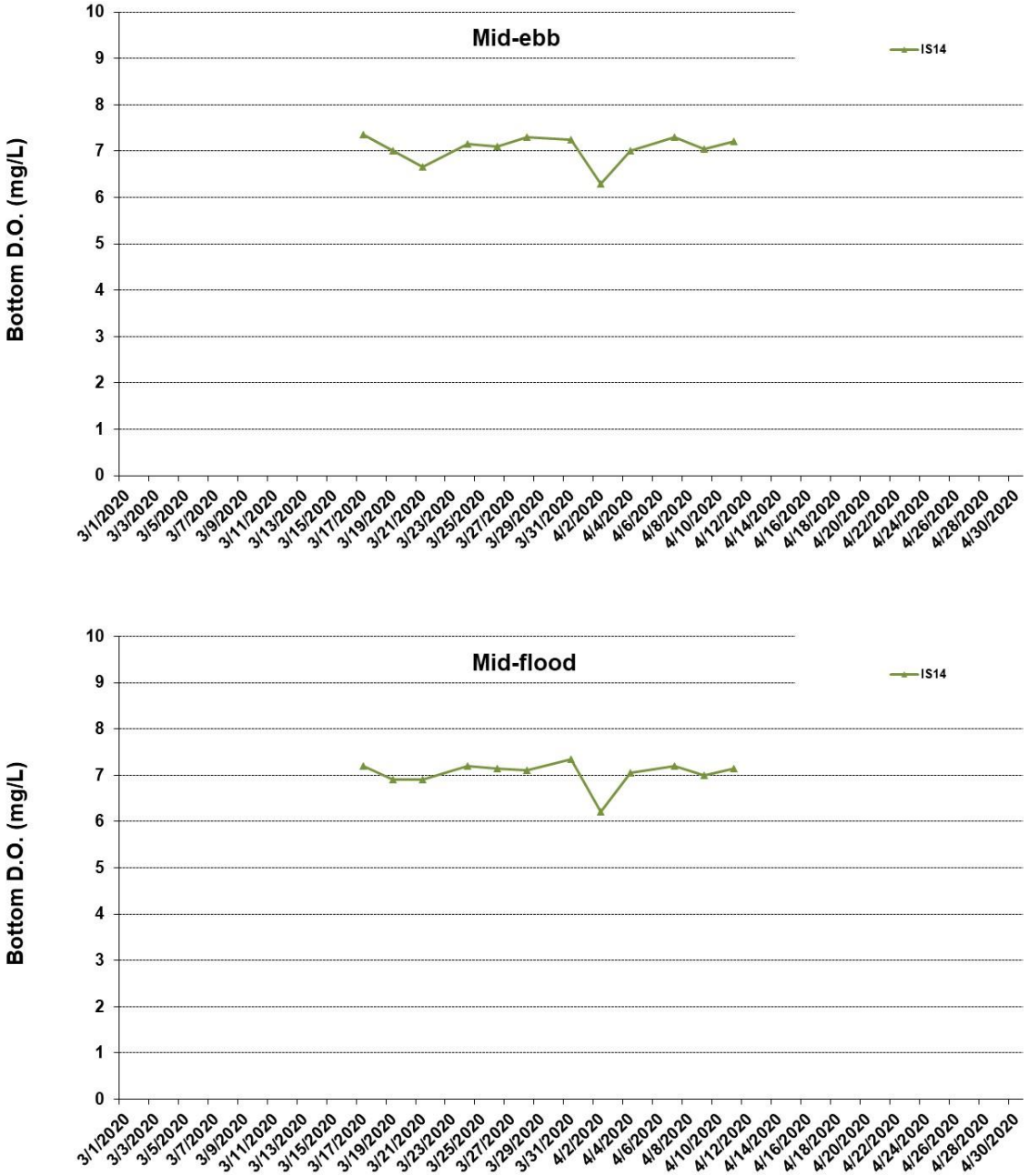


Figure J41 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at IS14. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

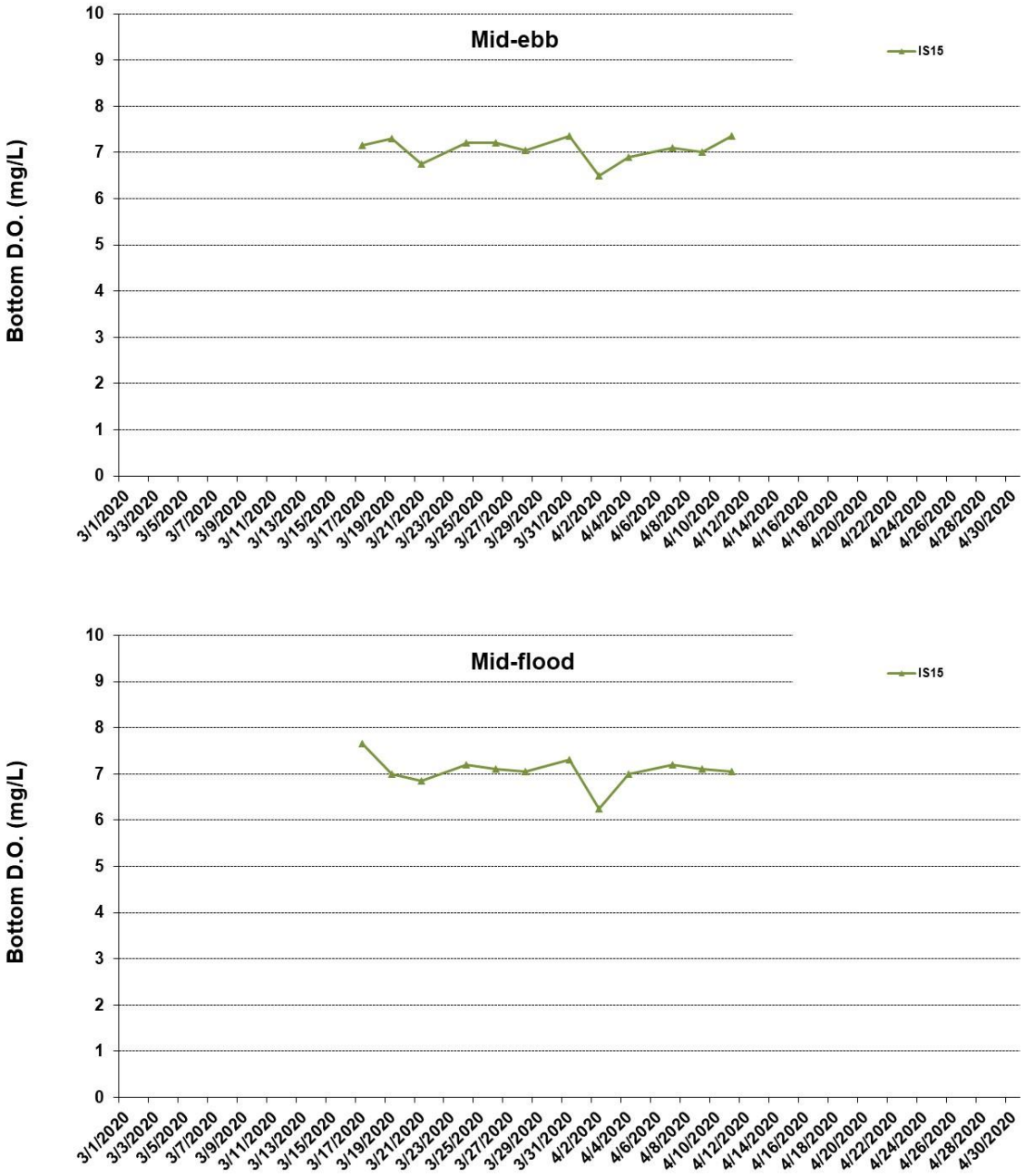


Figure J42 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at IS15. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

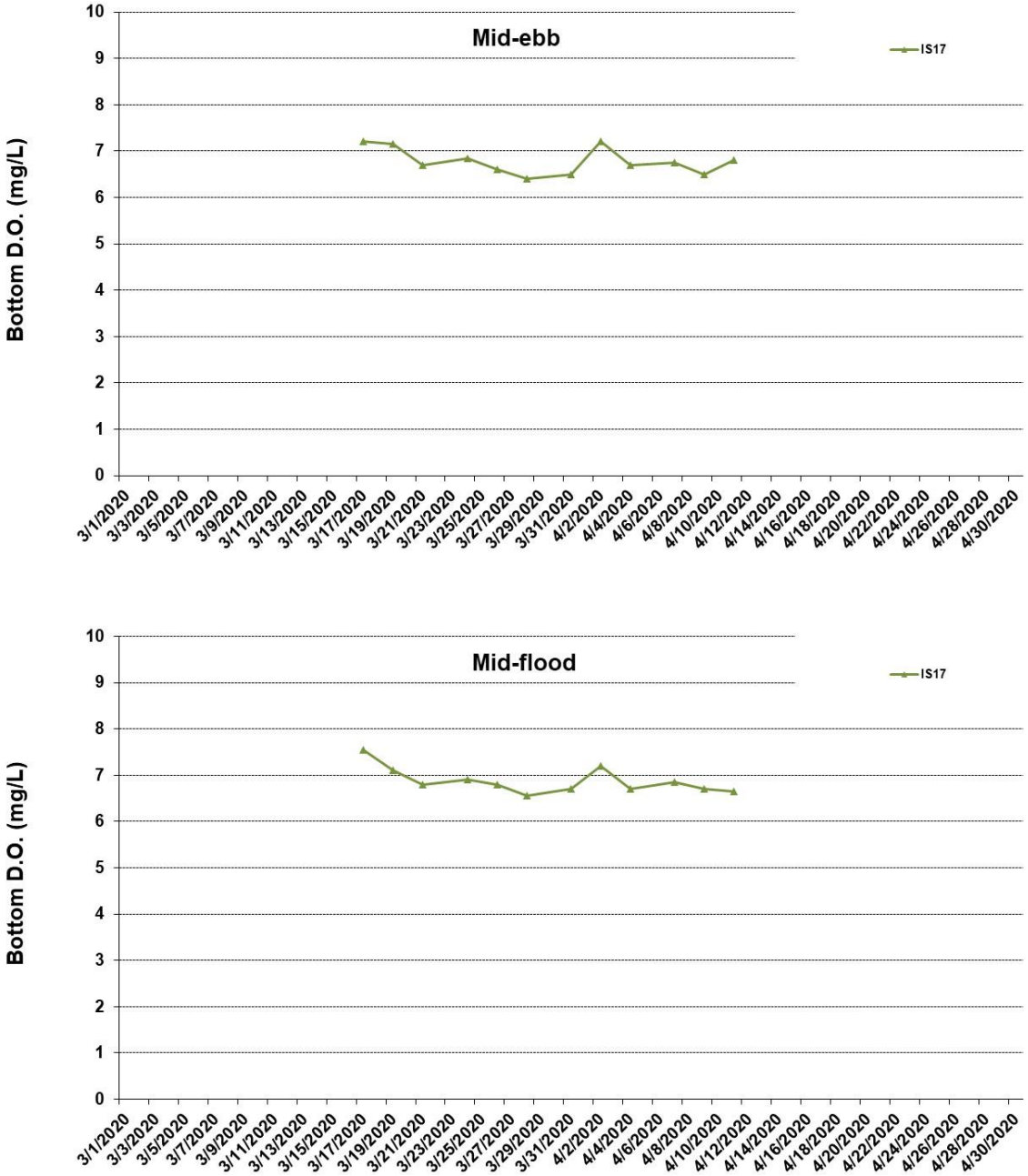


Figure J43 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at IS17. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

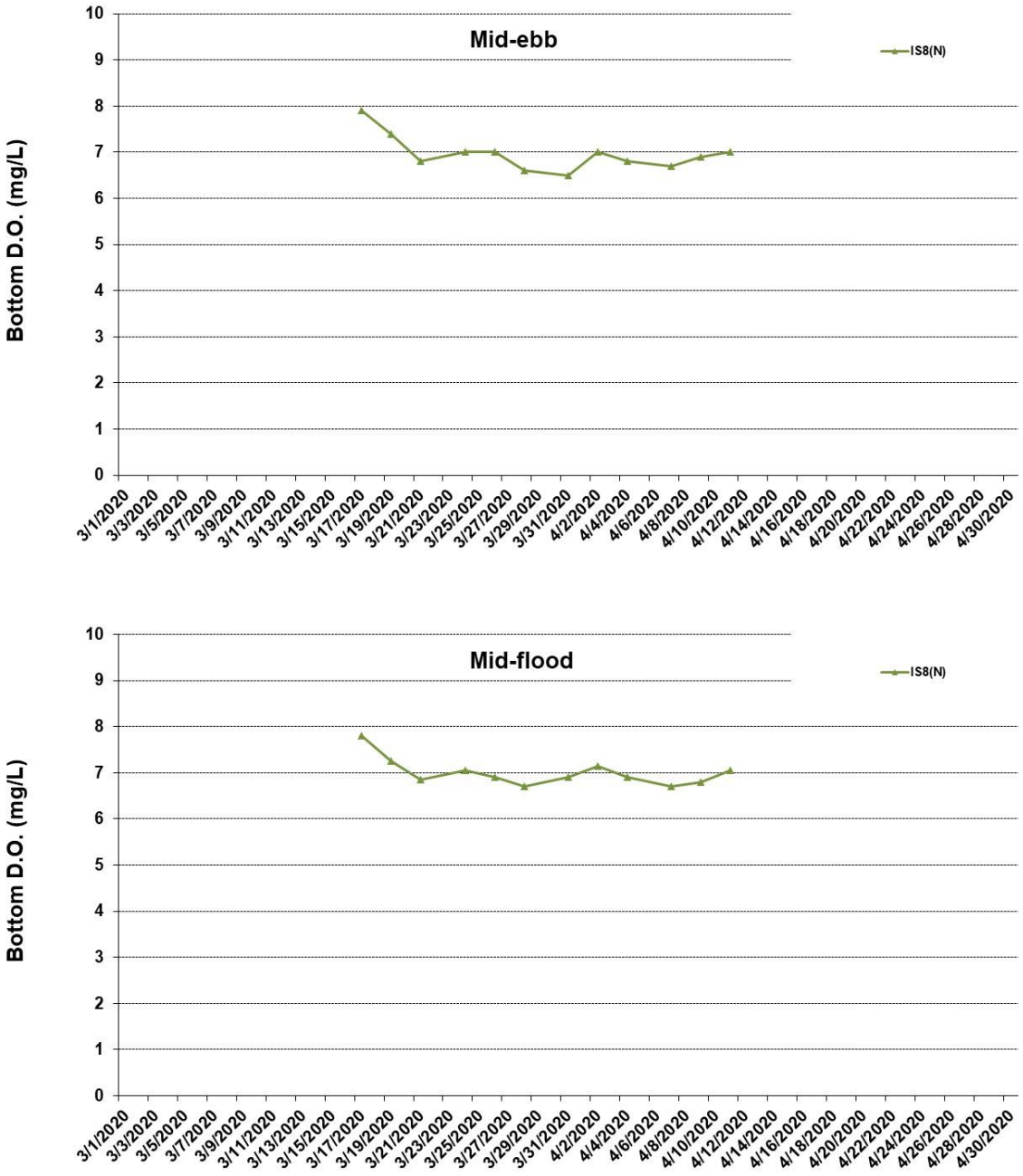


Figure J44 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at IS8(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

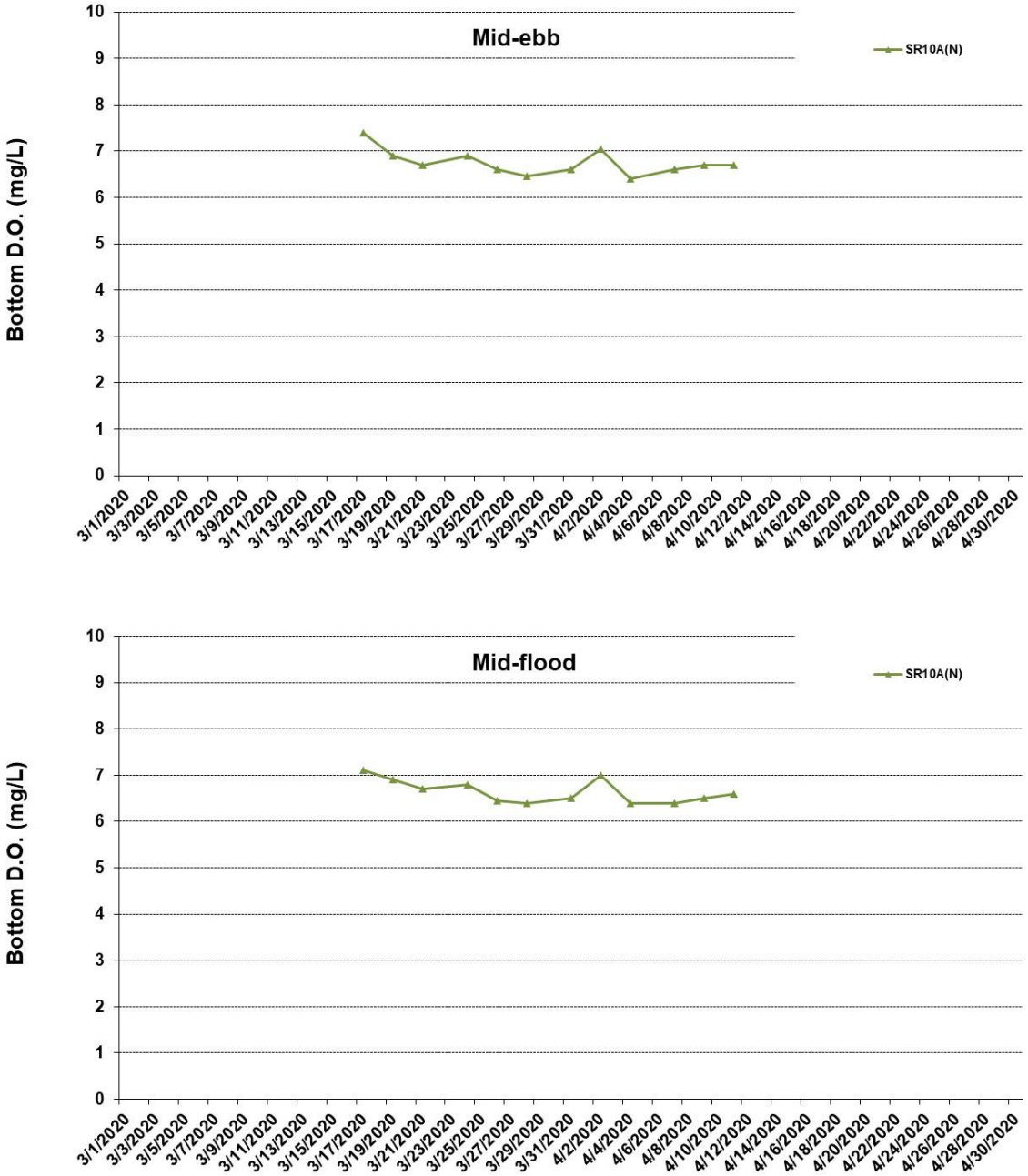


Figure J45 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at SR10A(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

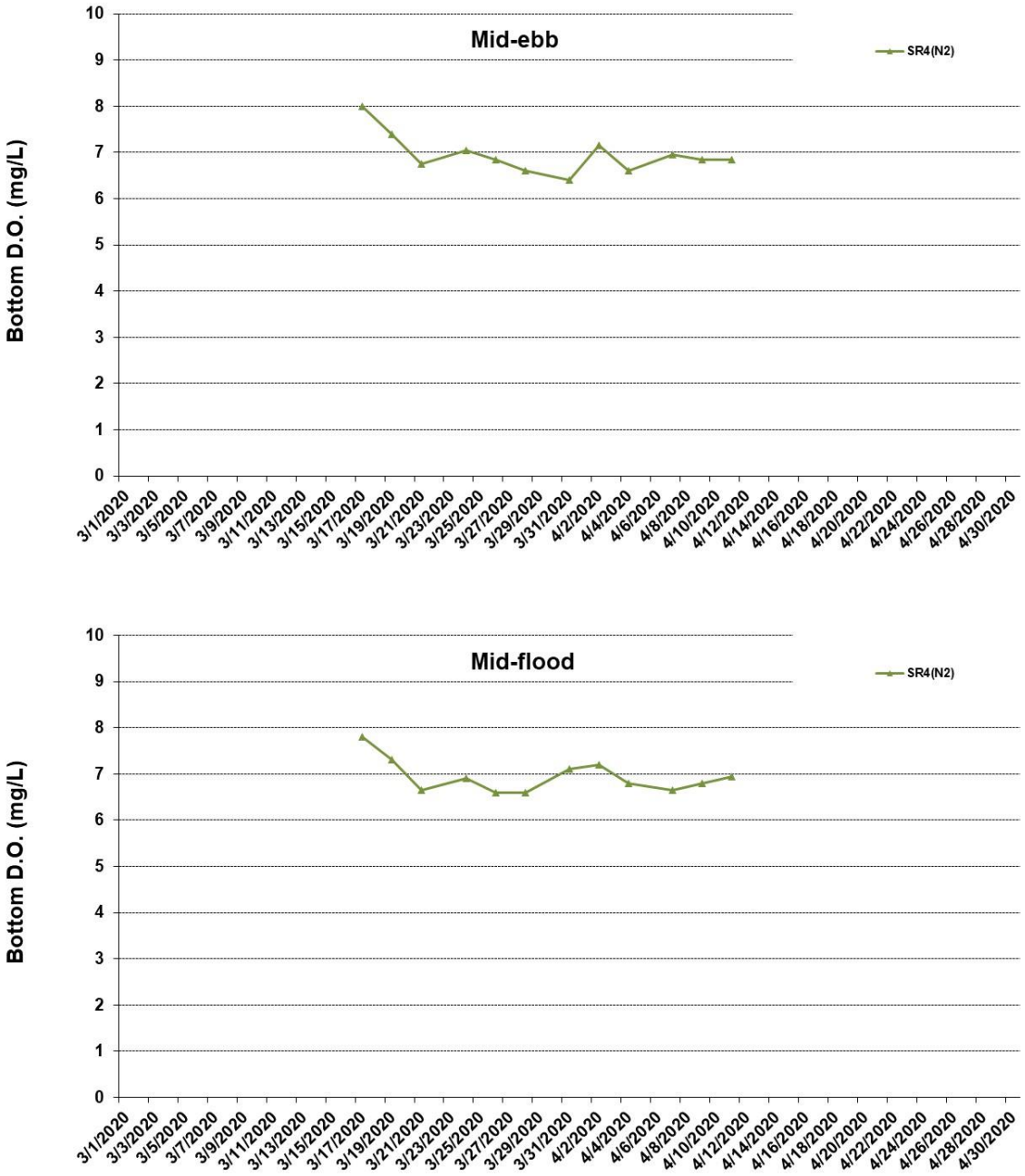


Figure J46 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at SR4(N2). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

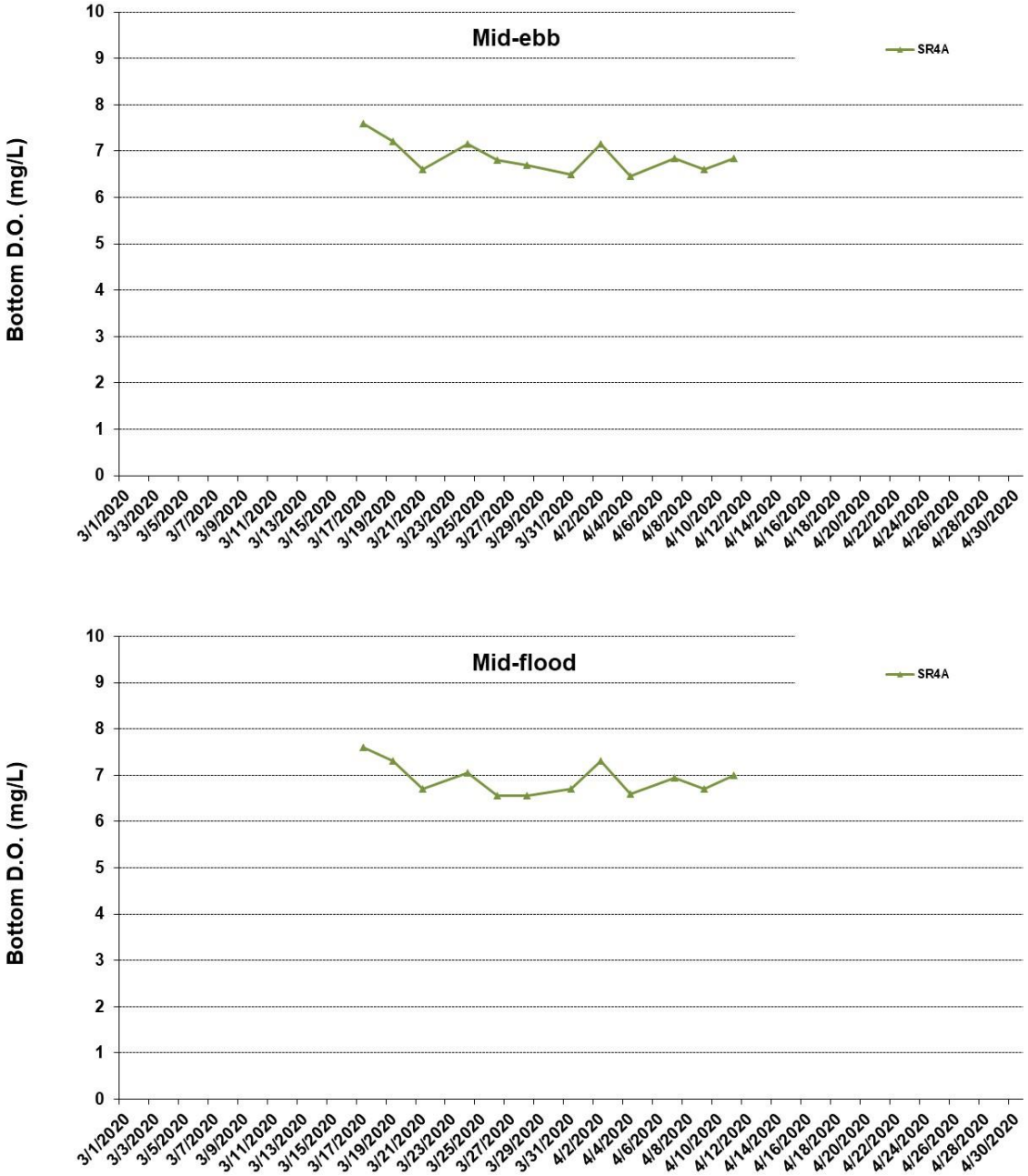


Figure J47 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at SR4A. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

