

**Contract No. HY/2012/07
Tuen Mun – Chek Lap Kok Link –
Southern Connection Viaduct Section**

Fiftieth Monthly EM&A Report

11 January 2018

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Contract No. HY/2012/07





Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section

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Fiftieth Monthly EM&A Report

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| Client: Gammon | | Project No: 0215660 | | | |
| Summary: This document presents the Fiftieth Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section. | | Date: 11 January 2018 | | | |
| | | Approved by:  | | | |
| | | Mr Craig Reid Partner | | | |
| | | Certified by:  | | | |
| | | Mr Jovy Tam ET Leader | | | |
| | | | | | |
| | | | | | |
| | Fiftieth Monthly EM&A Report | VAR | JT | CAR | 11/01/18 |
| Revision | Description | By | Checked | Approved | Date |
| <p>This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.</p> <p>We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.</p> | | <p>Distribution</p> <p><input type="checkbox"/> Internal</p> <p><input checked="" type="checkbox"/> Public</p> <p><input type="checkbox"/> Confidential</p> | | | |
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Ref.: HYDHZMBEEM00_0_6154L.18

11 January 2018

AECOM
Supervising Officer's Representative's Office
780 Cheung Tung Road, Lantau, N.T.

By Fax (3691 2899) and By Post

Attention: Mr. Daniel Ip

Dear Mr. Ip,

**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**

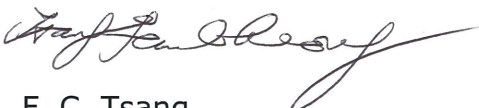
**Contract No. HY/2012/07 TM-CLKL Southern Connection Viaduct
Section
50th Monthly EM&A Report for December 2017 (EP-354/2009/D)**

Reference is made to the Monthly Environmental Monitoring and Audit (EM&A) Report (Dec. 2017) (ET's ref.: "0215660_50th Monthly EM&A_20180111.doc" dated 11 Jan. 2018) certified by the ET Leader and provided to us via e-mail on 11 Jan. 2018.

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. Stephen Chan (By Fax: 3188 6614)
HyD – Mr. Vico Cheung (By Fax: 3188 6614)
AECOM – Mr. Conrad Ng (By Fax: 3922 9797)
ERM – Mr. Jovy Tam (By Fax: 2723 5660)
Gammon – Mr. Roy Leung (By Fax: 3520 0486)

Internal: DY, YH, TMC, ENPO Site

Q:\Projects\HYDHZMBEEM00\02_Proj_Mgt\02_Corr\2018\HYDHZMBEEM00_0_6154L.18.docx

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EXECUTIVE SUMMARY

Under *Contract No. HY/2012/07*, Gammon Construction Limited (GCL) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Southern Connection Viaduct 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). Ramboll Environ Hong Kong Ltd. was employed by the HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO) in accordance with *Environmental Permit No. EP-354/2009/A*. Further applications for variation of environmental permit (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 southern landfall of TM-CLK Link lies alongside the Hong Kong - Zhuhai - Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) where a reclamation area is constructed by *Contract No. HY/2010/02* under *Environmental Permit No. EP-353/2009/K* and *EP-354/2009/D*. Upon the agreement and confirmation between the Supervising Officer Representatives and Contractors of *HY/2010/02* and *HY/2012/07* in September 2015, part of the reclamation area for southern landfall under *EP-353/2009/K* and *EP-354/2009/D* was handed-over to *Contract No. HY/2012/07*. Another part of the southern landfall area under *EP-354/2009/D* was handed-over to *Contract No. HY/2012/07* after completion of reclamation works by *Contract No. HY/2010/02* in June 2016.

The construction phase of the Contract commenced on 31 October 2013 and will be tentatively completed by 2018. The impact monitoring of the EM&A programme, including air quality, noise, water quality and marine ecological monitoring as well as environmental site inspections, commenced on 31 October 2013.

This is the Fiftieth Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 31 December 2017 for the Southern Connection Viaduct Section in accordance with the Updated EM&A Manual of the TM-CLK Link Project. As informed by the Contractor, major activities in the reporting period included:

Land-based Works

- Pier construction;
- Re-alignment of Cheung Tung Road;
- Road works along North Lantau Highway;

- Launching gantry operation
- Installation of pier head and deck segments; and
- Slope work of Viaducts A, B & C.

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

| | |
|-------------------------------------|-------------|
| 24-hour TSP Monitoring | 6 sessions |
| 1-hour TSP Monitoring | 6 sessions |
| Water Quality Monitoring | 13 sessions |
| Noise Monitoring | 6 sessions |
| Impact Dolphin Monitoring | 2 sessions |
| Joint Environmental Site Inspection | 4 sessions |

Breaches of Action and Limit Levels for Air Quality

No exceedance of Action and Limit Levels was recorded for construction air quality monitoring in the reporting month.

Breaches of Action and Limit Levels for Noise

No exceedance of Action and Limit Levels was recorded for construction noise monitoring in the reporting month.

Breaches of Action and Limit Levels for Water Quality

Two (2) Action Level of Suspended Solids (SS) exceedances were recorded for water quality impact monitoring in the reporting month.

Impact Dolphin Monitoring

During this month of dolphin monitoring, no unacceptable impact from the construction activities of the TM-CLKL Southern Connection Viaduct Section on Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was noticeable from general observations. Due to monthly variation in dolphin occurrence within the Study Area, it would be more appropriate to draw conclusion on whether any impacts on dolphins have been detected related to the construction activities of the TM-CLKL Southern Connection Viaduct Section in the quarterly EM&A reports, in which comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

Daily marine mammal exclusion zone monitoring was undertaken during the period of marine works under this Contract. No sighting of the Chinese

White Dolphin was recorded in December 2017 during the exclusion zone monitoring.

Environmental Complaints, Non-compliance & Summons

There was no environmental complaint, notification of summons or successful prosecution recorded in the reporting period.

Summary of Marine Travel Route record

No non-compliance with EIA recommendations, EP conditions and other requirements associated with the marine travel route record of this Contract was recorded in September and October. Summary of marine travel route record for this reporting period will be provided in next reporting period.

Reporting Change

There was no reporting change in the reporting period.

Upcoming Works for the Next Reporting Period

Works to be undertaken in the next monitoring period of January 2018 include the following:

Land-based Works

- Pier construction;
- Re-alignment of Cheung Tung Road;
- Road works along North Lantau Highway;
- Launching gantry operation
- Installation of pier head and deck segments; and
- Slope work of Viaducts A, B & C.

Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of January 2018 are mainly associated with dust, noise, marine water quality, marine ecology and waste management issues.

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 (EP-354/2009/A) was issued on 8 December 2010.

Under *Contract No. HY/2012/07*, Gammon Construction Limited (GCL) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Southern Connection Viaduct Section of TM-CLKL ("the Contract") 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 Environ Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO) in accordance with *Environmental Permit No. EP-354/2009/A*. Further applications for variation of environmental permit (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 southern landfall of TM-CLK Link lies alongside the Hong Kong - Zhuhai - Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) where a reclamation area is constructed by *Contract No. HY/2010/02* under *Environmental Permit No. EP-353/2009/K* and *EP-354/2009/D*. Upon the agreement and confirmation between the Supervising Officer Representatives and Contractors of *HY/2010/02* and *HY/2012/07* in September 2015, part of the reclamation area for southern landfall under *EP-353/2009/K* and *EP-354/2009/D* was handed-over to *Contract No. HY/2012/07*. Another part of the

southern landfall area under *EP-354/2009/D* was handed-over to *Contract No. HY/2012/07* after completion of reclamation works by *Contract No. HY/2010/02* in June 2016.

The construction phase of the Contract commenced on 31 October 2013 and will be tentatively completed by 2018. The impact monitoring phase of the EM&A programme, including air quality, noise, water quality and marine ecological monitoring as well environmental site inspections, commenced on 31 October 2013.

The general layout plan of the Contract components is presented in *Figures 1.1 & 1.2a to l*.

1.2 SCOPE OF REPORT

This is the Fiftieth Monthly EM&A Report under the *Contract No. HY/2012/07 Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section*. This report presents a summary of the environmental monitoring and audit works in December 2017.

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.

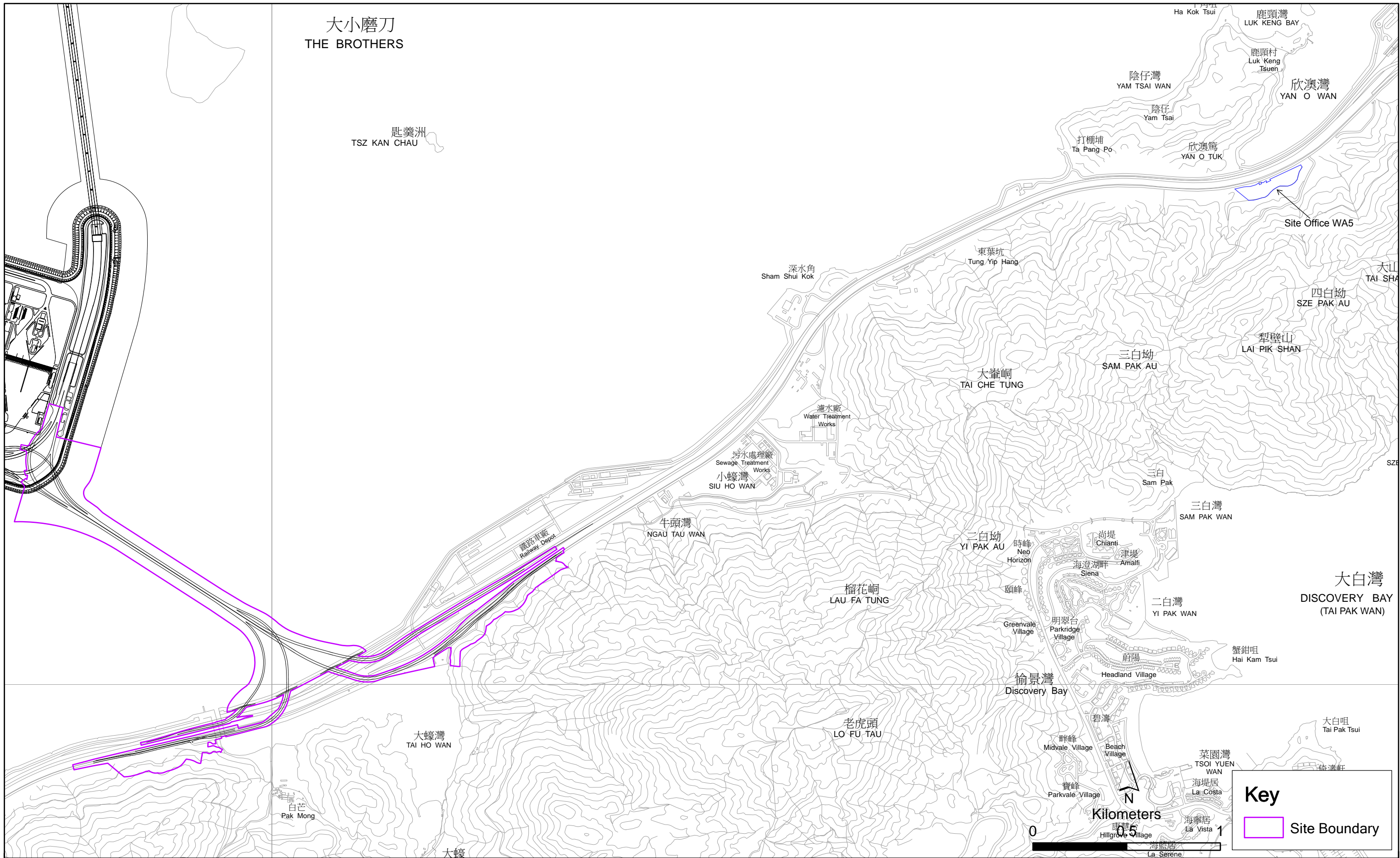


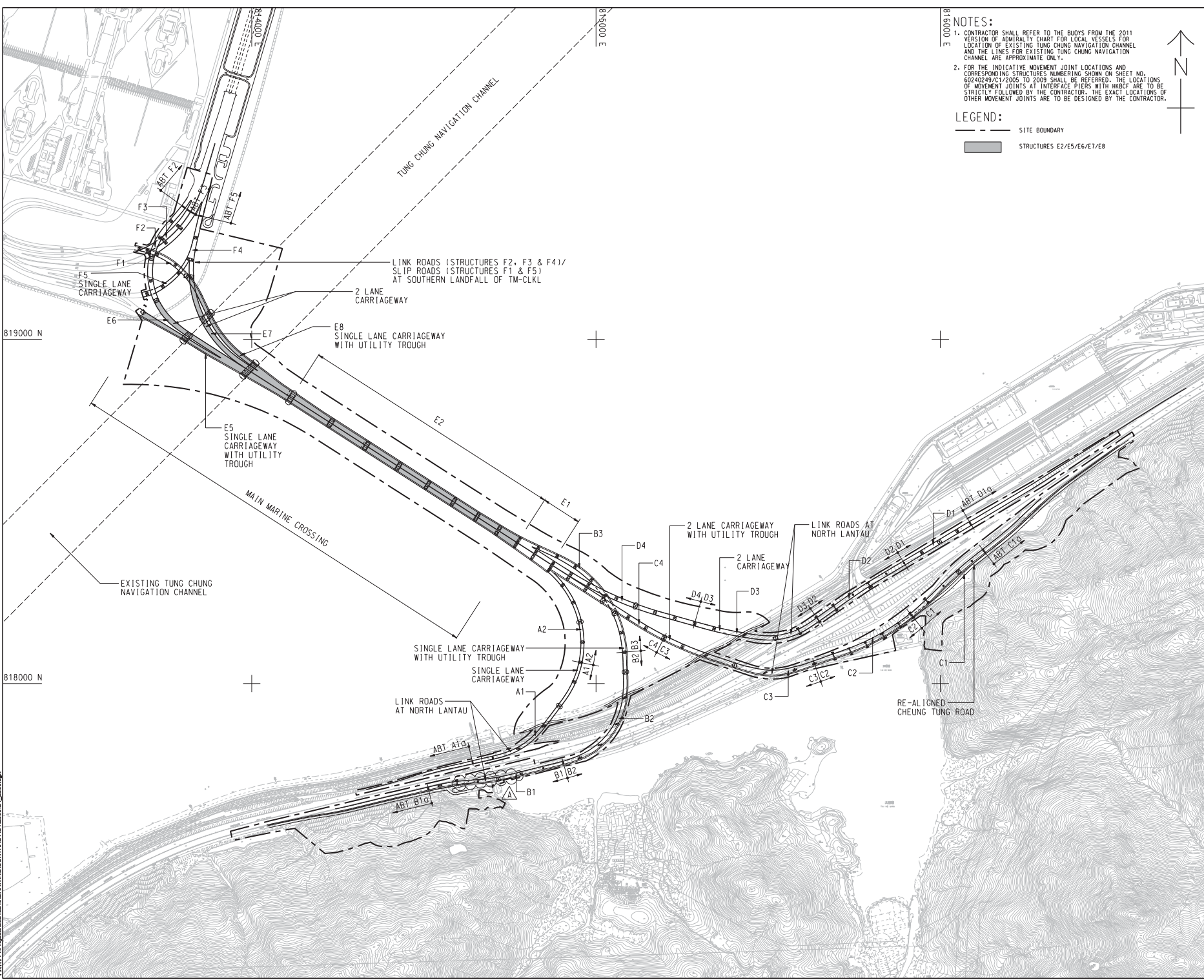
Figure 1.1

General Layout Plan of the Project

Environmental
Resources
Management



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 Path: P:\Projects\2012\02\240249\CONTRACT\CT1\0000\01_2000.dgn
 Designer: LHM/BS Checked: SLYT Approved: CWN
 Project Management Initials: ISO AT 50mm x 61mm
 Date: 12/11/2012



NOTES:

- CONTRACTOR SHALL REFER TO THE BUOYS FROM THE 2011 VERSION OF ADMIRALTY CHART FOR LOCAL VESSELS FOR LOCATION OF EXISTING TUNG CHUNG NAVIGATION CHANNEL AND THE LINES FOR EXISTING TUNG CHUNG NAVIGATION CHANNEL ARE APPROXIMATE ONLY.
- FOR THE INDICATIVE MOVEMENT JOINT LOCATIONS AND CORRESPONDING STRUCTURES NUMBERING SHOWN ON SHEET NO. 60240249/C1/2005 TO 2009 SHALL BE REFERRED. THE LOCATIONS OF MOVEMENT JOINTS AT INTERFACE PIERS WITH HKBCF ARE TO BE STRICTLY FOLLOWED BY THE CONTRACTOR. THE EXACT LOCATIONS OF OTHER MOVEMENT JOINTS ARE TO BE DESIGNED BY THE CONTRACTOR.

LEGEND:

— SITE BOUNDARY

▬ STRUCTURES E2/E5/E6/E7/E8



AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
路政署
HIGHWAYS DEPARTMENT
香港路政署
Hong Kong Project Management Office

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

Figure 1.2a

ISSUE/REVISION

| NO. | DATE | DESCRIPTION | CHK. |
|-----|------|-------------|------|
| | | | |
| | | | |
| | | | |

STATUS

SCALE
A1 : 6000

DIMENSION UNIT
METRES

KEY PLAN

PROJECT NO.
60240249

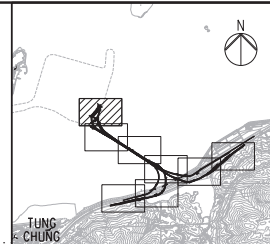
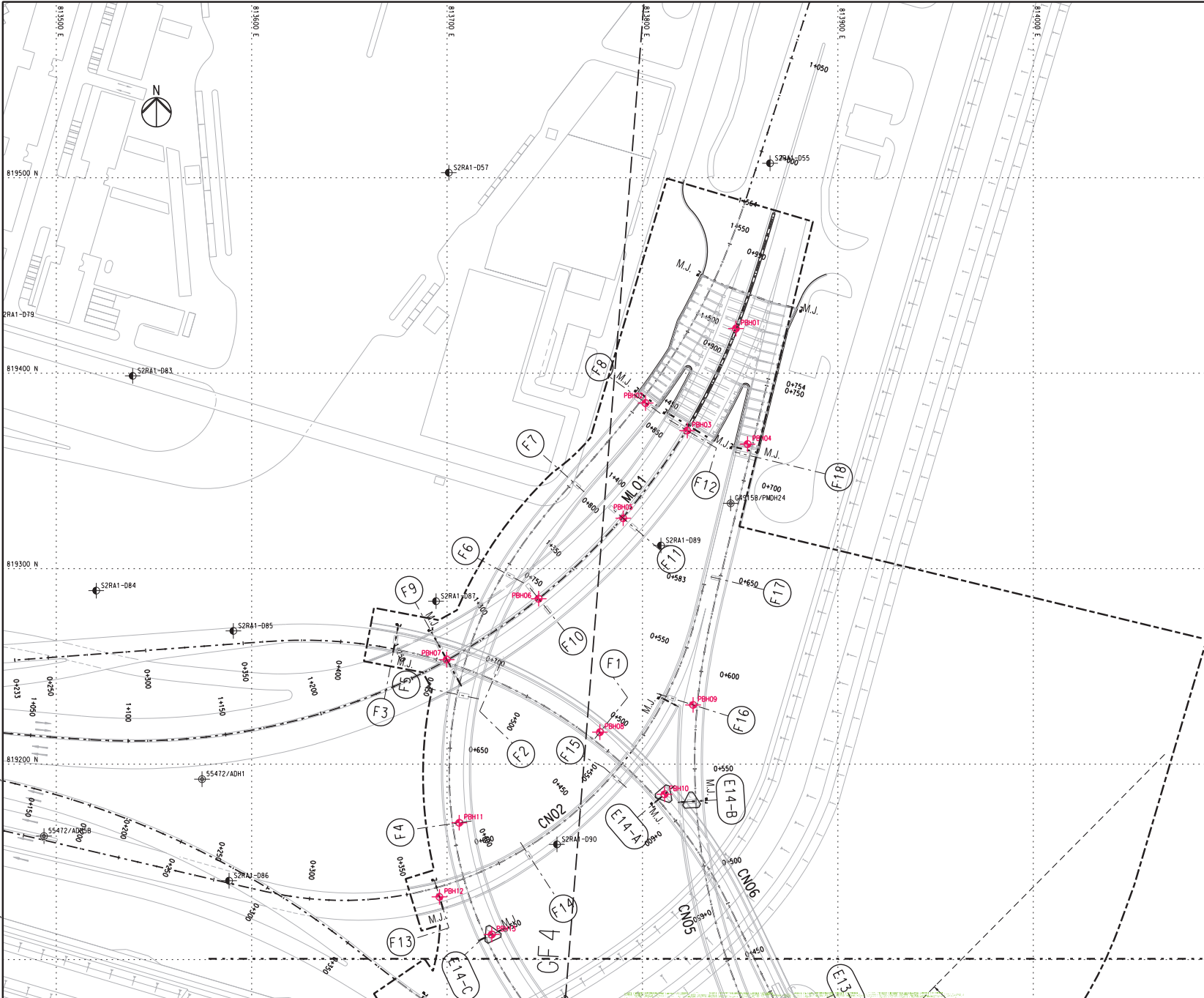
CONTRACT NO.
HY/2012/07

SHEET TITLE
SOUTHERN CONNECTION
GENERAL LAYOUT PLAN

SHEET NUMBER
60240249/C1/2000A

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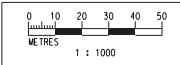


KEY PLAN

NOTES
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NO. J3518/P/OAP/04/1000 AND OTHER RELEVANT DRAWINGS.

- LEGEND**
- SITE BOUNDARY
 - GF1 FAULT
 - EXISTING G.I.-STATIONS :
 - ⊕ BOREHOLE BY GIU DATA EXCLUDING VC
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2012/04
 - ⊕ BOREHOLE BY GCL CONTRACT NL8/97
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2009/23
 - ⊕ TRIAL PIT BY GCL CONTRACT HY/2012/04
 - SLOPE STRIPPING BY GCL CONTRACT HY/2012/04
 - PROPOSED G.I.-STATIONS :
 - ⊕ PBH01 PROPOSED BOREHOLE
 - ⊕ TP01 PROPOSED TRIAL PIT
 - ⊕ CH01 PROPOSED COREHOLE
 - SS01 SS02 PROPOSED SLOPE STRIPPING

MATCH LINE
 FOR CONTINUATION
 SEE DRG J3518/P/OAP/04/01101



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| A | SUBMISSION | RC | 07/13 | | | | |
| B | SUBMISSION | RC | 07/13 | | | | |
| C | SUBMISSION | RC | 09/13 | | | | |

| Drawn | Date | Client |
|---------|---------------------------|-------------------------------|
| RL | 07/13 | HONG KONG HIGHWAYS DEPARTMENT |
| Checked | Approved | Supervising Officer |
| DS | DOP | AECOM |
| Scale | 1:1000 @ A1 / 1:2000 @ A3 | |

Client: **HONG KONG HIGHWAYS DEPARTMENT**
 香港路政署
 香港路政署
 香港路政署
 香港路政署

Supervising Officer: **AECOM**

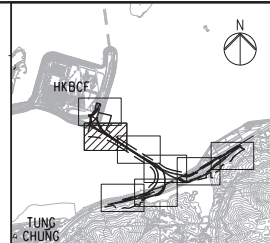
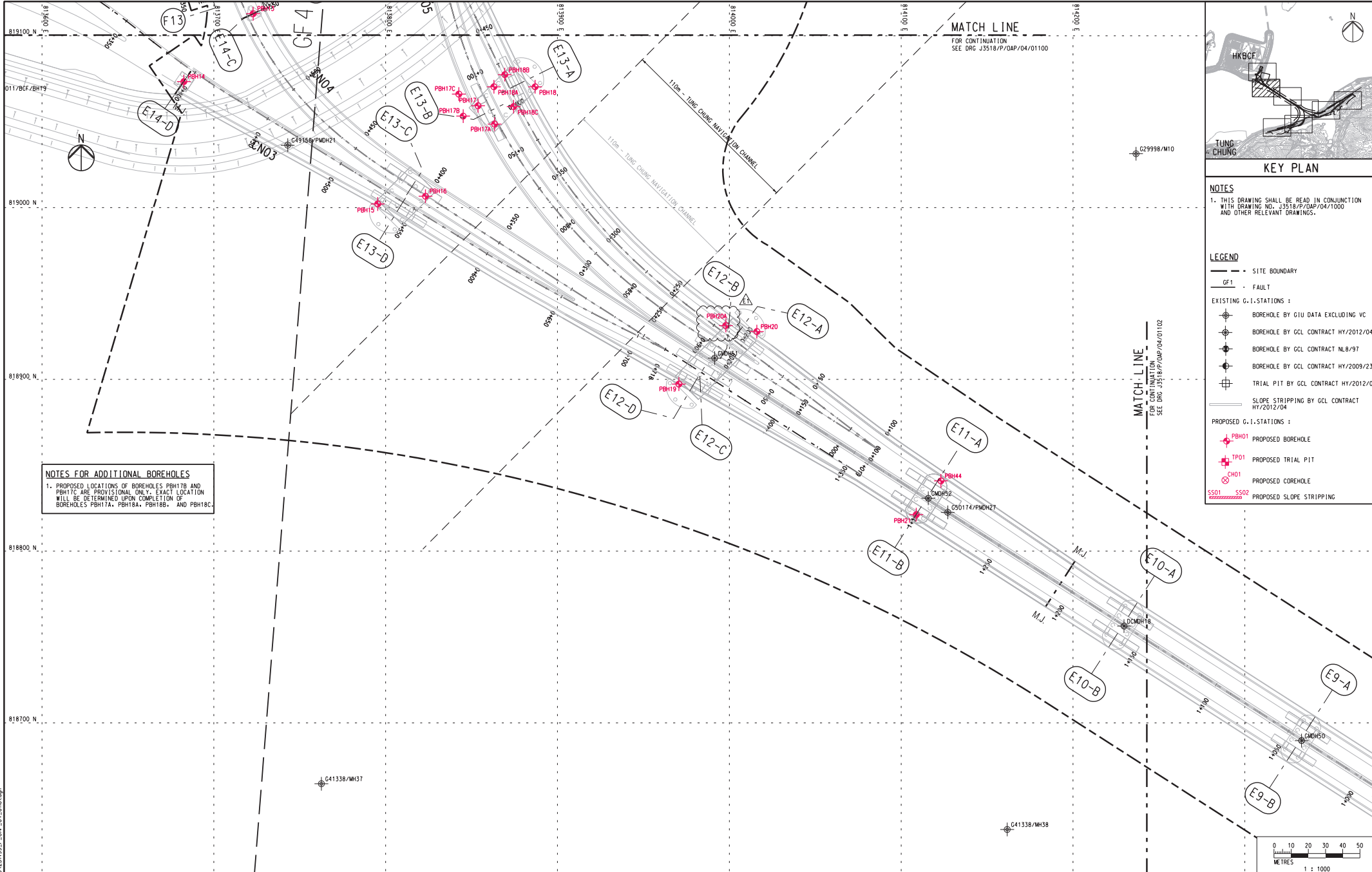
Project Title
Contract No. HY/2012/07
Tuen Mun - Chek Lap Kok Link
Southern Connection Viaduct Section

Contractor: **GAMMON**

Drawing title
Figure 1.2b

Drawing no. **J3518/P/OAP/04/01100** Rev. **C**

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KEY PLAN

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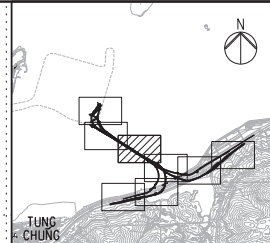
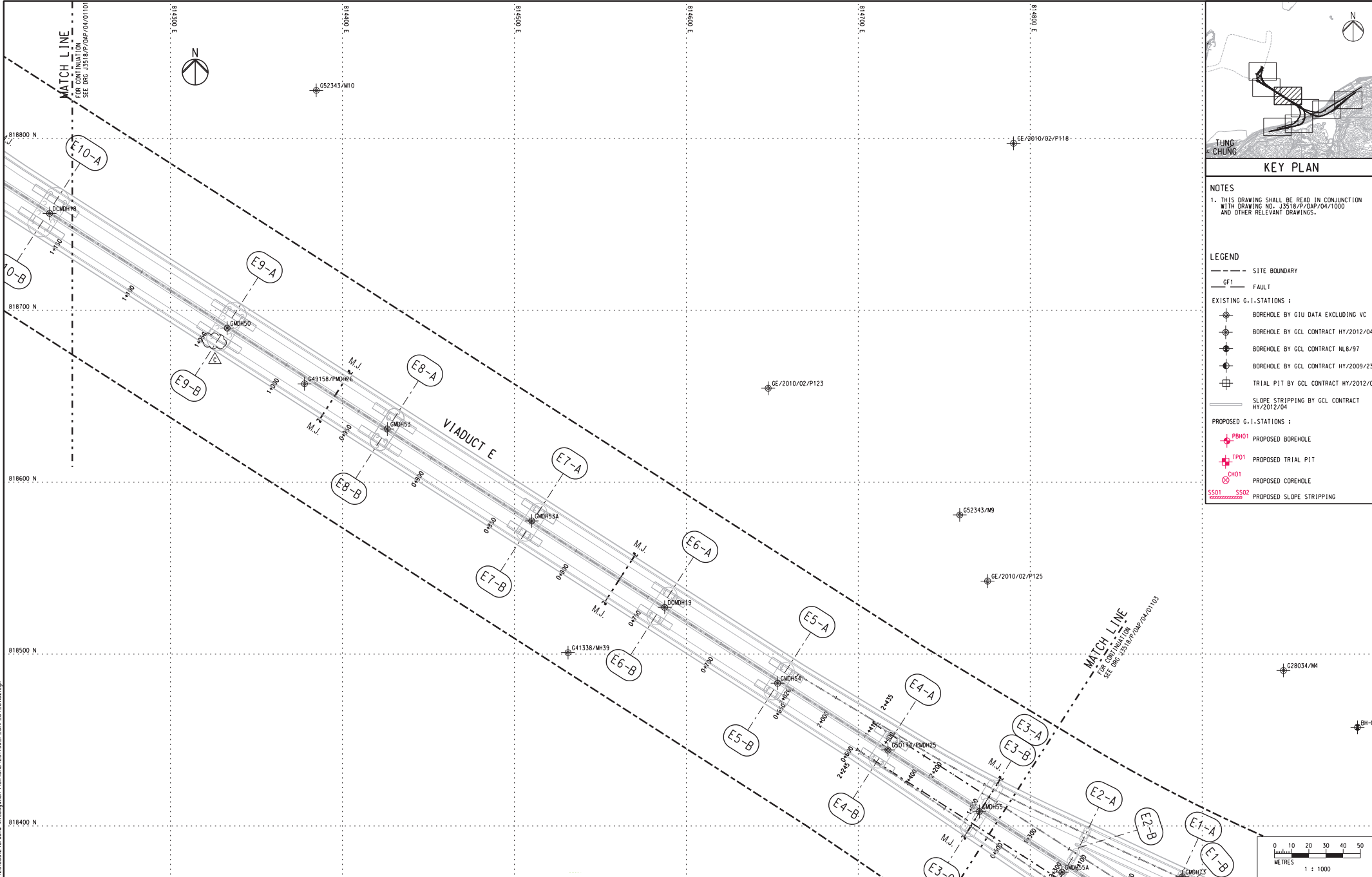
- LEGEND**
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 - ⊕ BOREHOLE BY GCL CONTRACT NL8/97
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2009/23
 - ⊕ TRIAL PIT BY GCL CONTRACT HY/2012/04
 - PROPOSED G.I. STATIONS:
 - ⊕ PBH01 PROPOSED BOREHOLE
 - ⊕ TP01 PROPOSED TRIAL PIT
 - ⊕ CH01 PROPOSED COREHOLE
 - SS01 SS02 PROPOSED SLOPE STRIPPING

NOTES FOR ADDITIONAL BOREHOLES
 1. PROPOSED LOCATIONS OF BOREHOLES PBH17B AND PBH17C ARE PROVISIONAL ONLY. EXACT LOCATION WILL BE DETERMINED UPON COMPLETION OF BOREHOLES PBH17A, PBH18A, PBH18B, AND PBH18C.