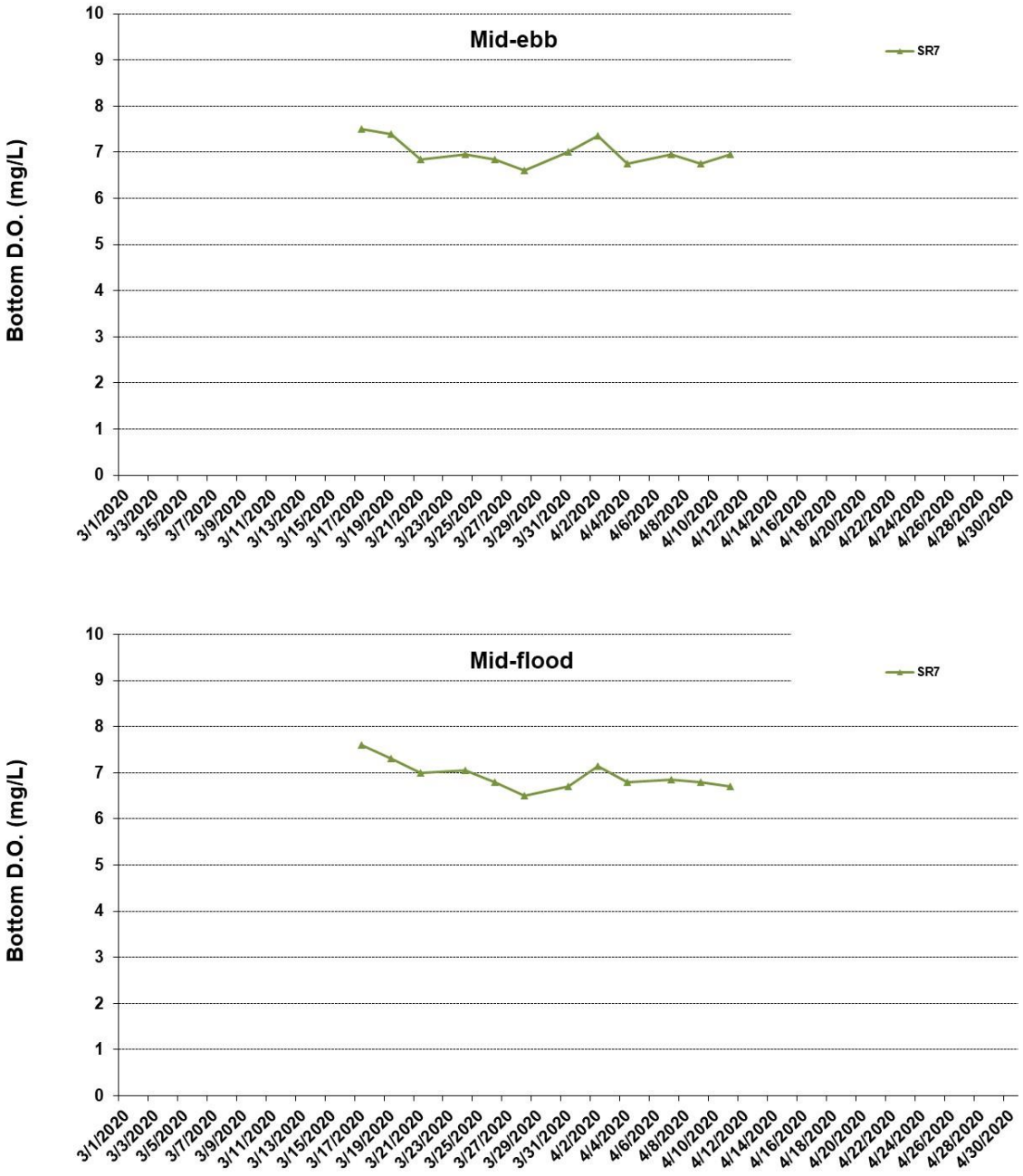


Figure J48 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at SR7. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

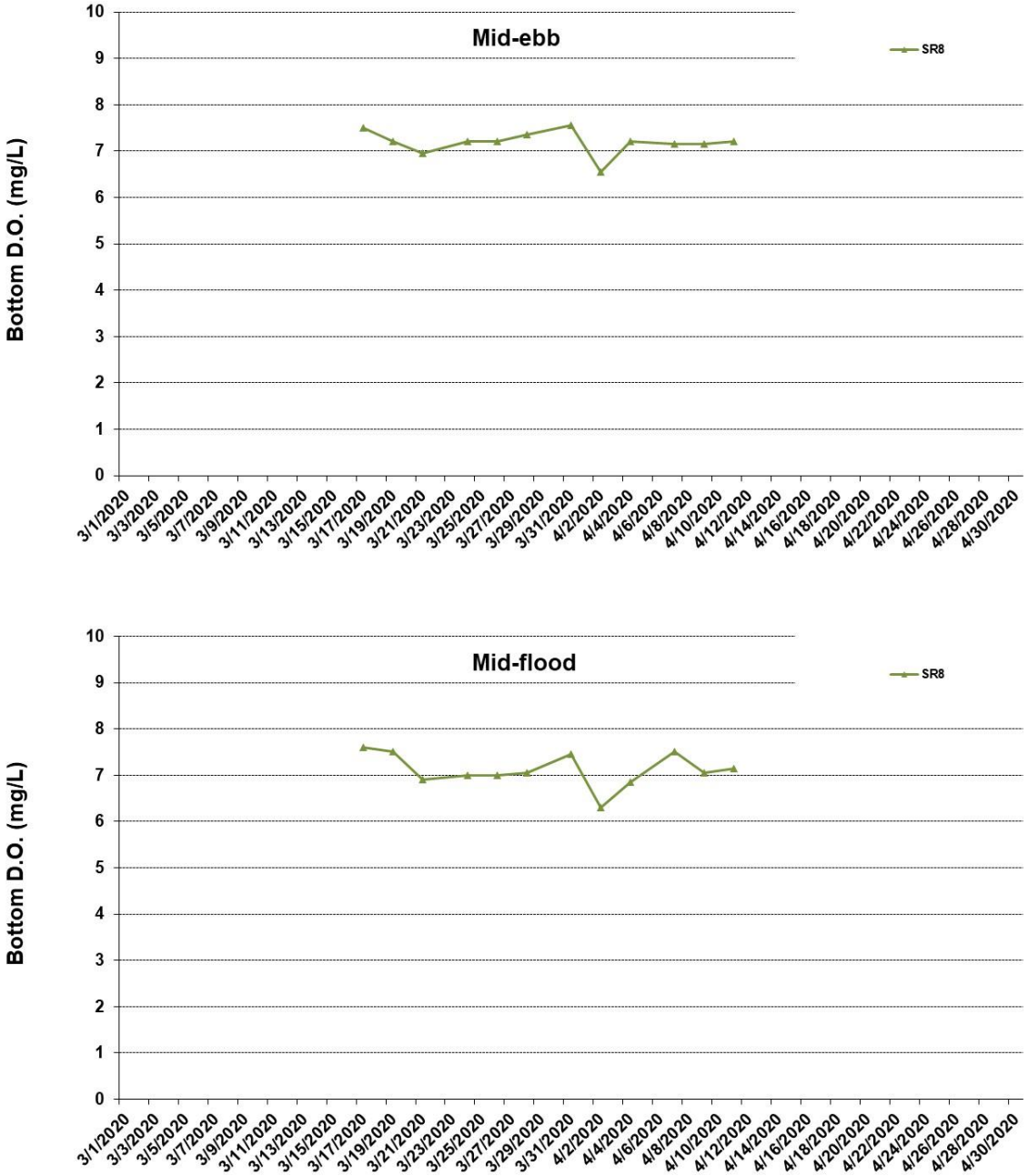


Figure J49 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at SR8. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

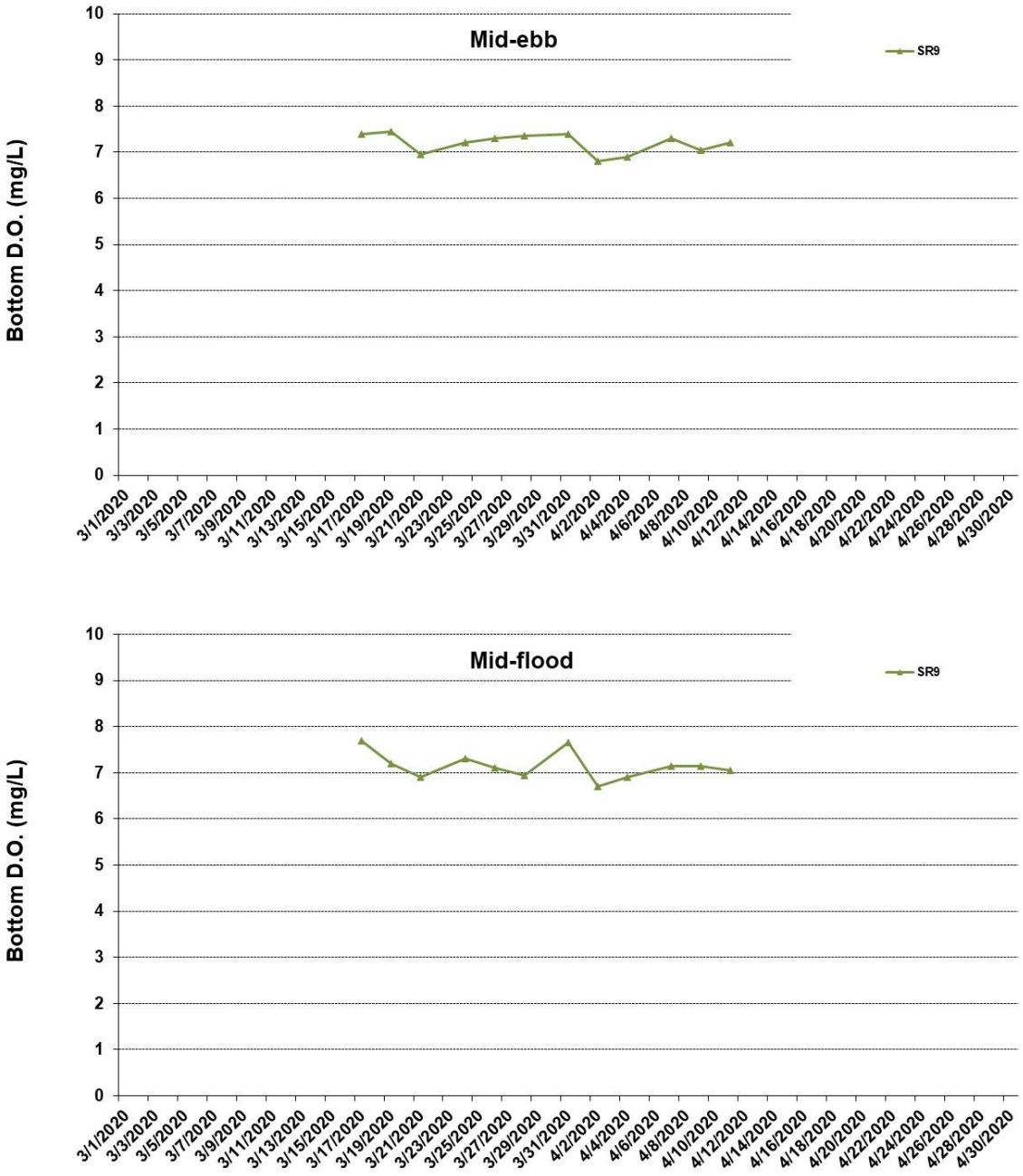


Figure J50 Post Construction Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 17 March 2020 and 11 April 2020 at SR9. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

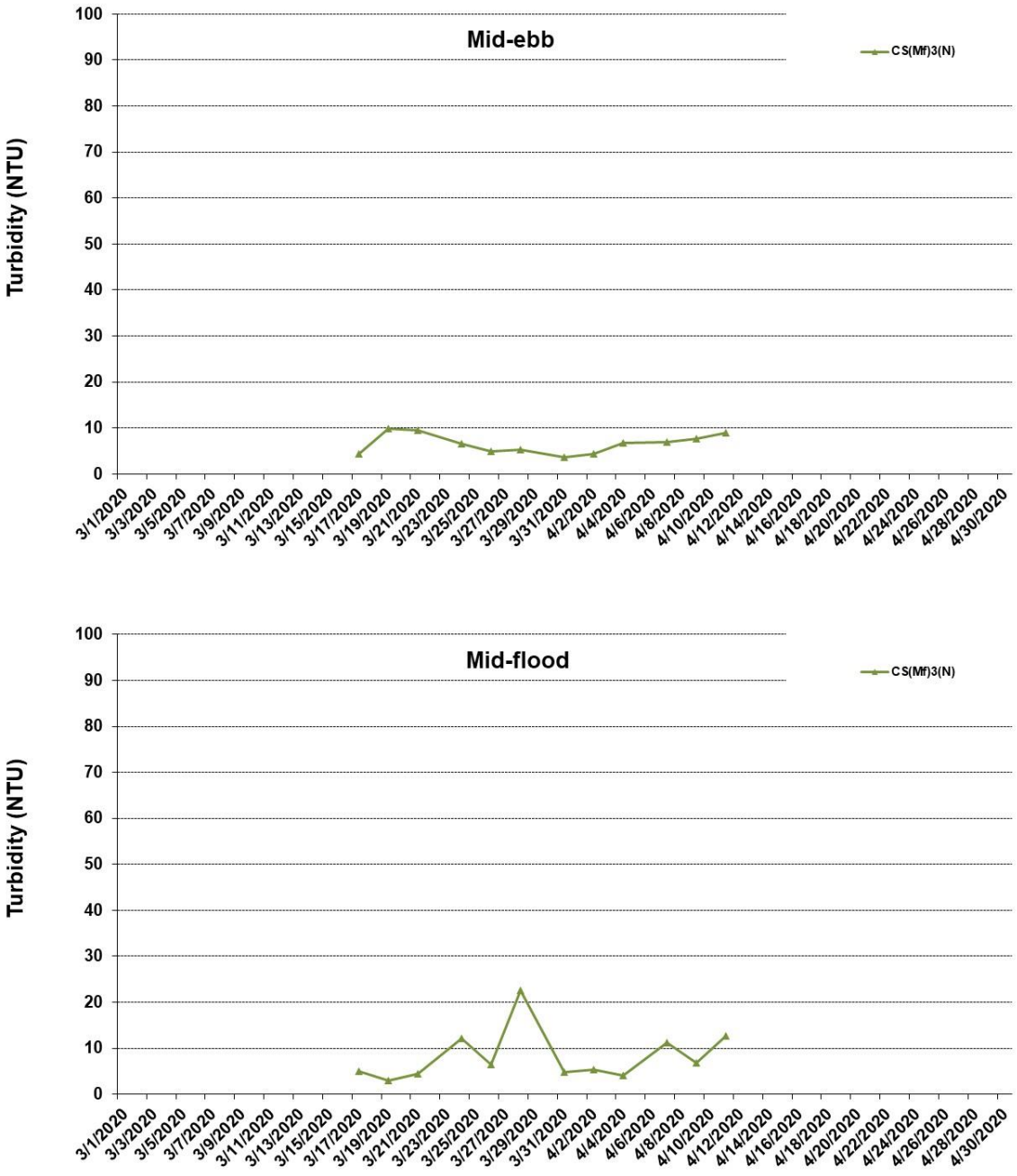


Figure J51 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at CS(Mf)3(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

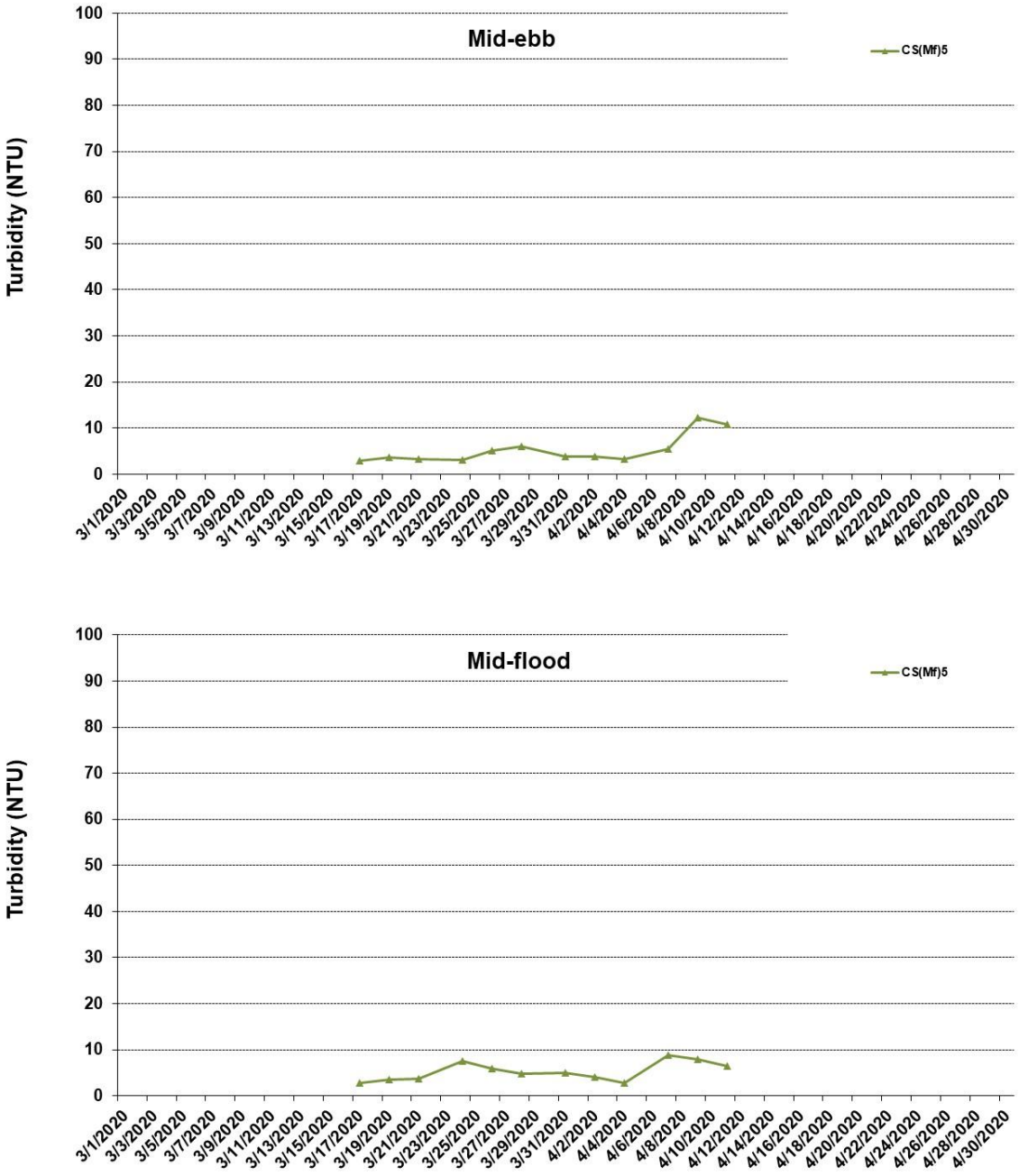


Figure J52 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at CS(Mf)5. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

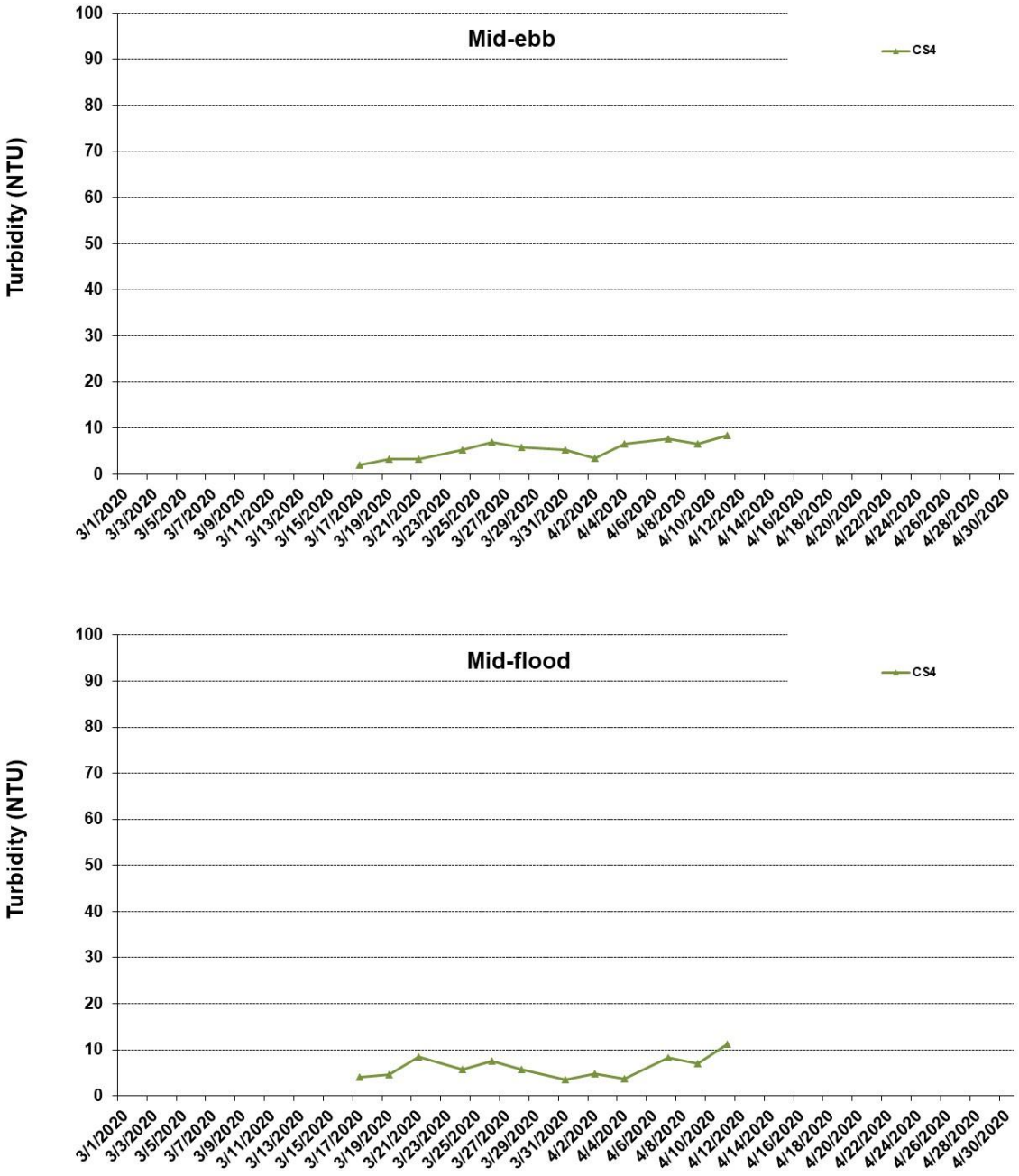


Figure J53 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at CS4. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

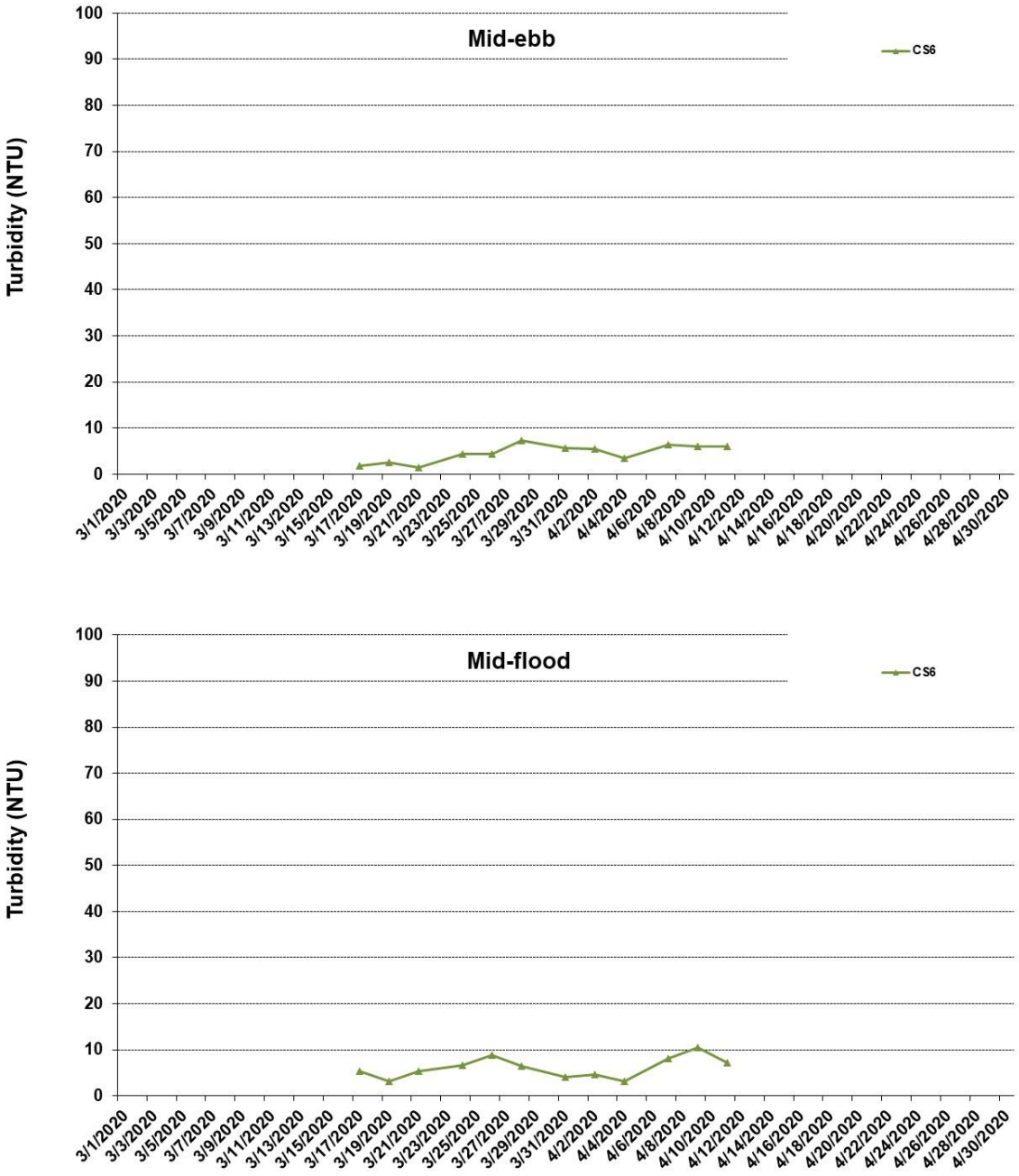


Figure J54 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at CS6. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

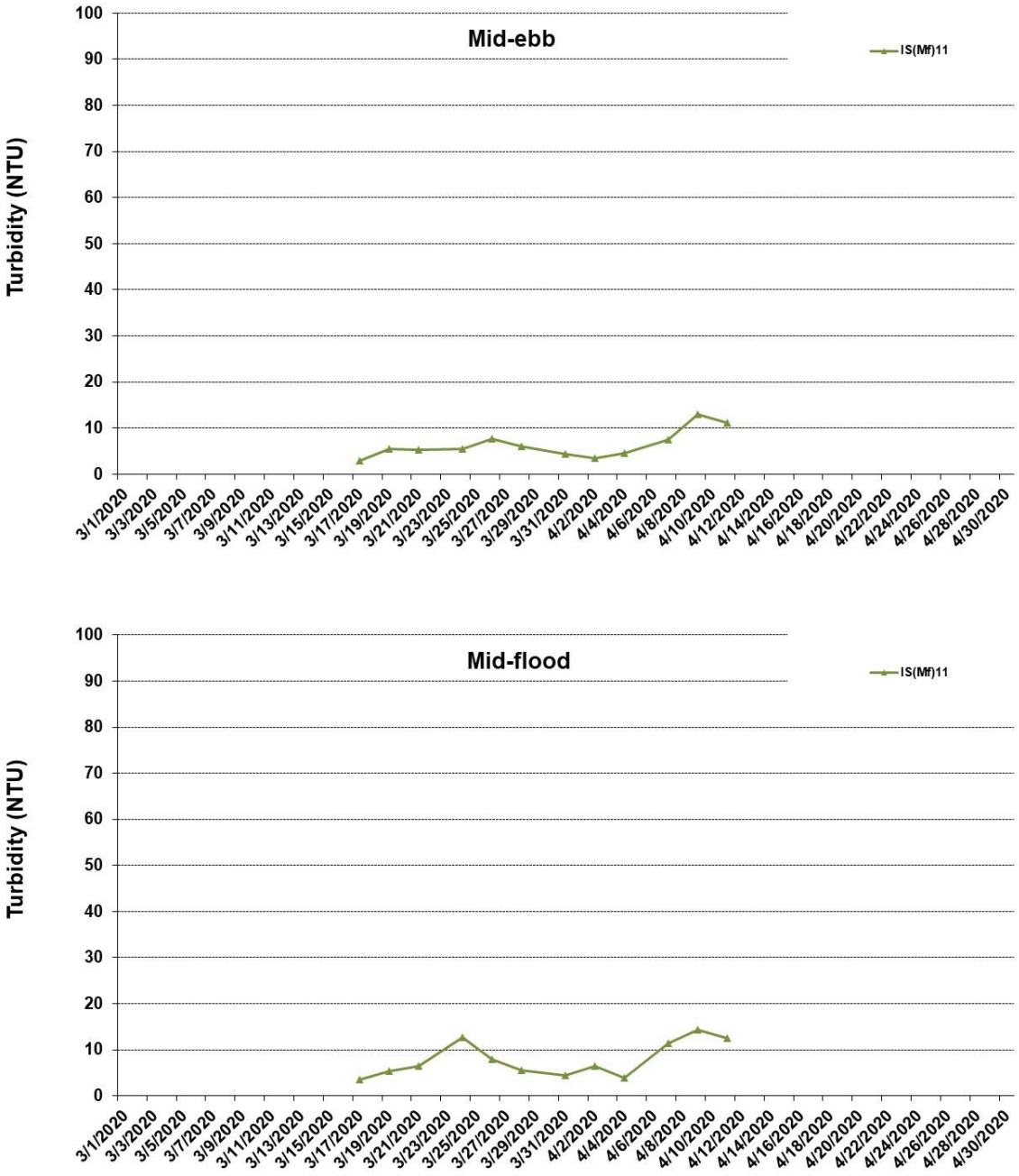


Figure J55 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at IS(Mf)11. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

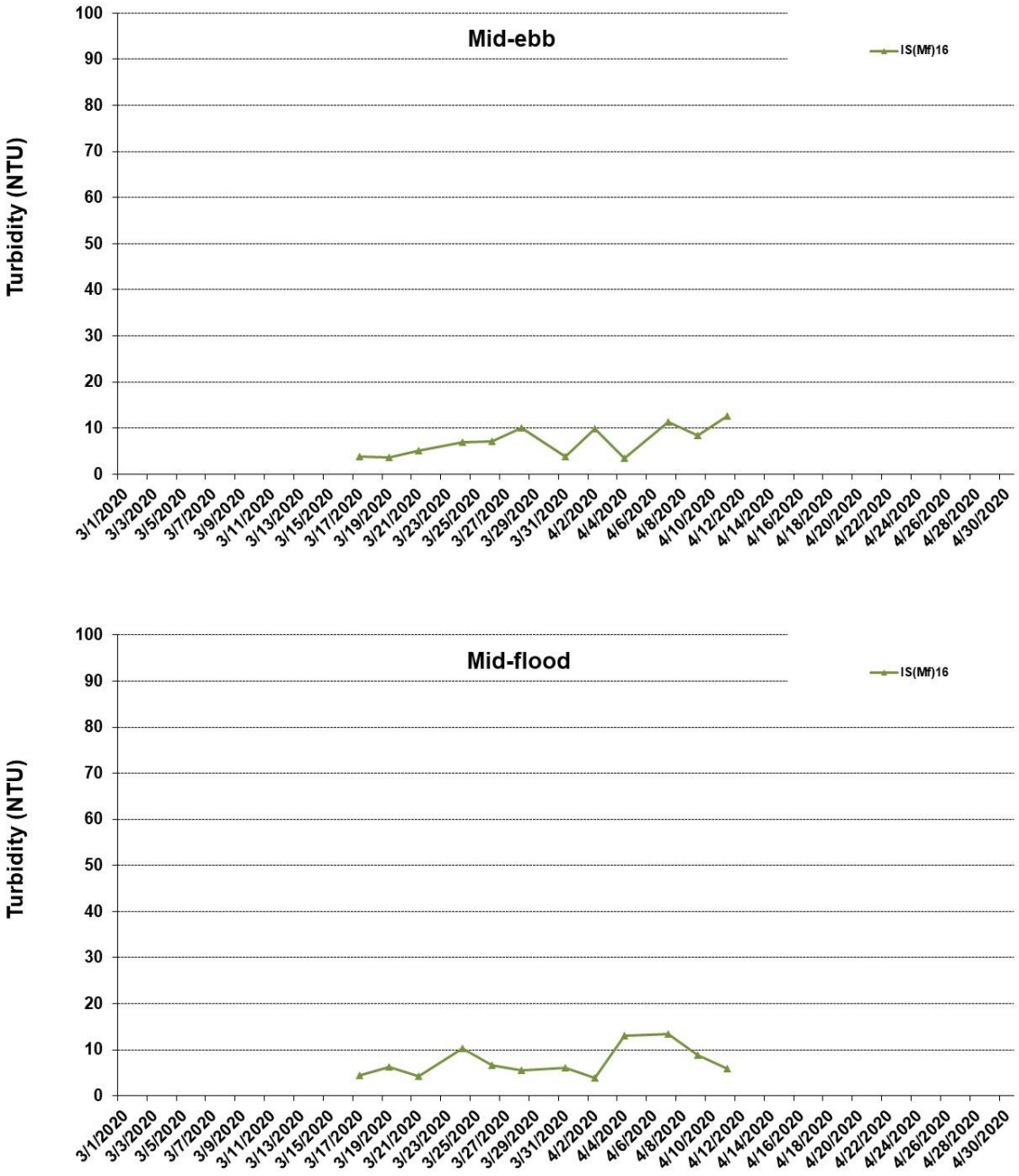


Figure J56 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at IS(Mf)16. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

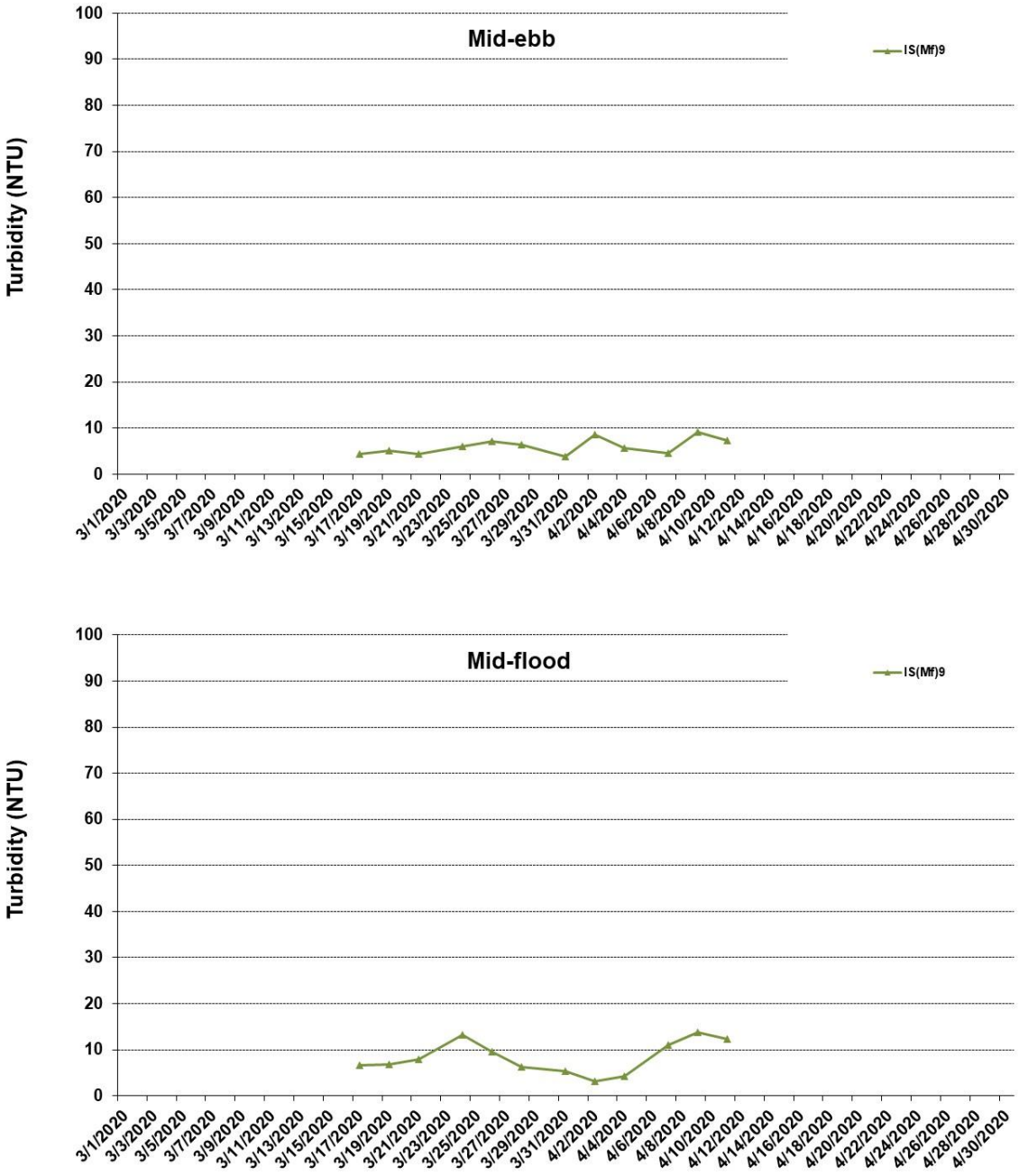


Figure J57 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at IS(Mf)9. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

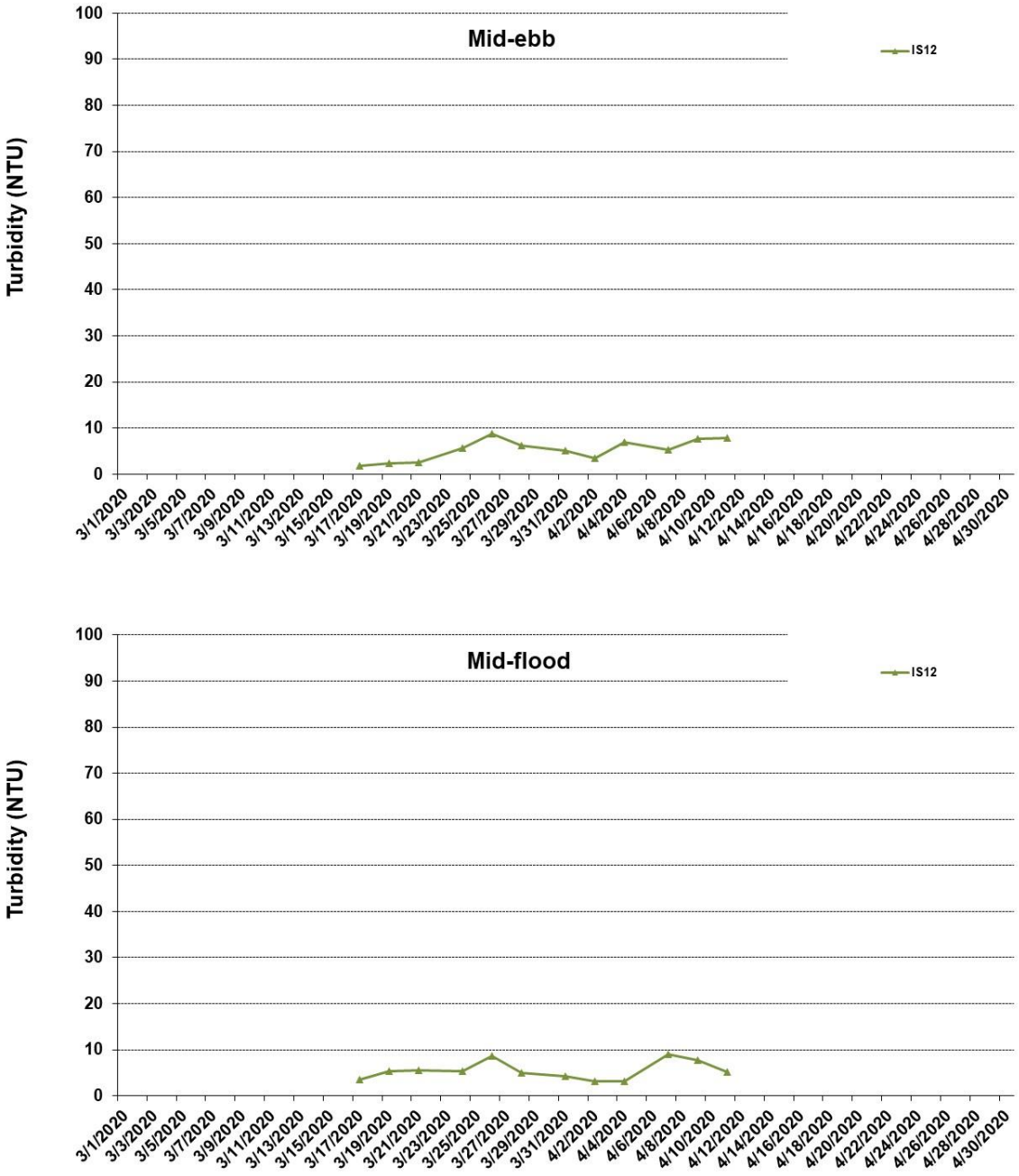


Figure J58 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at IS12. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

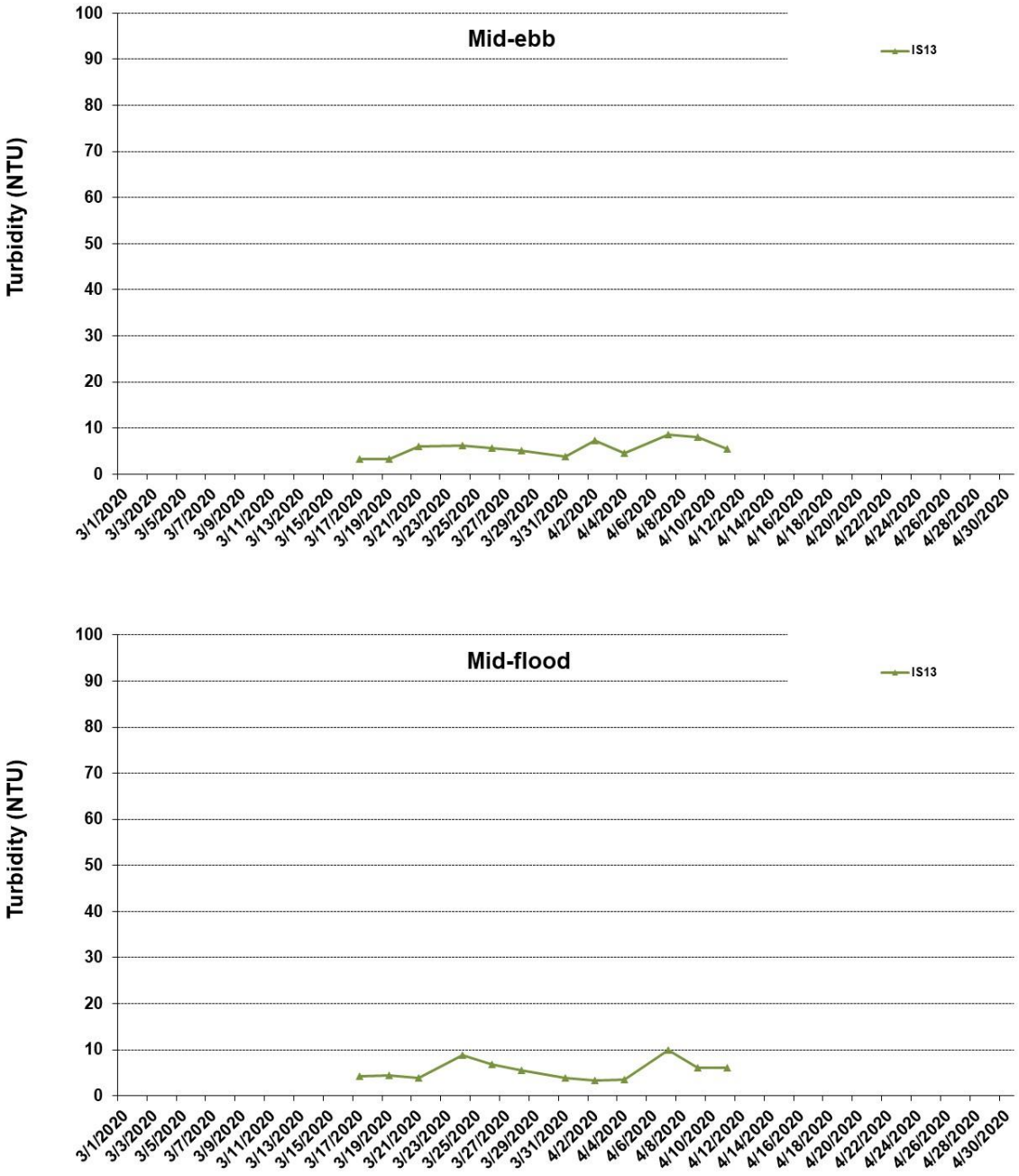


Figure J59 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at IS13. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

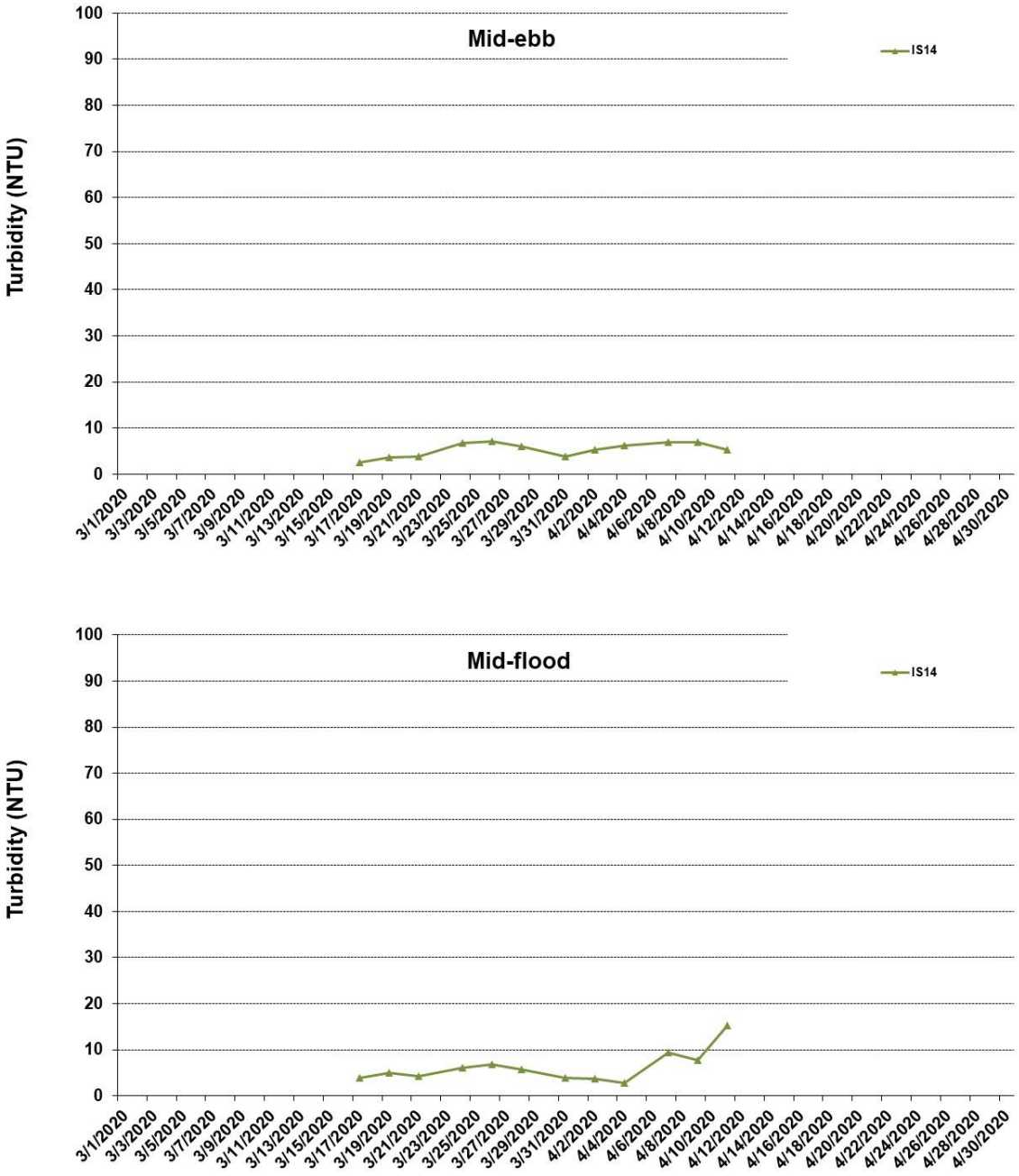


Figure J60 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at IS14. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

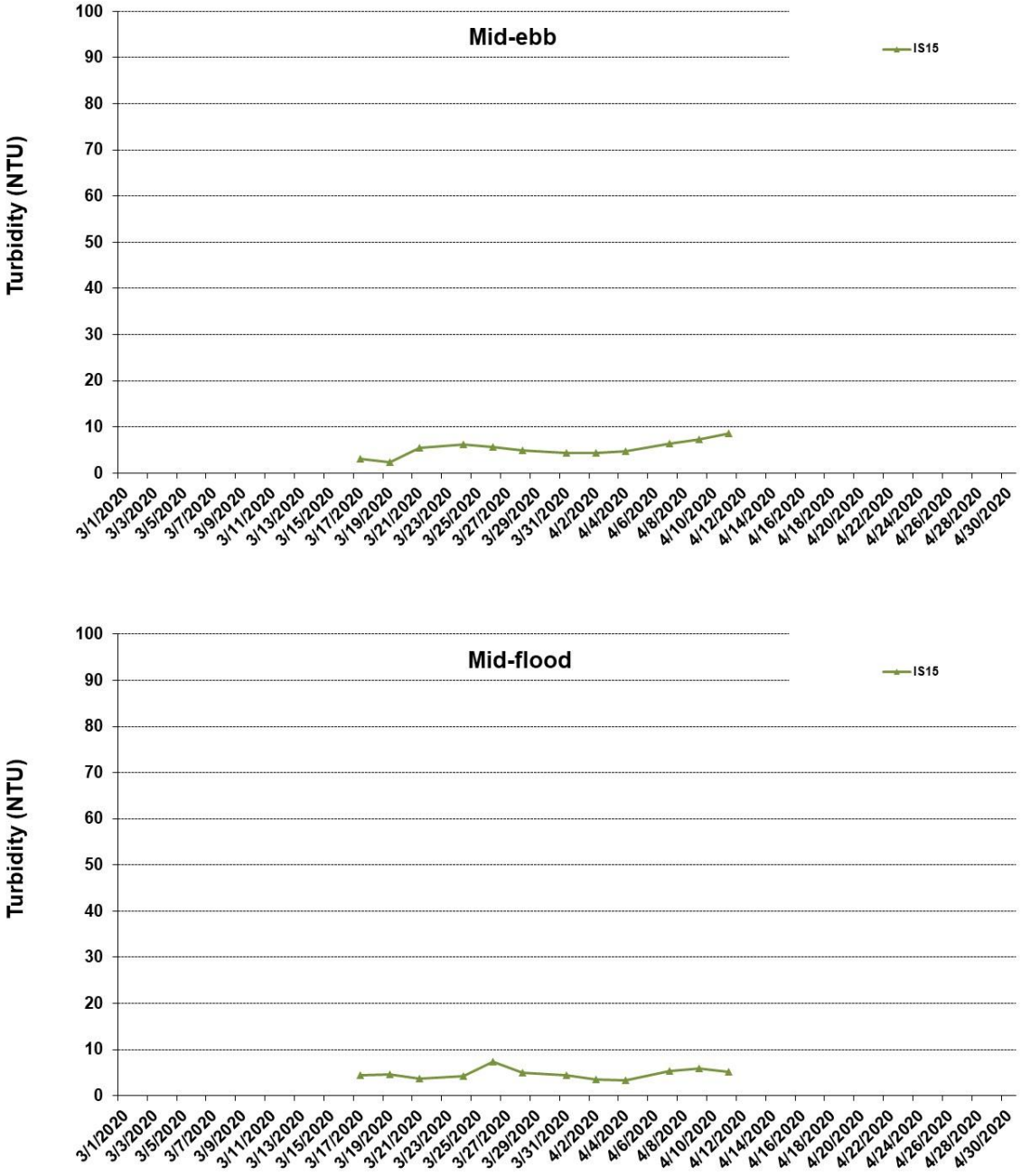


Figure J61 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at IS15. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