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| C | SUBMISSION | RC | 09/13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | SUBMISSION | RC | 10/13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E1 | FOR INTERNAL REVIEW | RC | 11/13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rev | Description | By | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Checked | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scale | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1:1000 @ A1; 1:2000 @ A3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Client | 路政署 HIGHWAYS DEPARTMENT 香港渠務及港務工程處 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supervising Officer | AECOM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contractor | Gammon | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Title | Contract No. HY/2012/07 Tuen Mun - Chek Lap Kok Link Southern Connection Viaduct Section | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Originator | ARUP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drawing title | Figure 1.2c | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drawing no. | J3518/P/OAP/04/01101 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rev. | E1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

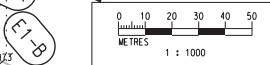
DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



KEY PLAN

NOTES
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NO. J3518/P/OAP/04/1000 AND OTHER RELEVANT DRAWINGS.

- LEGEND**
- SITE BOUNDARY
 - GF1 FAULT
 - EXISTING G.I.-STATIONS :
 - ⊕ BOREHOLE BY GIU DATA EXCLUDING VC
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2012/04
 - ⊕ BOREHOLE BY GCL CONTRACT NL8/97
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2009/23
 - ⊕ TRIAL PIT BY GCL CONTRACT HY/2012/04
 - PROPOSED G.I.-STATIONS :
 - ⊕ PBH01 PROPOSED BOREHOLE
 - ⊕ TP01 PROPOSED TRIAL PIT
 - ⊕ CH01 PROPOSED COREHOLE
 - SS01 SS02 PROPOSED SLOPE STRIPPING



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 File name : J:\3518\99\REC\000\2013092\Ground Investigation Plan\CAD\23498_P_OAP_04_01102.dgn

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| B | SUBMISSION | RC | 07/13 | | | | | Checked | Approved | |
| C | SUBMISSION | RC | 09/13 | | | | | DS | DOP | |
| | | | | | | | | Scale | 1:1000 @ A1 / 1:2000 @ A3 | |

Client: **路政署 HIGHWAYS DEPARTMENT**
 港珠澳大桥香港工程指挥部
 * Hong Kong Southern Connection Viaduct Project
 Hong Kong Project Management Office

Supervising Officer: **AECOM**
 Contractor: **Gammon**

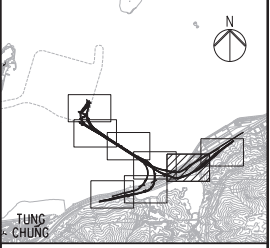
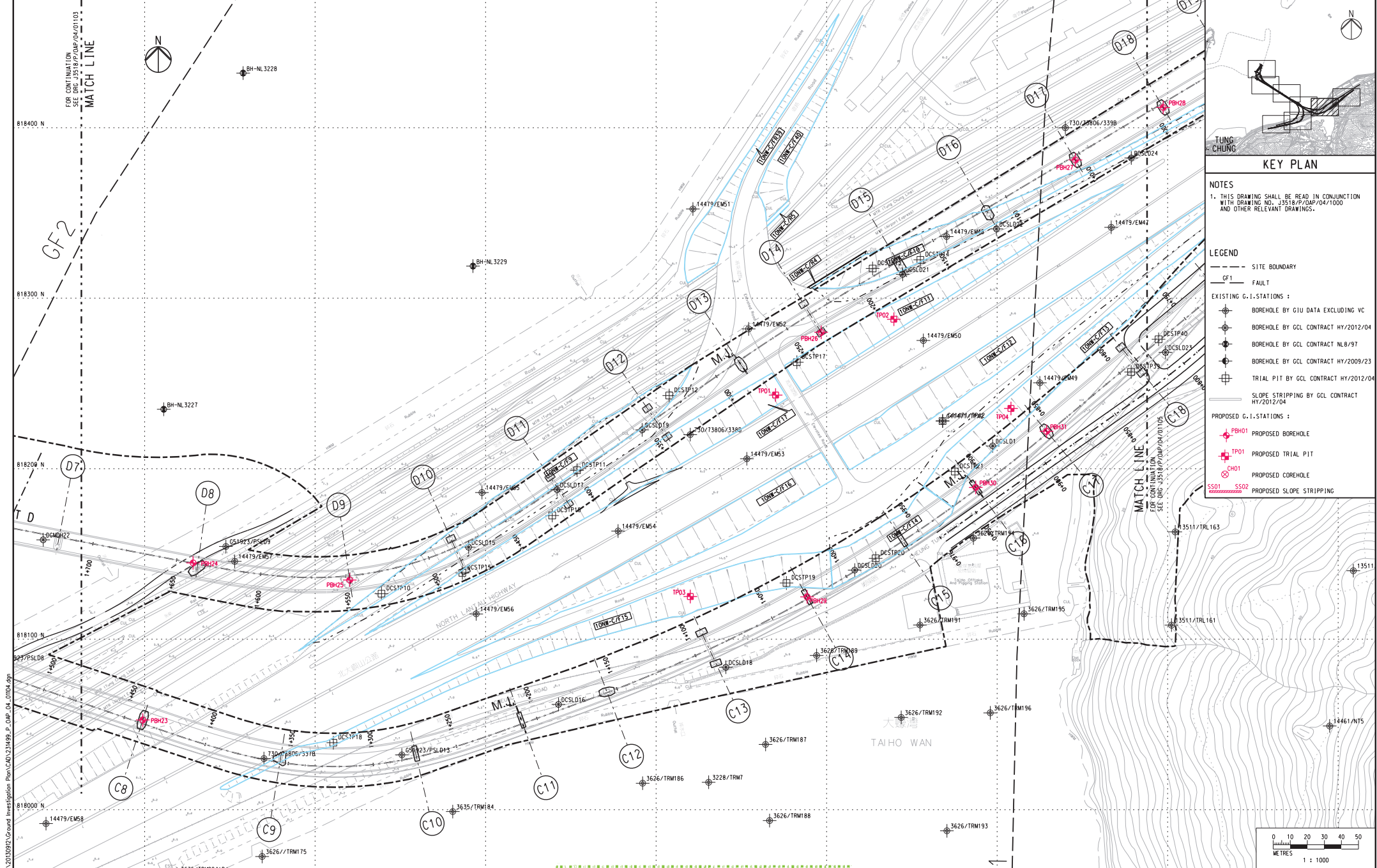
Project Title: Contract No. HY/2012/07
 Tuen Mun - Chek Lap Kok Link
 Southern Connection Viaduct Section

Originator: **ARUP**

Drawing title: **Figure 1.2d**

Drawing no. **J3518/P/OAP/04/01102** Rev. **C**

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NOTES
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NO. J3518/P/OAP/04/1000 AND OTHER RELEVANT DRAWINGS.

- LEGEND**
- SITE BOUNDARY
 - GF1- FAULT
 - EXISTING G.I. STATIONS :
 - ⊕ BOREHOLE BY GIU DATA EXCLUDING VC
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2012/04
 - ⊕ BOREHOLE BY GCL CONTRACT NL6/97
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2009/23
 - ⊕ TRIAL PIT BY GCL CONTRACT HY/2012/04
 - PROPOSED G.I. STATIONS :
 - ⊕ PBH01 PROPOSED BOREHOLE
 - ⊕ TP01 PROPOSED TRIAL PIT
 - ⊕ CH01 PROPOSED COREHOLE
 - SS01 SS02 PROPOSED SLOPE STRIPPING



| Rev | Description | By | Date | Rev | Description | By | Date | Drawn | Date |
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| B | SUBMISSION | RC | 07/13 | | | | | Checked | Approved |
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| | | | | | | | | Scale | 1:1000 @ A1 / 1:2000 @ A3 |

Client
 路政署
 HIGHWAYS DEPARTMENT
 港珠澳大橋香港工程總處
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

Supervising Officer
 AECOM

Project Title
 Contract No. HY/2012/07
 Tuen Mun - Chek Lap Kok Link
 Southern Connection Viaduct Section

Contractor
 Gammon

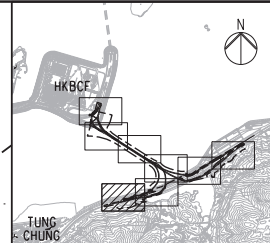
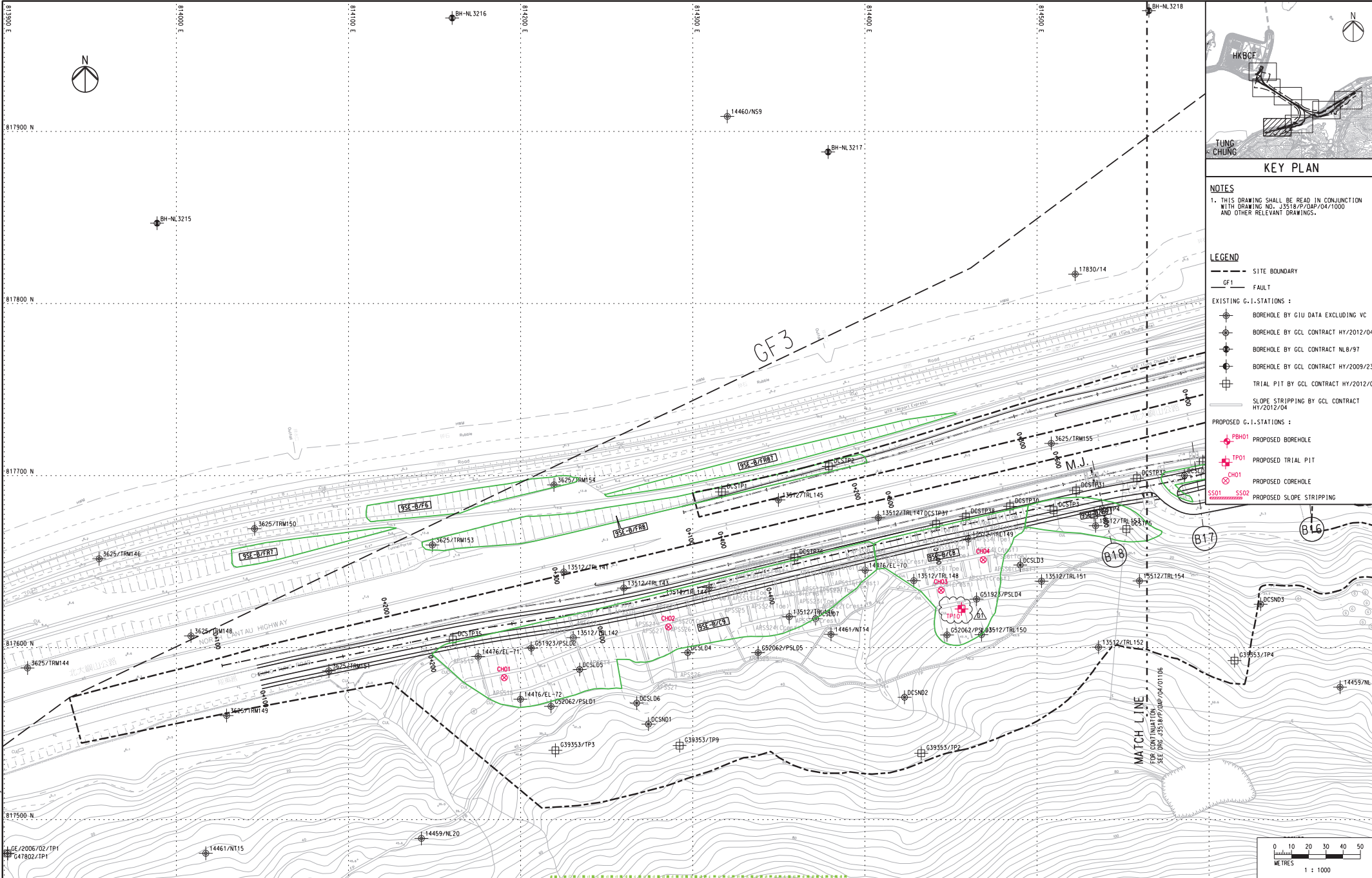
Originator
 ARUP

Drawing title
Figure 1.2f

Drawing no. J3518/P/OAP/04/01104 Rev. C

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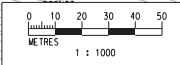
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KEY PLAN

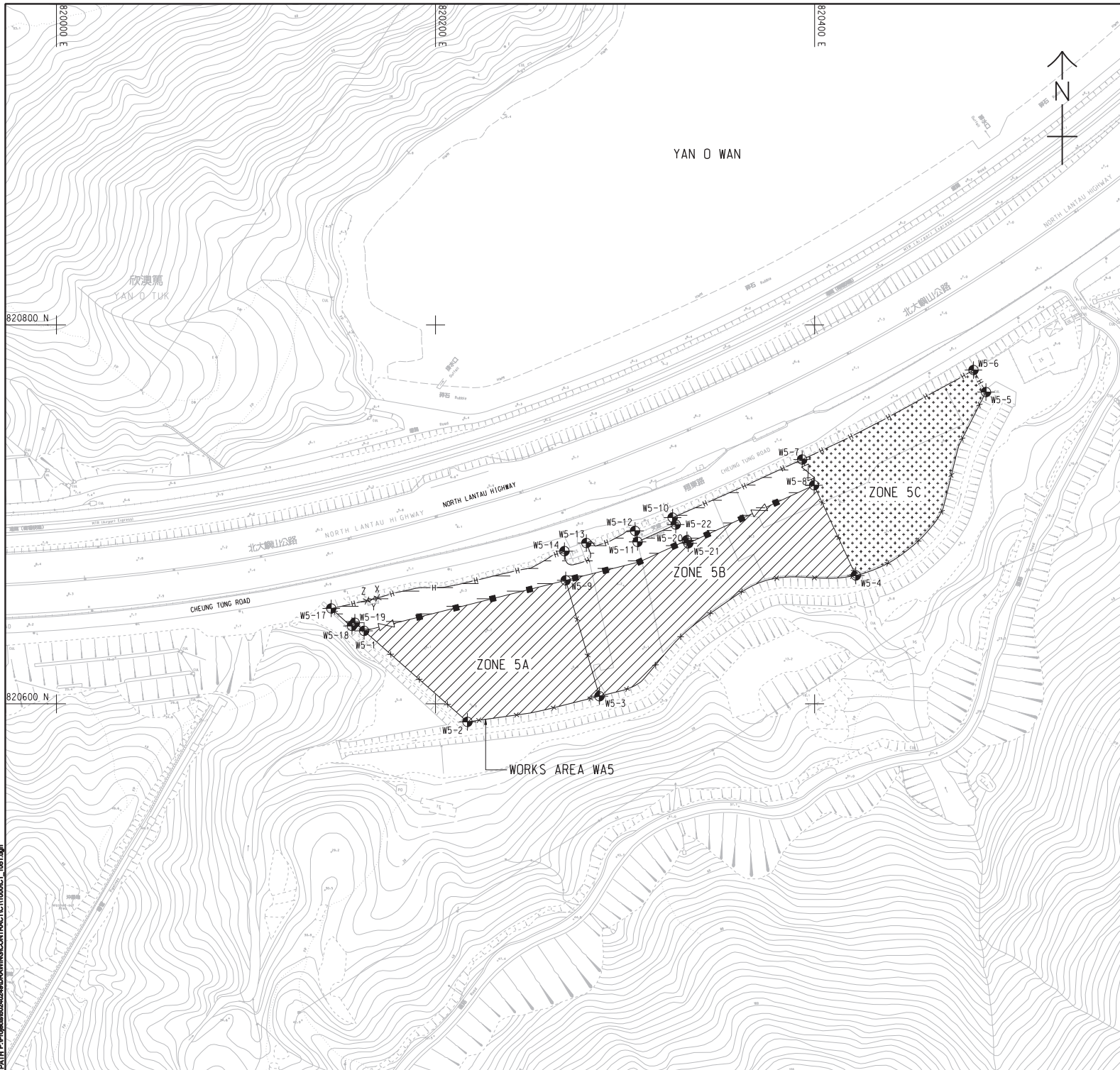
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| Drawn | Date | Checked | Approved | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RL | 07/13 | DS | DOP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



NOTES:

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE WORKS AREA KEY PLAN IN SHEET NO. 60240249/C1/1000.
- THE SETTING OUT INFORMATION AND WORKS AREA CONDITIONS SHOWN IN THIS DRAWING ARE FOR REFERENCE ONLY. THE WORKS AREA BOUNDARY SHALL BE IN ACCORDANCE WITH THE ENGINEERING CONDITIONS FOR TEMPORARY GOVERNMENT LAND ALLOCATION NO. T15 619. IN CASE OF DISCREPANCY BETWEEN THE BOUNDARY SHOWN ON THIS DRAWING AND THE BOUNDARY INDICATED ON THE ENGINEERING CONDITIONS, THE LATTER SHALL PREVAIL.
- DEMARCATION OF THE WORKS AREA SHALL BE DETERMINED ON SITE.
- REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NOS. H6110 AND H6111 FOR DETAILS OF HOARDING.
- REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NOS. H6121 AND H6122 FOR DETAILS OF CHAIN LINK FENCE.
- REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NO. H6121 FOR DETAILS OF GATE.
- CHAIN LINK FENCE SHALL BE ERRECTED ALONG THE WORKS AREA BOUNDARY. THE ALIGNMENT AND EXTENT OF CHAIN LINK FENCE SHOWN ARE INDICATIVE ONLY AND SHALL BE CONFIRMED BY THE SUPERVISING OFFICER.
- THE LOCATION AND WIDTH OF GATE SHOWN ARE INDICATIVE ONLY AND SHALL BE CONFIRMED BY THE SUPERVISING OFFICER.
- NO STRUCTURES SHALL BE ERRECTED OTHER THAN SUCH STRUCTURES NOT EXCEEDING TWO STOREYS IN HEIGHT, WHICH ARE APPROVED BY THE DISTRICT LANDS OFFICER AS BEING APPROPRIATE FOR THE USE OF THE SITE AS A WORKS AREA.
- THE TENTATIVE OCCUPATION PERIOD SHALL BE REFERRED TO EMPLOYER'S REQUIREMENTS PART 2 AND PART 14 SECTION 1 CLAUSE 1.45A.
- THE WORKS AREAS SHOWN ON THIS DRAWING ARE TO BE SHARE-USED AMONG THE CONTRACTS OF TM-CLK RELATED CONTRACTS. THE AREAS HATCHED WITH [diagonal lines] ARE TENTATIVELY ALLOCATED FOR THE USE OF THIS CONTRACT.
- THE COMMON AREA SHALL BE CONCRETE PAVED BY THE CONTRACTOR.

LEGEND:

- WORKS AREA UNDER THIS CONTRACT
- COMMON AREA (MAINTAINED UNDER THIS CONTRACT) TO BE SHARE-USED WITH OTHER CONTRACTS
- WORKS AREA FOR THIS CONTRACT TO BE EARLY HANDED OVER BY THE CONTRACTOR.
- HOARDING AND GATE (TO BE ERRECTED AND MAINTAINED UNDER THIS CONTRACT)
- CHAIN LINK FENCE AND GATE (TO BE ERRECTED AND MAINTAINED BY OTHERS)
- CHAIN LINK FENCE AND GATE (TO BE ERRECTED AND MAINTAINED UNDER THIS CONTRACT)

SETTING OUT COORDINATES OF WORKS AREA W5

| POINT | COORDINATES | |
|-------|-------------|------------|
| | EASTING | NORTHING |
| W5-1 | 820162.308 | 820638.492 |
| W5-2 | 820216.839 | 820590.455 |
| W5-3 | 820286.496 | 820603.985 |
| W5-4 | 820421.757 | 820667.742 |
| W5-5 | 820490.425 | 820764.554 |
| W5-6 | 820483.839 | 820776.180 |
| W5-7 | 820393.451 | 820728.958 |
| W5-8 | 820399.746 | 820715.343 |
| W5-9 | 820268.674 | 820665.173 |
| W5-10 | 820325.075 | 820698.276 |
| W5-11 | 820306.587 | 820685.458 |
| W5-12 | 820305.269 | 820691.287 |
| W5-13 | 820279.580 | 820684.863 |
| W5-14 | 820268.027 | 820680.572 |
| X | 820169.407 | 820655.859 |
| Y | 820166.601 | 820655.172 |
| Z | 820163.794 | 820654.484 |
| W5-17 | 820144.957 | 820650.334 |
| W5-18 | 820155.899 | 820641.093 |
| W5-19 | 820157.432 | 820642.788 |
| W5-20 | 820332.642 | 820686.314 |
| W5-21 | 820333.350 | 820684.738 |
| W5-22 | 820326.723 | 820694.608 |

ISSUE/REVISION

| NO. | DATE | DESCRIPTION | CHK. |
|-----|---------|----------------|------|
| 1 | OCT. 12 | TENDER DRAWING | CWN |

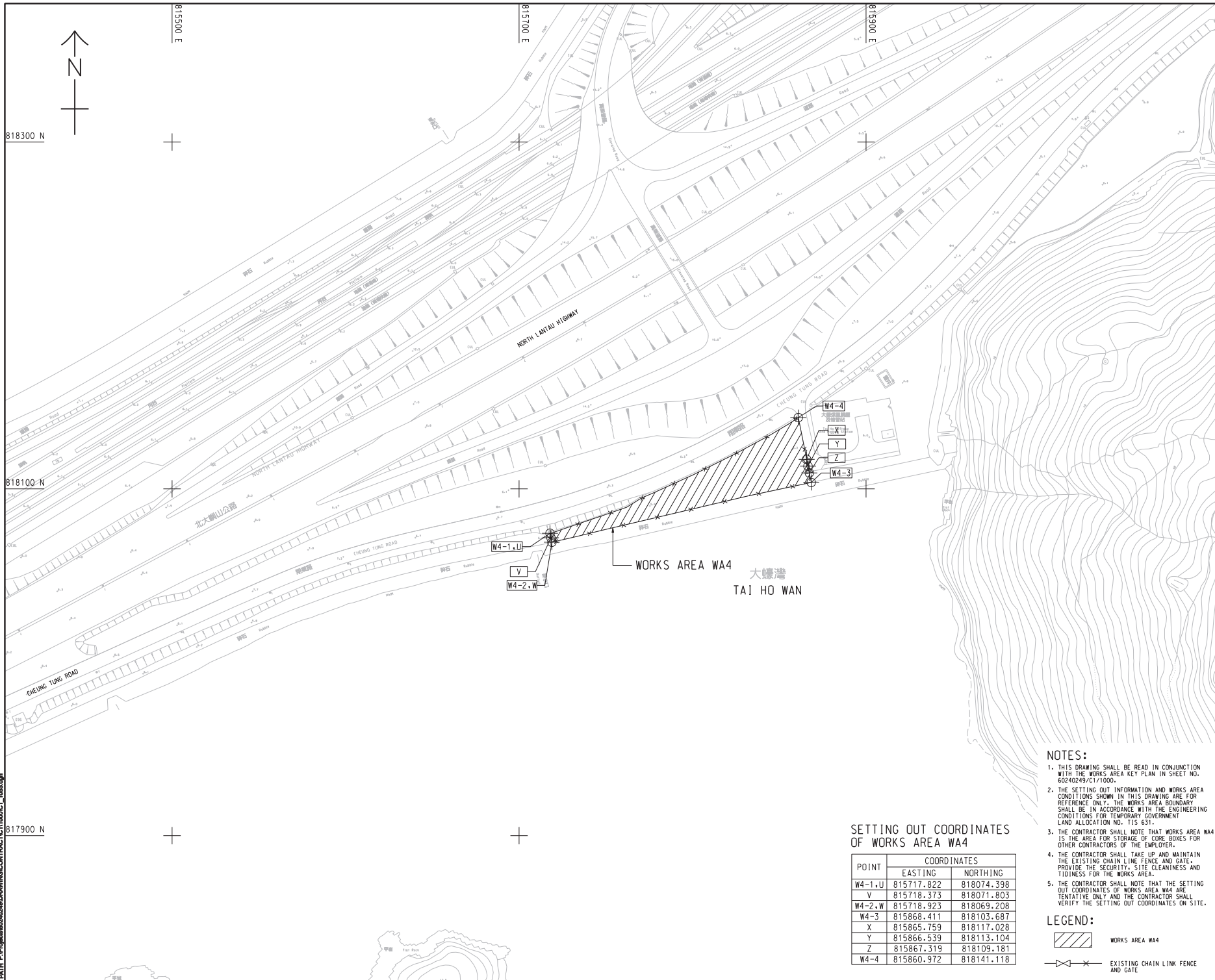
STATUS

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KEY PLAN

Figure 1.2h

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WORKS AREA WA4
 大螺灣
 TAI HO WAN

SETTING OUT COORDINATES OF WORKS AREA WA4

| POINT | COORDINATES | |
|--------|-------------|------------|
| | EASTING | NORTHING |
| W4-1,U | 815717.822 | 818074.398 |
| V | 815718.373 | 818071.803 |
| W4-2,W | 815718.923 | 818069.208 |
| W4-3 | 815868.411 | 818103.687 |
| X | 815865.759 | 818117.028 |
| Y | 815866.539 | 818113.104 |
| Z | 815867.319 | 818109.181 |
| W4-4 | 815860.972 | 818141.118 |

- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE WORKS AREA KEY PLAN IN SHEET NO. 60240249/C1/100.
 - THE SETTING OUT INFORMATION AND WORKS AREA CONDITIONS SHOWN IN THIS DRAWING ARE FOR REFERENCE ONLY. THE WORKS AREA BOUNDARY SHALL BE IN ACCORDANCE WITH THE ENGINEERING CONDITIONS FOR TEMPORARY GOVERNMENT LAND ALLOCATION NO. T15 631.
 - THE CONTRACTOR SHALL NOTE THAT WORKS AREA WA4 IS THE AREA FOR STORAGE OF CORE BOXES FOR OTHER CONTRACTORS OF THE EMPLOYER.
 - THE CONTRACTOR SHALL TAKE UP AND MAINTAIN THE EXISTING CHAIN LINK FENCE AND GATE. PROVIDE THE SECURITY, SITE CLEANLINESS AND TIDINESS FOR THE WORKS AREA.
 - THE CONTRACTOR SHALL NOTE THAT THE SETTING OUT COORDINATES OF WORKS AREA WA4 ARE TENTATIVE ONLY AND THE CONTRACTOR SHALL VERIFY THE SETTING OUT COORDINATES ON SITE.

LEGEND:

WORKS AREA WA4

EXISTING CHAIN LINK FENCE AND GATE

AECOM

PROJECT
 TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
 TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
 路政署 DEPARTMENT OF HIGHWAYS
 港務局 港務工程管理局
 Hong Kong + Zhuhai + Hainan Bridge
 Hong Kong Project Management Office

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS
 2012110814

Figure 1.2j

ISSUE/REVISION

| NO. | DATE | DESCRIPTION | CHK. |
|-----|---------|-----------------------|-------|
| 1 | NOV. 12 | TENDER ADDENDUM NO. 1 | C/W/H |

SCALE
 A1 : 1:1000

DIMENSION UNIT
 大呎
 METRES

KEY PLAN

PROJECT NO.
 60240249

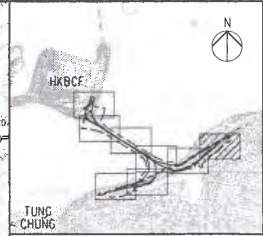
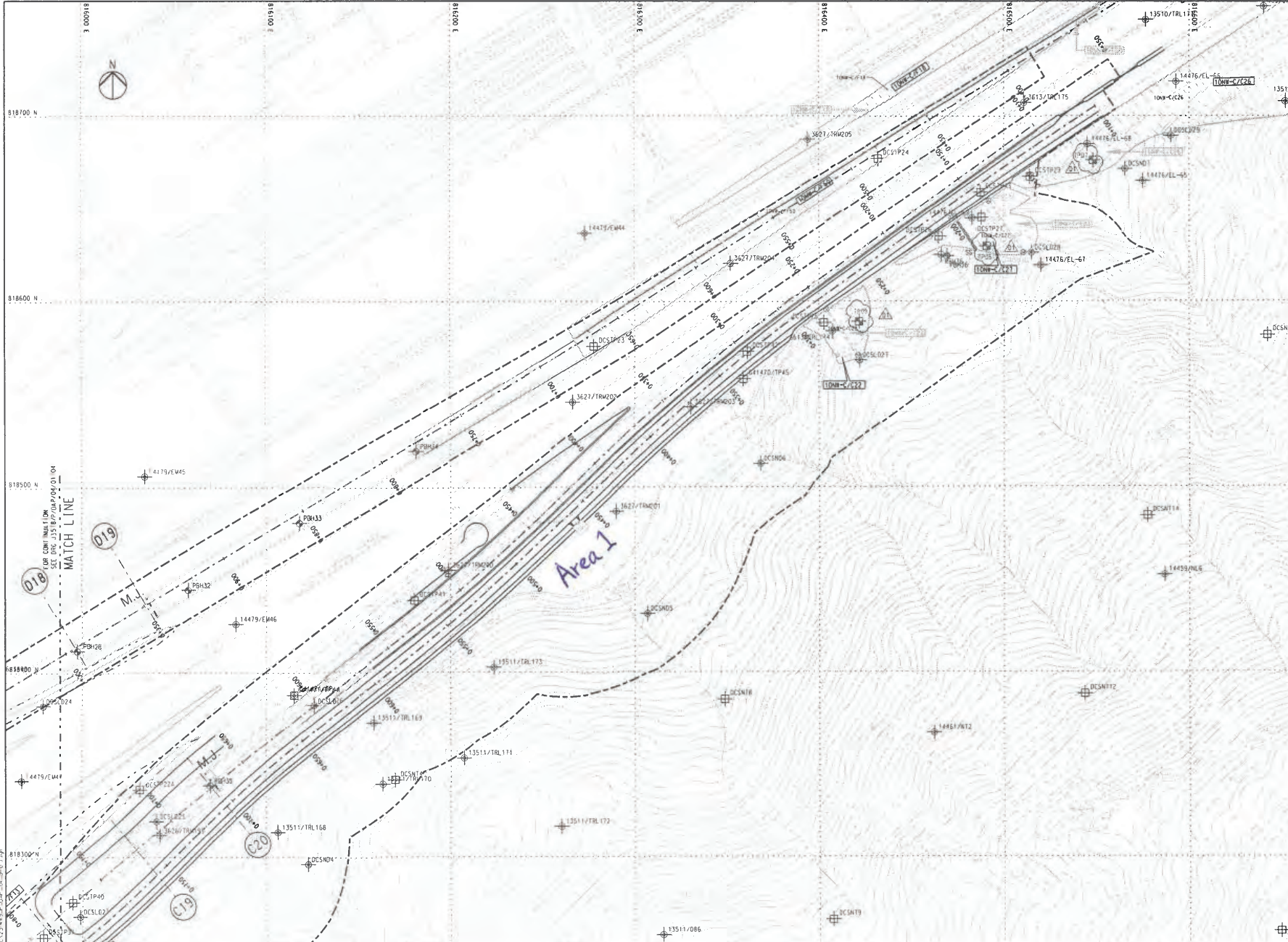
CONTRACT NO.
 HY/2012/07

SHEET TITLE
 WORKS AREA WA4

SHEET NUMBER
 60240249/C1/1053

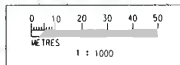
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DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



NOTES
 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NO. J3518/P/OAP/04/1000 AND OTHER RELEVANT DRAWINGS.

- LEGEND**
- SITE BOUNDARY
 - GF1 FAULT
- EXISTING G.I. STATIONS :**
- ⊕ BOREHOLE BY GIU DATA EXCLUDING VC
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2012/04
 - ⊕ BOREHOLE BY GCL CONTRACT N6.8/97
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2009/23
 - ⊕ TRIAL PIT BY GCL CONTRACT HY/2012/04
 - ⊕ SLOPE STRIPPING BY GCL CONTRACT HY/2012/04
- PROPOSED G.I. STATIONS :**
- ⊕ B-0 PROPOSED BOREHOLE
 - ⊕ T-0 PROPOSED TRIAL PIT
 - ⊕ C-01 PROPOSED COREHOLE
 - ⊕ S-01 PROPOSED SLOPE STRIPPING



| Rev | Description | By | Date | Rev | Description | By | Date |
|-----|-------------------------|----|-------|-----|-------------|----|------|
| 01 | ISSUED FOR CONSTRUCTION | RL | 31/03 | | | | |
| 02 | ISSUED FOR CONSTRUCTION | RL | 07/13 | | | | |
| 03 | ISSUED FOR CONSTRUCTION | RL | 29/13 | | | | |
| 04 | ISSUED FOR CONSTRUCTION | RL | 19/12 | | | | |

| Drawn | Date | Client |
|---------|----------|------------------------------------------------------------------------------------------------------------------------|
| RL | 07/13 | 路政署 HIGHWAYS DEPARTMENT 港珠澳大桥香港工程指挥部 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office |
| Checked | Approved | |
| DS | DOP | |
| Scale | | |

Scale: 1:1000 @ A1 / 1:2000 @ A3

| | | |
|--|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| | Client 路政署 HIGHWAYS DEPARTMENT 港珠澳大桥香港工程指挥部 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office | Project Title Contract No. HY/2012/07 Tuen Mun - Chek Lap Kok Link Southern Connection Viaduct Section |
| | Supervising Officer AECOM | Contractor Gammon |

Drawing title
Figure 1.2k

Drawing no. J3518/P/OAP/04/01105 Rev. D1

Table 1.1 Contact Information of Key Personnel

| Party | Position | Name | Telephone | Fax |
|---------------------------------------------|---------------------------|----------------|------------------|------------|
| HyD (Highways Department) | Project Coordinator | Stanley Chan | 2762 3406 | 3188 6614 |
| | Senior Engineer | Steven Shum | 2762 4133 | 3188 6614 |
| SOR (AECOM Asia Company Limited) | Chief Resident Engineer | Daniel Ip | 3553 3800 | 2492 2057 |
| | Resident Engineer | Kingman Chan | 3691 3950 | 3691 2899 |
| ENPO / IEC (Ramboll Environ Hong Kong Ltd.) | ENPO Leader | Y.H. Hui | 3465 2850 | 3465 2899 |
| | IEC | Dr. F.C. Tsang | 3465 2851 | 3465 2899 |
| Contractor (Gammon Construction Limited) | Environmental Manager | Brian Kam | 3520 0387 | 3520 0486 |
| | Environmental Officer | Roy Leung | 3520 0387 | 3520 0486 |
| | 24-hour Complaint Hotline | | 9738 4332 | |
| ET (ERM-HK) | ET Leader | Jovy Tam | 2271 3113 | 2723 5660 |

1.4 SUMMARY OF CONSTRUCTION WORKS

The construction phase of the Contract commenced on 31 October 2013. The three-month rolling construction programme is shown in Appendix B.

As informed by the Contractor, details of the major works carried out in this reporting month are listed below:

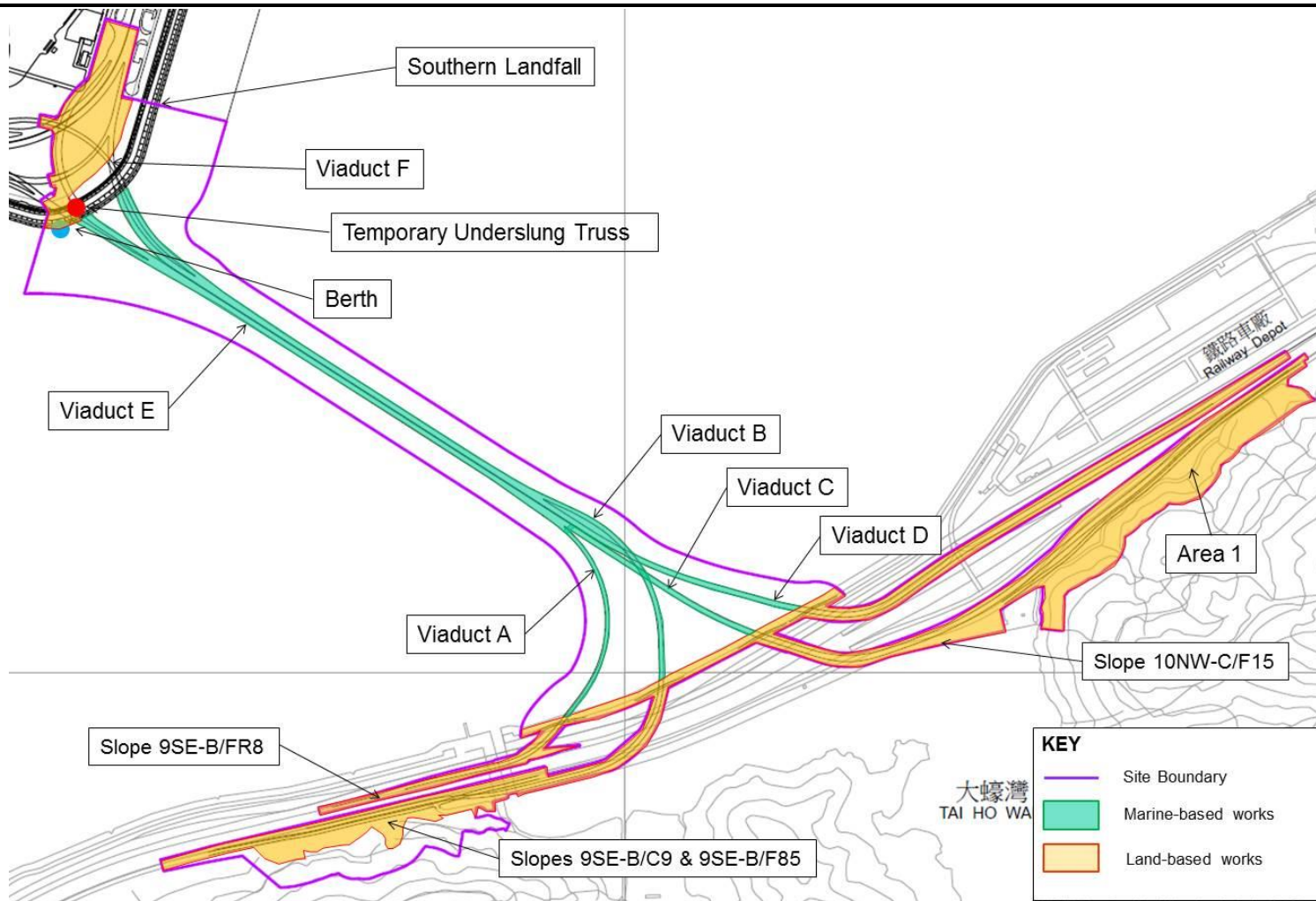
Land-based Works

- Pier construction;
- Re-alignment of Cheung Tung Road;
- Road works along North Lantau Highway;
- Launching gantry operation;
- Installation of pier head and deck segments; and
- Slope work of Viaducts A, B & C.

The locations of the construction activities are shown in *Figure 1.3*. The Environmental Sensitive Receivers in the vicinity of the Project are shown in *Figure 1.4*.

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

Figure 1.3 Locations of Major Construction Activities in the Reporting Month



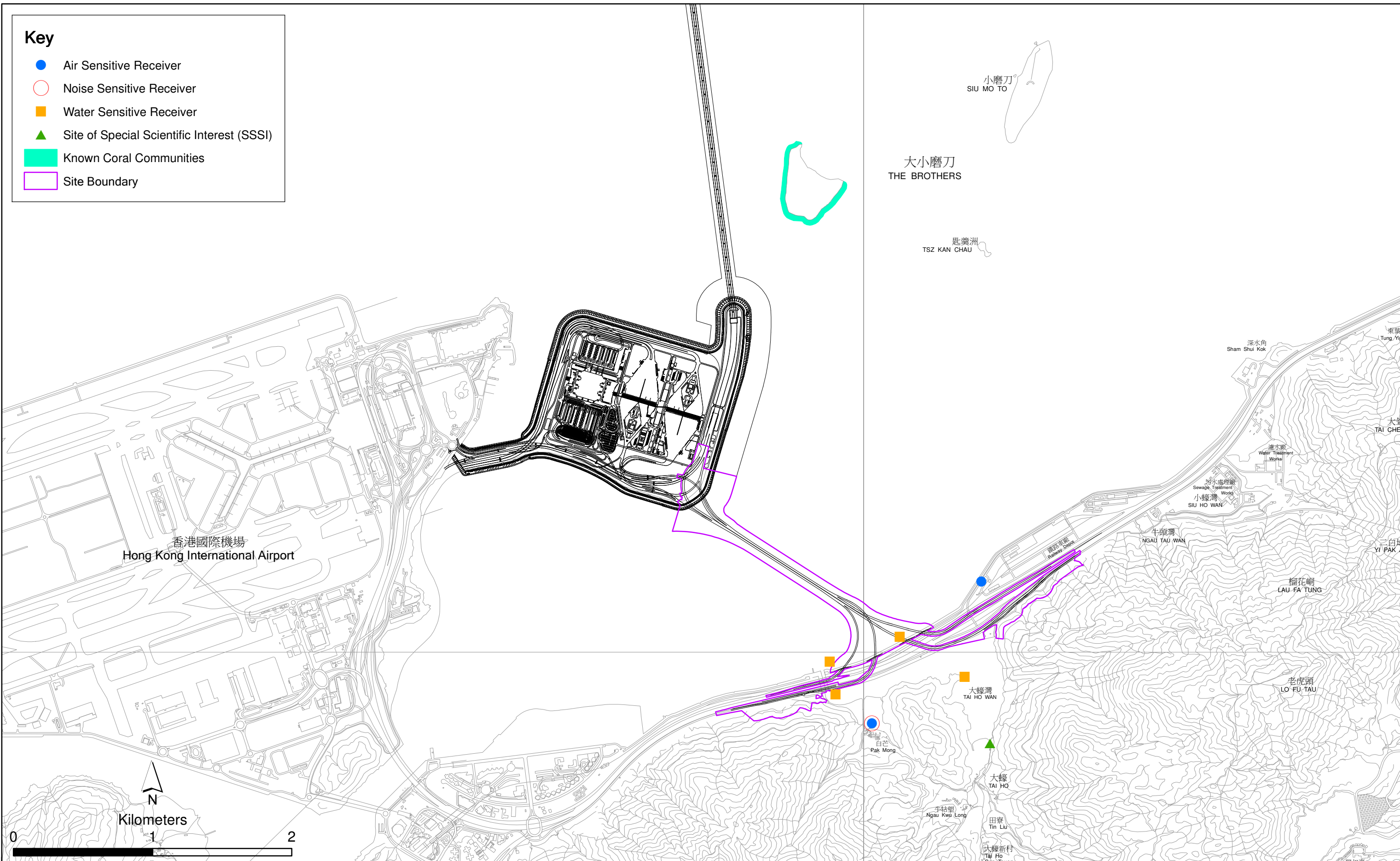


Figure 1.4

Environmental Sensitive Receivers in the Vicinity of Contract No. HY/2012/07
Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section

The EM&A programme required environmental monitoring for air quality, noise, 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, 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. The Action and Limit Levels of the air quality monitoring is provided in *Appendix D*.

Table 2.1 *Locations of Impact Air Quality Monitoring Stations*

| Monitoring Station | Location | Description | Monitoring Dates |
|--------------------|-----------|-----------------------------------------|----------------------------------------|
| ASR 9 | MTR Depot | On the ground nearby MTR Depot Entrance | 5, 11, 14, 20, 23 and 29 December 2017 |
| ASR 8A | Area 4 | On ground at the works area, Area 4 | 5, 11, 14, 20, 23 and 29 December 2017 |

High Volume Samplers (HVSs) were used for 1-hour TSP and 24-hour TSP monitoring at ASR8A and ASR9 in accordance with the requirements of the Updated EM&A Manual. The TSP monitoring stations are illustrated in *Figure 2.1* and detailed in *Table 2.1*. Wind meter was deployed at Area 4 for logging wind speed and wind direction. Copies of the calibration certificates for the equipment are presented in *Appendix E*. Details of the deployed equipment are given in *Table 2.2*.

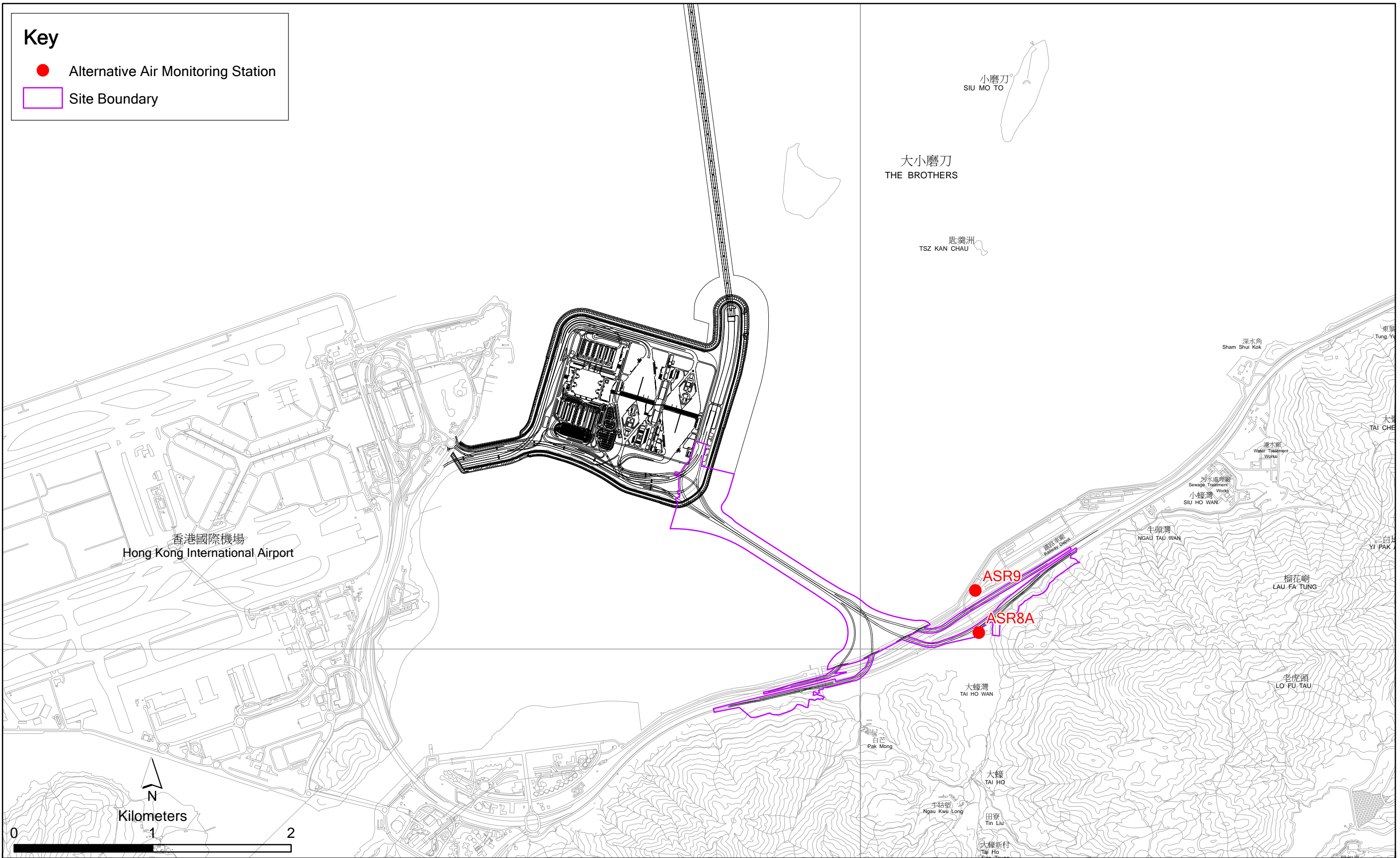


Figure 2.1

Locations of Air Quality Monitoring Stations

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 Sensor | Global Water (Wind Speed Sensor: WE550; Wind Direction Sensor: WE570) |
| Wind Anemometer for calibration | Lutron (Model No. AM-4201) |

2.1.2 *Monitoring Schedule for the Reporting Month*

The schedule for air quality monitoring in December 2017 is provided in *Appendix F*.

2.1.3 *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 are presented in *Appendix G*.

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

| Monitoring Station | Average ($\mu\text{g}/\text{m}^3$) | Range ($\mu\text{g}/\text{m}^3$) | Action Level ($\mu\text{g}/\text{m}^3$) | Limit Level ($\mu\text{g}/\text{m}^3$) |
|---------------------------|------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------|
| ASR 8A | 90 | 31-149 | 394 | 500 |
| ASR 9 | 90 | 41-180 | 393 | 500 |

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

| Monitoring Station | Average ($\mu\text{g}/\text{m}^3$) | Range ($\mu\text{g}/\text{m}^3$) | Action Level ($\mu\text{g}/\text{m}^3$) | Limit Level ($\mu\text{g}/\text{m}^3$) |
|---------------------------|------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------|
| ASR 8A | 86 | 38-151 | 178 | 260 |
| ASR 9 | 95 | 45-172 | 178 | 260 |

The major dust sources in the reporting period included construction activities under the Contract as well as nearby traffic emissions.

All 1-hour and 24-hour TSP results were below the Action and Limit Levels at all monitoring locations in the reporting period. No action is thus required to be undertaken in accordance with the Event Action Plan presented in *Appendix L*.

Meteorological information collected at ASR8A including wind speed and wind direction is provided in *Appendix H*.

2.2 NOISE MONITORING

2.2.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual, impact noise monitoring was conducted once per week during the construction phase of the Contract. The Action and Limit Level of the noise monitoring is provided in *Appendix D*.

Noise monitoring was performed on 5, 11, 14, 20, 23 and 29 December 2017 using sound level meter at the designated monitoring station NSR1A (*Figure 2.2; Table 2.5*) in accordance with the requirements stipulated in the Updated EM&A Manual. Acoustic calibrator was deployed to check the sound level meters at a known sound pressure level. Details of the deployed equipment are provided in *Table 2.6*. Copies of the calibration certificates for the equipment are presented in *Appendix E*.

Table 2.5 *Location of Impact Noise Monitoring Station*

| Monitoring Station | Location | Description | Parameter | Frequency and Duration | Monitoring Dates |
|--------------------|---------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------|
| NSR 1A | Pak Mong Village Pavilion | On the ground at the village entrance | 30-minute measurement at each monitoring station between 0700 and 1900 on normal weekdays (Monday to Saturday). L_{eq} , L_{10} and L_{90} would be recorded. | At least once per week | 5, 11, 14, 20, 23 and 29 December 2017 |

Table 2.6 *Noise Monitoring Equipment*

| Equipment | Brand and Model |
|------------------------------|-----------------|
| Integrated Sound Level Meter | Rion NL-52 |
| Acoustic Calibrator | Rion NC-73 |

2.2.2 Monitoring Schedule for the Reporting Month

The schedule for construction noise monitoring in the reporting period is provided in *Appendix F*.

2.2.3 Results and Observations

Results for noise monitoring are summarized in *Table 2.7* and the monitoring data is provided in *Appendix I*.

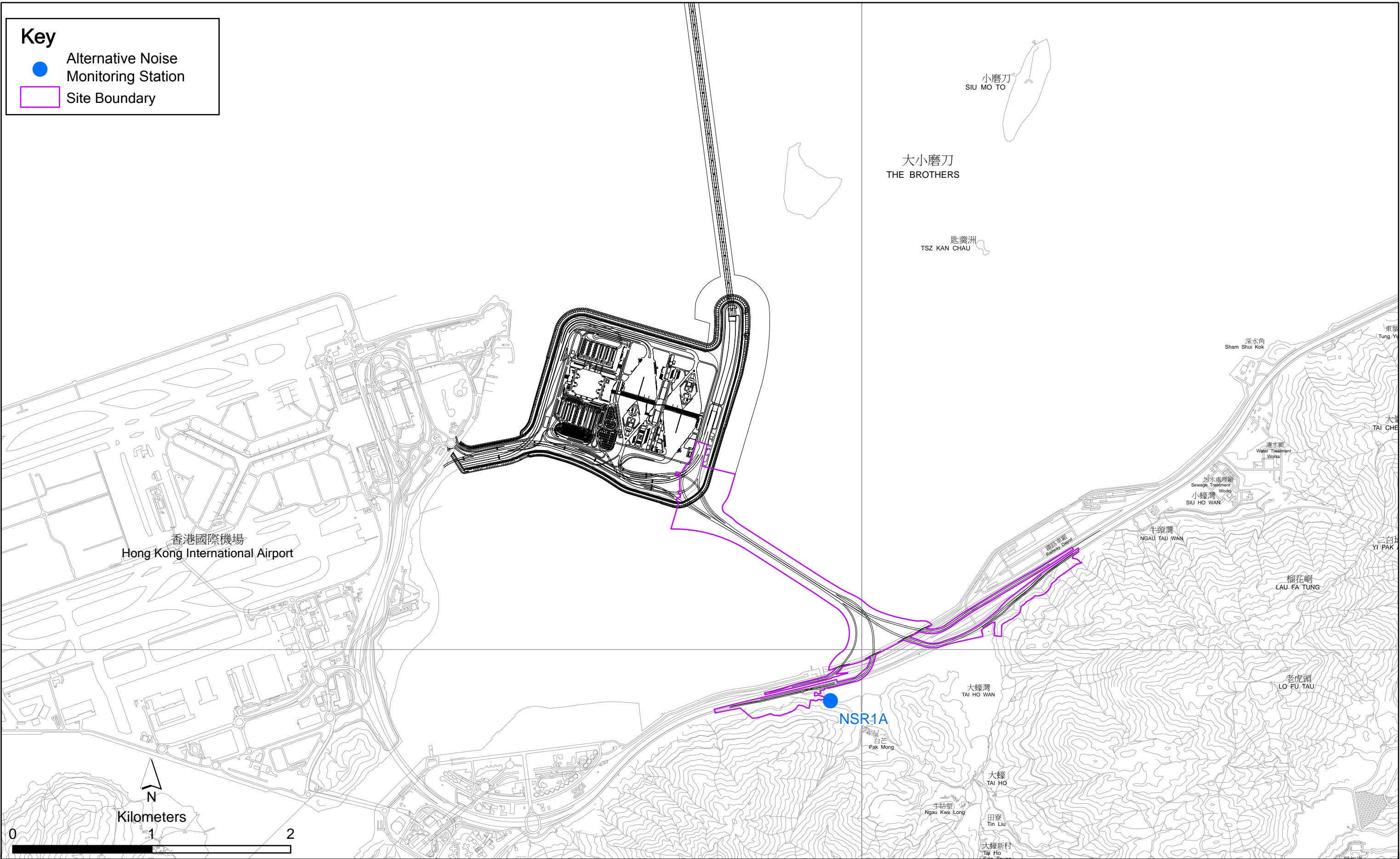


Figure 2.2

Location of Noise Monitoring Station

Table 2.7 Summary of Construction Noise Monitoring Results in the Reporting Period

| | Average , dB(A), Leq (30mins) | Range, dB(A), Leq (30mins) | Limit Level, dB(A), Leq (30mins) |
|--------|----------------------------------|-------------------------------|-------------------------------------|
| NSR 1A | 63 | 61-64 | 75 |

No noise Action or Limit Level exceedance was recorded in the reporting month. No action is thus required to be undertaken in accordance with the Event Action Plan presented in *Appendix L*.

Major noise sources during the noise monitoring included noise from crane operation, hammering, nearby traffic noise and aircraft noise.

2.3 WATER QUALITY MONITORING

2.3.1 Monitoring Requirements and Equipment

Impact water quality monitoring was carried out to ensure that any deterioration of water quality was detected, and that timely action was taken to rectify the situation. Impact water quality monitoring was undertaken three days per week during the construction period in accordance with the Updated EM&A Manual. The Action and Limit Levels of the water quality monitoring are provided in *Appendix D*.

The locations of the monitoring stations under the Contract are shown in *Figure 2.3* and *Table 2.8*.