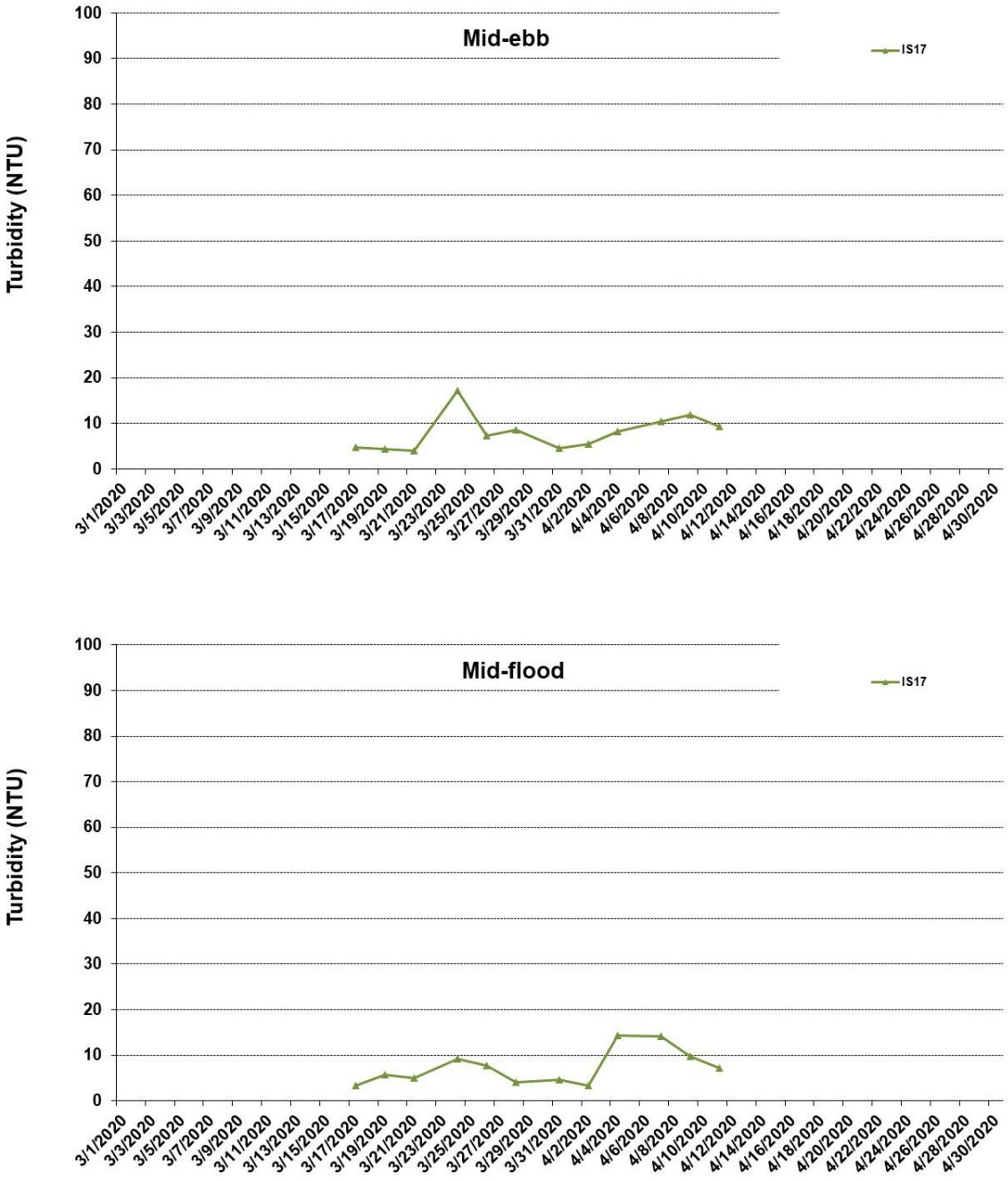


Figure J62 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at IS17. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

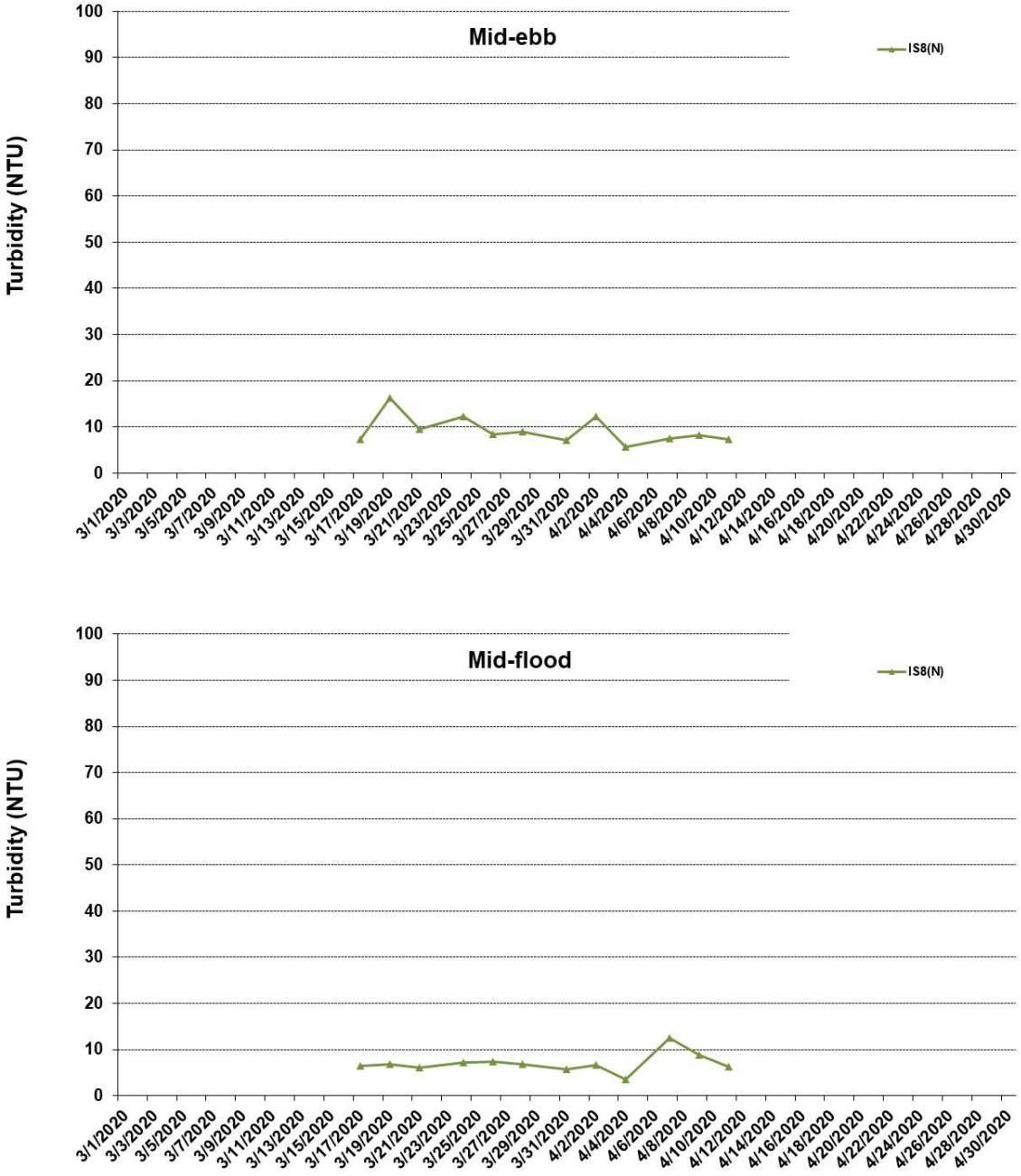


Figure J63 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at IS8(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

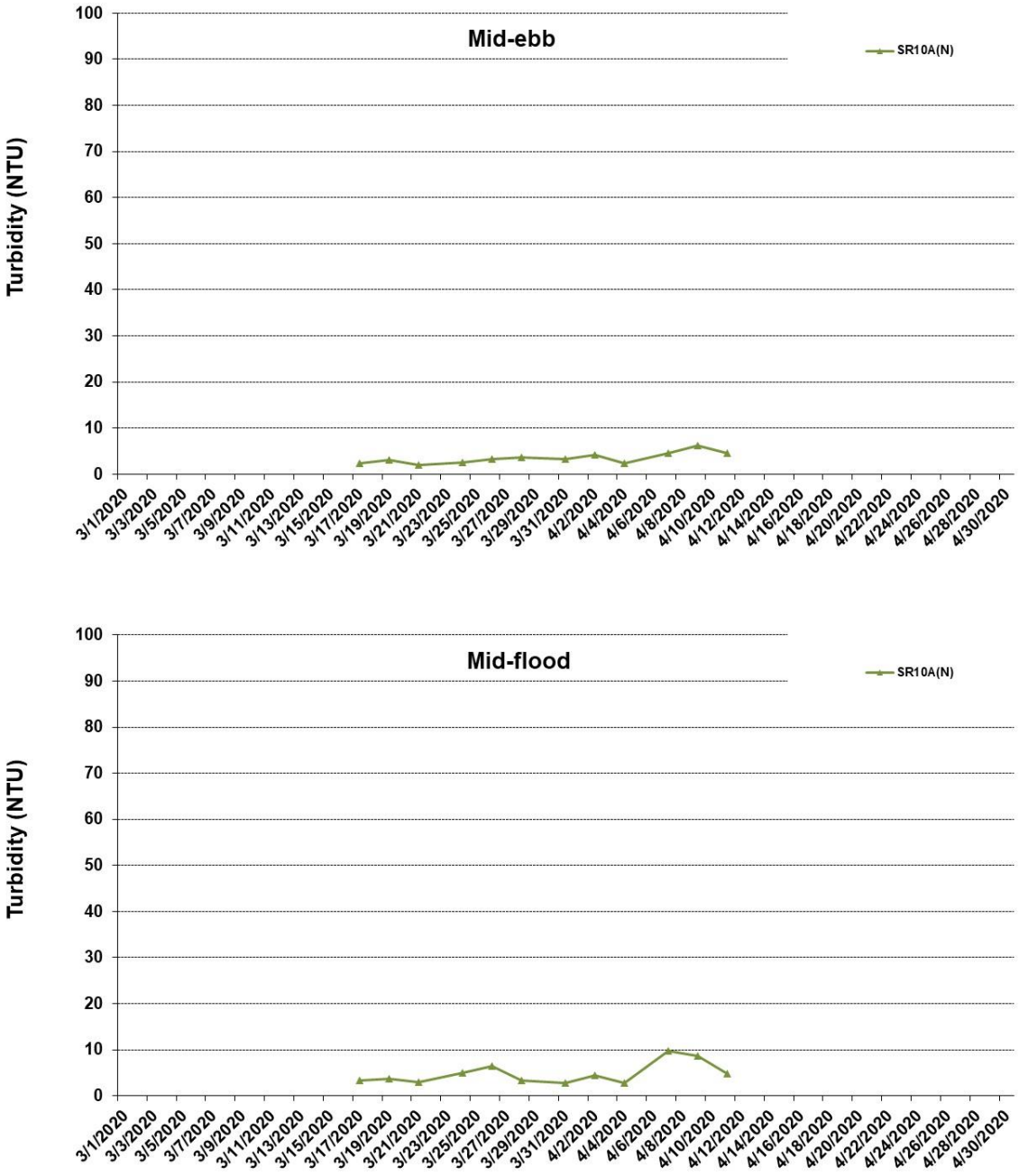


Figure J64 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at SR10A(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

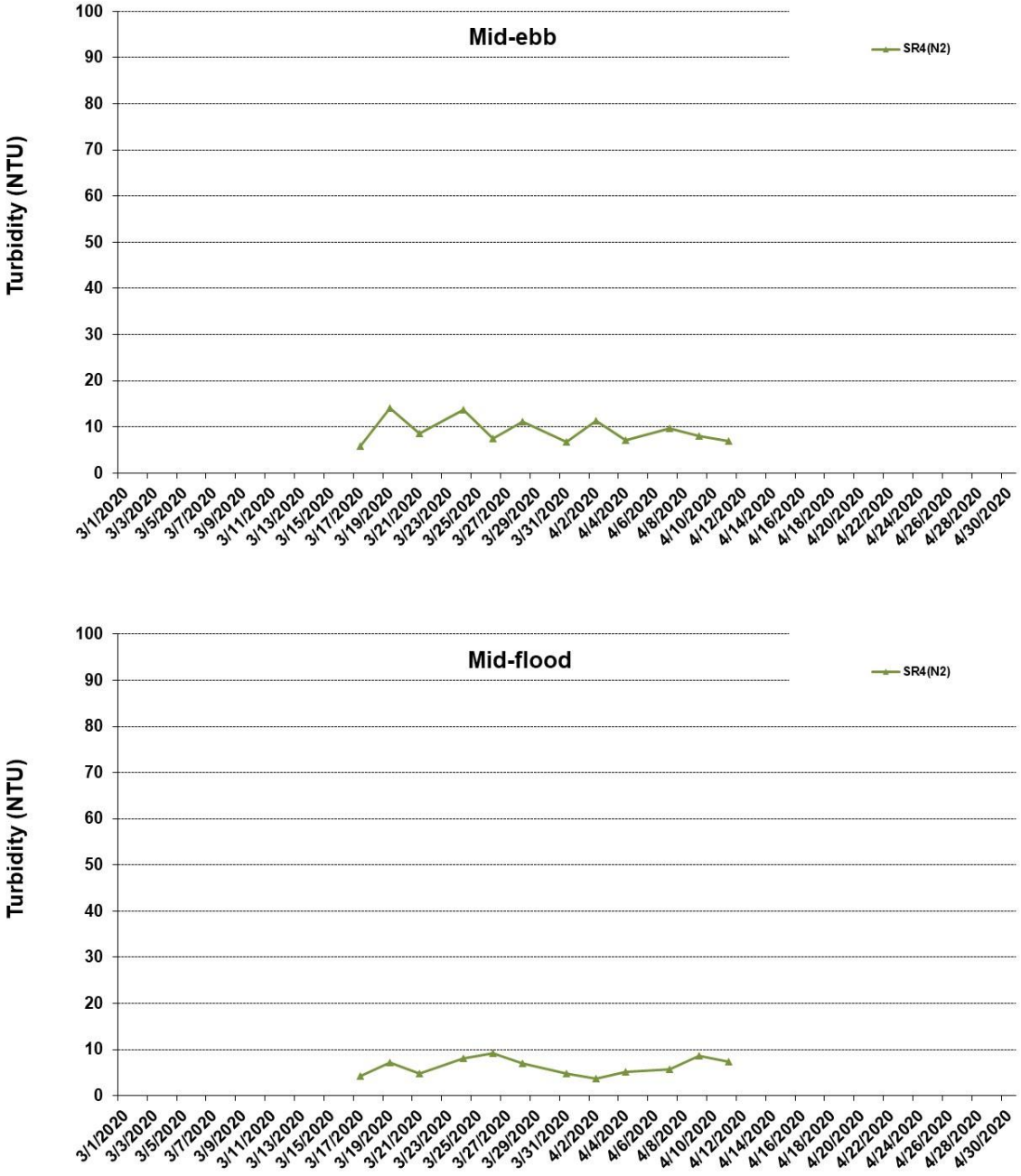


Figure J65 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at SR4(N2). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

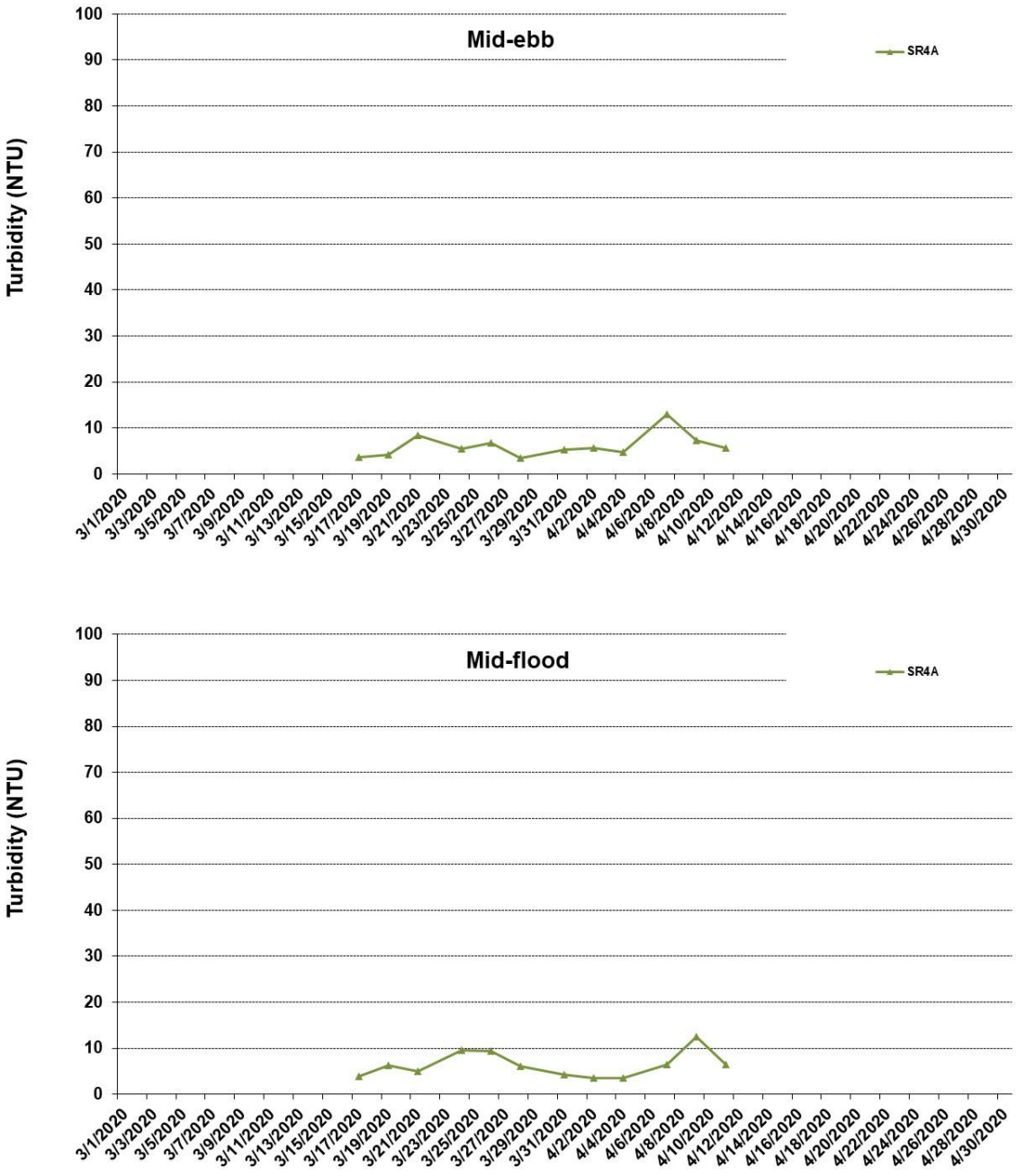


Figure J66 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at SR4. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

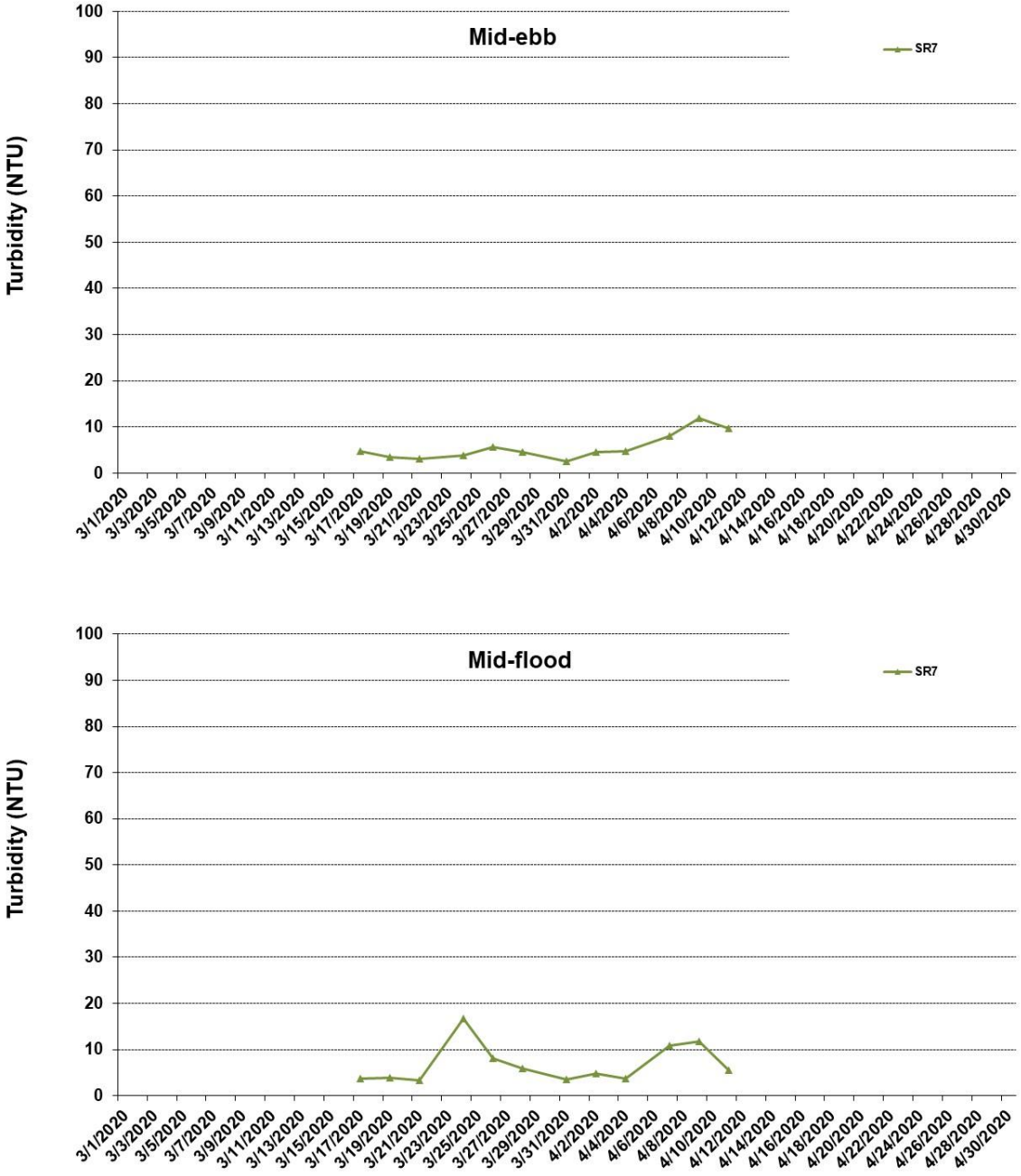
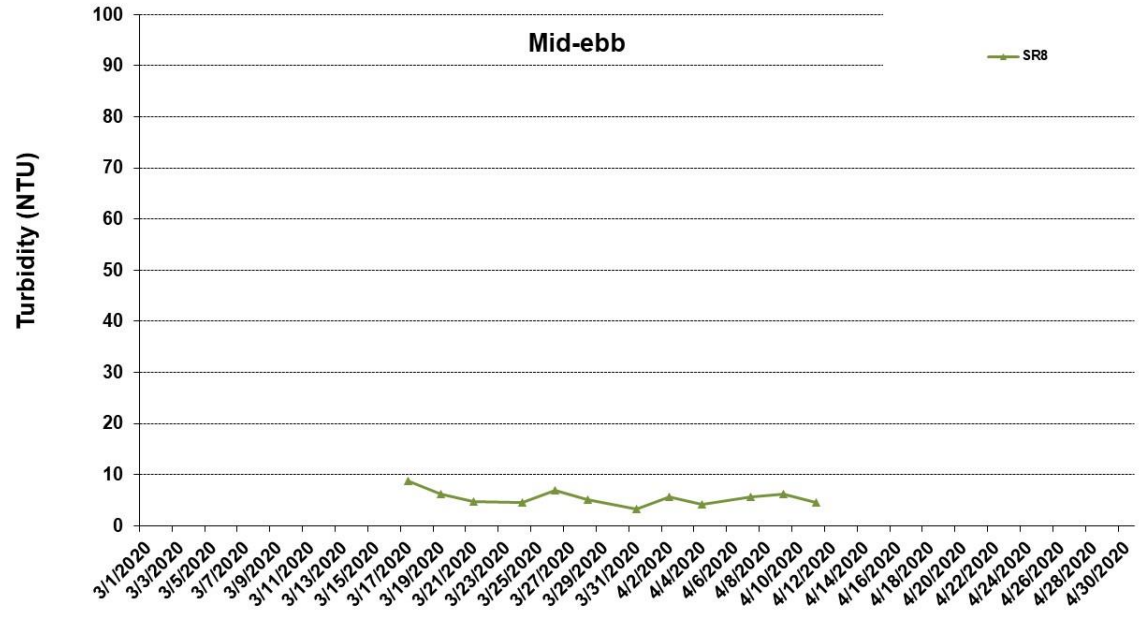


Figure J67 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at SR7. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



6

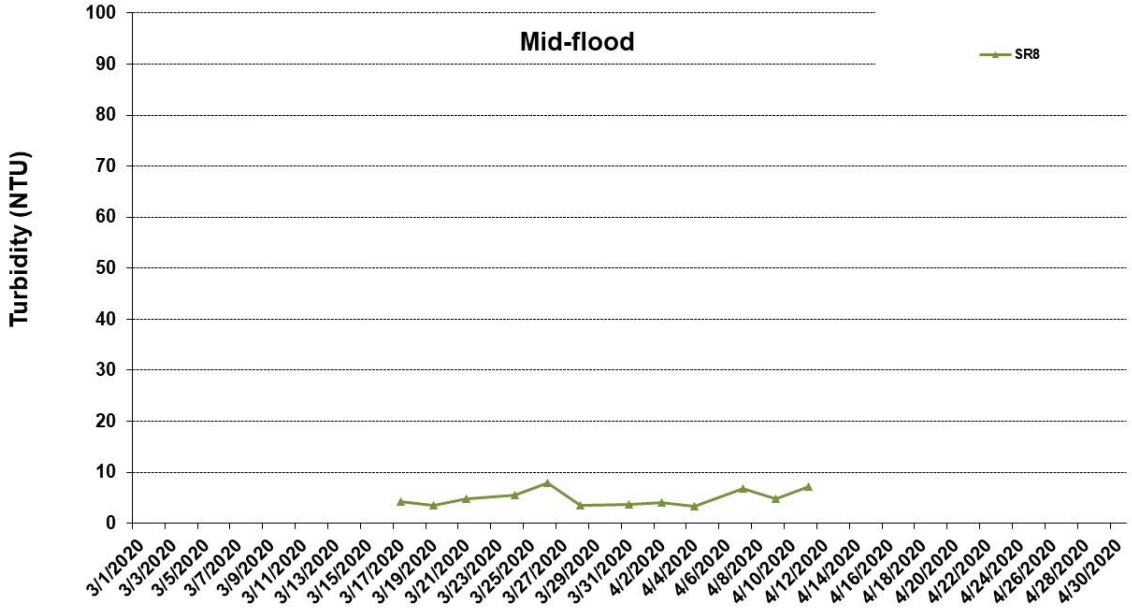


Figure J68 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at SR8. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