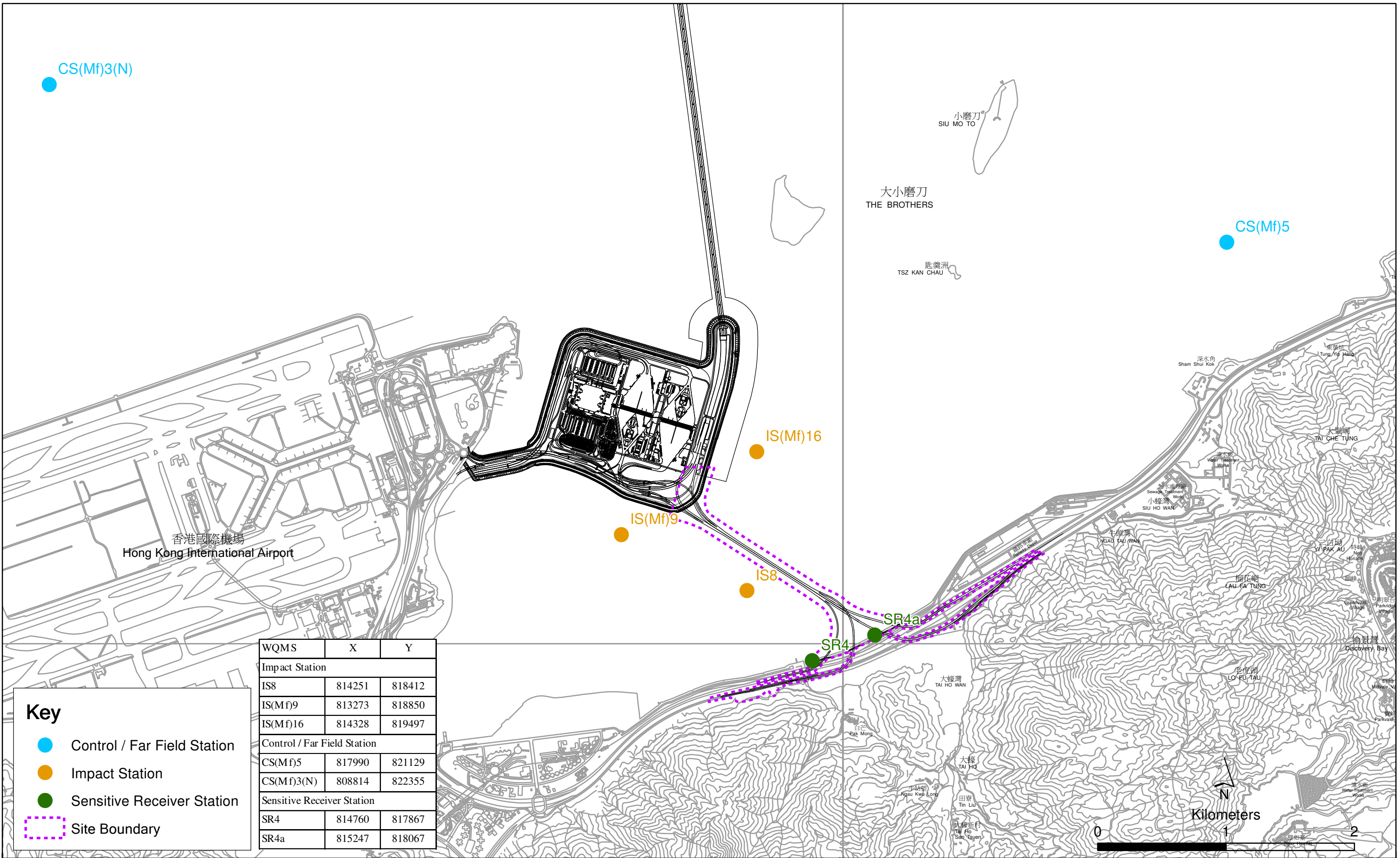


Figure 2.3

Locations of Water Quality Monitoring Stations

Table 2.8 Locations of Impact Water Quality Monitoring Stations and its Corresponding Monitoring Requirements

| Station ID | Type | Coordinates | | *Parameters, unit | Frequency | Depth |
|------------|------------------------------------------------------|-------------|----------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Easting | Northing | | | |
| IS(Mf)9 | Impact Station (Close to HKBCF construction site) | 813273 | 818850 | <ul style="list-style-type: none"> • Temperature(°C) • pH (pH unit) • Turbidity (NTU) | Impact monitoring: 3 days per week, at mid-flood and mid-ebb tides during the construction period of the Contract | 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 |
| IS(Mf)16 | Impact Station (Close to HKBCF construction site) | 814328 | 819497 | | | |
| IS8 | Impact Station (Close to HKBCF construction site) | 814251 | 818412 | | | |
| SR4 | Sensitive receiver (Tai Ho Inlet) | 814760 | 817867 | <ul style="list-style-type: none"> • Suspended Solid (SS) (mg/L) | | |
| SR4a | Sensitive receiver | 815247 | 818067 | | | |
| CS(Mf)3(N) | Control Station | 808814 | 822355 | | | |
| CS(Mf)5 | Control Station | 817990 | 821129 | | | |

*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.

Table 2.9 summarises the equipment used in the impact water quality monitoring programme. Copies of the calibration certificates are attached in Appendix E.

Table 2.9 Water Quality Monitoring Equipment

| Equipment | Brand and Model |
|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Multi-parameters (Dissolved Oxygen, Salinity, Turbidity, Temperature, pH) | YSI ProDSS / YSI 6920 V2 Sonde / YSI 6920V2 |
| Positioning Equipment | Furuno GP-170 |
| Water Depth Detector | Lowrance Mark 5x / Garmin Striker 4 |
| Water Sampler | WildCo Vertical Alpha Bottles 1120-2.2L / 1120-3.2L Aquatic Research Instrument Vertical/Horizontal Point Water Sampler 2.2L / 3.0L |

2.3.2 *Monitoring Schedule for the Reporting Month*

The schedule for water quality monitoring in December 2017 is provided in *Appendix F*.

2.3.3 *Results and Observations*

In total of 13 monitoring events for impact water quality monitoring were conducted at all designated monitoring stations in the reporting month. Impact water quality monitoring results and graphical presentations are provided in *Appendix J*.

Two (2) Action Level of Suspended Solids (SS) exceedances were recorded for water quality impact monitoring in the reporting month. Actions were taken in accordance with the Event Action Plan as presented in *Appendix L*.

2.4 *DOLPHIN MONITORING*

2.4.1 *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 Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) from the Contract. In order to fulfil the EM&A requirements and make good use of available resources, the on-going impact line transect dolphin monitoring data collected by HyD's *Contract No. HY/2011/03 Hong Kong-Zhuhai-Macao Bridge. Hong Kong Link Road - Section between Scenic Hill and Hong Kong Boundary Crossing Facilities* on the monthly basis is adopted to avoid duplicates of survey effort.

2.4.2 *Monitoring Equipment*

Table 2.10 summarizes the equipment used for the impact dolphin monitoring.

Table 2.10 *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 Binoculars | Infinitor LRF 1000 |
| Marine Binocular | Bushell 7 × 50 marine binocular with compass and reticules |
| Vessel for Monitoring | 65 foot single engine motor vessel with viewing platform 4.5m above water level |

2.4.3 *Monitoring Parameter, Frequencies and 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.

2.4.4 *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 2.11* below ⁽¹⁾.

⁽¹⁾ Proposal on the changes of transect lines for dolphin monitoring was approved by EPD on 28 July 2017 (Reference number: (19) in EP2/G/A/129 Pt. 8).

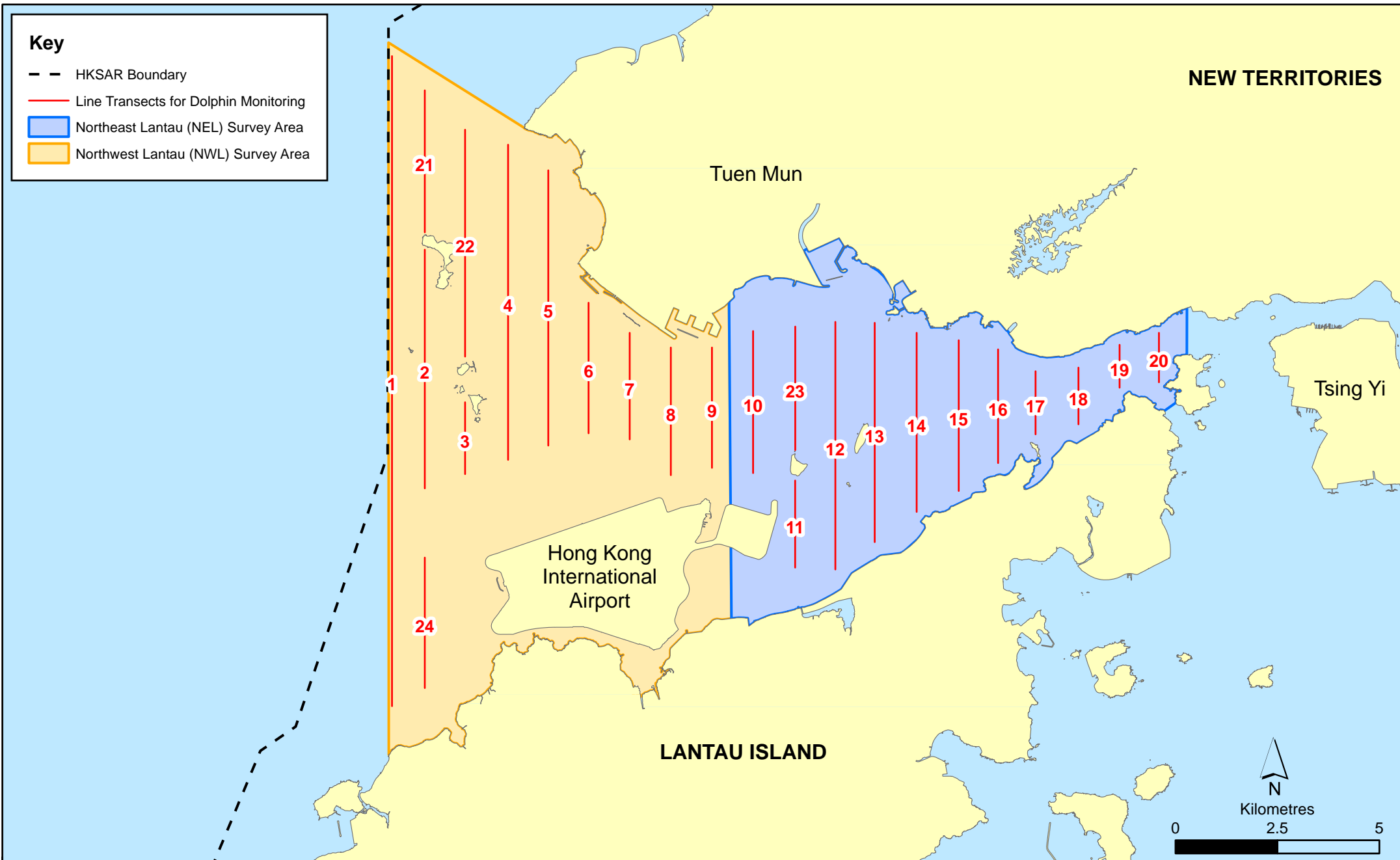


Figure 2.4

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

Table 2.11 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 |

2.4.5 Action & Limit Levels

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

2.4.6 *Monitoring Schedule for the Reporting Month*

Dolphin monitoring was carried out on 5, 12, 15 and 20 December 2017 (*Appendix F*).

2.4.7 *Results and Observations*

A total of 268.23 km of survey effort was collected, with 88.4% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility) during the surveys in December 2017. Among the two areas, 99.20 km and 169.03 km of survey effort were collected from NEL and NWL survey areas, respectively. The total survey effort conducted on primary and secondary lines were 194.97 km and 73.26 km, respectively. The survey efforts are summarized in *Appendix K*.

Four (4) groups of 13 Chinese White Dolphins were sighted during the two sets of monitoring surveys in December 2017. All dolphin sightings were made in NWL, while none was sighted in NEL. During the surveys in December 2017, all sightings were made during on-effort search, while all of the on-effort sightings were made on primary lines. None of the dolphin groups was associated with operating fishing vessel and was not sighted in the proximity of the Project's alignment. The distribution of dolphin sighting during the reporting month is shown in *Figure 2.5*.

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 December 2017 are shown in *Tables 2.12 & 2.13*.

Table 2.12 *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: Dec 5 th / 12 th | 0.0 | 0.0 |
| | Set 2: Dec 15 th / 20 th | 0.0 | 0.0 |
| NWL | Set 1: Dec 5 th / 12 th | 1.7 | 8.3 |
| | Set 2: Dec 15 th / 20 th | 8.4 | 22.4 |

Note: Dolphin Encounter Rates are deduced from the two sets of surveys (two surveys in each set) in December 2017 in Northeast (NEL) and Northwest Lantau (NWL)

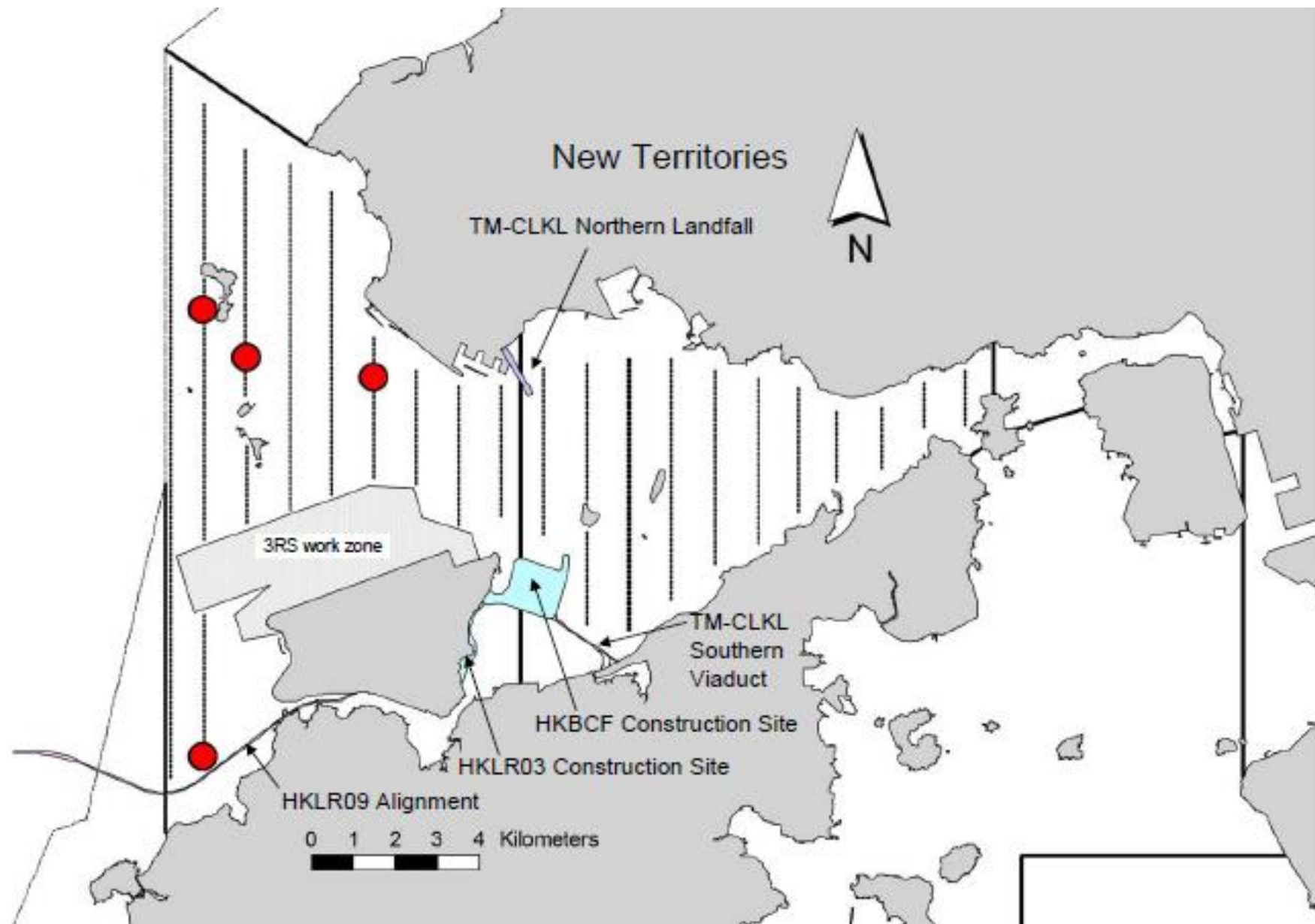


Figure 2.5

HY/2012/07 TM-CLKL Southern Connection Viaduct Section
 The distribution of dolphin sightings during the reporting period
 (Source: Adopted from HKLR03 Monitoring Survey in December 2017)

Date 4/1/2018

Environmental
 Resources
 Management



Table 2.13 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 | 4.2 | 2.9 | 13.6 | 9.4 |

Note: Overall dolphin encounter rates (sightings per 100 km of survey effort) from all four surveys are conducted in December 2017 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau

During this month of dolphin monitoring, no unacceptable impact from the construction activities of the TM-CLKL Southern Connection Viaduct Section on Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was noticeable from general observations. Due to monthly variation in dolphin occurrence within the Study Area, it would be more appropriate to draw conclusion on whether any impacts on dolphins have been detected related to the construction activities of the TM-CLKL Southern Connection Viaduct Section in the quarterly EM&A reports, in which comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

2.4.8 Marine Mammal Exclusion Zone Monitoring

Daily 250 m marine mammal exclusion zone monitoring was undertaken during the period of daytime marine works activities. No sighting of Chinese White Dolphin was recorded in December 2017 during the exclusion zone monitoring.

Passive Acoustic Monitoring (PAM) had been decommissioned as no marine piling works was carried out outside the daylight hours since September 2015.

2.5 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, four (4) site inspections were carried out on 6, 13, 20 and 28 December 2017.

Key observations during the site inspections are summarized in *Table 2.14*.

Table 2.14 Specific Observations Identified during the Weekly Site Inspections in this Reporting Month

| Inspection Date | Environmental Observations | Recommendations/ Remarks |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6 December 2017 | <p>Southern Landfall (Portion A) (Portion S-c)</p> <ul style="list-style-type: none"> Accumulated general refuse should be cleared. Frequent watering should be applied on partially dry area. <p>Viaduct B (Pier B16)</p> <ul style="list-style-type: none"> Chemical containers were observed not placed in drip tray. | <p>Southern Landfall (Portion A) (Portion S-c)</p> <ul style="list-style-type: none"> The Contractor was reminded to clear accumulated general refuse. The Contractor was reminded to apply frequent watering on all unpaved area. <p>Viaduct B (Pier B16)</p> <ul style="list-style-type: none"> The Contractor was reminded to place chemical containers in drip tray |
| 13 December 2017 | <p>Viaduct E (E12)</p> <ul style="list-style-type: none"> Chemical container was observed not placed in drip tray. Accumulated general refuse should be cleared. Drip tray should be properly plugged. <p>Seafront (Area 2)</p> <ul style="list-style-type: none"> Drip tray should be provided for chemical containers. | <p>Viaduct E (E12)</p> <ul style="list-style-type: none"> The Contractor was reminded to place chemical container in drip tray. The Contractor was reminded to clear accumulated general refuse. The Contractor was reminded to plug drip tray properly. <p>Seafront (Area 2)</p> <ul style="list-style-type: none"> The Contractor was reminded to provide drip tray for chemical containers. |
| 20 December 2017 | <p>Viaduct A (Ramp A) (Area A)</p> <ul style="list-style-type: none"> Chemical containers were observed not placed in drip tray. Accumulated general refuse should be cleared. <p>Viaduct B (Ramp B) (Area A)</p> <ul style="list-style-type: none"> Chemical containers were observed not placed in drip tray. Accumulated general refuse should be cleared. Watering should be applied on unpaved road for dust suppression. | <p>Viaduct A (Ramp A) (Area A)</p> <ul style="list-style-type: none"> The Contractor was reminded to place chemical containers in drip tray. The Contractor was reminded to clear accumulated general refuse. <p>Viaduct B (Ramp B) (Area A)</p> <ul style="list-style-type: none"> The Contractor was reminded to place chemical containers in drip tray. The Contractor was reminded to clear accumulated general refuse. The Contractor was reminded to maintain watering on all unpaved area. |
| 28 December 2017 | <p>Viaduct B (Ramp B) (Area A)</p> <ul style="list-style-type: none"> Chemical container was observed not placed in drip tray. <p>Viaduct E (Pier E12)</p> <ul style="list-style-type: none"> Chemical container was observed not placed in drip tray. | <p>Viaduct B (Ramp B) (Area A)</p> <ul style="list-style-type: none"> The Contractor was reminded to place chemical container in drip tray. <p>Viaduct E (Pier E12)</p> <ul style="list-style-type: none"> The Contractor was reminded to place chemical container in drip tray. |

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

2.6 WASTE MANAGEMENT STATUS

The Contractor has 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 include mainly construction wastes (inert and non-inert) and recyclable materials. 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 2.15*.

Table 2.15 Quantities of Different Waste Generated in the Reporting Period

| Month/ Year | Inert C&D Materials ^(a) (m ³) | Imported Fill (m ³) | Inert Constructio n Waste Re- used (m ³) | Non-inert Constructio n Waste ^(b) (kg) | Recyclable Materials ^(c) (kg) | Chemical Wastes (kg) | Marine Sediment (m ³) | | |
|------------------|------------------------------------------------------------|------------------------------------|------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------|----------------------------|-----------------------------------|--------------------------------------------------------|---------------|
| | | | | | | | Category L | Category M (M _p & M _f) | Category H |
| December 2017 | 3,054 | 0 | 164 | 181,710 | 15,636 | 2,400 | 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, felled trees 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*.

2.7 ENVIRONMENTAL LICENSES AND PERMITS

The status of environmental licensing and permit is summarized in *Table 2.16* below.

Table 2.16 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 Mar 2015 | N/A | HyD | Tuen Mun- Chek Lap Kok Link |
| Environmental Permit | EP-353/2009/K | 11 Apr 2016 | N/A | HyD | Hong Kong Boundary Crossing Facilities |
| Construction Dust Notification | 361571 | 5 Jul 2013 | N/A | GCL | |
| Construction Dust Notification | 362093 | 17 Jul 2013 | N/A | GCL | For Area 23 |
| Chemical Waste Registration | 5213-961-G2380-13 | 10 Oct 2013 | N/A | GCL | Chemical waste produced in Contract No. HY/2012/07 (Area 1 adjacent to Cheng Tung Road, Siu Ho Wan) |
| Chemical Waste Registration | 5213-961-G2380-14 | 10 Oct 2013 | N/A | GCL | Chemical waste produced in Contract No. HY/2012/07 (Area 2 adjacent to Cheung Tung Road, Pak Mong Village) |
| Chemical Waste Registration | 5213-974-G2588-03 | 4 Nov 2013 | N/A | GCL | Chemical waste produced in Contract No. HY/2012/07 (WA5 adjacent to Cheung Tung Road, Yam O) |
| Chemical Waste Registration | 5213-951-G2380-17 | 12 Jun 2014 | N/A | GCL | Viaducts A, B, C, D & E |
| Construction Waste Disposal Account | 7017735 | 10 Jul 2013 | N/A | GCL | - |
| Construction Waste Disposal Account | 7019470 | 3 Mar 2014 | N/A | GCL | Vessel CHIT Account |
| Waste Water Discharge License | WT00019017-2014 | 13 May 2014 | 31 May 2019 | GCL | Discharge for marine portion |
| Waste Water Discharge License | WT00019018-2014 | 13 May 2014 | 31 May 2019 | GCL | Discharge for land portion |
| Construction Noise Permit for night works and works in general holidays | GW-RW0294-17 | 19 Jun 2017 | 18 Dec 2017 | GCL | General works at WA5 |
| Construction Noise Permit for night works and works in general holidays | GW-RW0650-17 | 19 Dec 2017 | 18 Jun 2018 | GCL | General works at WA5 |
| Construction Noise Permit for night works and works in general holidays | GW-RS0540-17 | 20 Jun 2017 | 15 Dec 2017 | GCL | Broad Permit for Whole Site Areas |
| Construction Noise Permit for night works and works in general holidays | GW-RS1112-17 | 14 Dec 2017 | 31 Mar 2018 | GCL | Broad Permit for Whole Site Areas |
| Construction Noise Permit for night works and works in general holidays | GW-RS1025-17 | 30 Nov 2017 | 31 Dec 2017 | GCL | Broad Permit for Segment Launching at Land Portion |
| Construction Noise Permit for night works and works in general holidays | GW-RS0668-17 | 7 Aug 2017 | 6 Feb 2018 | GCL | Pre-casted pile cap shell installation at E8-E13 |
| Marine Dumping Permit | EP/MD/18-031 | 1 Jul 2017 | 31 Dec 2017 | GCL | For dumping Type I sediment |

2.8 **IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES**

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

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

The landscape and visual (L&V) mitigation measures were also monitored on weekly basis in the reporting period. The monitoring status is summarized in *Appendix C*.

2.9 **SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT**

Results for 1-hour TSP, 24-hour TSP and construction noise monitoring complied with the Action/ Limit levels in the reporting period.

Two (2) Action Level of Suspended Solids (SS) exceedances were recorded for water quality impact monitoring in the reporting month. The exceedances were considered not related to this Contract upon further investigation and the investigation report is presented in *Appendix N*.

Cumulative statistics on exceedances is provided in *Appendix N*.

2.10 **SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS**

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

There was no environmental complaint, notification of summons or successful prosecution recorded in the reporting period.

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

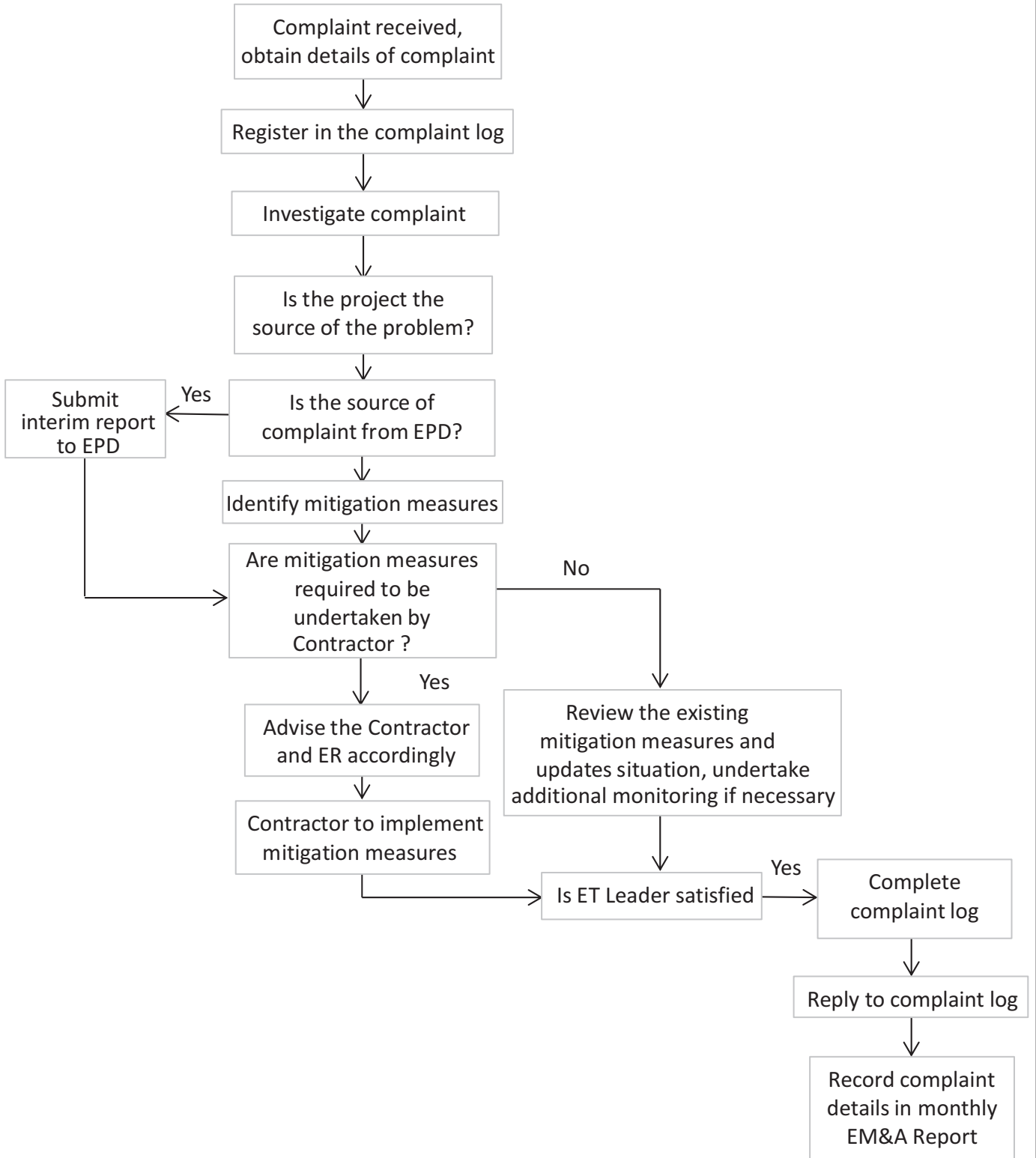


Figure 2.6

Environmental Complaint Handling Procedure

3 *FUTURE KEY ISSUES*

3.1 *CONSTRUCTION PROGRAMME FOR THE COMING MONTH*

As informed by the Contractor, the major works for this Contract in January 2018 will be:

Land-based Works

- Pier construction;
- Re-alignment of Cheung Tung Road;
- Road works along North Lantau Highway;
- Launching gantry operation;
- Installation of pier head and deck segments; and
- Slope work of Viaducts A, B & C.

3.2 *KEY ISSUES FOR THE COMING MONTH*

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of January 2018 are mainly associated with dust, noise, marine water quality, marine ecology and waste management issues.

3.3 *MONITORING SCHEDULE FOR THE COMING MONTH*

The tentative schedules for environmental monitoring in January 2018 are provided in *Appendix F*.

4.1 CONCLUSIONS

This Fiftieth Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 31 December 2017 in accordance with the Updated EM&A Manual and the requirements of the Environmental Permits (EP-354/2009/D and EP-353/2009/K).

Air quality (1-hour TSP and 24-hour TSP), noise, water quality (DO, turbidity and SS) and dolphin monitoring were carried out in the reporting month. Results for air quality and noise monitoring complied with the Action and Limit levels in the reporting period.

Two (2) Action Level of Suspended Solids (SS) exceedances were recorded for water quality impact monitoring in the reporting month. Investigation findings suggested the observed water quality exceedances were not related to the works under this Contract.

Four (4) groups of 13 Chinese White Dolphins were sighted during the two sets of monitoring surveys in December 2017. During this month of dolphin monitoring, no unacceptable impact from the construction activities of the TM-CLKL Southern Connection Viaduct Section on Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was noticeable from general observations.

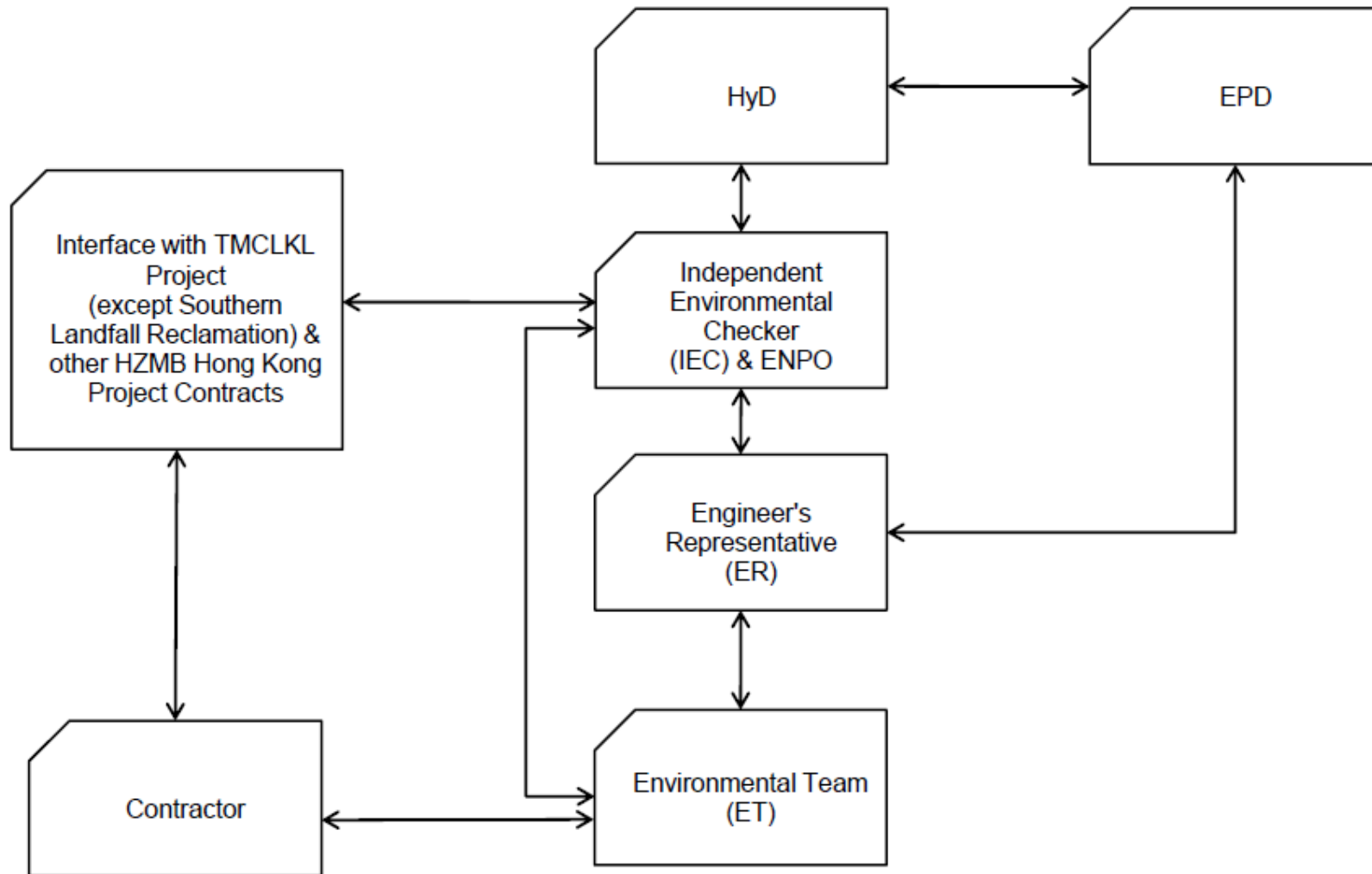
Environmental site inspection was carried out four (4) times in December 2017. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audits.

There was no environmental complaint, notification of summons or successful prosecution recorded in the 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



↔ Line of Communication

Appendix B

Three-Month Rolling Construction Programme

| Activity ID | Activity Name | Orig. Durn. | Act. Start / FC Early Start | Rem. Durn. | Act. Finish / FC Early Finish | Late Start | Late Finish | Total Float | Physical % Complete | 2017 | | | | | 2018 | | | | | | | | | | | | | | |
|--------------------------------------------------------------|----------------------------------------------------------------|-------------|-----------------------------|-------------|-------------------------------|------------|-------------|-------------|---------------------|----------|---------------|----|----|----|---------|----------------|----|----|----|----------|----|----|----|----|-------|----|----|----|----|
| | | | | | | | | | | December | | | | | January | | | | | February | | | | | March | | | | |
| | | | | | | | | | | 20 | 27 | 04 | 11 | 18 | 25 | 01 | 08 | 15 | 22 | 29 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 |
| Contract Milestones | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Key Dates for Completion | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stage of the Works | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Completion Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| KD03 | KD3 - Stage 3: TCSS Along NLH Near Viaduct C, D (EoT 8-Apr-16) | | 0 | | 0 | 21-Dec-17* | | 08-Apr-16 | -621 | 0% | | | | | | | | | | | | | | | | | | | |
| Portion Handover Dates | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Possession of the Works Area | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Access Dates | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POS02-6B | Portion A - Area 6B (To be confirmed) | | 0 | 21-Dec-17* | 0 | | 31-Jul-20 | | 954 | 0% | | | | | | | | | | | | | | | | | | | |
| Design | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Detailed Design | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Slope Works Near Viaduct A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Feature 9SE-B/FR8, B/R1, B/R2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Slope Works Design | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARDD0596-1 | IC/SO Approval of Slope Combined AIP/DDA - CP11.01 | | 60 | 13-Jun-17 A | 30 | 27-Jan-18 | 13-Jun-16 | 18-Jul-16 | -456 | 70% | [Planned Bar] | | | | | | | | | | | | | | | | | | |
| Slope Works Near Viaduct C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Feature 10NW-C/C22, C/C26, C/C27, C/F13, C/F14, C/F15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Slope Works Design | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARDD0589-2 | IC/SO Approval of Combined AIP/DDA - CP13.01 | | 28 | 01-Jun-17 A | 20 | 16-Jan-18 | 26-Jul-16 | 17-Aug-16 | -420 | 90% | [Planned Bar] | | | | | | | | | | | | | | | | | | |
| Procurement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Precast Parapets & Barriers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viaduct A to F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Precast Parapet Manufacture | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PP6011-01 | Viaduct A - Precast Parapets/Barriers Production | | 90 | 01-Sep-16 A | 90 | 16-Apr-18 | 12-Sep-16 | 30-Dec-16 | -379 | 55% | [Planned Bar] | | | | | [Critical Bar] | | | | | | | | | | | | | |
| PP6011-02 | Viaduct B - Precast Parapets/Barriers Production | | 120 | 03-May-16 A | 30 | 27-Jan-18 | 20-Sep-16 | 26-Oct-16 | -373 | 80% | [Planned Bar] | | | | | [Critical Bar] | | | | | | | | | | | | | |
| PP6011-05 | Viaduct E - Precast Parapets/Barriers Production | | 180 | 02-Jul-16 A | 156 | 06-Jul-18 | 16-May-16 | 18-Nov-16 | -479 | 40% | [Planned Bar] | | | | | [Critical Bar] | | | | | | | | | | | | | |
| PP6011-06 | Viaduct F - Precast Parapets/Barriers Production | | 198 | 21-Dec-17* | 198 | 24-Aug-18 | 18-Feb-17 | 18-Oct-17 | -251 | 0% | [Planned Bar] | | | | | [Critical Bar] | | | | | | | | | | | | | |
| Bearings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viaduct F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bearing Design & Manufacture | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PPBRF9 | Bearing Delivery - Viaduct F | | 34 | 18-Jul-17 A | 66 | 14-Mar-18 | 14-May-20 | 31-Jul-20 | 704 | 30% | [Planned Bar] | | | | | | | | | | | | | | | | | | |
| Movement Joints | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viaduct A to F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MJ Design & Manufacture | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PP6MJ02-2 | Manufacture & delivery of MJ | | 180 | 01-Apr-17 A | 90 | 16-Apr-18 | 07-May-16 | 23-Aug-16 | -485 | 80% | [Planned Bar] | | | | | | | | | | | | | | | | | | |
| PP7450 | Site preparation of MJ for Viaduct D | | 12 | 22-Feb-18 | 12 | 07-Mar-18 | 10-Aug-16 | 23-Aug-16 | -455 | 0% | | | | | | [Critical Bar] | | | | | | | | | | | | | |
| PP7530 | Site preparation of MJ for Viaduct C | | 12 | 07-Mar-18 | 12 | 20-Mar-18 | 07-Sep-16 | 21-Sep-16 | -442 | 0% | | | | | | [Critical Bar] | | | | | | | | | | | | | |
| Construction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Foundation & Substructure Works | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ramp A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: TMCLK-DWPI-1-M55
 Layout: J3518-DWP-3MRP Submission - M55
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

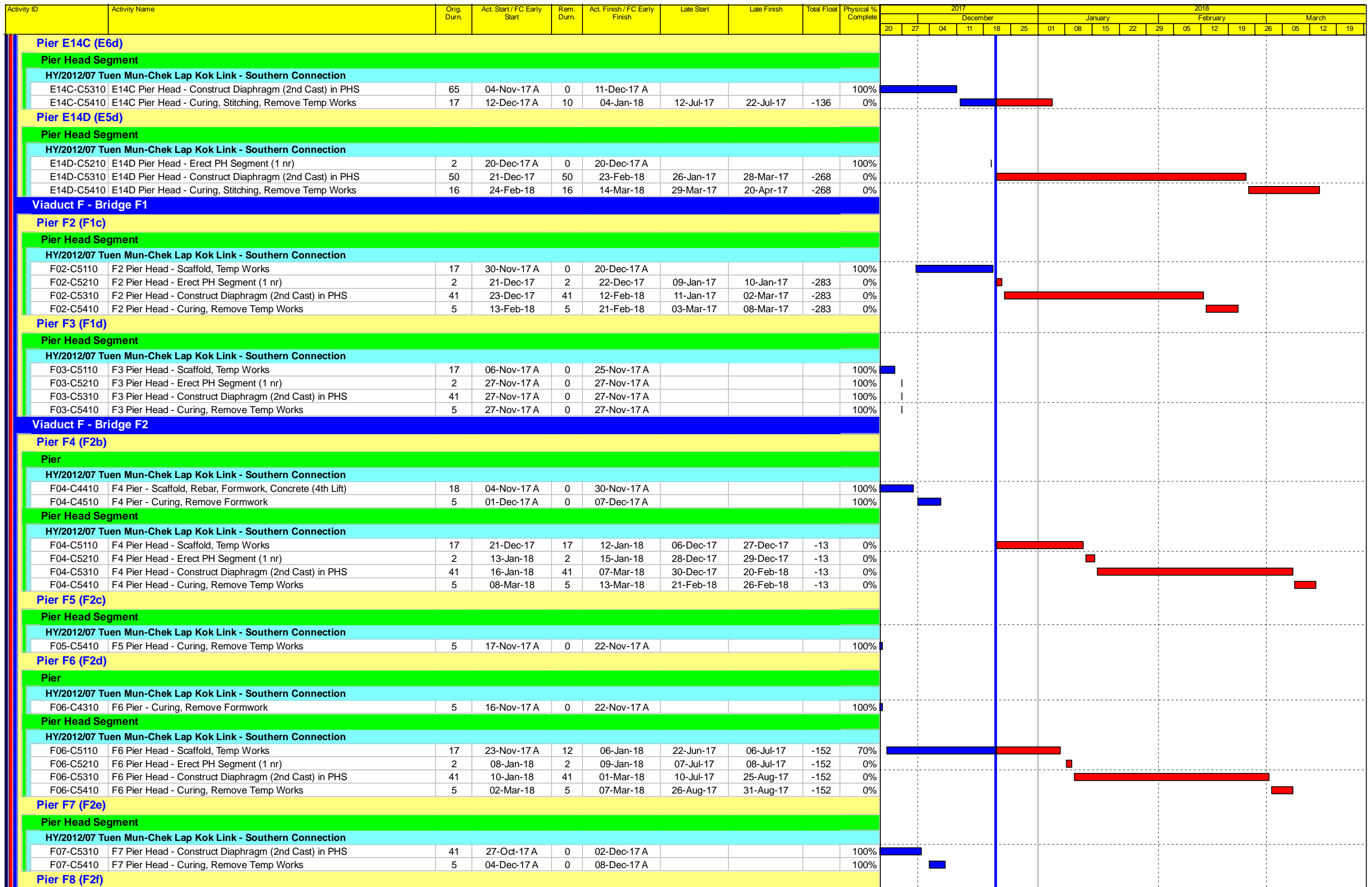
Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 1 of 11 Pages)
(Progress as of 21-Dec-17)

| Date | Revision | Checked | Approved |
|------------|----------|---------|----------|
| 30-Oct-17 | | PKN | HF |
| 28-Nov-... | | PKN | HF |
| 03-Jan-18 | | PKN | HF |

DWG. No.:
J3518/GCL/PGM/3MRP-M55

| Activity ID | Activity Name | Orig. Durn. | Act. Start / FC Early Start | Rem. Durn. | Act. Finish / FC Early Finish | Late Start | Late Finish | Total Float | Physical % Complete | 2017 | | | | | 2018 | | | | | | | | | | | | | | |
|--------------------------------------------------------------------|------------------------------------------------------------------------|-------------|-----------------------------|------------|-------------------------------|------------|-------------|-------------|---------------------|----------|----|----|----|----|---------|----|----|----|----|----------|----|----|----|----|-------|----|----|----|----|
| | | | | | | | | | | December | | | | | January | | | | | February | | | | | March | | | | |
| | | | | | | | | | | 20 | 27 | 04 | 11 | 18 | 25 | 01 | 08 | 15 | 22 | 29 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 |
| Abutment & Approach Ramp A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ramp Finishes, E&M & Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARA-C7710 | Ramp A - Parapet Panels | 30 | 21-Dec-17 | 30 | 27-Jan-18 | 20-Oct-16 | 23-Nov-16 | -349 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARA-C7720 | Ramp A - Ducting, Gantry & TCSS Provisions (KD5) | 30 | 08-Jan-18 | 30 | 10-Feb-18 | 03-Nov-16 | 07-Dec-16 | -349 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARA-C7810 | Ramp A - Drainage, Fire Main & E&M Services | 42 | 29-Jan-18 | 42 | 21-Mar-18 | 23-Dec-16 | 16-Feb-17 | -324 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARA-C7820 | Ramp A - Railings, Light Poles, Signs & Street Furniture | 24 | 12-Feb-18 | 24 | 14-Mar-18 | 10-Feb-17 | 09-Mar-17 | -300 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARA-C7830 | Ramp A - Deck Paving & Roadmarking (KD11) | 18 | 15-Mar-18 | 18 | 09-Apr-18 | 10-Mar-17 | 30-Mar-17 | -300 | 0% | | | | | | | | | | | | | | | | | | | | |
| Ramp B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Abutment & Approach Ramp B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ramp Structure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARB-C6130 | Ramp B - RE Wall - Panel Installation from 3rd Row to 6th Row | 66 | 30-Aug-17 A | 28 | 25-Jan-18 | 06-Jun-16 | 09-Jul-16 | -461 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARB-C6135 | Ramp B - RE Wall - Panel installation from 7th Row to 11th Row | 72 | 26-Jan-18 | 72 | 27-Apr-18 | 11-Jul-16 | 04-Oct-16 | -461 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARB-C6140 | Ramp B - RC Wall - Base Slab | 92 | 21-Dec-17 | 92 | 18-Apr-18 | 04-Jun-16 | 22-Sep-16 | -462 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARB-C6150 | Ramp B - RC Wall - Side Wall | 92 | 08-Jan-18 | 92 | 03-May-18 | 20-Jun-16 | 07-Oct-16 | -462 | 0% | | | | | | | | | | | | | | | | | | | | |
| Ramp C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Abutment & Approach Ramp C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ramp Finishes, E&M & Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARC-C7715 | Ramp C - Parapet Panels (Remaining) | 24 | 25-Apr-17 A | 26 | 23-Jan-18 | 03-Jun-16 | 05-Jul-16 | -463 | 95% | | | | | | | | | | | | | | | | | | | | |
| ARC-C7720 | Ramp C - Ducting, Gantry & TCSS Provisions (KD4) | 36 | 24-Jan-18 | 36 | 09-Mar-18 | 06-Jul-16 | 16-Aug-16 | -463 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARC-C7810 | Ramp C - Drainage, Fire Main & E&M Services | 54 | 14-Feb-18 | 54 | 25-Apr-18 | 27-Jul-16 | 28-Sep-16 | -463 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARC-C7820 | Ramp C - Railings, Light Poles, Signs & Street Furniture | 30 | 03-Mar-18 | 30 | 11-Apr-18 | 10-Aug-16 | 13-Sep-16 | -463 | 0% | | | | | | | | | | | | | | | | | | | | |
| Ramp D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Abutment & Approach Ramp D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ramp Finishes, E&M & Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARD-C7720 | Ramp D - Ducting, Gantry & TCSS Provisions (KD4) | 36 | 21-Dec-17 | 36 | 03-Feb-18 | 02-Feb-16 | 17-Mar-16 | -559 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARD-C7810 | Ramp D - Drainage, Fire Main & E&M Services | 54 | 15-Jan-18 | 54 | 21-Mar-18 | 26-Feb-16 | 04-May-16 | -559 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARD-C7820 | Ramp D - Railings, Light Poles, Signs & Street Furniture | 30 | 05-Feb-18 | 30 | 14-Mar-18 | 18-Mar-16 | 26-Apr-16 | -559 | 0% | | | | | | | | | | | | | | | | | | | | |
| ARD-C7830 | Ramp D - Deck Paving & Roadmarking (KD14) | 18 | 15-Mar-18 | 18 | 09-Apr-18 | 27-Apr-16 | 19-May-16 | -559 | 0% | | | | | | | | | | | | | | | | | | | | |
| Viaduct E - Bridge E5, E6, E7, E8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier E12D (E5b) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pile Cap Dolphin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E12D-C3070 | E12D Dolphin - Marine Pile Cap - Collar frame to perm. casing of pile | 3 | 21-Dec-17* | 3 | 23-Dec-17 | 06-Dec-17 | 08-Dec-17 | -13 | 0% | | | | | | | | | | | | | | | | | | | | |
| E12D-C3080 | E12D Dolphin - Marine Pile Cap - Install precast shell in position | 24 | 27-Dec-17 | 24 | 24-Jan-18 | 09-Dec-17 | 09-Jan-18 | -13 | 0% | | | | | | | | | | | | | | | | | | | | |
| E12D-C3130 | E12D Dolphin - Marine Pile Cap - Fixings, Dewatering & Trim Pile | 11 | 25-Jan-18 | 11 | 06-Feb-18 | 10-Jan-18 | 22-Jan-18 | -13 | 0% | | | | | | | | | | | | | | | | | | | | |
| E12D-C3150 | E12D Dolphin - Marine Pile Cap - Rebar, Concreting | 5 | 07-Feb-18 | 5 | 12-Feb-18 | 23-Jan-18 | 27-Jan-18 | -13 | 0% | | | | | | | | | | | | | | | | | | | | |
| E12D-C3160 | E12D Dolphin - Marine Pile Cap - CJ preparation & Curing | 3 | 13-Feb-18 | 3 | 15-Feb-18 | 29-Jan-18 | 31-Jan-18 | -13 | 0% | | | | | | | | | | | | | | | | | | | | |
| Pier E13A (E8c) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pile Cap Dolphin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E13A-C3070 | E13A Dolphin - Marine Pile Cap - Floating Seal & Casing Head Steelwork | 3 | 20-Feb-18 | 3 | 22-Feb-18 | 01-Feb-18 | 03-Feb-18 | -13 | 0% | | | | | | | | | | | | | | | | | | | | |
| E13A-C3080 | E13A Dolphin - Marine Pile Cap - Install precast shell in position | 24 | 23-Feb-18 | 24 | 22-Mar-18 | 05-Feb-18 | 07-Mar-18 | -13 | 0% | | | | | | | | | | | | | | | | | | | | |
| Pier E13D (E5c) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pile Cap Dolphin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E13D-C3070 | E13D Dolphin - Marine Pile Cap - Floating Seal & Casing Head Steelwork | 3 | 12-Dec-17 A | 0 | 14-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| E13D-C3080 | E13D Dolphin - Marine Pile Cap - Install precast shell in position | 24 | 15-Dec-17 A | 0 | 18-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| E13D-C3130 | E13D Dolphin - Marine Pile Cap - Fixings, Dewatering & Trim Pile | 11 | 19-Dec-17 A | 9 | 03-Jan-18 | 10-Mar-18 | 20-Mar-18 | 62 | 0% | | | | | | | | | | | | | | | | | | | | |
| E13D-C3150 | E13D Dolphin - Marine Pile Cap - Rebar, Concreting | 5 | 04-Jan-18 | 5 | 09-Jan-18 | 21-Mar-18 | 26-Mar-18 | 62 | 0% | | | | | | | | | | | | | | | | | | | | |
| E13D-C3160 | E13D Dolphin - Marine Pile Cap - CJ preparation & Curing | 3 | 10-Jan-18 | 3 | 12-Jan-18 | 27-Mar-18 | 29-Mar-18 | 62 | 0% | | | | | | | | | | | | | | | | | | | | |
| Pier E14A (E8d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E14A-C5410 | E14A Pier Head - Curing, Stitching, Remove Temp Works | 17 | 07-Nov-17 A | 9 | 03-Jan-18 | 20-Jul-17 | 29-Jul-17 | -129 | 85% | | | | | | | | | | | | | | | | | | | | |

| <ul style="list-style-type: none"> ■ Actual Work ■ Planned Bar ■ Critical Bar ◆ Milestone | Project ID: TMCLK-DWPI-1-M55 Layout: J3518-DWP-3MRP Submission - M55 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort. | Tuen Mun - Chek Lap Kok Link - Southern Connection 3-Month Rolling Programme (Page 2 of 11 Pages) (Progress as of 21-Dec-17) | <table border="1"> <thead> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> </thead> <tbody> <tr> <td>30-Oct-17</td> <td></td> <td>PKN</td> <td>HF</td> </tr> <tr> <td>28-Nov-...</td> <td></td> <td>PKN</td> <td>HF</td> </tr> <tr> <td>03-Jan-18</td> <td></td> <td>PKN</td> <td>HF</td> </tr> </tbody> </table> | Date | Revision | Checked | Approved | 30-Oct-17 | | PKN | HF | 28-Nov-... | | PKN | HF | 03-Jan-18 | | PKN | HF | DWG. No.: J3518/GCL/PGM/3MRP-M55 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------|----------|-----------|--|-----|----|------------|--|-----|----|-----------|--|-----|----|-------------------------------------------------------|
| Date | Revision | Checked | Approved | | | | | | | | | | | | | | | | | |
| 30-Oct-17 | | PKN | HF | | | | | | | | | | | | | | | | | |
| 28-Nov-... | | PKN | HF | | | | | | | | | | | | | | | | | |
| 03-Jan-18 | | PKN | HF | | | | | | | | | | | | | | | | | |



■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: TMCLK-DWPI-1-M55
 Layout: J3518-DWP-3MRP Submission - M55
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 3 of 11 Pages)
(Progress as of 21-Dec-17)

| Date | Revision | Checked | Approved |
|------------|----------|---------|----------|
| 30-Oct-17 | | PKN | HF |
| 28-Nov-... | | PKN | HF |
| 03-Jan-18 | | PKN | HF |

DWG. No.:
J3518/GCL/PGM/3MRP-M55

| Activity ID | Activity Name | Orig. Durn. | Act. Start / FC Early Start | Rem. Durn. | Act. Finish / FC Early Finish | Late Start | Late Finish | Total Float | Physical % Complete | 2017 | | | | | 2018 | | | | | | | | | |
|--------------------------------------------------------------------|-----------------------------------------------------------|-------------|-----------------------------|------------|-------------------------------|------------|-------------|-------------|---------------------|-------------------|----|----|----|----|---------|----|----|----|----------|----|----|-------|----|----|
| | | | | | | | | | | December | | | | | January | | | | February | | | March | | |
| | | | | | | | | | | 20 | 27 | 04 | 11 | 18 | 25 | 01 | 08 | 15 | 22 | 29 | 05 | 12 | 19 | 26 |
| Pile Cap | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F08-C3110 | F8 Pile Cap - Excavate, Break Pile Head | 15 | 15-Nov-17 A | 0 | 08-Dec-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| F08-C3210 | F8 Pile Cap - Blinding, Formwork, Rebar, Concrete | 19 | 09-Dec-17 A | 10 | 04-Jan-18 | 21-Sep-17 | 03-Oct-17 | -75 | 90% | [Planned Bar] | | | | | | | | | | | | | | |
| F08-C3310 | F8 Pile Cap - Curing, Remove Formwork, Backfill | 12 | 05-Jan-18 | 12 | 18-Jan-18 | 04-Oct-17 | 18-Oct-17 | -75 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| Pier | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F08-C4110 | F8 Pier - Scaffold, Rebar, Formwork, Concrete (1st Lift) | 13 | 19-Jan-18* | 13 | 02-Feb-18 | 22-Dec-17 | 09-Jan-18 | -21 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| F08-C4210 | F8 Pier - Curing, Remove Formwork | 5 | 03-Feb-18 | 5 | 08-Feb-18 | 10-Jan-18 | 15-Jan-18 | -21 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F08-C5110 | F8 Pier Head - Scaffold, Temp Works | 17 | 09-Feb-18 | 17 | 03-Mar-18 | 16-Jan-18 | 03-Feb-18 | -21 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| F08-C5210 | F8 Pier Head - Erect PH Segment (1 nr) | 2 | 05-Mar-18 | 2 | 06-Mar-18 | 05-Feb-18 | 06-Feb-18 | -21 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| F08-C5310 | F8 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 07-Mar-18 | 41 | 27-Apr-18 | 07-Feb-18 | 29-Mar-18 | -21 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| Viaduct F - Bridge F3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier F9 (F3d) | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F09-C5110 | F9 Pier Head - Scaffold, Temp Works | 17 | 14-Nov-17 A | 0 | 04-Dec-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| F09-C5210 | F9 Pier Head - Erect PH Segment (2 nr) | 2 | 28-Nov-17 A | 0 | 05-Dec-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| F09-C5310 | F9 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 05-Dec-17 A | 0 | 05-Dec-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| F09-C5410 | F9 Pier Head - Curing, Remove Temp Works | 5 | 05-Dec-17 A | 0 | 05-Dec-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| Pier F10 (F3c) | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F10-C5110 | F10 Pier Head - Scaffold, Temp Works | 17 | 21-Dec-17* | 17 | 12-Jan-18 | 20-Sep-17 | 11-Oct-17 | -76 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| F10-C5210 | F10 Pier Head - Erect PH Segment (2 nr) | 2 | 13-Jan-18 | 2 | 15-Jan-18 | 12-Oct-17 | 13-Oct-17 | -76 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| F10-C5310 | F10 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 16-Jan-18 | 41 | 07-Mar-18 | 14-Oct-17 | 01-Dec-17 | -76 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| F10-C5410 | F10 Pier Head - Curing, Remove Temp Works | 5 | 08-Mar-18 | 5 | 13-Mar-18 | 02-Dec-17 | 07-Dec-17 | -76 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| Pier F11 (F3b) | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F11-C5110 | F11 Pier Head - Scaffold, Temp Works | 17 | 21-Dec-17 | 17 | 12-Jan-18 | 14-Dec-17 | 05-Jan-18 | -6 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| F11-C5210 | F11 Pier Head - Erect PH Segment (2 nr) | 2 | 13-Jan-18 | 2 | 15-Jan-18 | 06-Jan-18 | 08-Jan-18 | -6 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| F11-C5310 | F11 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 16-Jan-18 | 41 | 07-Mar-18 | 09-Jan-18 | 28-Feb-18 | -6 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| F11-C5410 | F11 Pier Head - Curing, Remove Temp Works | 5 | 08-Mar-18 | 5 | 13-Mar-18 | 01-Mar-18 | 06-Mar-18 | -6 | 0% | [Critical Bar] | | | | | | | | | | | | | | |
| Pier F12 (F3a) | | | | | | | | | | | | | | | | | | | | | | | | |
| Pile Cap | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F12-C3310 | F12 Pile Cap - Curing, Remove Formwork, Backfill | 14 | 14-Nov-17 A | 0 | 29-Nov-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| Pier | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F12-C4110 | F12 Pier - Scaffold, Rebar, Formwork, Concrete (Pier A) | 13 | 17-Nov-17 A | 0 | 19-Dec-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| F12-C4210 | F12 Pier - Curing, Remove Formwork (Pier A) | 5 | 20-Dec-17 A | 5 | 28-Dec-17 | 27-Jul-20 | 31-Jul-20 | 765 | 0% | [Planned Bar] | | | | | | | | | | | | | | |
| F12-C4230 | F12 Pier - Scaffold, Rebar, Formwork, Concrete (Pier B) | 13 | 17-Nov-17 A | 0 | 19-Dec-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| F12-C4410 | F12 Pier - Curing, Remove Formwork (Pier B) | 5 | 20-Dec-17 A | 5 | 28-Dec-17 | 09-Feb-18 | 14-Feb-18 | 40 | 0% | [Planned Bar] | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F12-C5110 | F12 Pier Head - Scaffold, Temp Works | 17 | 29-Dec-17 | 17 | 18-Jan-18 | 15-Feb-18 | 09-Mar-18 | 40 | 0% | [Planned Bar] | | | | | | | | | | | | | | |
| F12-C5210 | F12 Pier Head - Erect PH Segment (2 nr) | 2 | 19-Jan-18 | 2 | 20-Jan-18 | 10-Mar-18 | 12-Mar-18 | 40 | 0% | [Planned Bar] | | | | | | | | | | | | | | |
| F12-C5310 | F12 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 22-Jan-18 | 41 | 13-Mar-18 | 13-Mar-18 | 04-May-18 | 40 | 0% | [Planned Bar] | | | | | | | | | | | | | | |
| F12-C5410 | F12 Pier Head - Curing, Remove Temp Works | 5 | 14-Mar-18 | 5 | 19-Mar-18 | 05-May-18 | 10-May-18 | 40 | 0% | [Planned Bar] | | | | | | | | | | | | | | |
| Viaduct F - Bridge F4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier F16 (F5a/F4a) | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | |
| F16-C4210 | F16 Pier - Scaffold, Rebar, Formwork, Concrete (2nd Lift) | 18 | 12-Oct-17 A | 0 | 23-Nov-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| F16-C4310 | F16 Pier - Scaffold, Rebar, Formwork, Concrete (3rd Lift) | 18 | 23-Nov-17 A | 0 | 23-Nov-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |
| F16-C4410 | F16 Pier - Curing, Remove Temp Works | 5 | 23-Nov-17 A | 0 | 23-Nov-17 A | | | | 100% | [Actual Work Bar] | | | | | | | | | | | | | | |