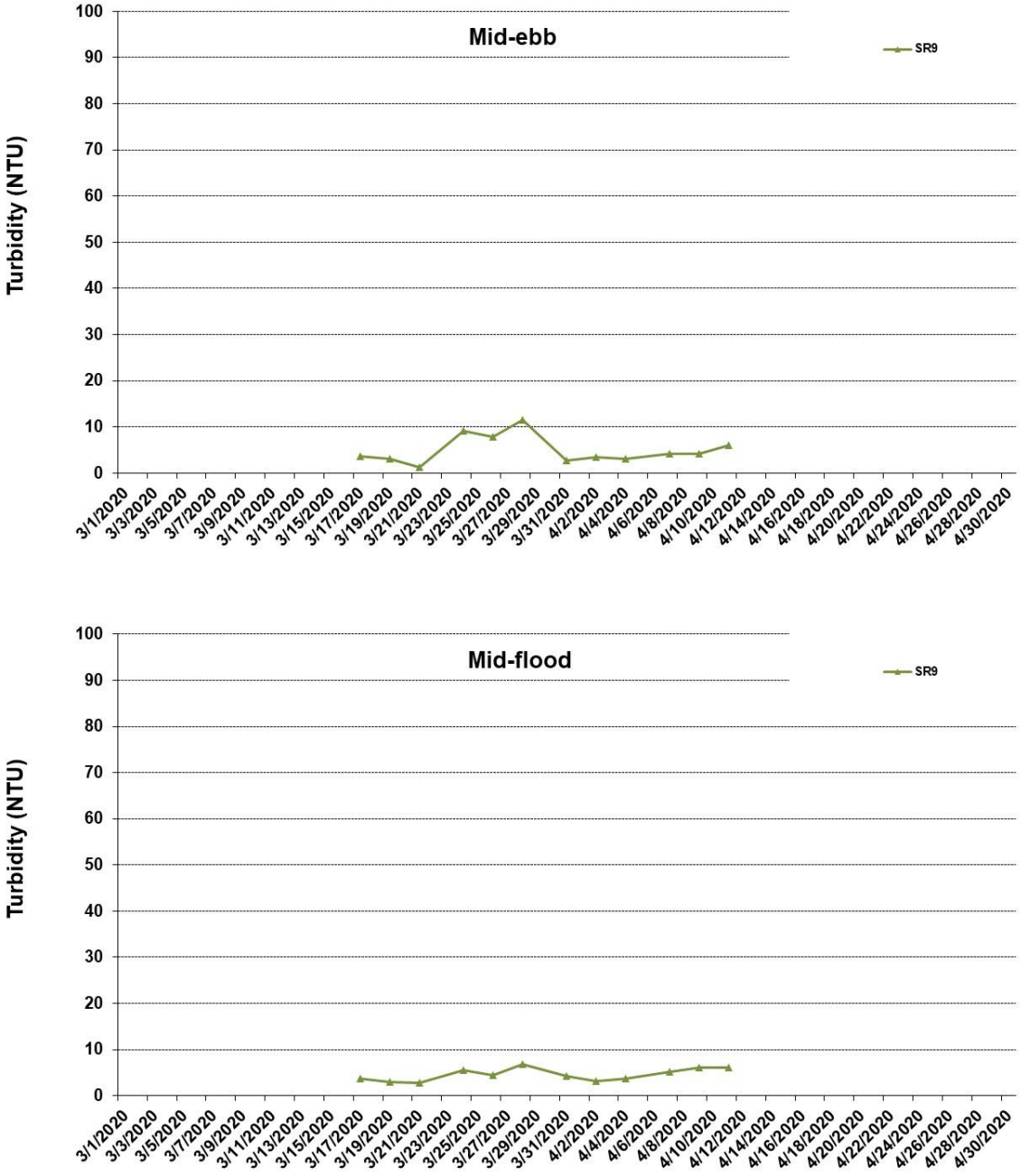


Figure J69 Post Construction Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 17 March 2020 and 11 April 2020 at SR9. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

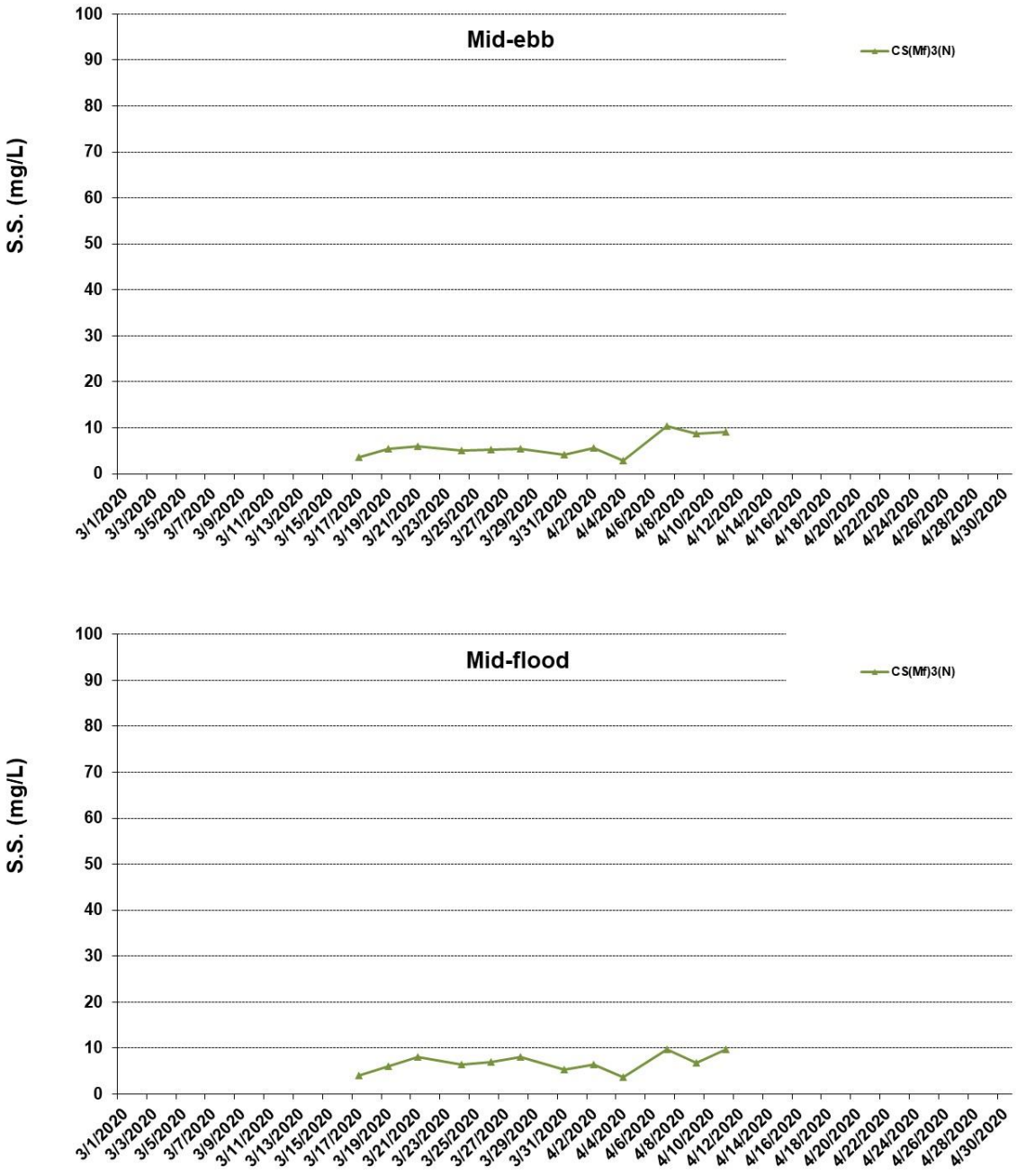


Figure J70 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at CS(Mf)3(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

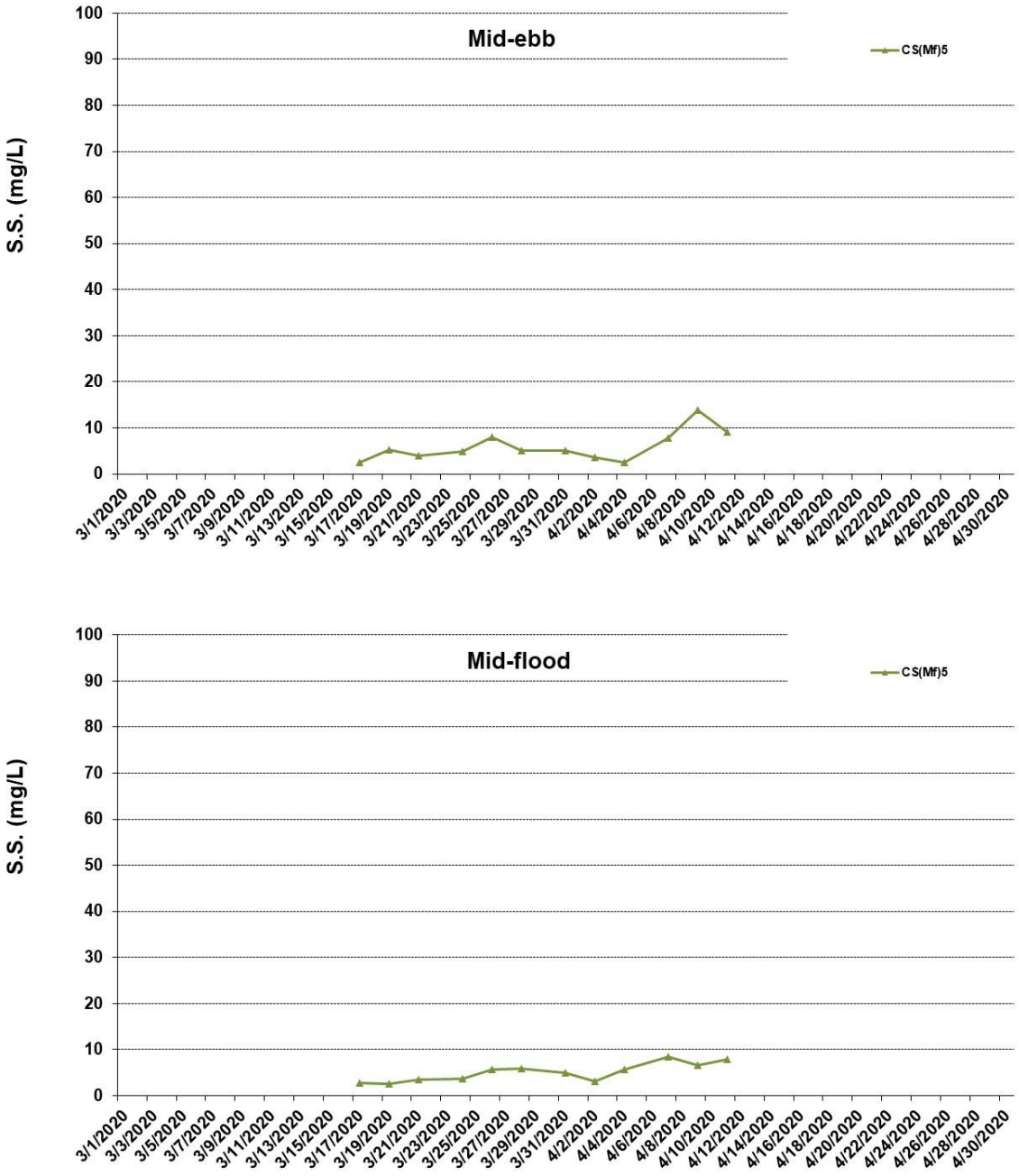


Figure J71 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at CS(Mf)5. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

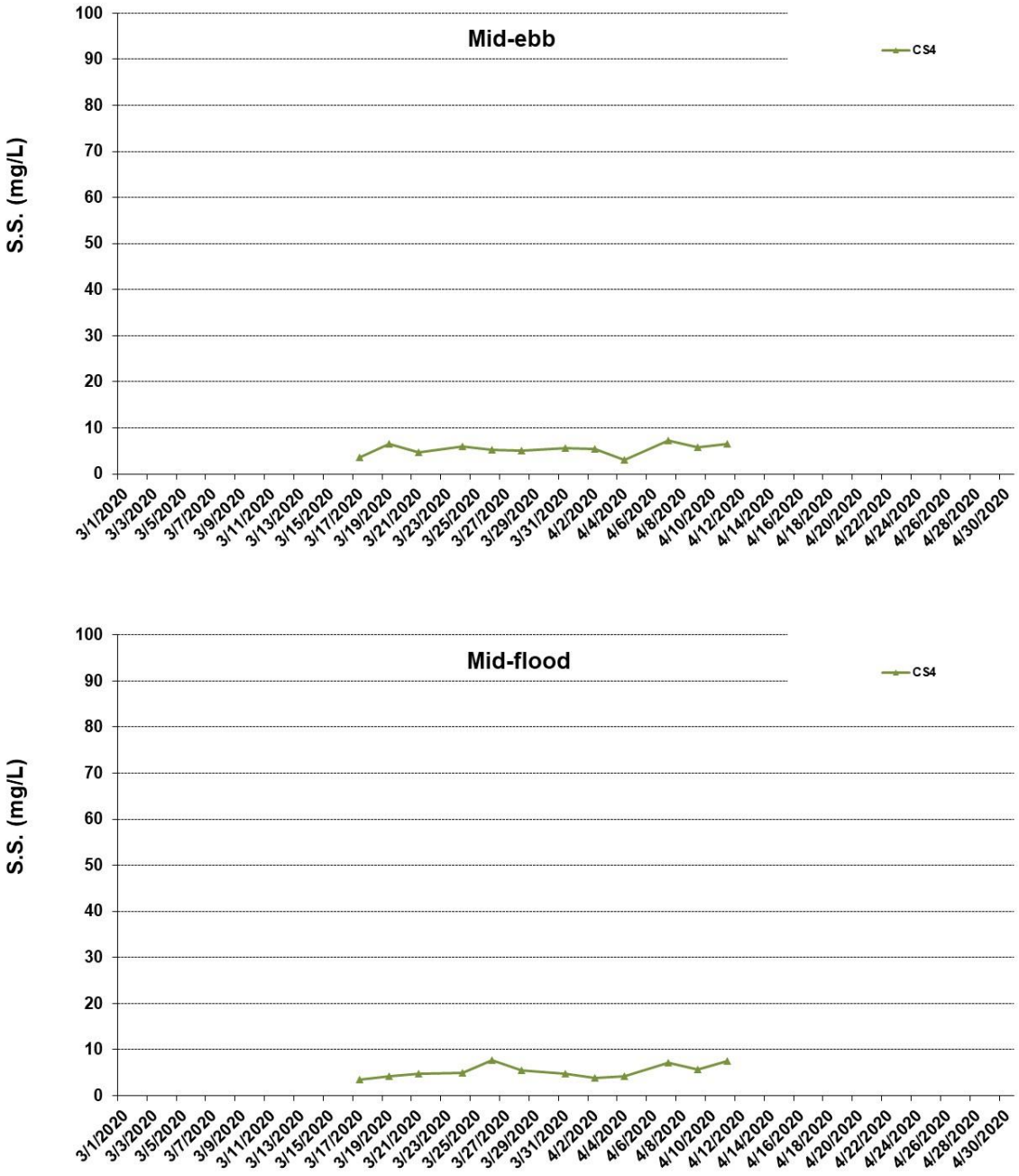


Figure J72 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at CS4. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

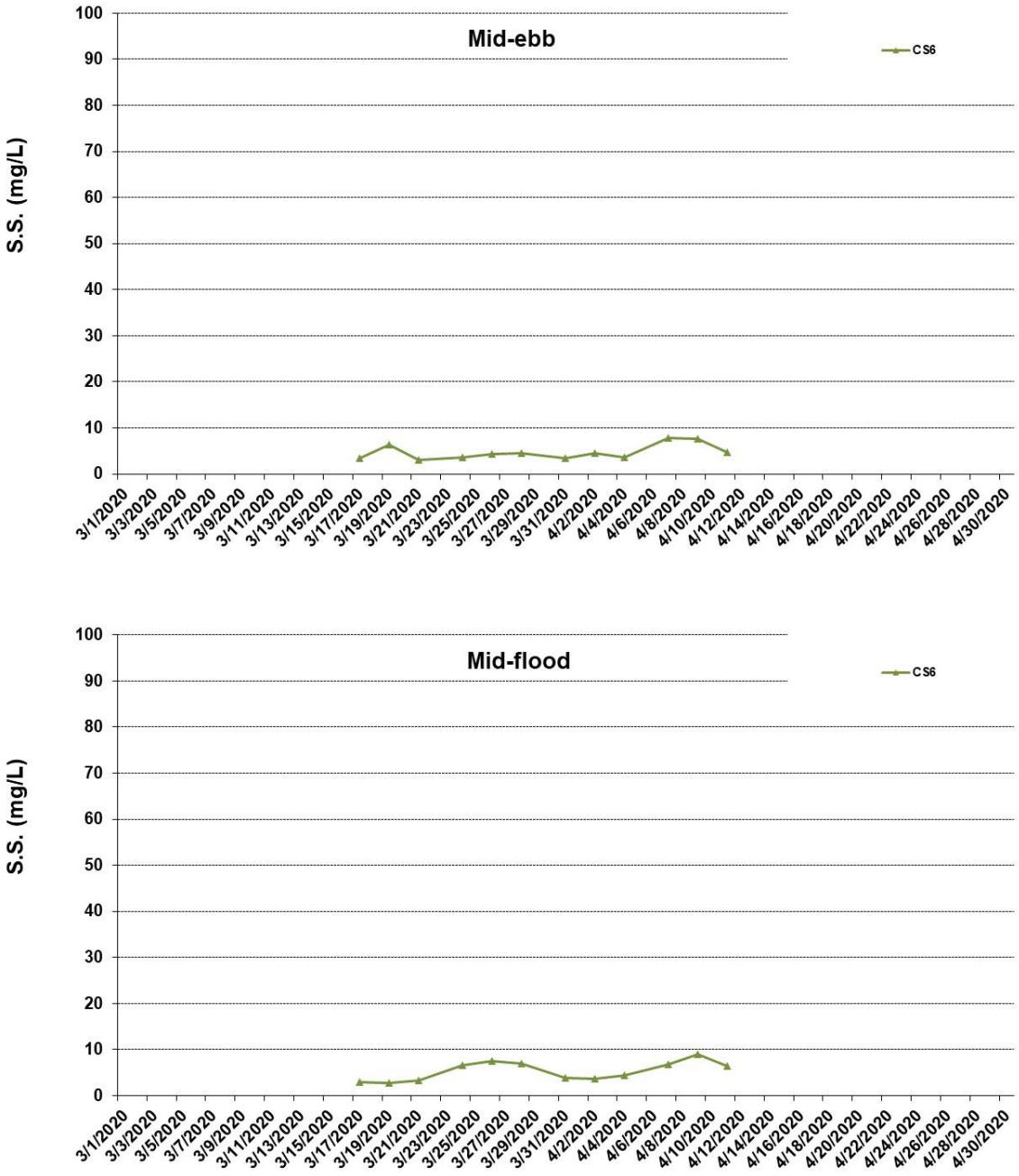


Figure J73 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at CS6. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

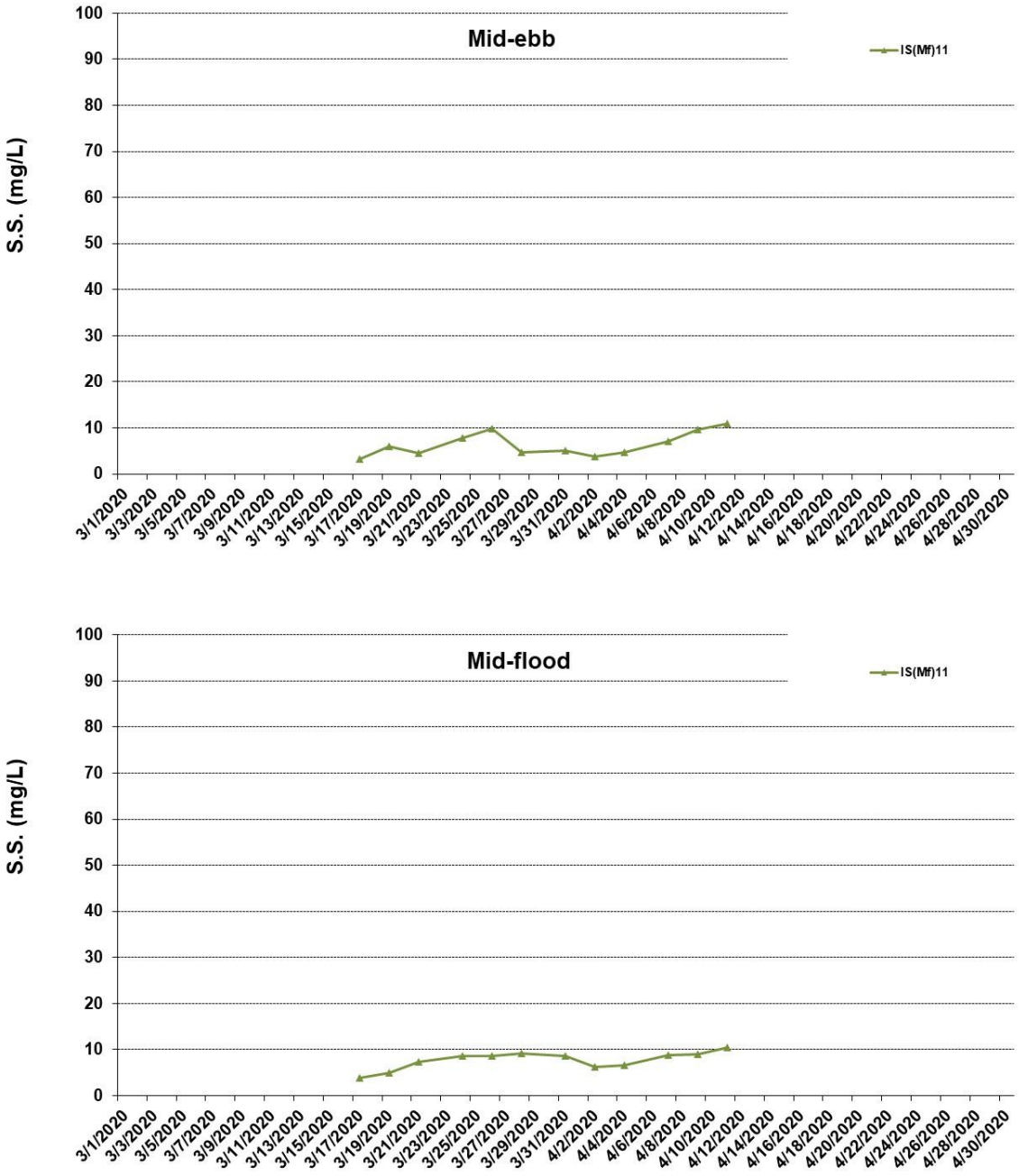


Figure J74 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at IS(Mf)11. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

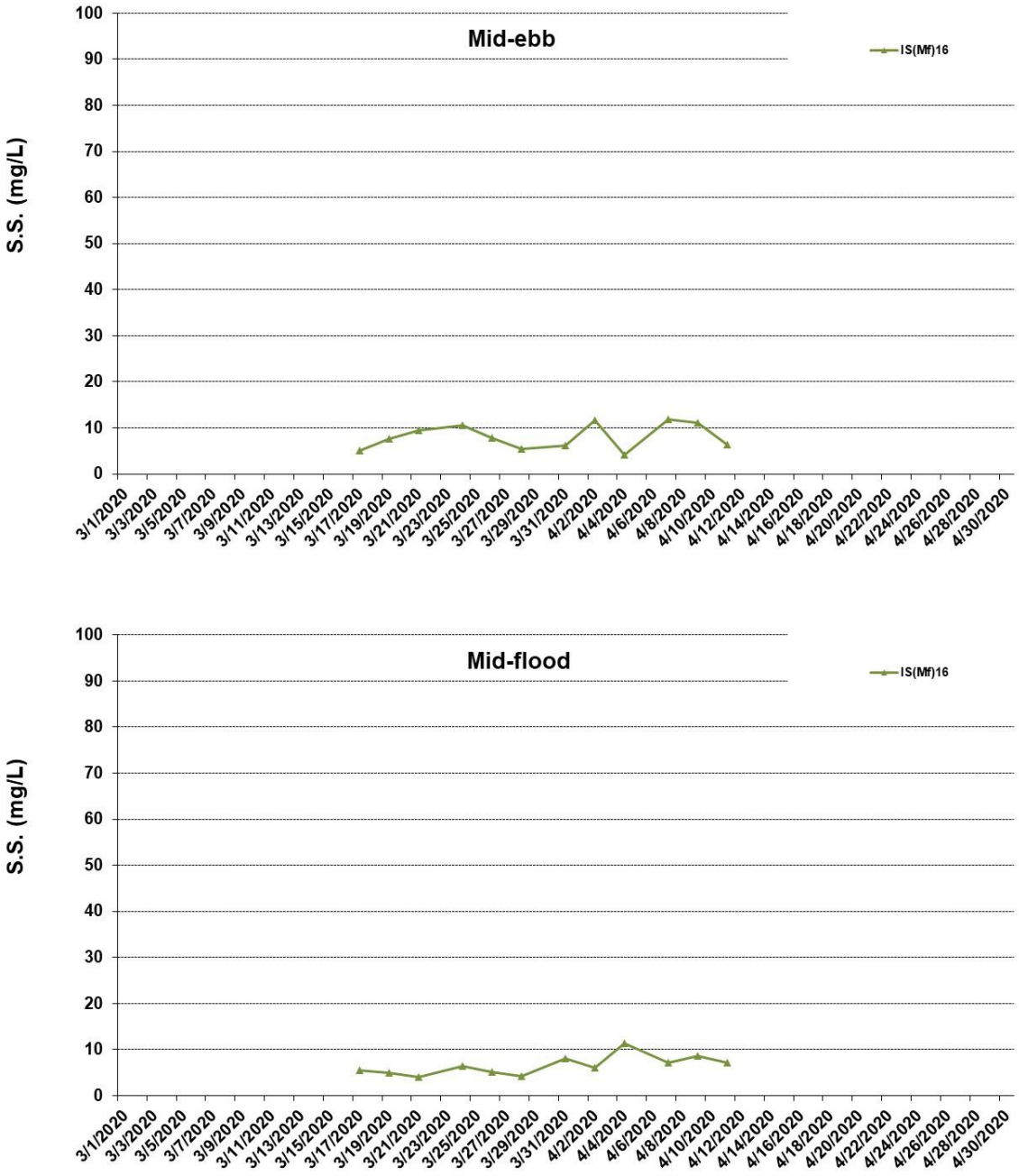


Figure J75 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at IS(Mf)16. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