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: TMCLK-DWPI-1-M55
 Layout: J3518-DWP-3MRP Submission - M55
 Filter: TASK filters: 3-Month Lookahead, No CC
 Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 4 of 11 Pages)
(Progress as of 21-Dec-17)

| Date | Revision | Checked | Approved |
|------------|----------|---------|----------|
| 30-Oct-17 | | PKN | HF |
| 28-Nov-... | | PKN | HF |
| 03-Jan-18 | | PKN | HF |

DWG. No.:
J3518/GCL/PGM/3MRP-M55

| Activity ID | Activity Name | Orig. Durn. | Act. Start / FC Early Start | Rem. Durn. | Act. Finish / FC Early Finish | Late Start | Late Finish | Total Float | Physical % Complete | 2017 | | | | | 2018 | | | | | | | | | | | | | | |
|--------------------------------------------------------------------|--------------------------------------------------------------|-------------|-----------------------------|------------|-------------------------------|------------|-------------|-------------|---------------------|----------|----|----|----|----|---------|----|----|----|----|----------|----|----|----|----|-------|----|----|----|----|
| | | | | | | | | | | December | | | | | January | | | | | February | | | | | March | | | | |
| | | | | | | | | | | 20 | 27 | 04 | 11 | 18 | 25 | 01 | 08 | 15 | 22 | 29 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F16-C5110 | F16 Pier Head - Construct Footing for Falsework | 12 | 20-Nov-17 A | 0 | 08-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| F16-C5210 | F16 Pier Head - Erect Falsework & Temp Platform | 45 | 09-Dec-17 A | 30 | 27-Jan-18 | 30-Aug-17 | 04-Oct-17 | -94 | 0% | | | | | | | | | | | | | | | | | | | | |
| F16-C5310 | F16 Pier Head - Construct In-Situ PH Segment & Span Segments | 60 | 29-Jan-18 | 60 | 16-Apr-18 | 06-Oct-17 | 15-Dec-17 | -94 | 0% | | | | | | | | | | | | | | | | | | | | |
| Pier F17 (F4b) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17-C4210 | F17 Pier - Scaffold, Rebar, Formwork, Concrete (2nd Lift) | 18 | 19-Oct-17 A | 0 | 12-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| F17-C4310 | F17 Pier - Curing, Remove Temp Works | 5 | 13-Dec-17 A | 0 | 19-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17-C5110 | F17 Pier Head - Scaffold, Temp Works | 17 | 21-Dec-17 | 17 | 12-Jan-18 | 29-Dec-17 | 18-Jan-18 | 5 | 0% | | | | | | | | | | | | | | | | | | | | |
| F17-C5210 | F17 Pier Head - Erect PH Segment (1 nr) | 2 | 13-Jan-18 | 2 | 15-Jan-18 | 19-Jan-18 | 20-Jan-18 | 5 | 0% | | | | | | | | | | | | | | | | | | | | |
| F17-C5310 | F17 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 16-Jan-18 | 41 | 07-Mar-18 | 22-Jan-18 | 13-Mar-18 | 5 | 0% | | | | | | | | | | | | | | | | | | | | |
| F17-C5410 | F17 Pier Head - Curing, Remove Temp Works | 5 | 08-Mar-18 | 5 | 13-Mar-18 | 14-Mar-18 | 19-Mar-18 | 5 | 0% | | | | | | | | | | | | | | | | | | | | |
| Pier F18 (F4c) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F18-C4110 | F18 Pier - Scaffold, Rebar, Formwork, Concrete (1st Lift) | 13 | 11-Nov-17 A | 0 | 07-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| F18-C4210 | F18 Pier - Scaffold, Rebar, Formwork, Concrete (2nd Lift) | 18 | 07-Dec-17 A | 0 | 07-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| F18-C4310 | F18 Pier - Curing, Remove Temp Works | 5 | 07-Dec-17 A | 0 | 07-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F18-C5110 | F18 Pier Head - Scaffold, Temp Works | 17 | 21-Dec-17 | 17 | 12-Jan-18 | 10-Feb-18 | 05-Mar-18 | 41 | 0% | | | | | | | | | | | | | | | | | | | | |
| F18-C5210 | F18 Pier Head - Erect PH Segment (1 nr) | 2 | 13-Jan-18 | 2 | 15-Jan-18 | 06-Mar-18 | 07-Mar-18 | 41 | 0% | | | | | | | | | | | | | | | | | | | | |
| F18-C5310 | F18 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 16-Jan-18 | 41 | 07-Mar-18 | 08-Mar-18 | 28-Apr-18 | 41 | 0% | | | | | | | | | | | | | | | | | | | | |
| F18-C5410 | F18 Pier Head - Curing, Remove Temp Works | 5 | 08-Mar-18 | 5 | 13-Mar-18 | 30-Apr-18 | 05-May-18 | 41 | 0% | | | | | | | | | | | | | | | | | | | | |
| Viaduct F - Bridge F5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier F13 (F5d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F13-C5110 | F13 Pier Head - Scaffold, Temp Works | 17 | 08-Nov-17 A | 0 | 06-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| F13-C5210 | F13 Pier Head - Erect PH Segment (1 nr) | 2 | 07-Dec-17 A | 0 | 07-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| F13-C5310 | F13 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 08-Dec-17 A | 30 | 27-Jan-18 | 25-Apr-17 | 01-Jun-17 | -199 | 0% | | | | | | | | | | | | | | | | | | | | |
| F13-C5410 | F13 Pier Head - Curing, Remove Temp Works | 5 | 29-Jan-18 | 5 | 02-Feb-18 | 02-Jun-17 | 07-Jun-17 | -199 | 0% | | | | | | | | | | | | | | | | | | | | |
| Pier F14 (F5c) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F14-C5110 | F14 Pier Head - Scaffold, Temp Works | 17 | 21-Dec-17 | 17 | 12-Jan-18 | 29-Nov-17 | 18-Dec-17 | -19 | 0% | | | | | | | | | | | | | | | | | | | | |
| F14-C5210 | F14 Pier Head - Erect PH Segment (1 nr) | 2 | 13-Jan-18 | 2 | 15-Jan-18 | 19-Dec-17 | 20-Dec-17 | -19 | 0% | | | | | | | | | | | | | | | | | | | | |
| F14-C5310 | F14 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 16-Jan-18 | 41 | 07-Mar-18 | 21-Dec-17 | 09-Feb-18 | -19 | 0% | | | | | | | | | | | | | | | | | | | | |
| F14-C5410 | F14 Pier Head - Curing, Remove Temp Works | 5 | 08-Mar-18 | 5 | 13-Mar-18 | 10-Feb-18 | 15-Feb-18 | -19 | 0% | | | | | | | | | | | | | | | | | | | | |
| Pier F15 (F5b) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pile Cap | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15-C3210 | F15 Pile Cap - Blinding, Formwork, Rebar, Concrete | 19 | 20-Nov-17 A | 0 | 04-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| F15-C3310 | F15 Pile Cap - Curing, Remove Formwork, Backfill | 12 | 05-Dec-17 A | 0 | 08-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| Pier | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15-C4110 | F15 Pier - Scaffold, Rebar, Formwork, Concrete (1st Lift) | 13 | 09-Dec-17 A | 0 | 15-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| F15-C4210 | F15 Pier - Scaffold, Rebar, Formwork, Concrete (2nd Lift) | 18 | 16-Dec-17 A | 12 | 06-Jan-18 | 18-Nov-17 | 01-Dec-17 | -28 | 0% | | | | | | | | | | | | | | | | | | | | |
| F15-C4310 | F15 Pier - Scaffold, Rebar, Formwork, Concrete (3rd Lift) | 18 | 08-Jan-18 | 18 | 27-Jan-18 | 02-Dec-17 | 22-Dec-17 | -28 | 0% | | | | | | | | | | | | | | | | | | | | |
| F15-C4410 | F15 Pier - Curing, Remove Temp Works | 5 | 29-Jan-18 | 5 | 02-Feb-18 | 23-Dec-17 | 30-Dec-17 | -28 | 0% | | | | | | | | | | | | | | | | | | | | |
| Pier Head Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15-C5110 | F15 Pier Head - Scaffold, Temp Works | 17 | 03-Feb-18 | 17 | 26-Feb-18 | 02-Jan-18 | 20-Jan-18 | -28 | 0% | | | | | | | | | | | | | | | | | | | | |
| F15-C5210 | F15 Pier Head - Erect PH Segment (2 nr) | 2 | 27-Feb-18 | 2 | 28-Feb-18 | 22-Jan-18 | 23-Jan-18 | -28 | 0% | | | | | | | | | | | | | | | | | | | | |
| F15-C5310 | F15 Pier Head - Construct Diaphragm (2nd Cast) in PHS | 41 | 01-Mar-18 | 41 | 21-Apr-18 | 24-Jan-18 | 15-Mar-18 | -28 | 0% | | | | | | | | | | | | | | | | | | | | |

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: TMCLK-DWPI-1-M55
 Layout: J3518-DWP-3MRP Submission - M55
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 5 of 11 Pages)
(Progress as of 21-Dec-17)

| Date | Revision | Checked | Approved |
|------------|----------|---------|----------|
| 30-Oct-17 | | PKN | HF |
| 28-Nov-... | | PKN | HF |
| 03-Jan-18 | | PKN | HF |

DWG. No.:
J3518/GCL/PGM/3MRP-M55

| Activity ID | Activity Name | Orig. Durn. | Act. Start / FC Early Start | Rem. Durn. | Act. Finish / FC Early Finish | Late Start | Late Finish | Total Float | Physical % Complete | 2017 | | | | | 2018 | | | | | | | | | | | | | | | | |
|--------------------------------------------------------------------|--------------------------------------------------------------|-------------|-----------------------------|------------|-------------------------------|------------|-------------|-------------|---------------------|----------|----|----|----|----|---------|----|----|----|----|----------|----|----|----|----|-------|----|----|----|----|----|----|
| | | | | | | | | | | December | | | | | January | | | | | February | | | | | March | | | | | | |
| | | | | | | | | | | 20 | 27 | 04 | 11 | 18 | 25 | 01 | 08 | 15 | 22 | 29 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 06 | 13 |
| Ramp F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Abutment & Approach Ramp F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ramp Structure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARF-C6110 | Ramp F - Strip Beams | 24 | 21-Dec-17 | 24 | 20-Jan-18 | 01-Jun-17 | 28-Jun-17 | -170 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| ARF-C6120 | Ramp F - Ground Beams | 54 | 22-Jan-18 | 54 | 28-Mar-18 | 29-Jun-17 | 31-Aug-17 | -170 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| ARF-C6130 | Ramp F - RC Columns | 54 | 08-Mar-18 | 54 | 15-May-18 | 11-Aug-17 | 14-Oct-17 | -170 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| Superstructure & Associated Works | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viaduct A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge A2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Finishes, E&M and Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VA2-C7710 | Viaduct A2 - Parapet Panels | 48 | 21-Dec-17 | 48 | 21-Feb-18 | 12-Sep-16 | 09-Nov-16 | -379 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VA2-C7720 | Viaduct A2 - Gantry & TCSS Provisions (KD5) | 36 | 05-Feb-18 | 36 | 21-Mar-18 | 27-Oct-16 | 07-Dec-16 | -379 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VA2-C7810 | Viaduct A2 - Drainage, Fire Main & E&M Services | 60 | 22-Feb-18 | 60 | 08-May-18 | 10-Jan-17 | 23-Mar-17 | -330 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| Bridge A1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Span Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A10-C6510 | A10 - Cantilever Span (Remaining 7 nr) - KF | 14 | 01-Nov-17 A | 0 | 21-Nov-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | |
| A11-C6210 | A11 - Falsework for End Span to A10 | 24 | 24-Oct-17 A | 0 | 22-Nov-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | |
| A11-C6310 | A11 - End Span to A10 (4 nr) - Crane | 8 | 23-Nov-17 A | 0 | 29-Nov-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | |
| VA1-C6510 | Viaduct A1 - Final Stitch & Stressing to Span | 24 | 21-Dec-17 | 24 | 20-Jan-18 | 15-Aug-16 | 10-Sep-16 | -403 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| Deck Finishes, E&M and Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VA1-C7710 | Viaduct A1 - Parapet Panels | 60 | 22-Jan-18 | 60 | 09-Apr-18 | 12-Sep-16 | 23-Nov-16 | -403 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VA1-C7720 | Viaduct A1 - Gantry & TCSS Provisions (KD5) | 36 | 08-Mar-18 | 36 | 23-Apr-18 | 27-Oct-16 | 07-Dec-16 | -403 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| Viaduct B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge B3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Finishes, E&M and Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VB3-C7720 | Viaduct B3 - Gantry & TCSS Provisions (KD5) | 36 | 21-Dec-17* | 36 | 03-Feb-18 | 27-Oct-16 | 07-Dec-16 | -343 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VB3-C7810 | Viaduct B3 - Drainage, Fire Main & E&M Services | 60 | 08-Jan-18 | 60 | 21-Mar-18 | 10-Jan-17 | 23-Mar-17 | -294 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VB3-C7820 | Viaduct B3 - Railings, Light Poles, Signs & Street Furniture | 30 | 05-Feb-18 | 30 | 14-Mar-18 | 10-Feb-17 | 16-Mar-17 | -294 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VB3-C7830 | Viaduct B3 - Deck Paving & Roadmarking (KD12) | 18 | 15-Mar-18 | 18 | 09-Apr-18 | 17-Mar-17 | 07-Apr-17 | -294 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| Bridge B2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Finishes, E&M and Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VB2-C7710 | Viaduct B2 - Parapet Panels | 60 | 21-Aug-17 A | 42 | 10-Feb-18 | 05-Oct-16 | 23-Nov-16 | -361 | 50% | | | | | | | | | | | | | | | | | | | | | | |
| VB2-C7720 | Viaduct B2 - Gantry & TCSS Provisions (KD5) | 36 | 15-Jan-18 | 36 | 28-Feb-18 | 27-Oct-16 | 07-Dec-16 | -361 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VB2-C7810 | Viaduct B2 - Drainage, Fire Main & E&M Services | 48 | 12-Feb-18 | 48 | 16-Apr-18 | 24-Jan-17 | 23-Mar-17 | -312 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VB2-C7820 | Viaduct B2 - Railings, Light Poles, Signs & Street Furniture | 30 | 01-Mar-18 | 30 | 09-Apr-18 | 10-Feb-17 | 16-Mar-17 | -312 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| Bridge B1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Span Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B17-C6310 | B17 - Cantilever Span (26 nr) - Crane | 35 | 22-Sep-17 A | 0 | 26-Nov-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | |
| B18-C6310 | B18 - End Span to B17 (8 nr) - Crane | 14 | 28-Sep-17 A | 0 | 30-Nov-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | |
| VB1-C6510 | Viaduct B1 - Final Stitch & Stressing to Span | 24 | 13-Dec-17 A | 18 | 13-Jan-18 | 29-Aug-16 | 19-Sep-16 | -391 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| Deck Finishes, E&M and Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VB1-C7710 | Viaduct B1 - Parapet Panels | 48 | 15-Jan-18 | 48 | 14-Mar-18 | 20-Sep-16 | 16-Nov-16 | -391 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VB1-C7720 | Viaduct B1 - Gantry & TCSS Provisions (KD5) | 36 | 22-Feb-18 | 36 | 09-Apr-18 | 27-Oct-16 | 07-Dec-16 | -391 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| VB1-C7810 | Viaduct B1 - Drainage, Fire Main & E&M Services | 60 | 01-Mar-18 | 60 | 15-May-18 | 10-Jan-17 | 23-Mar-17 | -336 | 0% | | | | | | | | | | | | | | | | | | | | | | |
| Viaduct C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge C4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Finishes, E&M and Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VC4-C7710 | Viaduct C4 - Parapet Panels | 48 | 12-Jun-17 A | 4 | 27-Dec-17 | 08-Jul-16 | 12-Jul-16 | -435 | 99% | | | | | | | | | | | | | | | | | | | | | | |
| VC4-C7720 | Viaduct C4 - Gantry & TCSS Provisions (KD4) | 36 | 21-Dec-17 | 36 | 03-Feb-18 | 28-Jun-16 | 09-Aug-16 | -443 | 0% | | | | | | | | | | | | | | | | | | | | | | |

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: TMCLK-DWPI-1-M55
 Layout: J3518-DWP-3MRP Submission - M55
 Filter: TASK filters: 3-Month Lookahead, No CC
 Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 6 of 11 Pages)
(Progress as of 21-Dec-17)

| Date | Revision | Checked | Approved |
|------------|----------|---------|----------|
| 30-Oct-17 | | PKN | HF |
| 28-Nov-... | | PKN | HF |
| 03-Jan-18 | | PKN | HF |

DWG. No.:
J3518/GCL/PGM/3MRP-M55

| Activity ID | Activity Name | Orig. Durn. | Act. Start / FC Early Start | Rem. Durn. | Act. Finish / FC Early Finish | Late Start | Late Finish | Total Float | Physical % Complete | 2017 | | | | | | | | | | | | 2018 | | | | | | | | | | | |
|--------------------------------------------------------------------|-------------------------------------------------------------------|-------------|-----------------------------|------------|-------------------------------|------------|-------------|-------------|---------------------|----------|----|----|----|----|----|---------|----|----|----|----|----|----------|----|----|----|----|----|-------|----|----|----|----|----|
| | | | | | | | | | | December | | | | | | January | | | | | | February | | | | | | March | | | | | |
| | | | | | | | | | | 20 | 27 | 04 | 11 | 18 | 25 | 01 | 08 | 15 | 22 | 29 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 20 | 27 |
| VE1CD-C7E | Viaduct E1C/D - Drainage, Fire Main & E&M Services | 60 | 22-Feb-18 | 60 | 08-May-18 | 13-Jul-16 | 21-Sep-16 | -479 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge E2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Span Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E06A-C6510 | E6A & E6B - Quarter Span (E6-E7) - TLB | 30 | 04-Jul-17 A | 9 | 30-Dec-17 | 30-Jul-17 | 07-Aug-17 | -140 | 80% | | | | | | | | | | | | | | | | | | | | | | | | |
| E06A-C6520 | E6A & E6B - E5A/E6A & E5B/E6B Stitches | 8 | 27-Oct-17 A | 8 | 29-Dec-17 | 31-Jul-17 | 07-Aug-17 | -139 | 50% | | | | | | | | | | | | | | | | | | | | | | | | |
| E06A-C6530 | E7A & E7B - E6A/E7A & E6B/E7B Stitches | 8 | 15-Dec-17 A | 8 | 29-Dec-17 | 31-Jul-17 | 07-Aug-17 | -139 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E06A-C6610 | E6A/E7A: Install Bearing & Stress Continuity Tendons | 12 | 02-Jan-18 | 12 | 15-Jan-18 | 08-Aug-17 | 21-Aug-17 | -120 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E06A-C6620 | E6B/E7B: Install Bearing & Stress Continuity Tendons | 12 | 02-Jan-18 | 12 | 15-Jan-18 | 08-Aug-17 | 21-Aug-17 | -120 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E08A-C6410 | E8A - Drop in (E8A-E7A) - THB | 30 | 30-Sep-17 A | 0 | 02-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| E08A-C6510 | E8A & E8B - Quarter Span (E8-E9) - TLB | 30 | 16-Sep-17 A | 15 | 06-Jan-18 | 31-Aug-17 | 14-Sep-17 | -108 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E08A-C6520 | E8A & E8B - E7A/E8A & E7B/E8B Stitches | 8 | 07-Jan-18 | 8 | 14-Jan-18 | 15-Sep-17 | 22-Sep-17 | -108 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E08A-C6530 | E9A & E9B - E8A/E9A & E8B/E9B Stitches | 8 | 18-Jan-18 | 8 | 25-Jan-18 | 26-Sep-17 | 06-Oct-17 | -108 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E08A-C6610 | E8A/E9A: Install Bearing & Stress Continuity Tendons | 12 | 26-Jan-18 | 12 | 06-Feb-18 | 07-Oct-17 | 18-Oct-17 | -108 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E08A-C6620 | E8B/E9B: Install Bearing & Stress Continuity Tendons | 12 | 26-Jan-18 | 12 | 06-Feb-18 | 07-Oct-17 | 18-Oct-17 | -108 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E08B-C6510 | E8B - Drop in (E8B-E7B) - THB | 30 | 11-Oct-17 A | 0 | 08-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| E10A-C6410 | E10A - Drop in (E10A-E9A) - THB | 30 | 09-Sep-17 A | 77 | 13-Mar-18 | 31-Jul-17 | 18-Oct-17 | -139 | 33% | | | | | | | | | | | | | | | | | | | | | | | | |
| E10B-C6510 | E10B - Drop in (E10B - E9B) - THB | 30 | 04-Mar-18 | 30 | 02-Apr-18 | 16-Sep-17 | 18-Oct-17 | -159 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E11B-C6510 | E10A & E10B - Quarter span (E10-E11) - TLB | 30 | 30-Aug-17 A | 154 | 31-May-18 | 12-Apr-17 | 15-Sep-17 | -246 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| VE2-C6610 | Viaduct E2 - Dismantle LG1 | 48 | 27-Nov-17 A | 33 | 31-Jan-18 | 28-Jul-17 | 04-Sep-17 | -122 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| VE2-C6620 | Viaduct E2 - Dismantle LG2 | 48 | 21-Dec-17 | 48 | 21-Feb-18 | 26-Jun-17 | 21-Aug-17 | -149 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Finishes, E&M and Roadworks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VE21-C7710 | Viaduct E2-1 (E3-E6) - Parapet Panels | 48 | 22-Feb-18 | 48 | 23-Apr-18 | 22-Aug-17 | 18-Oct-17 | -149 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge E5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Span Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E12D-C6210 | E12D Deck - Cantilever Span (16 seg) with 2 stitches - THB | 45 | 05-Oct-17 A | 0 | 24-Nov-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| E12D-C6220 | E12D Deck - Install WLF | 7 | 24-Nov-17 A | 0 | 27-Nov-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| E12D-C6230 | E12D Deck - Cantelever span (26 seg) with 1 stitch - WLF | 53 | 28-Nov-17 A | 25 | 16-Jan-18 | 13-Apr-17 | 08-May-17 | -245 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E12D-C6310 | E12D Deck - Stitch between E12D and E11B | 12 | 04-Mar-18 | 12 | 15-Mar-18 | 09-May-17 | 20-May-17 | -287 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13D-C6210 | E13D Deck - Cantilever Span (22 seg) with 2 stitches - KF and THB | 26 | 30-Oct-17 A | 10 | 31-Dec-17 | 27-Mar-17 | 06-Apr-17 | -261 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13D-C6220 | E13D Deck - Cantilever span (20 seg) with 1 stitch - KF and THB | 43 | 15-Jan-18 | 43 | 02-Mar-18 | 07-Apr-17 | 20-May-17 | -274 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13D-C6310 | E13D Deck - Stitch between E12D and E13D | 8 | 16-Mar-18 | 8 | 23-Mar-18 | 21-May-17 | 28-May-17 | -287 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E14D-C6120 | E14D Deck - Install Sliding System, T&C & Final ICE Check | 15 | 09-Dec-17 A | 0 | 12-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| E14D-C6210 | E14D Deck - End Span to E13D Segment '7' to '2' (6 nr) - Crane | 18 | 12-Dec-17 A | 0 | 20-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| E14D-C6220 | E14D Deck - Adjust Alignment of Installed Segments '1' to '7' | 6 | 15-Mar-18 | 6 | 21-Mar-18 | 21-Apr-17 | 27-Apr-17 | -268 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge E6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Span Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E12C-C6210 | E12C Deck - Cantilever Span (42 seg) with 2 stitches - THB | 67 | 10-Sep-17 A | 10 | 31-Dec-17 | 12-Aug-17 | 21-Aug-17 | -127 | 5% | | | | | | | | | | | | | | | | | | | | | | | | |
| E12C-C6310 | E12C Deck - Stitch between E12C and E11B | 12 | 04-Mar-18 | 12 | 15-Mar-18 | 22-Aug-17 | 02-Sep-17 | -184 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13C-C6210 | E13C Deck - Cantilever Span (18 seg) with 1 stitch - KF and THB | 36 | 27-Nov-17 A | 6 | 27-Dec-17 | 14-Mar-17 | 19-Mar-17 | -274 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13C-C6220 | E13C Deck - Install TLB with T&C | 19 | 26-Dec-17 | 19 | 14-Jan-18 | 18-Mar-17 | 06-Apr-17 | -274 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13C-C6230 | E13C Deck - Cantilever span (26 seg) with 1 stitch - KF and THB | 51 | 15-Jan-18 | 51 | 10-Mar-18 | 14-Jul-17 | 02-Sep-17 | -179 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13C-C6310 | E13C Deck - Stitch between E12C and E13C | 8 | 16-Mar-18 | 8 | 23-Mar-18 | 03-Sep-17 | 10-Sep-17 | -184 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge E7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Span Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E12B-C6210 | E12B Deck - Cantilever Span (40 seg) with 3 stitches - WLF | 66 | 04-Sep-17 A | 0 | 17-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| E12B-C6310 | E12B Deck - Stitch between E12B and E11A | 12 | 04-Mar-18 | 12 | 15-Mar-18 | 22-Aug-17 | 02-Sep-17 | -184 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13B-C6210 | E13B Deck - Cantilever Span (44 seg) with 3 stitches - KF | 82 | 16-Oct-17 A | 46 | 06-Feb-18 | 01-Mar-17 | 16-Apr-17 | -287 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13B-C6310 | E13B Deck - Stitch between E12B and E13B | 8 | 16-Mar-18 | 8 | 23-Mar-18 | 03-Sep-17 | 10-Sep-17 | -184 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E14B-C6540 | E14B Deck - End Span to E13B (Remaining 4 nr) - Crane | 15 | 20-Nov-17 A | 0 | 18-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge E8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deck Span Segment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E12A-C6410 | E12A Deck - Cantilever Span (22 nr) with 1st stitch - THB | 45 | 01-Oct-17 A | 0 | 04-Dec-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| E12A-C6420 | E12A deck - Install WLF & install (18nr) - WLF | 52 | 05-Dec-17 A | 22 | 13-Jan-18 | 31-Jul-17 | 21-Aug-17 | -139 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E12A-C6510 | E12A Deck - Stitch between E12A and E11A | 12 | 04-Mar-18 | 12 | 15-Mar-18 | 22-Aug-17 | 02-Sep-17 | -184 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |
| E13A-C6410 | E13A Deck - Cantilever Span(32 nr) with 3 stitches - KF | 72 | 10-Nov-17 A | 49 | 09-Feb-18 | 24-Jul-17 | 10-Sep-17 | -146 | 0% | | | | | | | | | | | | | | | | | | | | | | | | |

| | Project ID: TMCLK-DWPI-1-M55 Layout: J3518-DWP-3MRP Submission - M55 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort. | Tuen Mun - Chek Lap Kok Link - Southern Connection 3-Month Rolling Programme (Page 8 of 11 Pages) (Progress as of 21-Dec-17) | <table border="1"> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> <tr> <td>30-Oct-17</td> <td></td> <td>PKN</td> <td>HF</td> </tr> <tr> <td>28-Nov-...</td> <td></td> <td>PKN</td> <td>HF</td> </tr> <tr> <td>03-Jan-18</td> <td></td> <td>PKN</td> <td>HF</td> </tr> </table> | Date | Revision | Checked | Approved | 30-Oct-17 | | PKN | HF | 28-Nov-... | | PKN | HF | 03-Jan-18 | | PKN | HF | DWG. No.: J3518/GCL/PGM/3MRP-M55 |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------|----------|-----------|--|-----|----|------------|--|-----|----|-----------|--|-----|----|---------------------------------------------------|
| Date | Revision | Checked | Approved | | | | | | | | | | | | | | | | | |
| 30-Oct-17 | | PKN | HF | | | | | | | | | | | | | | | | | |
| 28-Nov-... | | PKN | HF | | | | | | | | | | | | | | | | | |
| 03-Jan-18 | | PKN | HF | | | | | | | | | | | | | | | | | |

| Activity ID | Activity Name | Orig. Durn. | Act. Start / FC Early Start | Rem. Durn. | Act. Finish / FC Early Finish | Late Start | Late Finish | Total Float | Physical % Complete | 2017 | | | | | 2018 | | | | | | | | | | | | | |
|-------------|-----------------------------------------------------------|-------------|-----------------------------|------------|-------------------------------|------------|-------------|-------------|---------------------|------|----|----|----|----|------|----------|--|---------|--|--|----------|--|-------|--|--|--|--|--|
| | | | | | | | | | | 20 | 27 | 04 | 11 | 18 | 25 | December | | January | | | February | | March | | | | | |
| E13A-C6610 | E13A Deck - Cantilever Span (Remaining 12 nr) - KF | 21 | 07-Feb-18 | 21 | 03-Mar-18 | 17-Apr-17 | 08-May-17 | -287 | 0% | | | | | | | | | | | | | | | | | | | |
| E13A-C6710 | E13A Deck - Stitch between E12A and E13A | 8 | 16-Mar-18 | 8 | 23-Mar-18 | 03-Sep-17 | 10-Sep-17 | -184 | 0% | | | | | | | | | | | | | | | | | | | |
| E14A-C6510 | E14A Deck - End Span to E13A (1 nr) with 1st Pair - Crane | 9 | 04-Jan-18 | 9 | 13-Jan-18 | 31-Jul-17 | 09-Aug-17 | -129 | 0% | | | | | | | | | | | | | | | | | | | |
| E14A-C6520 | E14A Deck - End Span to E13A (1 nr) with 2nd Pair - Crane | 5 | 15-Jan-18 | 5 | 19-Jan-18 | 10-Aug-17 | 15-Aug-17 | -129 | 0% | | | | | | | | | | | | | | | | | | | |
| E14A-C6530 | E14A Deck - End Span to E13A (1 nr) with 3rd Pair - Crane | 5 | 20-Jan-18 | 5 | 25-Jan-18 | 16-Aug-17 | 21-Aug-17 | -129 | 0% | | | | | | | | | | | | | | | | | | | |
| E14A-C6540 | E14A Deck - End Span to E13A (1 nr) with 4th Pair - Crane | 5 | 26-Jan-18 | 5 | 31-Jan-18 | 22-Aug-17 | 26-Aug-17 | -129 | 0% | | | | | | | | | | | | | | | | | | | |
| E14A-C6550 | E14A Deck - End Span to E13A (Remaining 3 nr) - Crane | 12 | 01-Feb-18 | 12 | 14-Feb-18 | 28-Aug-17 | 09-Sep-17 | -129 | 0% | | | | | | | | | | | | | | | | | | | |