ERM

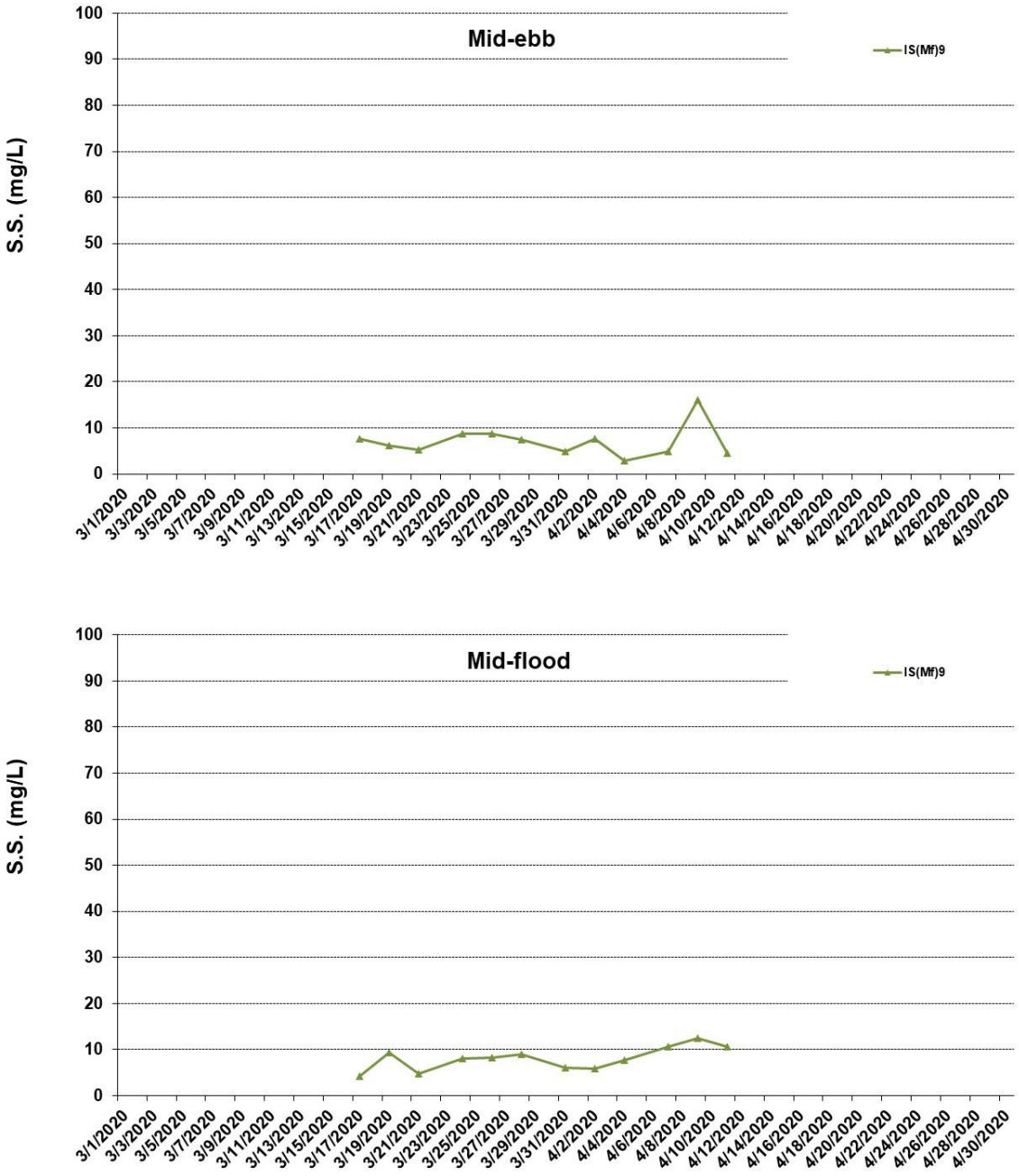


Figure J76 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at IS(Mf)9. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

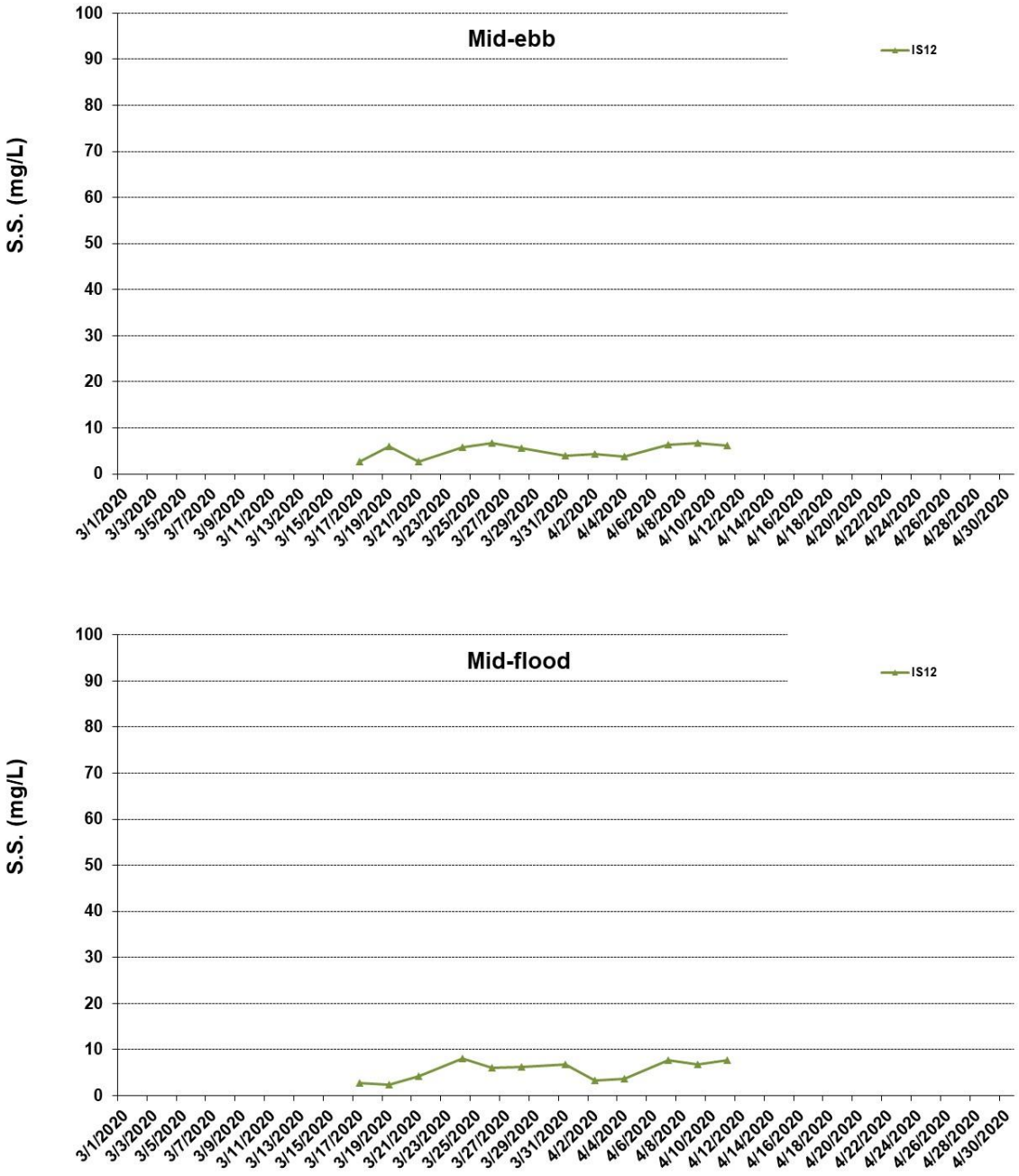


Figure J77 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at IS12. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

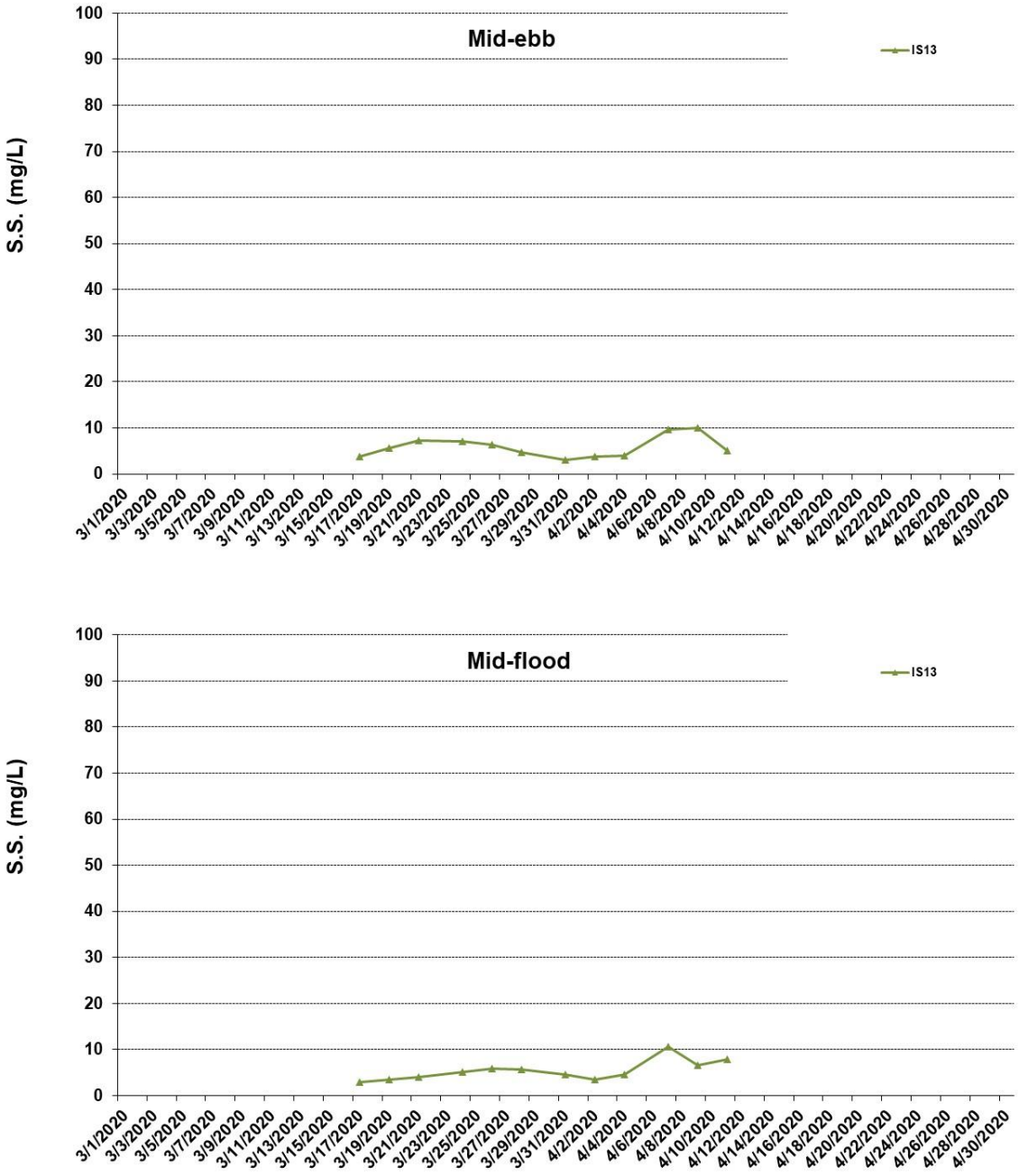


Figure J78 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at IS13. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

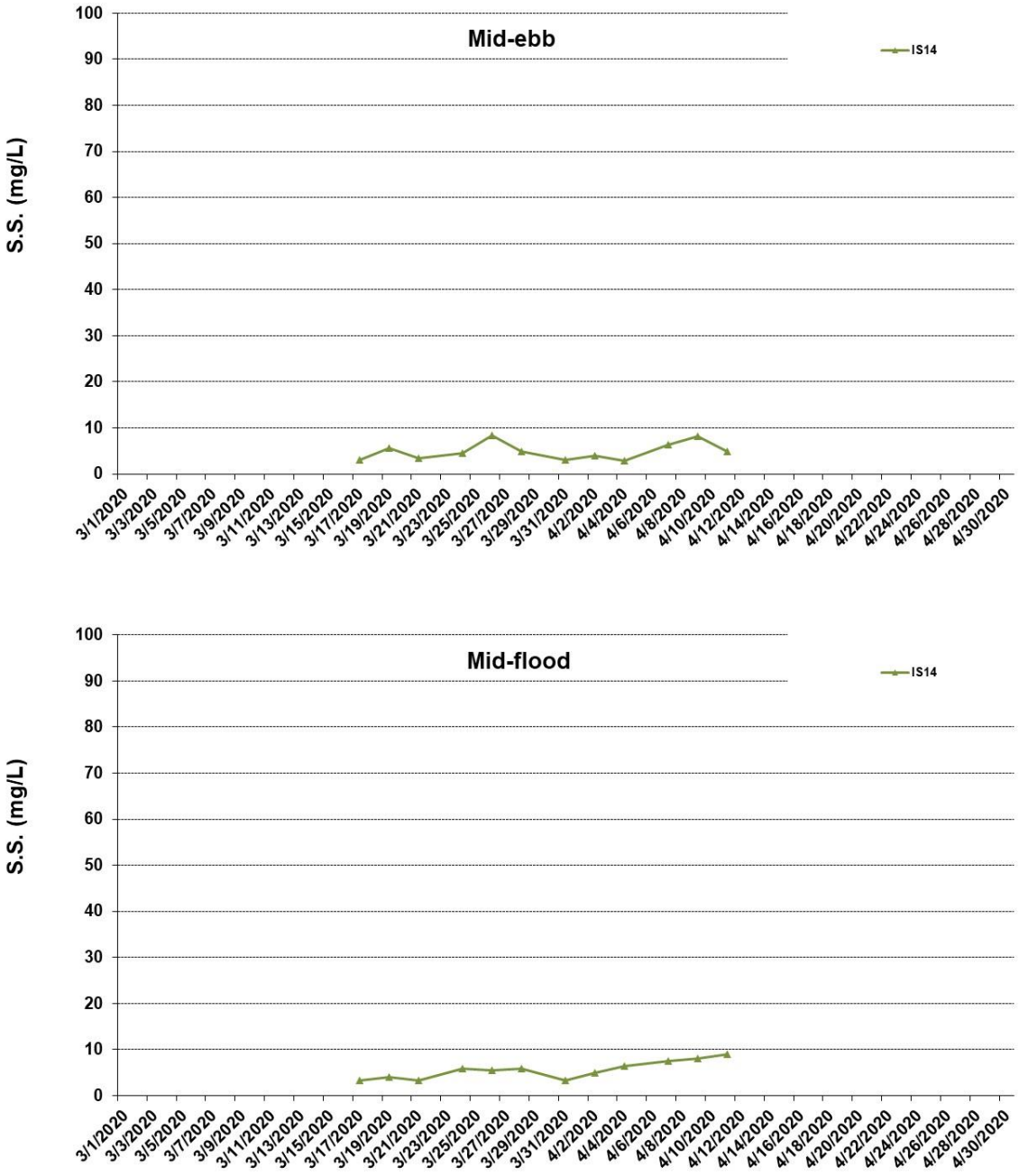


Figure J79 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at IS14. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

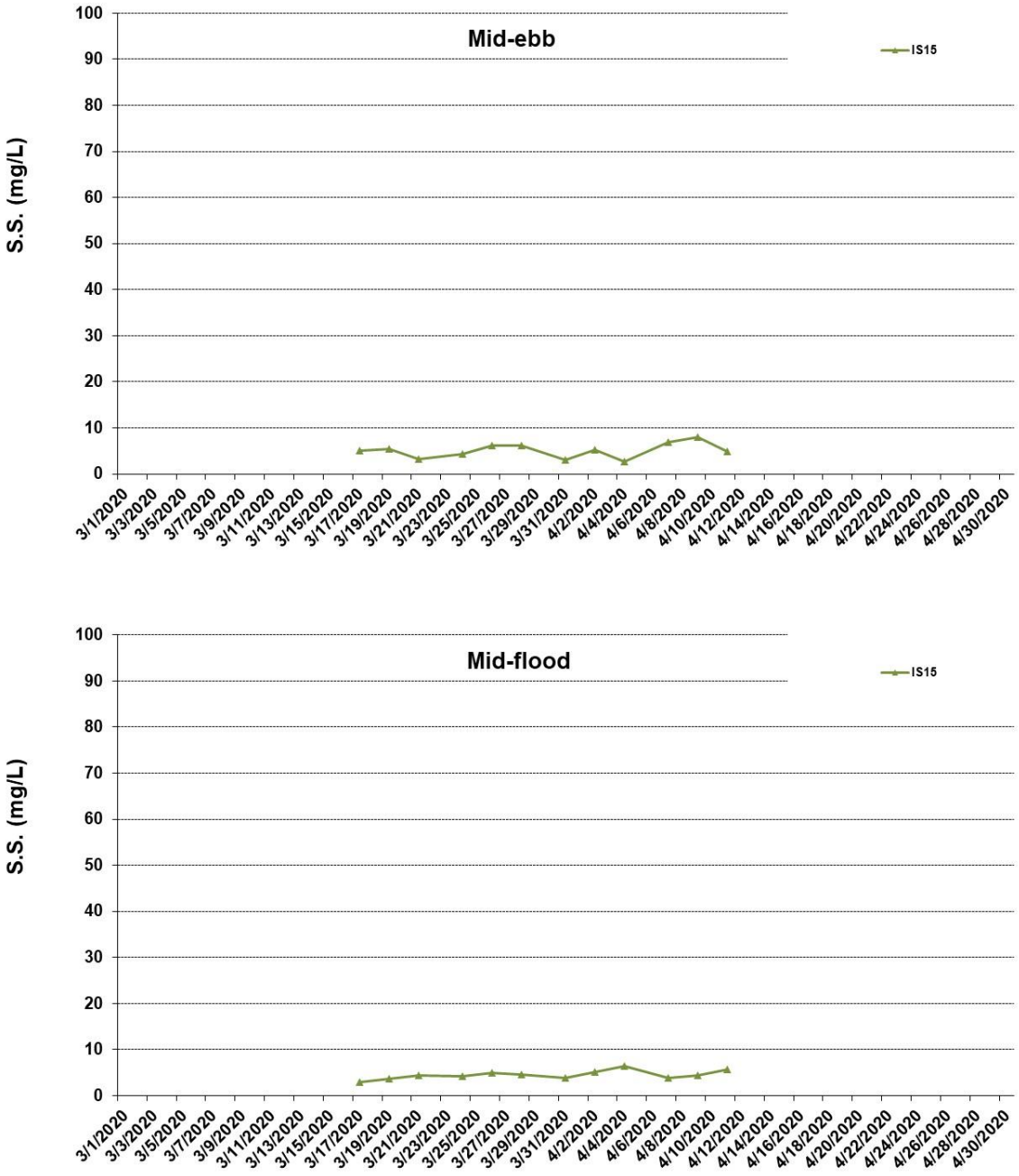


Figure J80 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at IS15. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

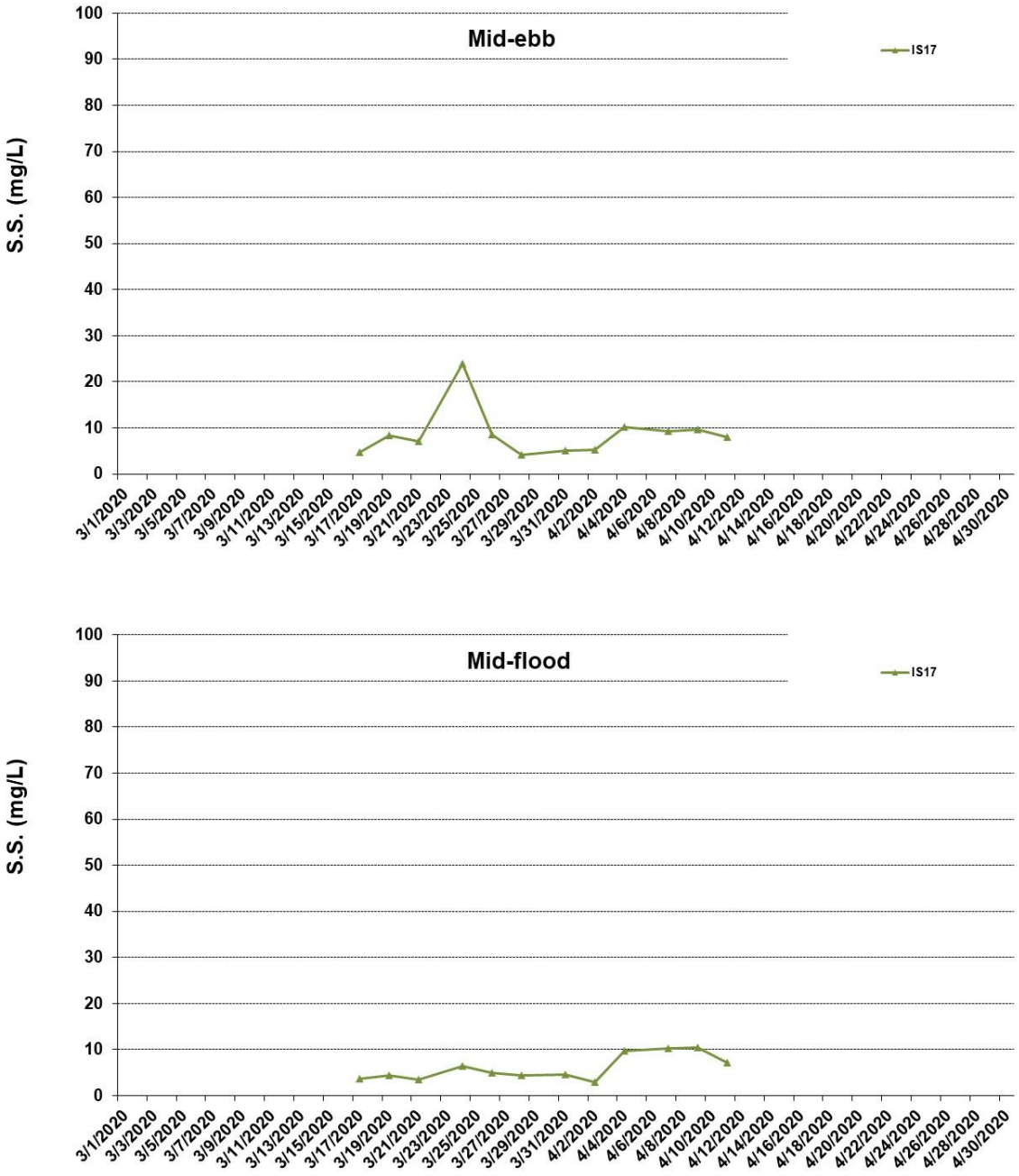


Figure J81 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at IS17. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

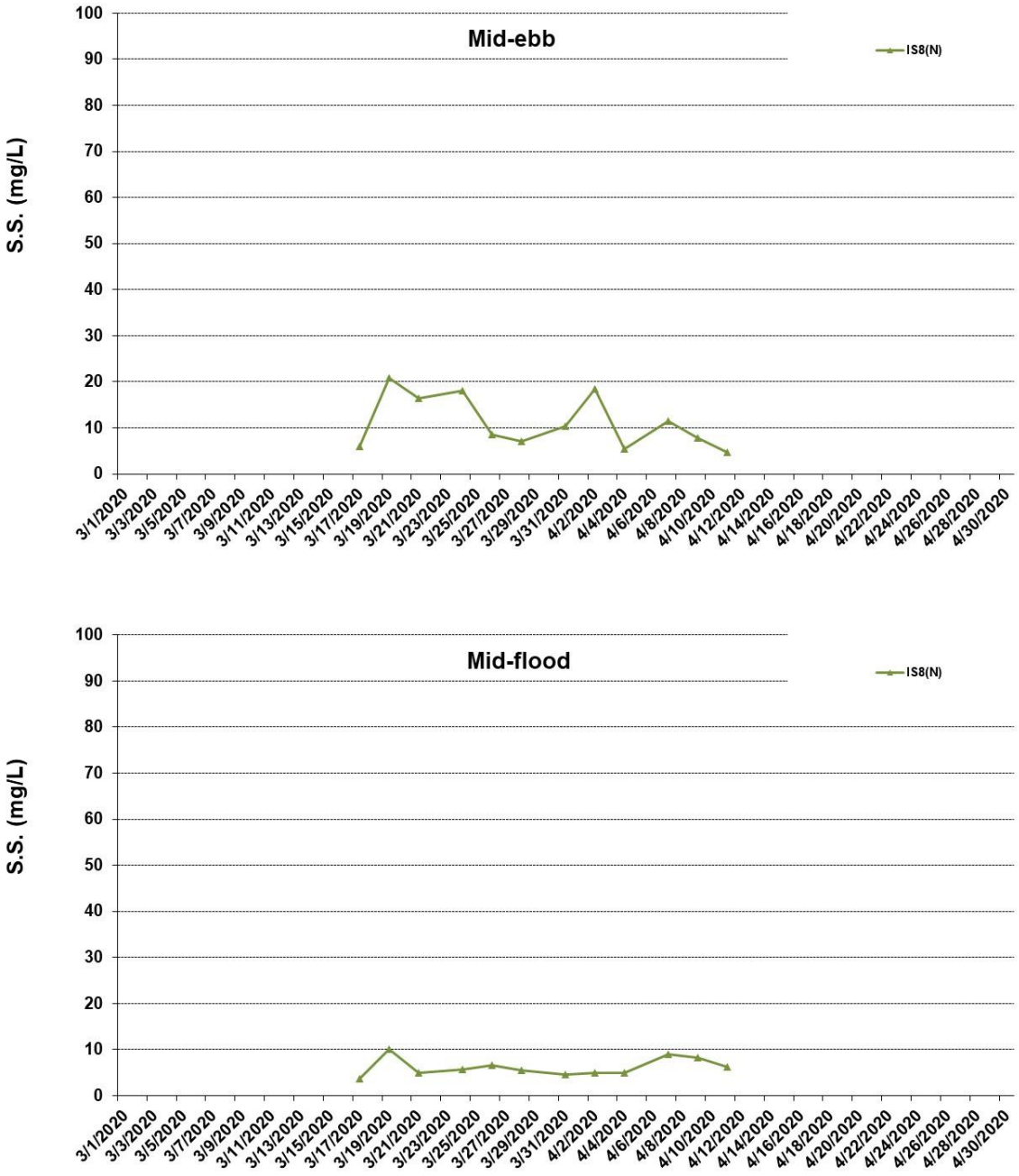


Figure J82 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at IS8(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

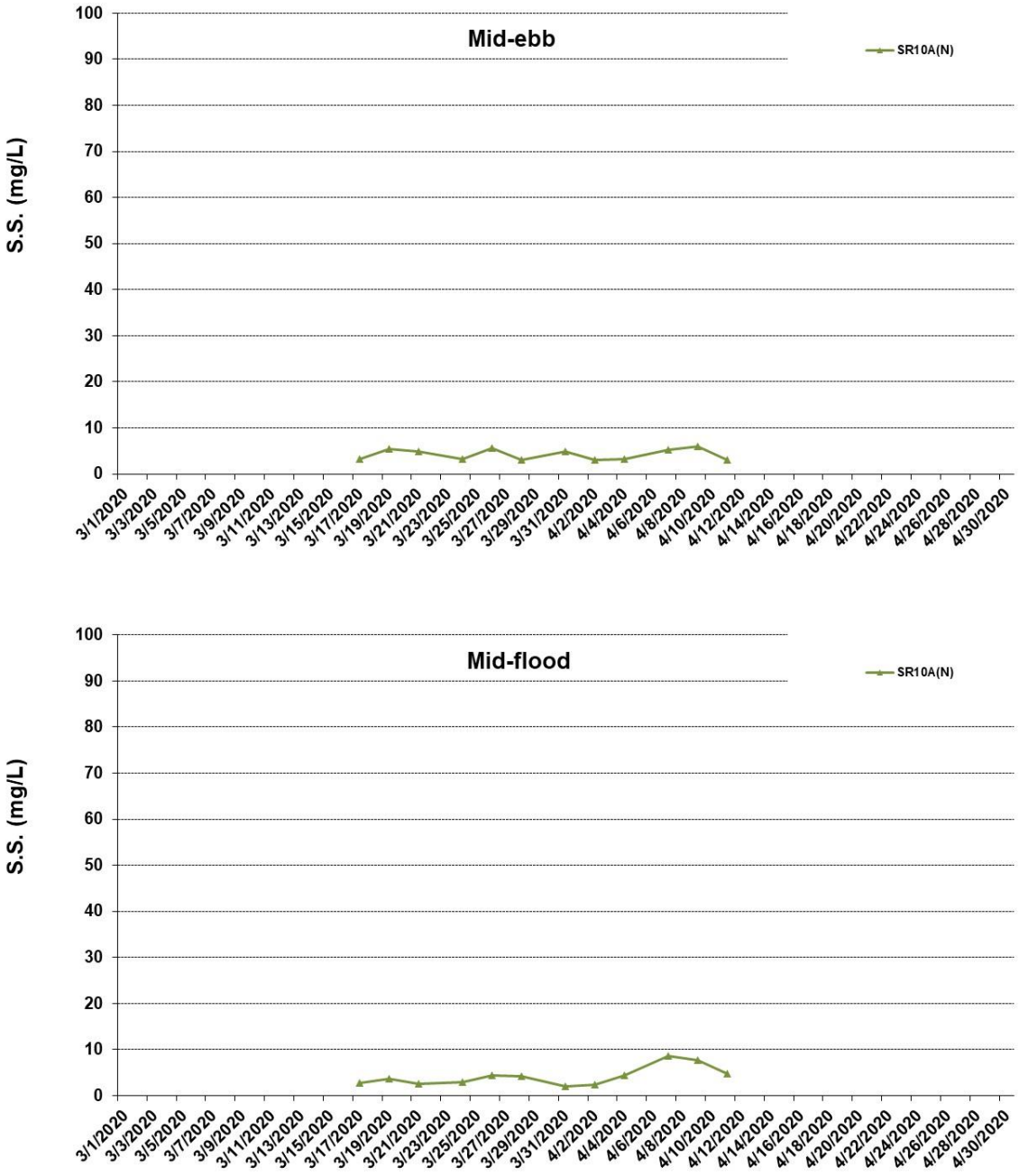


Figure J83 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at SR10A(N). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

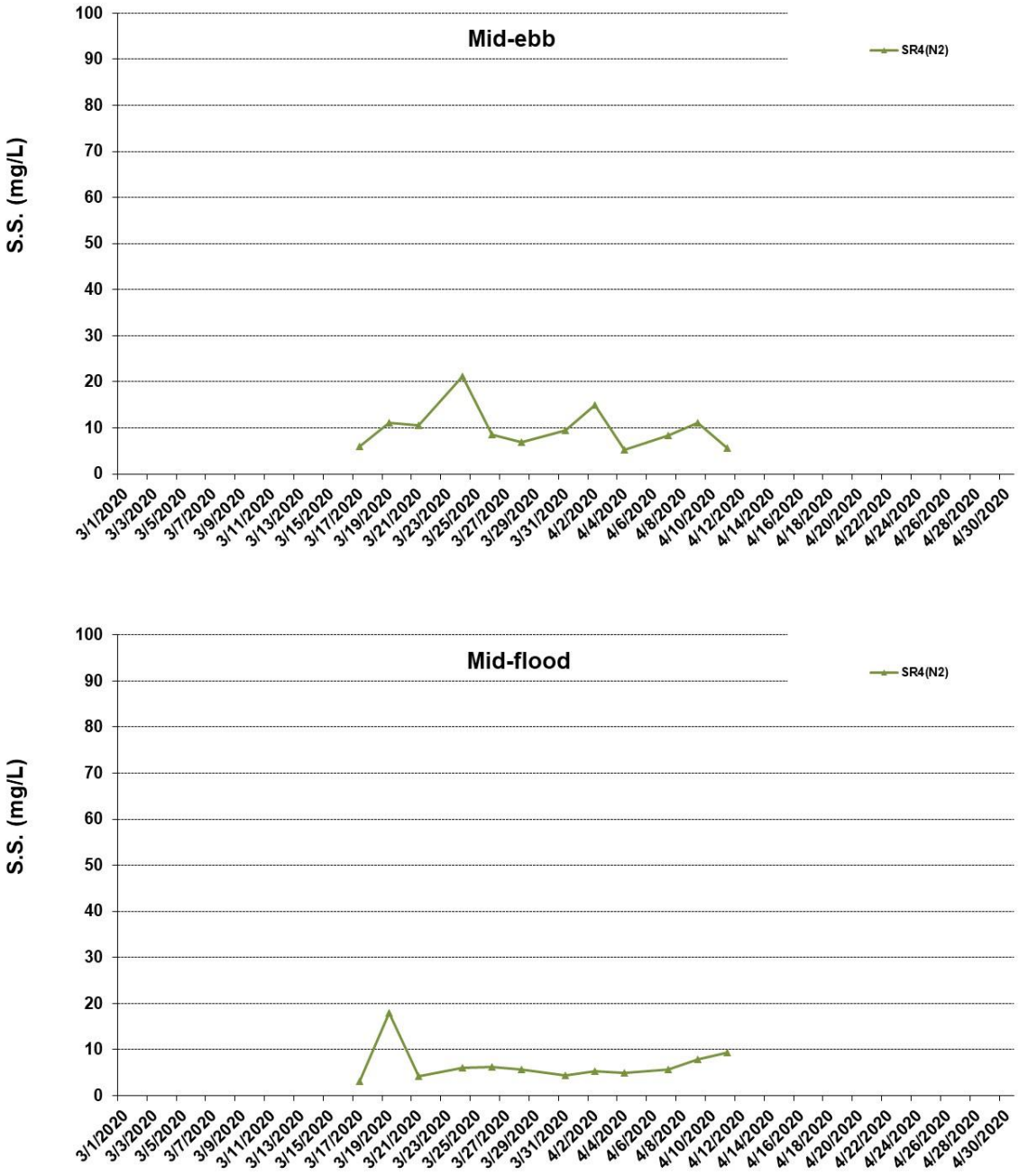


Figure J84 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at SR4(N2). The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

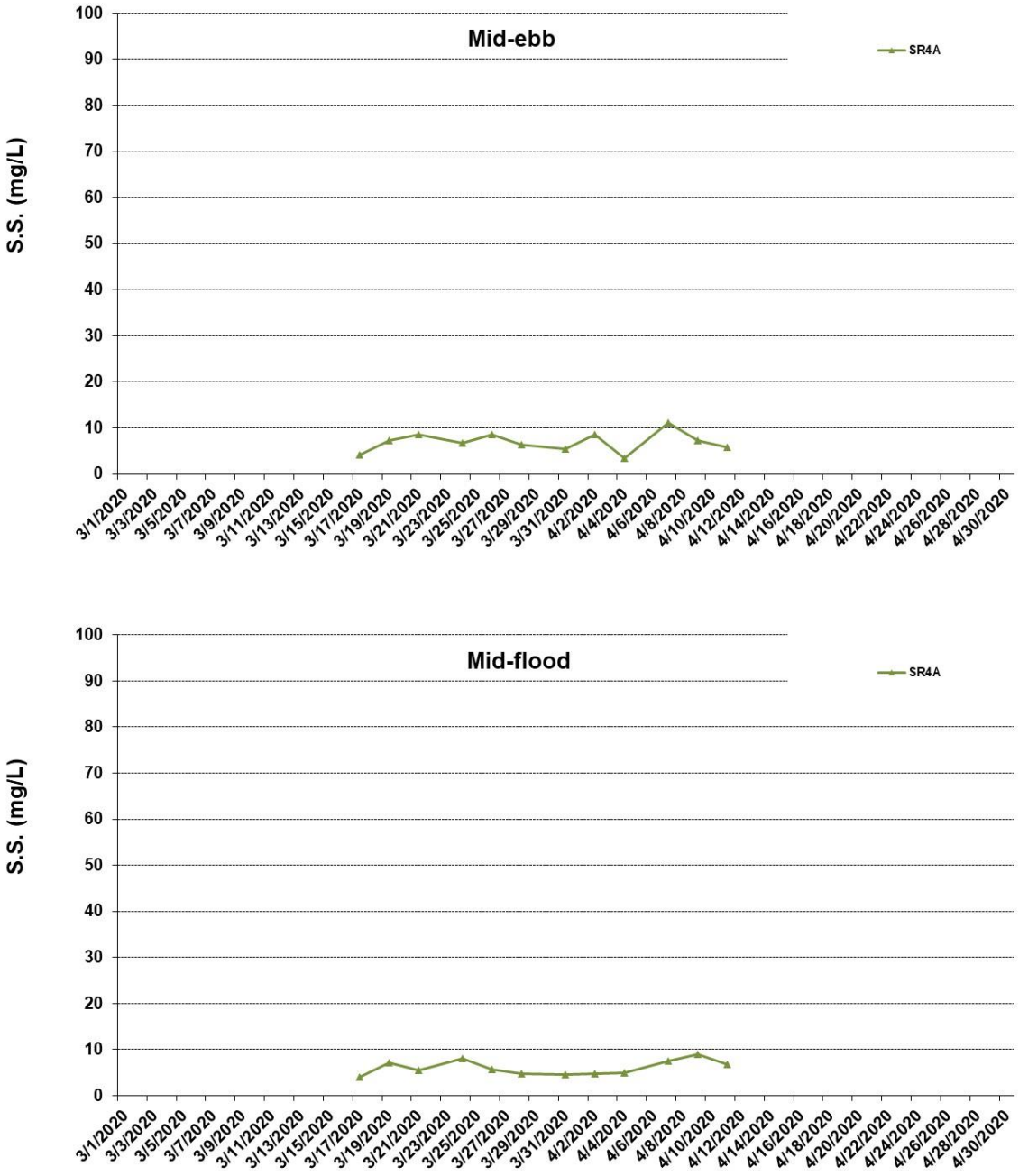


Figure J85 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at SR4A. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

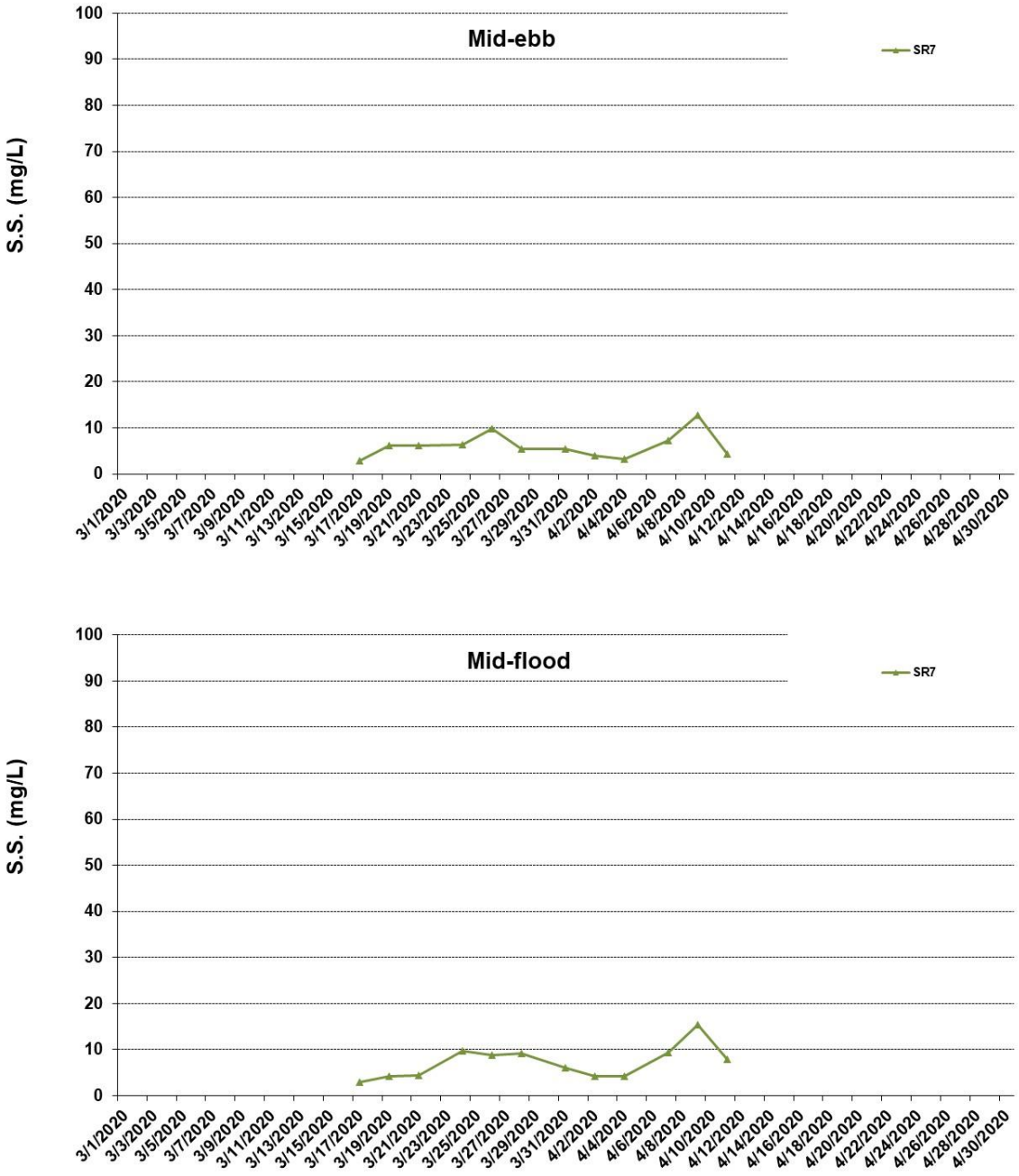
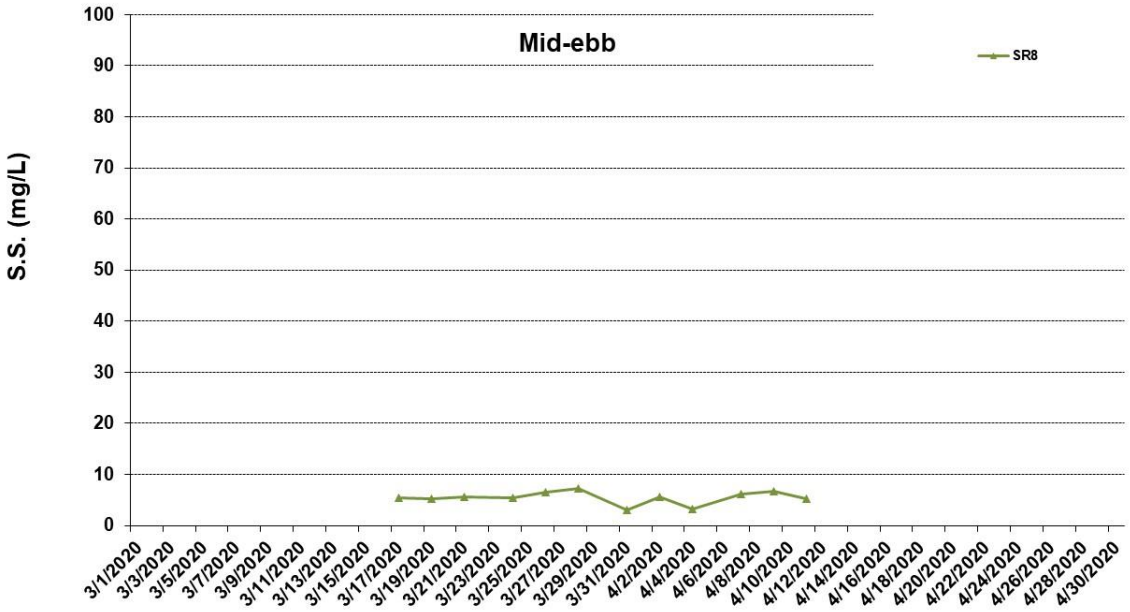


Figure J86 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at SR7. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.



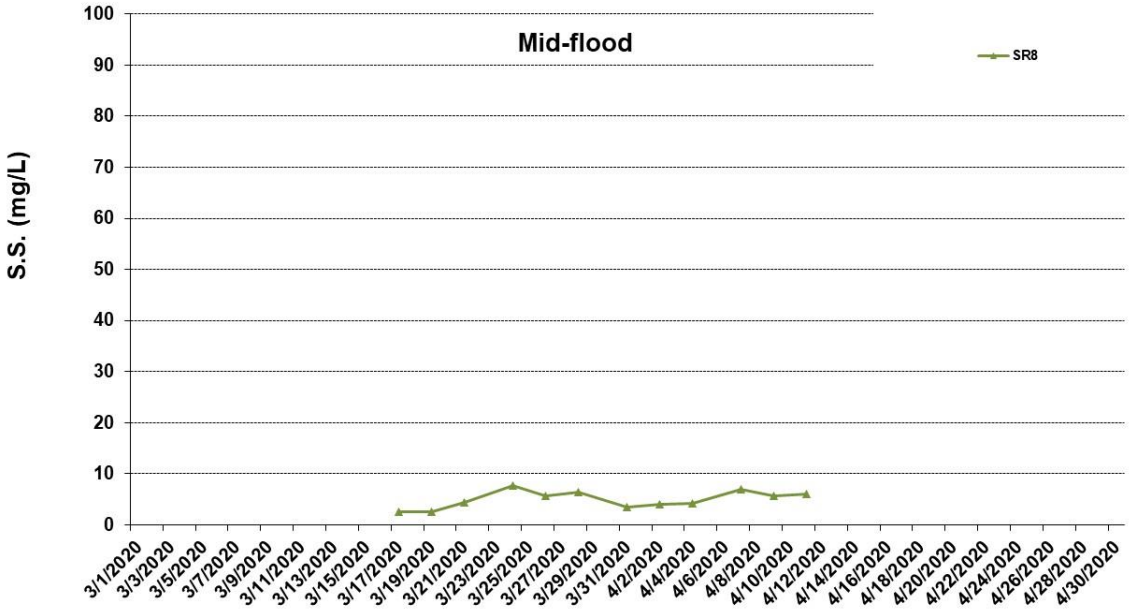


Figure J87 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at SR8. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

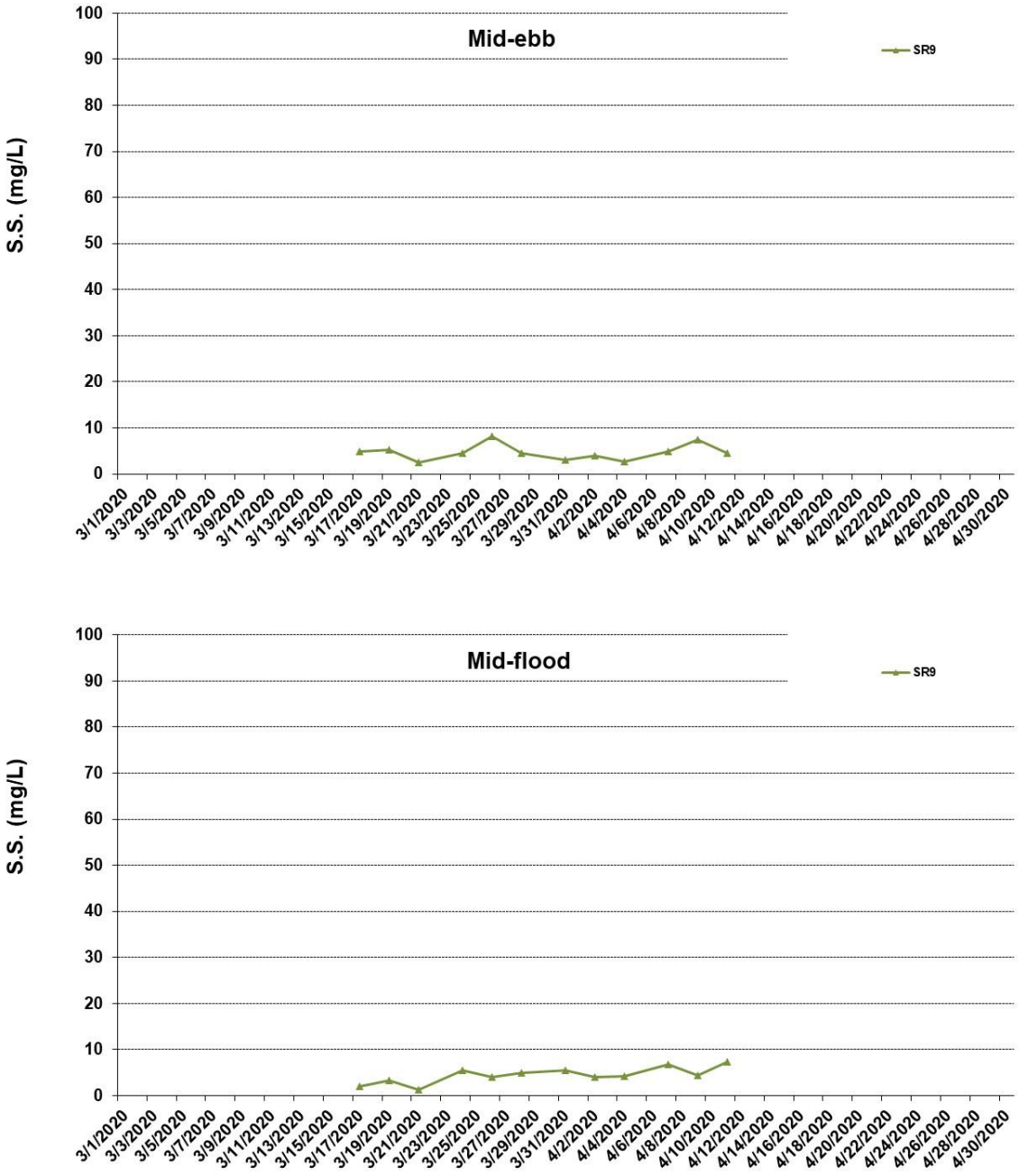


Figure J88 Post Construction Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 17 March 2020 and 11 April 2020 at SR9. The weather conditions during the monitoring period varied mostly from sunny to rainy. No marine works was carried out in the reporting period.

Appendix K

Event and Action Plan

Event and Action Plan for Impact Air Monitoring

	Action			
	ET [(a)]	**IEC [(a)]**	**SOR [(a)]**	**Contractor(s)**
Action Level Exceedance				
	1. Identify the source. 2. Repeat measurement to confirm finding. If two consecutive measurements exceed Action Level, the exceedance is then confirmed. 3. Inform the IEC and the SOR. 4. Investigate the cause of exceedance and check Contractor's working procedures to determine possible mitigation to be implemented. 5. If the exceedance is confirmed to be Project related after investigation, increase monitoring frequency to daily. 6. Discuss with the IEC and the Contractor on remedial actions required. 7. If exceedance continues, arrange meeting with the IEC and the SOR. 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by the ET. 2. Check the Contractor's working method. 3. If the exceedance is confirmed to be Project related after investigation, discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented.	1. Rectify any unacceptable practice 2. Amend working methods if appropriate 3. If the exceedance is confirmed to be Project related, submit proposals for remedial actions to IEC within 3 working days of notification 4. Implement the agreed proposals 5. Amend proposal if appropriate

	Action			
	ET [(a)]	**IEC [(a)]**	**SOR [(a)]**	**Contractor(s)**
Limit Level Exceedance				
	1. Identify the source. 2. Repeat measurement to confirm finding. If two consecutive measurements exceed Limit Level, the exceedance is then confirmed. 3. Inform the IEC, the SOR, the DEP and the Contractor. 4. Investigate the cause of exceedance and check Contractor's working procedures to determine possible mitigation to be implemented. 5. If the exceedance is confirmed to be Project related after investigation, increase monitoring frequency to daily. 6. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented. 7. Arrange meeting with the IEC and the SOR to discuss the remedial actions to be taken. 8. Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of the results. 9. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by the ET. 2. Check Contractor's working method. 3. If the exceedance is confirmed to be Project related after investigation, discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. If the exceedance is confirmed to be Project related after investigation, in consultation with the IEC, agree with the Contractor on the remedial measures to be implemented. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance. 2. If the exceedance is confirmed to be Project related after investigation, submit proposals for remedial actions to IEC within 3 working days of notification. 3. Implement the agreed proposals. 4. Amend proposal if appropriate. 5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated.

Note: (a) ET – Environmental Team; IEC – Independent Environmental Checker; SOR – Supervising Officer's Representative

Event / Action Plan for Impact Dolphin Monitoring

EVENT	ACTION			
	ET	**IEC**	**SOR**	**Contractor**
Action Level	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SOR and Contractor; 5. Check monitoring data. 6. Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and finding with the ET and the Contractor.	1. Discuss monitoring with the IEC and any other measures proposed by the ET; 2. If SOR is satisfied with the proposal of any other measures, SOR to signify the agreement in writing on the measures to be implemented.	1. Inform the SOR and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SOR; 3. Implement the agreed measures.
Limit Level	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences;	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and findings with the ET and the Contractor; 3. Attend the meeting to discuss with ET, SOR and	1. Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures. 2. If SOR is satisfied with the	1. Inform the SOR and confirm notification of the non-compliance in writing; 2. Attend the meeting to discuss with ET, IEC and SOR the necessity of additional dolphin monitoring and any other

EVENT	ACTION			
	ET	**IEC**	**SOR**	**Contractor**
	3. Identify source(s) of impact; 4. Inform the IEC, SOR and Contractor of findings; 5. Check monitoring data; 6. Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary. 7. If ET proves that the source of impact is caused by any of the construction activity by the works contract, ET to arrange a meeting to discuss with IEC, SOR and Contractor the necessity of additional dolphin monitoring and/or any other potential mitigation measures (e.g., consider to modify the perimeter silt curtain or consider to control/temporarily stop relevant construction activity etc.) and submit to IEC a proposal of additional dolphin monitoring and/or mitigation measures where necessary.	Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures. 4. Review proposals for additional monitoring and any other mitigation measures submitted by ET and Contractor and advise SOR of the results and findings accordingly. 5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise SOR the results and findings accordingly.	proposals for additional dolphin monitoring and/or any other mitigation measures submitted by ET and Contractor and verified by IEC, SOR to signify the agreement in writing on such proposals and any other mitigation measures. 3. Supervise the implementation of additional monitoring and/or any other mitigation measures.	potential mitigation measures. 3. Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary. 4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures.

Note: ET – Environmental Team, IEC – Independent Environmental Checker, SOR – Supervising Officer's Representative

Appendix L

Cumulative Statistics on Exceedances, Complaints, Notifications of Summons and Successful Prosecutions

Table L1 *Cumulative Statistics on Exceedances*

Parameters	Level of Exceedance	Total No. recorded in this reporting month	Total No. recorded since Contract commencement
1-hr TSP	Action	3	109
	Limit	1	13
24-hr TSP	Action	0	10
	Limit	0	4
Water Quality	Action	0	167
	Limit	0	19
Impact Dolphin Monitoring	Action	0	11
	Limit	0	18

Table L2 *Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions*

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Month (April 2020)	0	0	0
Total No. received since Contract commencement	17	1	0

Email message

Environmental Resources Management

2507, 25/F One Harbourfront
18 Tak Fung Street
Hunghom, Kowloon
Hong Kong
Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660

To	Ramboll Hong Kong, Limited (ENPO)
From	ERM- Hong Kong, Limited
Ref/Project number	Contract No. HY/2012/08 Tuen Mun–Chek Lap Kok Link–Northern Connection Sub-sea Tunnel Section
Subject	Notification of Exceedance for Air Quality Impact Monitoring
Date	8 April 2020

ERM

Dear Sir or Madam,

Please find attached the Notification of Exceedance (NOE) of the following Log no.:

0212330_8April2020_1hrTSP_Station ASR5
0212330_8April2020_1hrTSP_Station ASR1
0212330_8April2020_1hrTSP_Station ASR1

Three Action Level Exceedances were recorded on 8 April 2020.