Viaduct F

Bridge F1

Deck Span Segment

HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection

| | | | | | | | | | |
|------------|------------------------------------------------------------------|----|-----------|----|-----------|-----------|-----------|------|----|
| E14A-C6110 | E14A Deck - End Span to F1 (1 nr) with 1st Pair - THB | 9 | 04-Jan-18 | 9 | 13-Jan-18 | 31-Jul-17 | 09-Aug-17 | -129 | 0% |
| E14A-C6120 | E14A Deck - End Span to F1 (1 nr) with 2nd Pair - THB | 5 | 15-Jan-18 | 5 | 19-Jan-18 | 10-Aug-17 | 15-Aug-17 | -129 | 0% |
| E14A-C6130 | E14A Deck - End Span to F1 (1 nr) with 3rd Pair - THB | 5 | 20-Jan-18 | 5 | 25-Jan-18 | 16-Aug-17 | 21-Aug-17 | -129 | 0% |
| E14A-C6210 | E14A Deck - End Span to F1 (1 nr) with 4th Pair - THB | 5 | 26-Jan-18 | 5 | 31-Jan-18 | 22-Aug-17 | 26-Aug-17 | -129 | 0% |
| E14A-C6310 | E14A Deck - End Span to F1 (Remaining 4 nr) - THB | 12 | 01-Feb-18 | 12 | 14-Feb-18 | 28-Aug-17 | 09-Sep-17 | -129 | 0% |
| E14A-C6410 | E14A Deck - Stitching to E14A-F1 | 12 | 15-Feb-18 | 12 | 03-Mar-18 | 19-Sep-17 | 03-Oct-17 | -122 | 0% |
| F02-C6210 | F2 Deck - Install THB | 3 | 22-Feb-18 | 3 | 24-Feb-18 | 09-Mar-17 | 11-Mar-17 | -283 | 0% |
| F02-C6310 | F2 Deck - Cantilever Span (14 nr) - THB (Props at 5th, 7th Pair) | 69 | 26-Feb-18 | 69 | 23-May-18 | 13-Mar-17 | 08-Jun-17 | -283 | 0% |

Bridge F2

Deck Span Segment

HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection

| | | | | | | | | | |
|-----------|-------------------------------------------------------------|----|-------------|----|-------------|-----------|-----------|------|------|
| F05-C6210 | F5 Deck - Install THB | 3 | 20-Nov-17 A | 0 | 22-Nov-17 A | | | | 100% |
| F05-C6220 | F5 Deck - Cantilever Span (10 nr) - THB (Props at 5th Pair) | 42 | 23-Nov-17 A | 0 | 06-Dec-17 A | | | | 100% |
| F06-C6210 | F6 Deck - Install THB | 3 | 08-Mar-18 | 3 | 10-Mar-18 | 01-Sep-17 | 04-Sep-17 | -152 | 0% |
| F06-C6220 | F6 Deck - Cantilever Span (10 nr) - THB (Props at 5th Pair) | 42 | 12-Mar-18 | 42 | 04-May-18 | 05-Sep-17 | 25-Oct-17 | -152 | 0% |
| F07-C6210 | F7 Deck - Install THB | 3 | 08-Dec-17 A | 0 | 08-Dec-17 A | | | | 100% |
| F07-C6310 | F7 Deck - Cantilever Span (12 nr) - THB (Props at 5th Pair) | 45 | 08-Dec-17 A | 40 | 08-Feb-18 | 13-Feb-18 | 07-Apr-18 | 43 | 40% |

Bridge F4

Deck Span Segment

HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection

| | | | | | | | | | |
|------------|----------------------------------------------------|----|-------------|---|-------------|--|--|--|------|
| E14B-C6310 | E14B Deck - End Span to F16 (Remaining 5 nr) - THB | 15 | 20-Nov-17 A | 0 | 18-Dec-17 A | | | | 100% |
|------------|----------------------------------------------------|----|-------------|---|-------------|--|--|--|------|

Bridge F5

Deck Span Segment

HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection

| | | | | | | | | | |
|-----------|--------------------------------------------------------------|----|-----------|----|-----------|-----------|-----------|------|----|
| F13-C6210 | F13 Deck - Falsework for End Span to F14 | 24 | 03-Feb-18 | 24 | 06-Mar-18 | 08-Jun-17 | 06-Jul-17 | -199 | 0% |
| F13-C6310 | F13 Deck - End Span to F14 (7 nr) - Crane | 14 | 07-Mar-18 | 14 | 22-Mar-18 | 07-Jul-17 | 22-Jul-17 | -199 | 0% |
| F14-C6210 | F14 Deck - Install THB | 3 | 14-Mar-18 | 3 | 16-Mar-18 | 20-Feb-18 | 22-Feb-18 | -19 | 0% |
| F14-C6310 | F14 Deck - Cantilever Span (12 nr) - THB (Props at 5th Pair) | 45 | 17-Mar-18 | 45 | 14-May-18 | 23-Feb-18 | 20-Apr-18 | -19 | 0% |

CEDD Access Track Re-Provisioning Works

Viaduct A to D

Access Tracks

General

HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection

| | | | | | | | | | |
|---------|-------------------------------------------------------------|----|-----------|----|-----------|-----------|-----------|------|----|
| PR30060 | Construct perm. realignment of CEDD access track at Pier A8 | 42 | 21-Dec-17 | 42 | 10-Feb-18 | 02-Dec-16 | 23-Jan-17 | -312 | 0% |
| PR30070 | Construct perm. realignment of CEDD access track at Pier B8 | 42 | 17-Jan-18 | 42 | 09-Mar-18 | 28-Dec-16 | 18-Feb-17 | -312 | 0% |
| PR30080 | Construct perm. realignment of CEDD access track at Pier C7 | 42 | 09-Feb-18 | 42 | 06-Apr-18 | 21-Jan-17 | 14-Mar-17 | -312 | 0% |
| PR30090 | Construct perm. realignment of CEDD access track at Pier D8 | 42 | 08-Mar-18 | 42 | 30-Apr-18 | 17-Feb-17 | 07-Apr-17 | -312 | 0% |

At-Grade Works & Miscellaneous Works

At-Grade Works Along North Lantau Highway

Slope Works Near Viaduct D

Slope 10NW-C/F9

HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection

| | | | | | | | | | |
|---------|----------------------------------------------------|-----|-----------|-----|-----------|-----------|-----------|------|----|
| M201200 | 10NW-C/F9 - Slope works (incl. L-Shape Ret. Walls) | 110 | 21-Dec-17 | 110 | 10-May-18 | 19-Sep-16 | 02-Feb-17 | -374 | 0% |
|---------|----------------------------------------------------|-----|-----------|-----|-----------|-----------|-----------|------|----|

Slope 10NW-C/F10

HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection

| | | | | | | | | | |
|---------|-----------------------------------------------------|-----|-------------|----|-----------|-----------|-----------|------|-----|
| M201160 | 10NW-C/F10 - Slope works (incl. L-Shape Ret. Walls) | 110 | 09-Sep-17 A | 80 | 03-Apr-18 | 06-Aug-16 | 10-Nov-16 | -410 | 10% |
|---------|-----------------------------------------------------|-----|-------------|----|-----------|-----------|-----------|------|-----|

Slope 10NW-C/R4

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: TMCLK-DWPI-1-M55
 Layout: J3518-DWP-3MRP Submission - M55
 Filter: TASK filters: 3-Month Lookahead, No CC
 Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 9 of 11 Pages)
(Progress as of 21-Dec-17)

| Date | Revision | Checked | Approved |
|------------|----------|---------|----------|
| 30-Oct-17 | | PKN | HF |
| 28-Nov-... | | PKN | HF |
| 03-Jan-18 | | PKN | HF |

DWG. No.:
J3518/GCL/PGM/3MRP-M55

| Activity ID | Activity Name | Orig. Durn. | Act. Start / FC Early Start | Rem. Durn. | Act. Finish / FC Early Finish | Late Start | Late Finish | Total Float | Physical % Complete | 2017 | | | | | 2018 | | | | | | | | | | | | | | |
|--------------------------------------------------------------------|------------------------------------------------------------------|-------------|-----------------------------|------------|-------------------------------|------------|-------------|-------------|---------------------|----------|----|----|----|----|---------|----|----|----|----|----------|----|----|----|----|-------|----|----|----|----|
| | | | | | | | | | | December | | | | | January | | | | | February | | | | | March | | | | |
| | | | | | | | | | | 20 | 27 | 04 | 11 | 18 | 25 | 01 | 08 | 15 | 22 | 29 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| M201170 | 10NW-C/R4 - Slope works | 80 | 21-Dec-17 | 80 | 03-Apr-18 | 06-Aug-16 | 10-Nov-16 | -410 | 0% | | | | | | | | | | | | | | | | | | | | |
| Slope 10NW-C/F50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| M201150 | 10NW-C/F50 - Slope works | 165 | 11-Jan-17 A | 62 | 09-Mar-18 | 27-Aug-16 | 10-Nov-16 | -392 | 5% | | | | | | | | | | | | | | | | | | | | |
| Road Works Along NLH Westbound | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RW10020 | NLH W/B (Viaduct C) - Road Drainage Works for tie-in | 104 | 26-Jun-17 A | 24 | 20-Jan-18 | 10-Mar-17 | 07-Apr-17 | -234 | 25% | | | | | | | | | | | | | | | | | | | | |
| Road Works Along NLH Eastbound | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RW20080-2 | Ch475 - 650 Portion 5 (viaduct D area) : Roadwork | 81 | 11-Jan-17 A | 0 | 25-Nov-17 A | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| RW20080-4 | Ch157 - 275 Portion 7 (Viaduct D area) : Roadwork | 98 | 11-Jan-17 A | 10 | 04-Jan-18 | 27-Mar-17 | 07-Apr-17 | -220 | 82% | | | | | | | | | | | | | | | | | | | | |
| RW20084 | NLH E/B Viaduct A - Ch200-388 Roadwork (SL & HS) & Reinstate NLH | 127 | 17-Dec-16 A | 10 | 04-Jan-18 | 27-Mar-17 | 07-Apr-17 | -220 | 80% | | | | | | | | | | | | | | | | | | | | |
| At-Grade Works Along Cheung Tung Road | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Slope Works Near Viaduct B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Slope 9SE-B/F85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SWVB4020 | 9SE-B/F85 - Filling & forming slope | 36 | 15-Jan-18 | 36 | 28-Feb-18 | 16-Aug-18 | 27-Sep-18 | 172 | 0% | | | | | | | | | | | | | | | | | | | | |
| SWVB4030 | 9SE-B/F85 - Form UC | 12 | 01-Mar-18 | 12 | 14-Mar-18 | 28-Sep-18 | 12-Oct-18 | 172 | 0% | | | | | | | | | | | | | | | | | | | | |
| SWVB4035 | 9SE-B/F85 - Install Geo. Instru. & Baseline Monitoring | 30 | 15-Mar-18 | 30 | 23-Apr-18 | 13-Oct-18 | 17-Nov-18 | 172 | 0% | | | | | | | | | | | | | | | | | | | | |
| Slope Works Near Viaduct C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Slope 10NW-C/C26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SWVC1995 | TTA for closure of NLH HS | 2 | 15-Jan-18 | 2 | 16-Jan-18 | 16-Aug-16 | 17-Aug-16 | -420 | 0% | | | | | | | | | | | | | | | | | | | | |
| SWVC2000 | 10NW-C/C26 - Slope works | 166 | 17-Jan-18 | 166 | 10-Aug-18 | 18-Aug-16 | 09-Mar-17 | -420 | 0% | | | | | | | | | | | | | | | | | | | | |
| Slope PF1 & PF2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SWVC7000 | PF1 & PF2 slope works | 18 | 21-Dec-17 | 18 | 13-Jan-18 | 26-Jul-16 | 15-Aug-16 | -420 | 0% | | | | | | | | | | | | | | | | | | | | |
| Slope 10NW-C/F13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SWVC4000 | 10NW-C/F13 - Slope works | 100 | 01-Sep-17 A | 86 | 11-Apr-18 | 30-Jul-16 | 10-Nov-16 | -416 | 0% | | | | | | | | | | | | | | | | | | | | |
| Slope 10NW-C/F14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SWVC5000 | 10NW-C/F14 - Slope works | 100 | 01-Sep-17 A | 95 | 21-Apr-18 | 14-Jun-16 | 05-Oct-16 | -455 | 0% | | | | | | | | | | | | | | | | | | | | |
| Slope 10NW-C/F15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SWVC6000 | 10NW-C/F15 - Slope works | 108 | 01-Sep-17 A | 78 | 28-Mar-18 | 05-Jul-16 | 05-Oct-16 | -438 | 0% | | | | | | | | | | | | | | | | | | | | |
| Re-alignment of CTR Along Viaduct B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RP00076 | Ch100-300: Lay Telecom Cable | 10 | 22-May-17 A | 60 | 07-Mar-18 | 21-May-20 | 31-Jul-20 | 710 | 88% | | | | | | | | | | | | | | | | | | | | |
| RP00077 | Ch100-300: Street Lighting & Draw Pit | 13 | 27-Jun-17 A | 60 | 07-Mar-18 | 21-May-20 | 31-Jul-20 | 710 | 30% | | | | | | | | | | | | | | | | | | | | |
| RP00078 | Ch100-300: Relocation of Vent Pipe | 18 | 13-May-17 A | 60 | 07-Mar-18 | 21-May-20 | 31-Jul-20 | 710 | 60% | | | | | | | | | | | | | | | | | | | | |
| RP00083 | Ch100-300: Drainage & Roadwork for New CTR | 52 | 13-May-17 A | 52 | 26-Feb-18 | 22-Oct-16 | 21-Dec-16 | -347 | 40% | | | | | | | | | | | | | | | | | | | | |
| RP00084 | Ch100-300: TTA to New CTR | 1 | 27-Feb-18 | 1 | 27-Feb-18 | 22-Dec-16 | 22-Dec-16 | -347 | 0% | | | | | | | | | | | | | | | | | | | | |
| Re-alignment of CTR Along Viaduct C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| East Portion | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RW60060 | CTR East (stage 3) TTA 090-6 : Roadwork | 66 | 14-Jul-17 A | 48 | 21-Feb-18 | 04-Jun-20 | 31-Jul-20 | 722 | 50% | | | | | | | | | | | | | | | | | | | | |
| RW60070 | CTR East (stage 4) : Roadwork | 55 | 28-Oct-17 A | 48 | 21-Feb-18 | 10-Feb-17 | 07-Apr-17 | -258 | 30% | | | | | | | | | | | | | | | | | | | | |
| RW60080 | CTR Tie in Works | 116 | 18-May-17 A | 48 | 21-Feb-18 | 10-Feb-17 | 07-Apr-17 | -258 | 30% | | | | | | | | | | | | | | | | | | | | |
| Emergency Gates G6 & G7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RP10100 | Open re-aligned CTR & activate new gates G6 & G7 | 0 | 21-Dec-17 | 0 | | 10-Mar-17 | | -234 | 0% | | | | | | | | | | | | | | | | | | | | |
| RP10110 | Remove old gates G6 & G7 and reprovision Expressway Fence | 24 | 21-Dec-17 | 24 | 20-Jan-18 | 10-Mar-17 | 07-Apr-17 | -234 | 0% | | | | | | | | | | | | | | | | | | | | |
| At-Grade Works at Southern Landfall | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: TMCLK-DWPI-1-M55
 Layout: J3518-DWP-3MRP Submission - M55
 Filter: TASK filters: 3-Month Lookahead, No CC
 Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 10 of 11 Pages)
(Progress as of 21-Dec-17)

| Date | Revision | Checked | Approved |
|------------|----------|---------|----------|
| 30-Oct-17 | | PKN | HF |
| 28-Nov-... | | PKN | HF |
| 03-Jan-18 | | PKN | HF |

DWG. No.:
J3518/GCL/PGM/3MRP-M55

| Activity ID | Activity Name | Orig. Durn. | Act. Start / FC Early Start | Rem. Durn. | Act. Finish / FC Early Finish | Late Start | Late Finish | Total Float | Physical % Complete | 2017 | | | | | 2018 | | | | | | | | | | | | |
|--------------------------------------------------------------------|----------------------------------------------------------------------------|-------------|-----------------------------|------------|-------------------------------|------------|-------------|-------------|---------------------|----------|----|----|----|----|---------|----|----|----------|----|-------|----|----|----|----|----|----|----|
| | | | | | | | | | | December | | | | | January | | | February | | March | | | | | | | |
| | | | | | | | | | | 20 | 27 | 04 | 11 | 18 | 25 | 01 | 08 | 15 | 22 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 |
| HKBCF Area | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RW30005 | South Landfall - Initial record survey | 12 | 19-Jan-18 | 12 | 01-Feb-18 | 19-Oct-17 | 02-Nov-17 | -75 | 0% | | | | | | | | | | | | | | | | | | |
| RW30010 | South Landfall - Mobilisation for Portion B Works | 24 | 02-Feb-18 | 24 | 05-Mar-18 | 03-Nov-17 | 30-Nov-17 | -75 | 0% | | | | | | | | | | | | | | | | | | |
| RW30014 | South Landfall - DN300 Fresh water main works installation & connection (l | 60 | 06-Mar-18 | 60 | 19-May-18 | 01-Dec-17 | 12-Feb-18 | -75 | 0% | | | | | | | | | | | | | | | | | | |
| RW30030 | South Landfall - Stormwater drainage works | 60 | 06-Mar-18 | 60 | 19-May-18 | 12-Jul-18 | 19-Sep-18 | 102 | 0% | | | | | | | | | | | | | | | | | | |
| Watermain from Tung Chung to Southern Landfall | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Watermain Works | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WM00120 | Lay DN450 Fresh Water Main at Re-aligned CTR (approx. 500m) | 48 | 22-Apr-15 A | 12 | 06-Jan-18 | 29-Nov-17 | 12-Dec-17 | -19 | 90% | | | | | | | | | | | | | | | | | | |
| No TMCLK1 Work Phase | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| At-Grade Works & Miscellaneous Works | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| At-Grade Works Along Cheung Tung Road | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Re-alignment of CTR Along Viaduct B | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HY/2012/07 Tuen Mun-Chek Lap Kok Link - Southern Connection | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RP00074-3 | Ch100-300: Road Drainage | 38 | 06-May-17 A | 7 | 30-Dec-17 | 24-Jul-20 | 31-Jul-20 | 763 | 88% | | | | | | | | | | | | | | | | | | |

- Actual Work
- Planned Bar
- Critical Bar
- Milestone

Project ID: TMCLK-DWPI-1-M55
Layout: J3518-DWP-3MRP Submission - M55
Filter: TASK filters: 3-Month Lookahead, No CC
Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 11 of 11 Pages)
(Progress as of 21-Dec-17)

| Date | Revision | Checked | Approved |
|------------|----------|---------|----------|
| 30-Oct-17 | | PKN | HF |
| 28-Nov-... | | PKN | HF |
| 03-Jan-18 | | PKN | HF |

DWG. No.:
J3518/GCL/PGM/3MRP-M55

Appendix C

Environmental Mitigation and Enhancement Measure Implementation Schedules

(In reference to CINOTECH (2011) Agreement No.
CE35/2011 EP Baseline Environmental Monitoring for
Hong Kong-Zhuhai-Macao Bridge Tuen Mun-Chek Lap
Kok Link - Investigation. Updated EM&A Manual for
Tuen Mun-Chek Lap Kok Link)

*Contract No. HY/2012/07
Tuen Mun – Chek Lap Kok Link
Southern Connection Viaduct 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 eight 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 | 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 | | ✓ |

| 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 | 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 | | ✓ |
| 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 | | ✓ |
| NOISE | | | | | | | | | |
| 5.11 | Section 4 | Noise monitoring | All existing representative sensitive receivers / during North Lantau Viaduct construction | Contractor | EM&A Manual | | Y | | ✓ |
| WATER QUALITY | | | | | | | | | |
| <i>General Marine Works</i> | | | | | | | | | |
| 6.10 | - | Bored piling to be undertaken within a metal casing. | Marine viaducts of TM-CLKL and HKLR/ bored piling | Contractor | TM-EIAO | | Y | | ✓ |
| 6.10 | - | 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 | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|-------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------|-----------------------------------------------------------|-----------------------|---|---|--------|
| | | | | | | D | C | O | |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 Guidelines. DASO permit conditions. | | Y | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| <i>Temporary Staging work</i> | | | | | | | | | |
| | 5.2 | Regular inspection for the accumulation of floating refuse and collection of floating refuse if required | During temporary staging works | Contractor | | | Y | | ✓ |
| | 5.2 | Provision of temporary drainage system on the temporary staging for collection of construction site runoff to allow appropriate treatment before discharge into the sea | During temporary staging works | Contractor | | | Y | | ↔ |
| | 5.2 | Wastewater generated from construction works such as bored / drilling water will be collected, treated, neutralized and de-silted through silt trap or sedimentation tank before disposal | During temporary staging works | Contractor | | | Y | | ✓ |
| | 5.2 | One additional water quality monitoring station is | During temporary | Contractor | | | Y | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|-------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------|----------------------------------|-----------------------|---|---|--------|
| | | | | | | D | C | O | |
| | | proposed at station SR4a In case elevated SS or turbidity is identified during the water quality monitoring, the source of pollution will be tracked down and be removed as soon as possible. In case depletion of dissolved oxygen is identified, artificial aeration will be arranged at the monitoring station SR4a, | staging works | | | | | | |
| <i>Land Works</i> | | | | | | | | | |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | Temporary access roads should be surfaced with crushed stone or gravel. | All areas/ throughout construction period | Contractor | TM-EIAO | | Y | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------|----------------------------------|-----------------------|---|---|--------|
| | | | | | | D | C | O | |
| 6.10 | - | 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 | | ↔ |
| 6.10 | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 offsite disposal. | All areas/ throughout construction period | Contractor | TM-EIAO | | Y | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------|-----------------------|---|---|--------|
| | | | | | | D | C | O | |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | | ✓ |
| 6.10 | - | 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 | ✓ |
| 6.10 | 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 | | ✓ |
| <i>Water Quality Monitoring</i> | | | | | | | | | |
| 6.10 | 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 | ✓ |
| 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 | Specification for bored piling monitoring | Detailed Design | Design Consultant | TMEIA | Y | | | n/a |
| 8.14 | 6.3 | Implement any recommendations of the bored piling monitoring | Southern marine viaduct/ Throughout | Contractor | TMEIA | | Y | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------|-----------------------|---|---|----------------------------------|
| | | | | | | D | C | O | |
| | | | construction during bored piling | | | | | | |
| 8.14 | 6.3,6.5 | Avoidance of peak CWD calving season in May and June for driving of metal caissons during bored piling works | Southern marine viaduct/ May and June during bored piling | Contractor | TMEIA | | Y | | n/a |
| 8.14 | 6.3,6.5 | Specification and implementation of 250m dolphin exclusion zone. | All marine bored piling and temporary staging works areas/Detailed Design/ during all marine bored piling and temporary staging works | Design Consultant/ Contractor | TMEIA | Y | Y | | ✓ |
| 8.15 | 6.3, 6.5 | Specification and deployment of an artificial reef of an area of 3,600 m ² 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 enforced 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 marine bored piling and the whole lifespan of temporary staging works. | All areas/ Detailed Design/ during marine bored piling and temporary staging works | Design Consultant/ Contractor | TMEIA | Y | Y | | ✓ |
| 8.15 | 6.3, 6.4 | Pre-construction phase survey and coral translocation | Tai Ho Wan (donor site) and Yam Tsui Wan (receptor site) /Detailed Design/Prior to construction | Design Consultant/ Contractor | TMEIA | Y | Y | | n/a |
| 8.15 | 6.5 | Audit coral translocation success | Yam Tsui Wan (receptor site)/Post translocation | Contractor | TMEIA | | Y | | Completed in October 2014 |
| 7.13 | 6.5 | Undertaken gabion wall works in Stream NL1 in the dry season | North Lantau slope works/dry | Contractor | TMEIA | | Y | | n/a |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|-----------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------|----------------------------------|-----------------------|---|---|-------------------------------------|
| | | | | | | D | C | O | |
| | | | season/construction phase | | | | | | |
| 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. To be approved by AFCD/LCSD |
| 7.13 | 6.5 | Spoil heaps shall be covered at all times. | All areas / Throughout construction period | Contractor | TMEIA | | Y | | ✓ |
| 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 | Round angle, patterned finishes, and oval shaped pier were considered in the viaduct design, and further details will be developed under ACABAS submission (DM3) | All areas/detailed design | Design Consultant | TMEIA | Y | | | n/a |
| 10.9 | 7.6 | Details of the street furniture will be developed in the detailed design stage (DM4) | 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 | Existing trees on boundary of the Project Area shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees | All areas/detailed design/ during construction | Design Consultant/ Contractor | TMEIA | Y | Y | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------|----------------------------------|-----------------------|---|---|--------------------------------------------------|
| | | | | | | D | C | O | |
| | | prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas. (Tree protection measures will be detailed at Tree Removal Application stage) (CM1) | | | | | | | |
| 10.9 | 7.6 | Trees unavoidably affected by the works shall be transplanted where practical. Trees will be transplanted straight to their final receptor site and not held in a temporary nursery. A detailed Tree Transplanting Specification shall be provided in the Contract Specification. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme (CM2) | All areas/detailed design/ during construction | Design Consultant/ Contractor | TMEIA | Y | Y | | ✓ Tree transplanted as Contract Specification |
| 10.9 | 7.6 | Hillside and roadside screen planting to proposed roads, associated structures and slope works (CM3). | All areas/detailed design/ during construction/post construction | Design Consultant/ | TMEIA | Y | Y | | ✓ |
| 10.9 | 7.6 | Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material (in earth tone) (CM4) | All areas/detailed design/ during construction/post construction | Design Consultant/ Contractor | TMEIA | Y | Y | | ↔ |
| 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 | | ✓ |
| 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 | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------|----------------------------------|-----------------------|---|---|-----------------------------------------------------------|
| | | | | | | D | C | O | |
| 10.9 | 7.6 | Recycle/Reuse all felled trees and vegetation, e.g. mulching (CM9) | All areas/ detailed design/ during construction | Design Consultant/ Contractor | TMEIA | Y | Y | | n/a No felled trees or vegetation suitable for recycle |
| 10.9 | 7.6 | Compensatory tree planting shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006 (CM10). | All areas/ detailed design/ during construction | Design Consultant/ Contractor | TMEIA | Y | Y | | ✓ |
| 10.9 | 7.6 | Re-vegetation of affected woodland/shrubland with native species (OM1) | All areas/ detailed design/ during construction/ during operation | Design Consultant/ Contractor | TMEIA | Y | Y | Y | n/a. To be implemented by AFCD/HyD/ L CSD |
| 10.9 | 7.6 | Tall buffer screen tree / shrub / climber planting should be incorporated to soften hard engineering structures and facilities (OM2) | All areas/ detailed design/ during construction/ during operation | Design Consultant/ Contractor | TMEIA | Y | Y | Y | n/a To be implemented by HyD/LCSD |
| 10.9 | 7.6 | Streetscape elements (e.g. paving, signage, street furniture, lighting etc.) shall be sensitively designed in a manner that responds to the local context, and minimises potential negative landscape and visual impacts. Lighting units should be directional and minimise unnecessary light spill (OM3) | All areas/ detailed design/ during construction / during operation | Design Consultant/ Contractor | TMEIA | Y | Y | Y | n/a. To be implemented by HyD/LCSD |
| 10.9 | 7.6 | Structure, ornamental tree / shrub / climber planting should be provided along roadside amenity strips, central dividers and newly formed slopes to enhance the townscape quality and further greenery enhancement | All areas/ detailed design/ during construction / during operation | Design Consultant/ Contractor | TMEIA | Y | Y | Y | n/a. To be implemented by |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---|---|----------------------------------|
| | | | | | | D | C | O | |
| | | (OM4) | | | | | | | HyD/LCSD |
| 10.9 | 7.6 | Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and finishes | All areas/ detailed design/ during construction / during operation | Design Consultant/ Contractor | TMEIA | Y | Y | Y | n/a. To be implemented by HyD |
| WASTE | | | | | | | | | |
| 12.6 | | The Contractor shall identify a coordinator for the management of waste. | Contract mobilisation | Contractor | TMEIA | | Y | | ✓ |
| 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 | All areas / throughout | Contractor | TMEIA | | Y | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------|----------------------------------|-----------------------|---|---|--------|
| | | | | | | D | C | O | |
| | | where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting. | construction period | | | | | | |
| 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 | | | n/a |
| 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 | 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 | All areas / throughout construction period | Contractor | TMEIA | | Y | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------|----------------------------------|-----------------------|---|---|--------|
| | | | | | | D | C | O | |
| | | materials should avoid over-ordering and wastage. | | | | | | | |
| 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: <ul style="list-style-type: none"> - suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; - Having a capacity of <450L unless the specifications have been approved by the EPD; and - Displaying a label in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations. Clearly labelled and used solely for the storage of chemical wastes; - Enclosed with at least 3 sides; - 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; | All areas / throughout construction period | Contractor | TMEIA | | Y | | ↔ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------|----------------------------------|-----------------------|---|---|--------|
| | | | | | | D | C | O | |
| | | <ul style="list-style-type: none"> - Adequate ventilation; - Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and - 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 | | ✓ |
| 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 | | ✓ |
| 12.6 | 8.1 | All waste containers shall be in a secure area on hard standing; | 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 | Site Offices/ | Contractor | TMEIA | | Y | | ✓ |

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|--------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------|----------------------------------|-----------------------|---|---|--------|
| | | | | | | D | C | O | |
| | | 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. | throughout construction period | | | | | | |
| 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 |

Notes:

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

Status:

- ✓ 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

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 $\mu\text{g}/\text{m}^3$ | ASR9A/ASR8A = 178 ASR9C/ASR8/ASR9 = 178 | 260 |
| 1 Hour TSP Level in $\mu\text{g}/\text{m}^3$ | ASR9A/ASR8A = 394 ASR9C/ASR8/ASR9 = 393 | 500 |

Table D2 *Action and Limit Levels for Construction Noise (0700-1900 hrs of normal weekdays)*

| Time Period | Action | Limit |
|----------------------------------|-------------------------------------------|--------------|
| 0700-1900 hrs on normal weekdays | When one documented complaint is received | 75* dB(A) |

Table D3 *Action and Limit Levels for Water Quality*

| Parameter | Action Level# | Limit Level# |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DO in mg/L ^(a) | <u>Surface and Middle</u> 5.0 mg/L | <u>Surface and Middle</u> 4.2 mg/L |
| | <u>Bottom</u> 4.7 mg/L | <u>Bottom</u> 3.6 mg/L |
| Turbidity in NTU (Depth-averaged ^{(b), (c)}) | 120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., 27.5 NTU | 130% of upstream control station at the same tide of the same day and 99%-ile of baseline data, i.e., 47.0 NTU |
| SS in mg/L (Depth-averaged ^{(b), (c)}) | 120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., 23.5 mg/L | 130% of upstream control station at the same tide of the same day and 10mg/L for WSD Seawater Intakes at Tuen Mun and 99%-ile of baseline data, i.e., 34.4 mg/L |

Notes:

Baseline data: data from HKZMB Baseline Water Quality Monitoring between 6 and 31 October 2011.