Regards,

Dr Jasmine Ng
Environmental Team Leader

ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/08
TUEN MUN – CHEK LAP KOK LINK – NORTHERN CONNECTION SUB-SEA TUNNEL SECTION

Air Quality Impact Monitoring
Notification of Exceedance

Log No.	**Action Level Exceedance** **0212330_8April2020_1hrTSP_Station ASR5** **0212330_8April2020_1hrTSP_Station ASR1** **0212330_8April2020_1hrTSP_Station ASR1** **[Total No. of Exceedances = 3]**	
Date	8 April 2020 (Measured) 20 April 2020 (Laboratory results received by ERM)	
Monitoring Station	ASR5 and ASR1	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	24-hr TSP (µg/m³)	ASR1 = 213 ASR5 = 238 AQMS1 = 213 ASR6 = 238 ASR10 = 214
	1-hr TSP (µg/m³)	ASR1 = 331 ASR5 = 340 AQMS1 = 335 ASR6 = 338 ASR10 = 337
Limit Levels	1-hr TSP (µg/m³)	500
	24-hr TSP (µg/m³)	260
Measured Levels	Action Level Exceedance for 1-hr TSP is observed at ASR5 (384 µg/m³) during 1540 - 1640. Action Level Exceedance for 1-hr TSP is observed at ASR1 (357 µg/m³) during 1449 – 1549. Action Level Exceedance for 1-hr TSP is observed at ASR1 (457 µg/m³) during 1551 – 1651.	
Works Undertaken (at the time of monitoring event)	On 8 April 2020, Carpark Formation works were carried out on site (refer to *Figure 2*).	
Possible Reason for Action or Limit Level Exceedance(s)	The exceedances are unlikely to be due to this Contract, in view of the following: • According to the construction information provided by the Contractor, Carpark formation works were carried out on site on 8 April 2020. • With reference to the recorded wind direction (1400-1500: 128°; 1500-1600: 124°; 1600-1700: 84°), blowing from a south-easterly/easterly direction) and wind speed (1400-1500: 1.8 m/s; 1500-1600: 2.7 m/s; 1600-1700: 0.9 m/s) during the works period. Although Station ASR5 and ASR1 are located downstream to the construction works, Carpark Formation works were carried out with the implementation of dust mitigation measures. • Dust suppression measures were implemented properly on site. Water spraying was applied on site to prevent dust. Water spraying was also applied on exposed soil within the Contract site and associated works areas (refer to *Watering Record*). Based on the above, the exceedances are unlikely to be due to this Contract.	

Actions Taken / To Be Taken	The Contractor has been reminded to implement the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual including watering to maintain all exposed road surfaces and dust sources wet, use of sprinklers for water spraying, covering the materials having the potential to create dust by clean tarpaulin, use of water truck and watering on all exposed soil within the Contract site throughout the construction period.
Remarks	The monitoring results, wind data and the locations of air quality monitoring stations are attached.

Air quality monitoring results on 8/4/2020								
Project	Contract	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	2020-04-08	ASR10	Sunny	13:13:00	1-hour TSP	44	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR10	Sunny	14:15:00	1-hour TSP	123	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR10	Sunny	15:17:00	1-hour TSP	80	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR6	Sunny	13:42:00	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR6	Sunny	14:26:00	1-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR6	Sunny	15:28:00	1-hour TSP	121	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR5	Sunny	13:36:00	1-hour TSP	198	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR5	Sunny	14:38:00	1-hour TSP	243	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR5	Sunny	15:40:00	1-hour TSP	384	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR1	Sunny	13:47:00	1-hour TSP	328	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR1	Sunny	14:49:00	1-hour TSP	357	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR1	Sunny	15:51:00	1-hour TSP	457	ug/m3
TMCLKL	HY/2012/08	2020-04-08	AQMS1	Sunny	13:58:00	1-hour TSP	50	ug/m3
TMCLKL	HY/2012/08	2020-04-08	AQMS1	Sunny	15:00:00	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2020-04-08	AQMS1	Sunny	16:02:00	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR10	Sunny	16:19:00	24-hour TSP	42	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR6	Sunny	16:30:00	24-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR5	Sunny	16:42:00	24-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2020-04-08	ASR1	Sunny	16:53:00	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2020-04-08	AQMS1	Sunny	17:04:00	24-hour TSP	67	ug/m3

Action level exceedance
Limit level exceedance

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	**Time (24hrs)**	**Average of Wind Speed (m/s)**	**Average of Wind Direction(degree)**
20/04/08	0:00	0	1
20/04/08	1:00	0	354
20/04/08	2:00	0	355
20/04/08	3:00	0	48
20/04/08	4:00	0	73
20/04/08	5:00	0.9	50
20/04/08	6:00	0.4	31
20/04/08	7:00	0.9	52
20/04/08	8:00	1.3	84
20/04/08	9:00	1.3	99
20/04/08	10:00	1.3	99
20/04/08	11:00	0.9	95
20/04/08	12:00	1.3	90
20/04/08	13:00	1.8	86
20/04/08	14:00	1.8	128
20/04/08	15:00	2.7	124
20/04/08	16:00	0.9	84
20/04/08	17:00	1.3	91
20/04/08	18:00	0.9	81
20/04/08	19:00	0.9	68
20/04/08	20:00	0.9	98
20/04/08	21:00	1.8	80
20/04/08	22:00	1.8	93
20/04/08	23:00	0.9	96

Figure 1

Locations of air quality monitoring stations

DATE: 06/03/2013

Environmental Resources Management

ERM

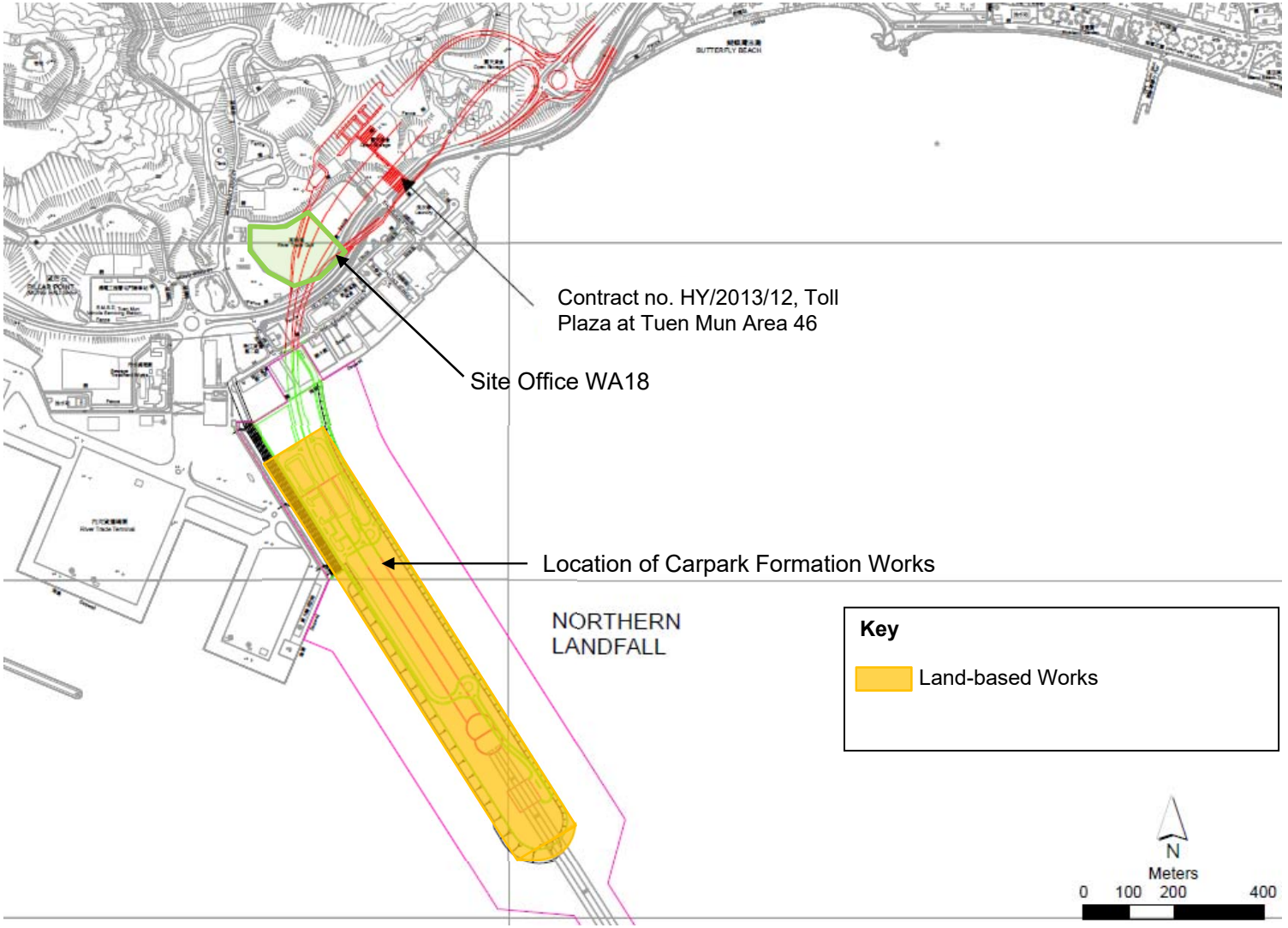


Figure 2

HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section
Work Location

Environmental Resources Management

ERM

Dragages - Bouygues Joint Venture	Contract No. HY/2012/08 Tuen Mun – Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section	**Weekly Water Spraying Record** **每週灑水檢查記錄**

Site Location 地盤位置: Northern Landfall

Date 日期: 02 Mar 2020 to 至 08 Mar 2020

	Time 時間	Monday 星期一	Tuesday 星期二	Wednesday 星期三	Thursday 星期四	Friday 星期五	Saturday 星期六	Sunday 星期日
1	8:00 – 8:45	√	√	√	√	√	√	√
2	8:45 – 9:30	√	√	√	√	√	√	√
3	9:30 – 10:15	√	√	√	√	√	√	√
4	10:15 – 11:00	√	√	√	√	√	√	√
5	11:00 – 11:45	√	√	√	√	√	√	√
6	11:45 – 12:30	√	√	√	√	√	√	√
7	12:30 – 13:15	√	√	√	√	√	√	√
8	13:15 – 14:00	√	√	√	√	√	√	√
9	14:00 – 14:45	√	√	√	√	√	√	√
10	14:45 – 15:30	√	√	√	√	√	√	√
11	15:30 – 16:45	√	√	√	√	√	√	√
12	16:45 – 17:30	√	√	√	√	√	√	√
	Verified by Site Foreman 地盤科文簽署確認							

Night shift 夜間工作 (if necessary 如需要)								
	17:30 – 19:00							
	19:00 – 20:30							
	20:30 – 22:00							
	22:00 – 23:00							

*Please - tick (√) in the box if complete the spraying of water.
circle (O) in the box if it is raining.

*如果 - 已經完成灑水, 請於方格內加上剔號(√)。
是下雨天, 請於方格內加上圓圈(O)。

Remarks:

(1) Pursuant to EP Clause 3.15, the Permit Holder shall undertake watering at least 12 times per day on all exposed soil within the Project site and associated work areas in Tuen Mun area throughout the construction phase.
(2) Spraying position includes the main haul road, open area, slopes, stockpiles and any other dusty materials.
(3) If it is raining, no water spraying is needed.
(4) The no of spraying will be increased due to site condition.

備註:

(1) 根據環境許可證 3. 15 條例，在整個施工階段內，許可證持有人須每天至少 12 次在屯門區項目工地和相關的工作區域內的所有暴露土壤灑水。
(2) 灑水位置包括主要運輸道路，空曠地帶，斜坡，存料堆，以及任何其他產生塵埃物料。
(3) 當下雨時，地盤將不需要灑水。
(4) 如果地盤情況更改或有需要時，灑水次數會相應增加。

Email message

Environmental Resources Management

2507, 25/F One Harbourfront
18 Tak Fung Street
Hunghom, Kowloon
Hong Kong
Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660

To	Ramboll Hong Kong, Limited (ENPO)
From	ERM- Hong Kong, Limited
Ref/Project number	Contract No. HY/2012/08 Tuen Mun–Chek Lap Kok Link–Northern Connection Sub-sea Tunnel Section
Subject	Notification of Exceedance for Air Quality Impact Monitoring
Date	5 May 2020

ERM

Dear Sir or Madam,

Please find attached the Notification of Exceedance (NOE) of the following Log no.:

0212330_14April2020_1hrTSP_Station ASR1

One Limit Level Exceedance was recorded on 14 April 2020.

Regards,

Dr Jasmine Ng
Environmental Team Leader

ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/08
TUEN MUN – CHEK LAP KOK LINK –
NORTHERN CONNECTION SUB-SEA TUNNEL SECTION

Air Quality Impact Monitoring
Notification of Exceedance

Log No.	**Limit Level Exceedance** **0212330_14April2020_1hrTSP_Station ASR1** **[Total No. of Exceedances = 1]**	
Date	14 April 2020 (Measured) 27 April 2020 (Laboratory results received by ERM)	
Monitoring Station	ASR1	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	24-hr TSP (µg/m³)	ASR1 = 213 ASR5 = 238 AQMS1 = 213 ASR6 = 238 ASR10 = 214
	1-hr TSP (µg/m³)	ASR1 = 331 ASR5 = 340 AQMS1 = 335 ASR6 = 338 ASR10 = 337
Limit Levels	1-hr TSP (µg/m³)	500
	24-hr TSP (µg/m³)	260
Measured Levels	Limit Level Exceedance for 1-hr TSP is observed at ASR1 (673 µg/m³) during 1400 – 1500.	
Works Undertaken (at the time of monitoring event)	On 14 April 2020, Carpark Formation works were carried out on site (refer to *Figure 2*).	
Possible Reason for Action or Limit Level Exceedance(s)	The exceedance is unlikely to be due to this Contract, in view of the following: • According to the construction information provided by the Contractor, only Carpark formation works were carried out on site on 14 April 2020. • With reference to the recorded wind direction (80°), blowing from a north-easterly direction) and wind speed (1.3 m/s) during the works period. Although Station ASR1 is located downstream to the construction works, Carpark Formation works were carried out with the implementation of dust mitigation measures. • Dust suppression measures were implemented properly on site. Water spraying was applied on site to prevent dust. Water spraying was also applied on exposed soil within the Contract site and associated works areas (refer to *Watering Record*). Based on the above, the exceedance is unlikely to be due to this Contract.	

Actions Taken / To Be Taken	The Contractor has been reminded to implement the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual including watering to maintain all exposed road surfaces and dust sources wet, use of sprinklers for water spraying, covering the materials having the potential to create dust by clean tarpaulin, use of water truck and watering on all exposed soil within the Contract site throughout the construction period.
Remarks	The monitoring results, wind data and the locations of air quality monitoring stations are attached.

Air quality monitoring results on 14/4/2020								
Project	Contract	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	2020-04-14	ASR10	Sunny	13:27:00	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR10	Sunny	14:29:00	1-hour TSP	44	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR10	Sunny	15:31:00	1-hour TSP	47	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR6	Sunny	13:38:00	1-hour TSP	193	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR6	Sunny	14:40:00	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR6	Sunny	15:42:00	1-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR5	Sunny	13:50:00	1-hour TSP	254	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR5	Sunny	14:52:00	1-hour TSP	109	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR5	Sunny	15:54:00	1-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR1	Sunny	14:00:00	1-hour TSP	673	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR1	Sunny	15:02:00	1-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR1	Sunny	16:04:00	1-hour TSP	161	ug/m3
TMCLKL	HY/2012/08	2020-04-14	AQMS1	Sunny	14:12:00	1-hour TSP	140	ug/m3
TMCLKL	HY/2012/08	2020-04-14	AQMS1	Sunny	15:14:00	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2020-04-14	AQMS1	Sunny	16:16:00	1-hour TSP	127	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR10	Sunny	16:33:00	24-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR6	Sunny	16:44:00	24-hour TSP	109	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR5	Sunny	16:54:00	24-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2020-04-14	ASR1	Sunny	17:06:00	24-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2020-04-14	AQMS1	Sunny	17:18:00	24-hour TSP	93	ug/m3

Action level exceedance
Limit level exceedance

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	**Time (24hrs)**	**Average of Wind Speed (m/s)**	**Average of Wind Direction(degree)**
20/04/14	0:00	0	24
20/04/14	1:00	0	25
20/04/14	2:00	0	6
20/04/14	3:00	0	347
20/04/14	4:00	0	350
20/04/14	5:00	1.3	309
20/04/14	6:00	0.4	347
20/04/14	7:00	0	333
20/04/14	8:00	0	123
20/04/14	9:00	0	104
20/04/14	10:00	0	102
20/04/14	11:00	0.4	127
20/04/14	12:00	0.9	139
20/04/14	13:00	1.3	96
20/04/14	14:00	1.3	80
20/04/14	15:00	1.3	142
20/04/14	16:00	0.9	200
20/04/14	17:00	1.3	212
20/04/14	18:00	1.3	197
20/04/14	19:00	0.4	119
20/04/14	20:00	0.9	83
20/04/14	21:00	0.9	139
20/04/14	22:00	0.4	61
20/04/14	23:00	0.4	83

Figure 1

Locations of air quality monitoring stations

DATE: 06/03/2013

Environmental Resources Management

ERM

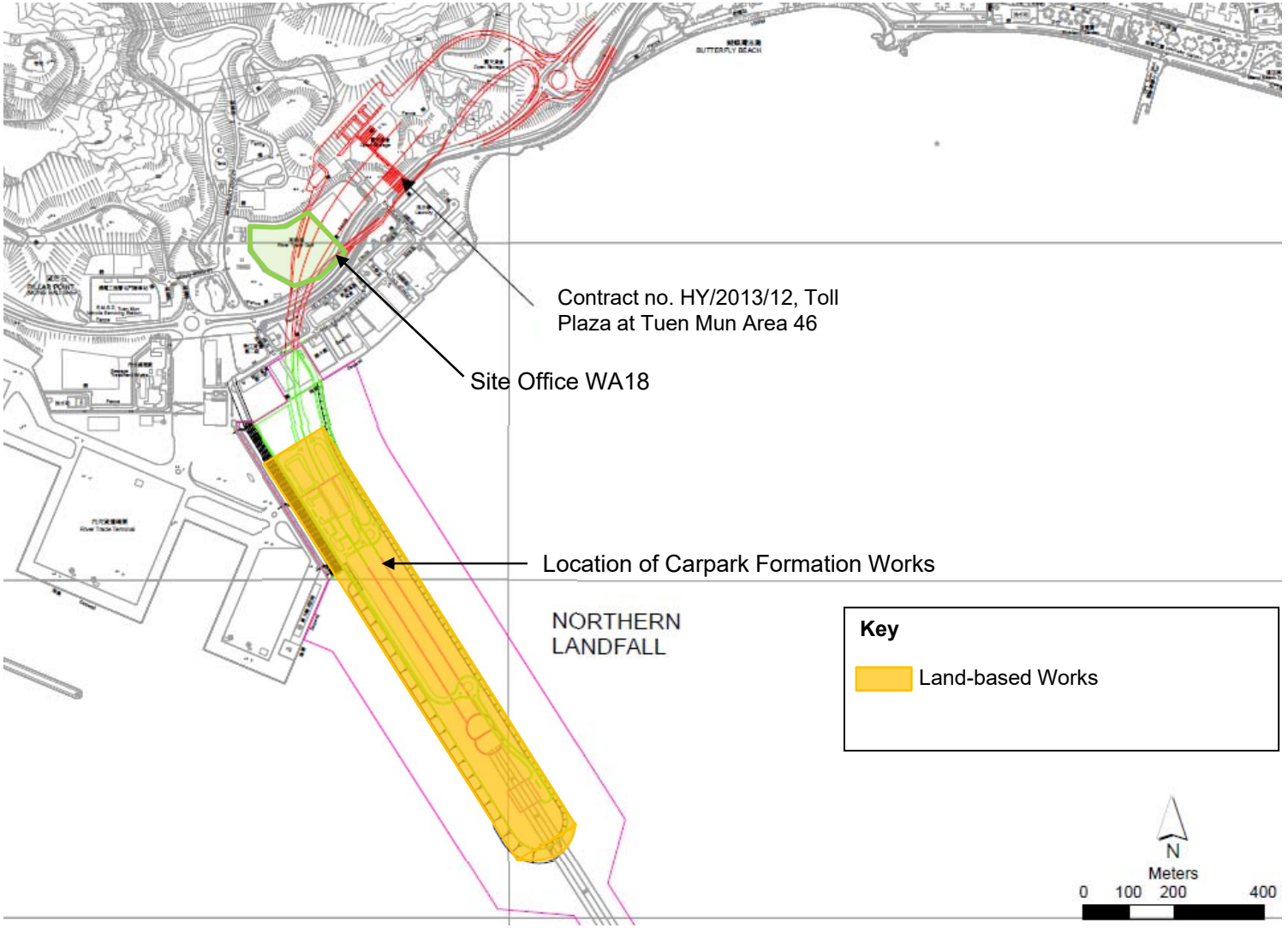


Figure 2

HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section
Work Location

Environmental Resources Management

ERM

Dragages HongKong 香港寶嘉 | Dragages - Bouygues Joint Venture 寶嘉・布依格聯營

Contract No. HY/2012/08
Tuen Mun – Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section

Weekly Water Spraying Record
每週灑水檢查記錄

Site Location 地盤位置: __Northern Landfall____

Date 日期: 13 Apr 2020 to 至 19 Apr 2020

	Time 時間	Monday 星期一	Tuesday 星期二	Wednesday 星期三	Thursday 星期四	Friday 星期五	Saturday 星期六	Sunday 星期日
1	8:00 – 8:45	✓	✓	✓	✓	✓	✓	✓
2	8:45 – 9:30	✓	✓	✓	✓	✓	✓	✓
3	9:30 – 10:15	✓	✓	✓	✓	✓	✓	✓
4	10:15 – 11:00	✓	✓	✓	✓	✓	✓	✓
5	11:00 – 11:45	✓	✓	✓	✓	✓	✓	✓
6	11:45 – 12:30	✓	✓	✓	✓	✓	✓	✓
7	12:30 – 13:15	✓	✓	✓	✓	✓	✓	✓
8	13:15 – 14:00	✓	✓	✓	✓	✓	✓	✓
9	14:00 – 14:45	✓	✓	✓	✓	✓	✓	✓
10	14:45 – 15:30	✓	✓	✓	✓	✓	✓	✓
11	15:30 – 16:45	✓	✓	✓	✓	✓	✓	✓
12	16:45 – 17:30	✓	✓	✓	✓	✓	✓	✓
	Verified by Site Foreman 地盤科文簽署確認	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]

Night shift 夜間工作 (if necessary 如需要)

	17:30 – 19:00							
	19:00 – 20:30							
	20:30 – 22:00							
	22:00 – 23:00							

*Please - tick (√) in the box if complete the spraying of water.
circle (O) in the box if it is raining.

*如果 - 已經完成灑水, 請於方格內加上剔號(√)。
是下雨天, 請於方格內加上圓圈(O)。

Remarks:

(1) Pursuant to EP Clause 3.15, the Permit Holder shall undertake watering at least 12 times per day on all exposed soil within the Project site and associated work areas in Tuen Mun area throughout the construction phase.
(2) Spraying position includes the main haul road, open area, slopes, stockpiles and any other dusty materials.
(3) If it is raining, no water spraying is needed.
(4) The no of spraying will be increased due to site condition.

備註:

(1) 根據環境許可證 3. 15 條例，在整個施工階段內，許可證持有人須每天至少 12 次在屯門區項目工地和相關的工作區域內的所有暴露土壤灑水。
(2) 灑水位置包括主要運輸道路，空曠地帶，斜坡，存料堆，以及任何其他產生塵埃物料。
(3) 當下雨時，地盤將不需要灑水。
(4) 如果地盤情況更改或有需要時，灑水次數會相應增加。

Appendix M

Waste Flow Table

Appendix D – Monthly Summary Waste Flow Table

Name of Department: HyD **Contract No. / Works Order No.:** HY/2012/08

Monthly Summary Waste Flow Table for April 2020 [to be submitted not later than the 15th day of each month following reporting month]

(All quantities shall be rounded off to 3 decimal places.)

Month	Monthly Break-down of Inert Construction & Demolition Materials (i.e. Public Fill Materials)				
	(a)=(b)+(c)+(d)+(e) Total Quantity Generated	(b) Hard Rock and Large Broken Concrete	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill
	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)
Sub-total, 2013-2019	3008.812	0.000	336.902	889.467	1782.443
Jan-2020	174.69	0.000	0.000	0.000	174.69
Feb-2020	1.455	0.000	0.000	0.000	1.455
Mar-2020	3.252	0.000	0.000	0.000	3.252
Apr-2020	4.200	0.000	0.000	0.000	4.200
May-2020					
Jun-2020					
Half Year Sub-total					
Jul-2020					
Aug-2020					
Sep-2020					
Oct-2020					
Nov-2020					
Dec-2020					
Project Total Quantities	3192.409	0.000	336.902	889.467	1966.04

Month	**Actual Quantities of Non-inert Construction Waste Generated Monthly**								
	Metals		Paper/ cardboard packaging		Plastics (see Note 3)		Chemical Waste		Others, e.g. General Refuse disposed at Landfill
	(in '000kg)		(in '000kg)		(in '000kg)		(in '000kg)		(in '000ton)
	generated	recycled	generated	recycled	generated	recycled	generated	Disposed	generated
Sub-total, 2013-2019	9890.77	9890.77	14.64	14.64	16.84	16.84	85.807	85.807	21.943
Jan-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54
Feb-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.349
Mar-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.226
Apr-2020	0.00	0.00	1.30	1.30	0.00	0.00	6.40	6.40	0.521
May-2020									
Jun-2020									
Half Year Sub-total									
Jul-2020									
Aug-2020									
Sep-2020									
Oct-2020									
Nov-2020									
Dec-2020									
Project Total Quantities	9890.77	9890.77	15.94	15.94	16.84	16.84	92.207	92.207	26.579

Forecast of Total Quantities of Construction and Demolition Materials to be Generated from the Contract*									
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed of as Public Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	General Refuse disposed of at Landfill
(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 ton)
3200.000	0.000	350.000	1000.000	2000.000	10000	20.00	18.00	95.00	30.000

Notes:
(1) The performance targets are given in the **ER Appendix 8J Clause 14** and the EM & A Manual(s).
(2) The waste flow table shall also include C&D materials to be imported for use at the Site.
(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
(4) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m^3. (**ER Part 8 Clause 8.8.5 (d) (ii)** refers).