- (a) For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- (b) "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths
- (c) For turbidity and SS, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.
- (d) All figures given in the table are used for reference only, and EPD may amend the figures whenever it is considered as necessary

| Parameter | Action Level# | Limit Level# |
|-----------|------------------------------------------------------------------------------------------------------|--------------|
| (e) | The 1%-ile of baseline data for surface and middle DO is 4.2 mg/L, whilst for bottom DO is 3.6 mg/L. | |

Table D4 *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 D5 *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 | [STG < 2.4 & ANI < 8.9] and [STG < 3.9 & ANI < 17.9] | |

Appendix E

Calibration Certificates of Monitoring Equipments

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR8(A)
 Calibrated by : P.F. Yeung
 Date : 28/11/2017

Sampler

Model : TE-5170
 Serial Number : S/N 3956

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 20 Mar 2017
 Slope (m) : 2.08464
 Intercept (b) : -0.03684
 Correlation Coefficient(r) : 0.99994

Standard Condition

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

Calibration Condition

Pa (hpa) : 1016
 Ta(K) : 295

| Resistance Plate | | dH [green liquid] (inch water) | Z | X=Qstd (cubic meter/min) | IC (chart) | Y (corrected) |
|------------------|----------|-----------------------------------|-------|-----------------------------|---------------|------------------|
| 1 | 18 holes | 10.4 | 3.246 | 1.575 | 54 | 54.35 |
| 2 | 13 holes | 8.0 | 2.847 | 1.383 | 48 | 48.31 |
| 3 | 10 holes | 5.8 | 2.424 | 1.181 | 42 | 42.28 |
| 4 | 7 holes | 3.5 | 1.883 | 0.921 | 36 | 36.24 |
| 5 | 5 holes | 2.2 | 1.493 | 0.734 | 28 | 28.18 |

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

Sampler Calibration Relationship (Linear Regression)

Slope(m): 29.940 Intercept(b): 7.781 Correlation Coefficient(r): 0.9960

Checked by: Magnum Fan

Date: 05/12/2017

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR9
 Calibrated by : P.F. Yeung
 Date : 28/11/2017

Sampler

Model : TE-5170
 Serial Number : S/N 3958

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 20 Mar 2017
 Slope (m) : 2.08464
 Intercept (b) : -0.03684
 Correlation Coefficient(r) : 0.99994

Standard Condition

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

Calibration Condition

Pa (hpa) : 1016
 Ta(K) : 295

| Resistance Plate | | dH [green liquid] (inch water) | Z | X=Qstd (cubic meter/min) | IC (chart) | Y (corrected) |
|------------------|----------|-----------------------------------|-------|-----------------------------|---------------|------------------|
| 1 | 18 holes | 10.0 | 3.183 | 1.545 | 54 | 54.35 |
| 2 | 13 holes | 7.8 | 2.811 | 1.366 | 49 | 49.32 |
| 3 | 10 holes | 5.8 | 2.424 | 1.181 | 43 | 43.28 |
| 4 | 7 holes | 3.8 | 1.962 | 0.959 | 38 | 38.25 |
| 5 | 5 holes | 2.3 | 1.527 | 0.750 | 32 | 32.21 |

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

Sampler Calibration Relationship (Linear Regression)

Slope(m): 27.680 Intercept(b): 11.374 Correlation Coefficient(r): 0.9987

Checked by: Magnum Fan

Date: 05/12/2017



TISCH ENVIRONMENTAL, INC.
 145 SOUTH MIAMI AVE
 VILLAGE OF CLEVELS, OH
 45002
 513.467.9000
 877.263.7610 TOLL FREE
 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 20, 2017 Rootsmeter S/N 0438320 Ta (K) - 293
 Operator Tisch Orifice I.D. - 2454 Pa (mm) - 759.46

| PLATE OR Run # | VOLUME START (m3) | VOLUME STOP (m3) | DIFF VOLUME (m3) | DIFF TIME (min) | METER | ORFICE |
|----------------|-------------------|------------------|------------------|-----------------|--------------|----------------|
| | | | | | DIFF Hg (mm) | DIFF H2O (in.) |
| 1 | NA | NA | 1.00 | 1.4390 | 3.2 | 2.00 |
| 2 | NA | NA | 1.00 | 1.0240 | 6.4 | 4.00 |
| 3 | NA | NA | 1.00 | 0.9170 | 7.9 | 5.00 |
| 4 | NA | NA | 1.00 | 0.8730 | 8.8 | 5.50 |
| 5 | NA | NA | 1.00 | 0.7200 | 12.8 | 8.00 |

DATA TABULATION

| Vstd | (x axis) Qstd | (y axis) | Va | (x axis) Qa | (y axis) |
|-------------------------------------|---------------|----------|---------------------------|-------------|----------|
| 1.0120 | 0.7033 | 1.4257 | 0.9958 | 0.6920 | 0.8784 |
| 1.0078 | 0.9842 | 2.0163 | 0.9916 | 0.9683 | 1.2423 |
| 1.0057 | 1.0967 | 2.2543 | 0.9895 | 1.0791 | 1.3889 |
| 1.0045 | 1.1507 | 2.3643 | 0.9884 | 1.1322 | 1.4567 |
| 0.9992 | 1.3878 | 2.8514 | 0.9831 | 1.3654 | 1.7568 |
| Qstd slope (m) = 2.08464 | | | Qa slope (m) = 1.30537 | | |
| intercept (b) = -0.03684 | | | intercept (b) = -0.02270 | | |
| coefficient (r) = 0.99994 | | | coefficient (r) = 0.99994 | | |
| y axis = SQRT[H2O(Pa/760) (298/Ta)] | | | y axis = SQRT[H2O(Ta/Pa)] | | |

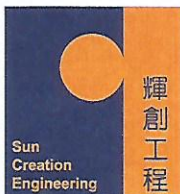
CALCULATIONS

Vstd = Diff. Vol [(Pa-Diff. Hg)/760] (298/Ta)
 Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa]
 Qa = Va/Time

For subsequent flow rate calculations:

Qstd = 1/m{ [SQRT(H2O(Pa/760) (298/Ta))] - b}
 Qa = 1/m{ [SQRT H2O(Ta/Pa)] - b}



Certificate of Calibration 校正證書

Certificate No. : C171447
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC17-0633) Date of Receipt / 收件日期 : 16 March 2017
Description / 儀器名稱 : Sound Level Calibrator
Manufacturer / 製造商 : Rion
Model No. / 型號 : NC-73
Serial No. / 編號 : 10486660
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 : (55 ± 20)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範
Calibration check

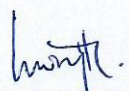
DATE OF TEST / 測試日期 : 17 March 2017


TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed manufacturer's specification.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA

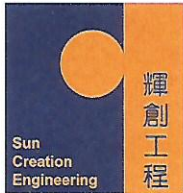
Tested By : 
測試
H T Wong
Technical Officer

Certified By : 
核證
K C Lee
Project Engineer

Date of Issue : 23 March 2017
簽發日期

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

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。



輝創工程有限公司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration 校正證書

Certificate No. : C171447

證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

| <u>Equipment ID</u> | <u>Description</u> | <u>Certificate No.</u> |
|---------------------|-----------------------------------|------------------------|
| CL130 | Universal Counter | C163709 |
| CL281 | Multifunction Acoustic Calibrator | PA160023 |
| TST150A | Measuring Amplifier | C161175 |

- Test procedure : MA100N.

- Results :

5.1 Sound Level Accuracy

| UUT Nominal Value | Measured Value (dB) | Mfr's Spec. (dB) | Uncertainty of Measured Value (dB) |
|----------------------|------------------------|---------------------|---------------------------------------|
| 94 dB, 1 kHz | 93.6 | ± 0.5 | ± 0.2 |

5.2 Frequency Accuracy

| UUT Nominal Value (kHz) | Measured Value (kHz) | Mfr's Spec. | Uncertainty of Measured Value (Hz) |
|----------------------------|-------------------------|----------------|---------------------------------------|
| 1 | 0.987 | 1 kHz ± 2 % | ± 1 |

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :

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

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

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

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。

Sun Creation Engineering Limited – Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 – 校正及檢測實驗室

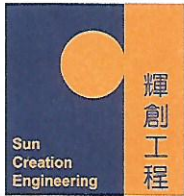
c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com



輝創工程有限公司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration

校正證書

Certificate No. : C171100

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC17-0482) Date of Receipt / 收件日期 : 28 February 2017

Description / 儀器名稱 : Sound Level Meter

Manufacturer / 製造商 : Rion

Model No. / 型號 : NL-52

Serial No. / 編號 : 01010406

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 : $(23 \pm 2)^{\circ}\text{C}$

Relative Humidity / 相對濕度 : $(55 \pm 20)\%$

Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration

DATE OF TEST / 測試日期 : 2 March 2017

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

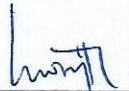
The results do not exceed manufacturer's specification. (after adjustment)

The results are detailed in the subsequent page(s).

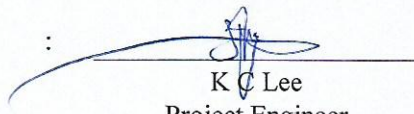
The test equipment used for calibration are traceable to National Standards via :

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA

Tested By
測試


H T Wong
Technical Officer

Certified By
核證


K C Lee
Project Engineer

Date of Issue
簽發日期

3 March 2017

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

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。

Sun Creation Engineering Limited - Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 - 校正及檢測實驗室

c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

Certificate of Calibration

校正證書

Certificate No. : C171100

證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- Self-calibration using the internal standard (After Adjustment) was performed before the test 6.1.1.2 to 6.3.2.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

| Equipment ID | Description | Certificate No. |
|--------------|-------------------------------------|-----------------|
| CL280 | 40 MHz Arbitrary Waveform Generator | C170048 |
| CL281 | Multifunction Acoustic Calibrator | PA160023 |

- Test procedure : MA101N.

- Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

6.1.1.1 Before Adjustment

| UUT Setting | | | | Applied Value | | UUT Reading (dB) | IEC 61672 Class 1 Spec. (dB) |
|-------------|----------------|---------------------|----------------|---------------|-------------|------------------|------------------------------|
| Range (dB) | Function | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | | |
| 30 - 130 | L _A | A | Fast | 94.00 | 1 | * 96.4 | ± 1.1 |

* Out of IEC 61672 Class 1 Spec.

6.1.1.2 After Adjustment

| UUT Setting | | | | Applied Value | | UUT Reading (dB) | IEC 61672 Class 1 Spec. (dB) |
|-------------|----------------|---------------------|----------------|---------------|-------------|------------------|------------------------------|
| Range (dB) | Function | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | | |
| 30 - 130 | L _A | A | Fast | 94.00 | 1 | 94.0 | ± 1.1 |

6.1.2 Linearity

| UUT Setting | | | | Applied Value | | UUT Reading (dB) |
|-------------|----------------|---------------------|----------------|---------------|-------------|------------------|
| Range (dB) | Function | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | |
| 30 - 130 | L _A | A | Fast | 94.00 | 1 | 94.0 (Ref.) |
| | | | | 104.00 | | 104.0 |
| | | | | 114.00 | | 114.0 |

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

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

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Certificate of Calibration

校正證書

Certificate No. : C171100

證書編號

6.2 Time Weighting

| UUT Setting | | | | Applied Value | | UUT Reading (dB) | IEC 61672 Class 1 Spec. (dB) |
|-------------|----------------|---------------------|----------------|---------------|-------------|------------------|------------------------------|
| Range (dB) | Function | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | | |
| 30 - 130 | L _A | A | Fast | 94.00 | 1 | 94.0 | Ref. |
| | | | Slow | | | 94.0 | ± 0.3 |

6.3 Frequency Weighting

6.3.1 A-Weighting

| UUT Setting | | | | Applied Value | | UUT Reading (dB) | IEC 61672 Class 1 Spec. (dB) |
|-------------|----------------|---------------------|----------------|---------------|----------|------------------|------------------------------|
| Range (dB) | Function | Frequency Weighting | Time Weighting | Level (dB) | Freq. | | |
| 30 - 130 | L _A | A | Fast | 94.00 | 63 Hz | 67.7 | -26.2 ± 1.5 |
| | | | | | 125 Hz | 77.8 | -16.1 ± 1.5 |
| | | | | | 250 Hz | 85.3 | -8.6 ± 1.4 |
| | | | | | 500 Hz | 90.7 | -3.2 ± 1.4 |
| | | | | | 1 kHz | 94.0 | Ref. |
| | | | | | 2 kHz | 95.2 | +1.2 ± 1.6 |
| | | | | | 4 kHz | 95.0 | +1.0 ± 1.6 |
| | | | | | 8 kHz | 92.9 | -1.1 (+2.1 ; -3.1) |
| | | | | | 12.5 kHz | 89.5 | -4.3 (+3.0 ; -6.0) |

6.3.2 C-Weighting

| UUT Setting | | | | Applied Value | | UUT Reading (dB) | IEC 61672 Class 1 Spec. (dB) |
|-------------|----------------|---------------------|----------------|---------------|----------|------------------|------------------------------|
| Range (dB) | Function | Frequency Weighting | Time Weighting | Level (dB) | Freq. | | |
| 30 - 130 | L _C | C | Fast | 94.00 | 63 Hz | 93.1 | -0.8 ± 1.5 |
| | | | | | 125 Hz | 93.8 | -0.2 ± 1.5 |
| | | | | | 250 Hz | 94.0 | 0.0 ± 1.4 |
| | | | | | 500 Hz | 94.0 | 0.0 ± 1.4 |
| | | | | | 1 kHz | 94.0 | Ref. |
| | | | | | 2 kHz | 93.8 | -0.2 ± 1.6 |
| | | | | | 4 kHz | 93.2 | -0.8 ± 1.6 |
| | | | | | 8 kHz | 91.0 | -3.0 (+2.1 ; -3.1) |
| | | | | | 12.5 kHz | 87.6 | -6.2 (+3.0 ; -6.0) |

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

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。



Certificate of Calibration 校正證書

Certificate No. : C171100
證書編號

- Remarks : - UUT Microphone Model No. : UC-59 & S/N : 04870
- Mfr's Spec. : IEC 61672 Class 1
- Uncertainties of Applied Value :
- | | | |
|--------|------------------|--------------------------|
| 94 dB | : 63 Hz - 125 Hz | : ± 0.35 dB |
| | 250 Hz - 500 Hz | : ± 0.30 dB |
| | 1 kHz | : ± 0.20 dB |
| | 2 kHz - 4 kHz | : ± 0.35 dB |
| | 8 kHz | : ± 0.45 dB |
| | 12.5 kHz | : ± 0.70 dB |
| 104 dB | : 1 kHz | : ± 0.10 dB (Ref. 94 dB) |
| 114 dB | : 1 kHz | : ± 0.10 dB (Ref. 94 dB) |
- The uncertainties are for a confidence probability of not less than 95 %.

Note :

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

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

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

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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. : AG090069
Date of Issue : September 13, 2017
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
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 : 16J101716
Date of Received : Sep 12, 2017
Date of Calibration : Sep 12, 2017
Date of Next Calibration^(a) : Dec 12, 2017

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 | 7.37 | -0.05 | Satisfactory |
| 10.01 | 10.04 | +0.03 | Satisfactory |

Tolerance of pH should be less than ±0.10 (pH unit)

(2) Temperature

| Reading of Ref. thermometer (°C) | Displayed Reading (°C) | Tolerance (°C) | Results |
|----------------------------------|------------------------|----------------|--------------|
| 16.5 | 17.2 | +0.7 | Satisfactory |
| 25.0 | 25.3 | +0.3 | Satisfactory |
| 37.0 | 36.7 | -0.3 | 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 from relevant international standards.
^(b) The results relate only to the calibrated equipment as received
^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY :


FUNG Yuen-ching Aries
Laboratory Manager



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. : AG090069
Date of Issue : September 13, 2017
Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) | Results |
|-------------------------|--------------------------|------------------|--------------|
| 8.04 | 7.98 | -0.06 | Satisfactory |
| 3.63 | 3.72 | +0.09 | Satisfactory |
| 0.01 | 0.06 | +0.05 | Satisfactory |

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

| Expected Reading ($\mu\text{S}/\text{cm}$) | Displayed Reading ($\mu\text{S}/\text{cm}$) | Tolerance (%) | Results |
|----------------------------------------------|-----------------------------------------------|---------------|--------------|
| 146.9 | 140.4 | -4.4 | Satisfactory |
| 1412 | 1322 | -6.4 | Satisfactory |
| 12890 | 12064 | -6.4 | Satisfactory |
| 58670 | 57032 | -2.8 | Satisfactory |
| 111900 | 107344 | -4.1 | Satisfactory |

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

(5) Salinity

| Expected Reading (g/L) | Displayed Reading (g/L) | Tolerance (%) | Results |
|------------------------|-------------------------|---------------|--------------|
| 10 | 10.17 | +1.7 | Satisfactory |
| 20 | 20.20 | +1.0 | Satisfactory |
| 30 | 30.07 | +2.3 | Satisfactory |

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

(6) Turbidity

| Expected Reading (NTU) | Displayed Reading ⁽¹⁾ (NTU) | Tolerance ⁽²⁾ (%) | Results |
|------------------------|----------------------------------------|------------------------------|--------------|
| 10 | 9.7 | -3.0 | Satisfactory |
| 20 | 19.0 | -5.0 | Satisfactory |
| 100 | 101.1 | +1.1 | Satisfactory |
| 800 | 814.6 | +1.8 | Satisfactory |

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

~ END OF REPORT ~

Remark(s): -

⁽¹⁾ "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

⁽²⁾ The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.



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. : AG090067
Date of Issue : 13 September 2017
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
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 : 17E102521
Date of Received : Sep 12, 2017
Date of Calibration : Sep 12, 2017
Date of Next Calibration^(a) : Dec 12, 2017

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 | 4.09 | +0.09 | Satisfactory |
| 7.42 | 7.38 | -0.04 | Satisfactory |
| 10.01 | 9.94 | -0.07 | Satisfactory |

Tolerance of pH should be less than ±0.10 (pH unit)

(2) Temperature

| Reading of Ref. thermometer (°C) | Displayed Reading (°C) | Tolerance (°C) | Results |
|----------------------------------|------------------------|----------------|--------------|
| 16.5 | 16.9 | +0.4 | Satisfactory |
| 25.0 | 25.2 | +0.2 | Satisfactory |
| 37.0 | 36.4 | -0.6 | 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 from relevant international standards.
^(b) The results relate only to the calibrated equipment as received
^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY :

FUNG Yuen-ching Aries
Laboratory Manager



專業化驗有限公司

QUALITY PRO TEST-CONSULT LIMITED

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CALIBRATION REPORT

Report No. : AG090067
Date of Issue : 13 September 2017
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PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) | Results |
|-------------------------|--------------------------|------------------|--------------|
| 8.03 | 7.95 | -0.08 | Satisfactory |
| 3.76 | 3.84 | +0.08 | Satisfactory |
| 0.02 | 0.12 | +0.10 | Satisfactory |

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

| Conc. of KCl (M) | Expected Reading ($\mu\text{S/cm}$) | Displayed Reading ($\mu\text{S/cm}$) | Tolerance (%) | Results |
|------------------|---------------------------------------|----------------------------------------|---------------|--------------|
| 0.001 | 146.9 | 151.6 | +3.2 | Satisfactory |
| 0.01 | 1,412 | 1,340 | -5.1 | Satisfactory |
| 0.1 | 12,890 | 12,006 | -6.9 | Satisfactory |
| 0.5 | 58,670 | 57,088 | -2.7 | Satisfactory |
| 1.0 | 111,900 | 105,890 | -5.4 | Satisfactory |

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

(5) Salinity

| Expected Reading (g/L) | Displayed Reading (g/L) | Tolerance (%) | Results |
|------------------------|-------------------------|---------------|--------------|
| 10 | 9.95 | -0.5 | Satisfactory |
| 20 | 20.30 | +1.5 | Satisfactory |
| 30 | 30.31 | +1.0 | Satisfactory |

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

(6) Turbidity

| Expected Reading (NTU) | Displayed Reading ^(f) (NTU) | Tolerance ^(g) (%) | Results |
|------------------------|----------------------------------------|------------------------------|--------------|
| 10 | 9.6 | -4.0 | Satisfactory |
| 20 | 19.3 | -3.5 | Satisfactory |
| 100 | 98.7 | -1.3 | Satisfactory |
| 800 | 781.2 | +2.3 | 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 from relevant international standards.



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG090072
Date of Issue : 14 September 2017
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment : YSI 6920 V2 Sonde (Multi-Parameters)
Manufacturer : YSI (a xylem brand)
Serial Number : 000109DF
Date of Received : Sep 12, 2017
Date of Calibration : Sep 12, 2017 to Sep 14, 2017
Date of Next Calibration^(a) : Dec 12, 2017

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 | 7.45 | +0.03 | Satisfactory |
| 10.01 | 10.07 | +0.06 | Satisfactory |

Tolerance of pH should be less than ±0.10 (pH unit)

(2) Temperature

| Reading of Ref. thermometer (°C) | Displayed Reading (°C) | Tolerance (°C) | Results |
|----------------------------------|------------------------|----------------|--------------|
| 16.5 | 17.0 | +0.5 | Satisfactory |
| 25.0 | 25.5 | +0.5 | Satisfactory |
| 37.0 | 36.6 | -0.4 | 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 from relevant international standards.
- ^(b) The results relate only to the calibrated equipment as received
- ^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- ^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- ^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY :


FUNG Yuen-ching Aries
Laboratory Manager



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG090072
Date of Issue : 14 September 2017
Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) | Results |
|-------------------------|--------------------------|------------------|--------------|
| 8.05 | 8.11 | +0.06 | Satisfactory |
| 3.96 | 4.04 | +0.08 | Satisfactory |
| 0.03 | 0.18 | +0.15 | Satisfactory |

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

| Conc. of KCl (M) | Expected Reading ($\mu\text{S/cm}$) | Displayed Reading ($\mu\text{S/cm}$) | Tolerance (%) | Results |
|------------------|---------------------------------------|----------------------------------------|---------------|--------------|
| 0.001 | 146.9 | 152.4 | +3.7 | Satisfactory |
| 0.01 | 1,412 | 1346 | -4.7 | Satisfactory |
| 0.1 | 12,890 | 13382 | +3.8 | Satisfactory |
| 0.5 | 58,670 | 59964 | +2.2 | Satisfactory |
| 1.0 | 111,900 | 108242 | -3.3 | Satisfactory |

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

(5) Salinity

| Expected Reading (g/L) | Displayed Reading (g/L) | Tolerance (%) | Results |
|------------------------|-------------------------|---------------|--------------|
| 10 | 9.92 | -0.8 | Satisfactory |
| 20 | 19.88 | -0.6 | Satisfactory |
| 30 | 29.79 | -0.7 | Satisfactory |

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

(6) Turbidity^(f)

| Expected Reading (NTU) | Displayed Reading ^(g) (NTU) | Tolerance ^(h) (%) | Results |
|------------------------|----------------------------------------|------------------------------|--------------|
| 10 | 10.2 | +2.0 | Satisfactory |
| 20 | 20.8 | +4.0 | Satisfactory |
| 100 | 108.4 | +8.4 | Satisfactory |
| 800 | 822.0 | +2.8 | Satisfactory |

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

~ END OF REPORT ~

Remark(s): -

^(f) Recalibration of specified parameter was conducted on 14 September 2017.

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

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



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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

Report No. : AG090070
Date of Issue : 13 September, 2017
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment : YSI 6920 V2 Sonde (Multi-Parameters)
Manufacturer : YSI (a xylem brand)
Serial Number : 00019CB2
Date of Received : Sep 12, 2017
Date of Calibration : Sep 12, 2017
Date of Next Calibration^(a) : Dec 12, 2017

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

| <u>Parameter</u> | <u>Reference Method</u> |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | 3.94 | -0.06 | Satisfactory |
| 7.42 | 7.37 | -0.05 | Satisfactory |
| 10.01 | 9.98 | -0.03 | Satisfactory |

Tolerance of pH should be less than ±0.10 (pH unit)

~ 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 from relevant international standards.
^(b) The results relate only to the calibrated equipment as received
^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY :


FUNG Yuen-ching Aries
Laboratory Manager



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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

Report No. : AG090070
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PART D – CALIBRATION RESULTS (Cont'd)

(2) Temperature

| Reading of Ref. thermometer (°C) | Displayed Reading (°C) | Tolerance (°C) | Results |
|----------------------------------|------------------------|----------------|--------------|
| 16.5 | 17.2 | +0.7 | Satisfactory |
| 25.0 | 25.3 | +0.3 | Satisfactory |
| 37.0 | 36.4 | -0.6 | Satisfactory |

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

(3) Dissolved Oxygen

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) | Results |
|-------------------------|--------------------------|------------------|--------------|
| 8.03 | 8.09 | +0.06 | Satisfactory |
| 3.89 | 3.99 | +0.10 | Satisfactory |
| 0.02 | 0.11 | +0.09 | Satisfactory |

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

| Conc. of KCl (M) | Expected Reading ($\mu\text{S}/\text{cm}$) | Displayed Reading ($\mu\text{S}/\text{cm}$) | Tolerance (%) | Results |
|------------------|----------------------------------------------|-----------------------------------------------|---------------|--------------|
| 0.001 | 146.9 | 152.4 | +3.7 | Satisfactory |
| 0.01 | 1,412 | 1,530 | +8.4 | Satisfactory |
| 0.1 | 12,890 | 13,648 | +5.9 | Satisfactory |
| 0.5 | 58,670 | 59,342 | +1.1 | Satisfactory |
| 1.0 | 111,900 | 103,422 | -7.6 | Satisfactory |

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

(5) Salinity

| Expected Reading (g/L) | Displayed Reading (g/L) | Tolerance (%) | Results |
|------------------------|-------------------------|---------------|--------------|
| 10 | 9.95 | -0.5 | Satisfactory |
| 20 | 19.91 | -0.4 | Satisfactory |
| 30 | 29.77 | -0.8 | Satisfactory |

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

(6) Turbidity

| Expected Reading (NTU) | Displayed Reading ^(f) (NTU) | Tolerance ^(g) (%) | Results |
|------------------------|----------------------------------------|------------------------------|--------------|
| 10 | 10.9 | +9.0 | Satisfactory |
| 20 | 20.1 | +0.5 | Satisfactory |
| 100 | 108.3 | +8.3 | Satisfactory |
| 800 | 819.4 | +2.4 | 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 from relevant international standards.



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120027
Date of Issue : 11 December 2017
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
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 : Dec 07, 2017
Date of Calibration : Dec 07, 2017 to Dec 07, 2017
Date of Next Calibration^(a) : Mar 07, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

| <u>Parameter</u> | <u>Reference Method</u> |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | 4.03 | +0.03 | Satisfactory |
| 6.86 | 6.86 | +0.00 | Satisfactory |
| 7.42 | 7.46 | +0.04 | Satisfactory |
| 10.01 | 9.94 | -0.07 | Satisfactory |

Tolerance of pH should be less than ± 0.10 (pH unit)

(2) Temperature

| Reading of Ref. thermometer (°C) | Displayed Reading (°C) | Tolerance (°C) | Results |
|----------------------------------|------------------------|----------------|--------------|
| 16 | 16.30 | +0.3 | Satisfactory |
| 20 | 20.30 | +0.3 | Satisfactory |
| 38 | 37.80 | -0.2 | 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 from relevant international standards.
^(b) The results relate only to the calibrated equipment as received
^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY :


FUNG Yuen-ching Aries
Laboratory Manager



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120027
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Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) | Results |
|-------------------------|--------------------------|------------------|--------------|
| 0 | 0.07 | +0.07 | Satisfactory |
| 3.54 | 3.62 | +0.08 | Satisfactory |
| 8.70 | 8.62 | -0.08 | Satisfactory |

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

| Conc. of KCl (M) | Expected Reading ($\mu\text{S}/\text{cm}$) | Displayed Reading ($\mu\text{S}/\text{cm}$) | Tolerance (%) | Results |
|------------------|----------------------------------------------|-----------------------------------------------|---------------|--------------|
| 0.001 | 146.9 | 142.8 | -2.8 | Satisfactory |
| 0.01 | 1412 | 1476 | +4.5 | Satisfactory |
| 0.1 | 12890 | 12774 | -0.9 | Satisfactory |
| 0.5 | 58670 | 54732 | -6.7 | Satisfactory |
| 1.0 | 111900 | 111148 | -0.7 | Satisfactory |

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

(5) Salinity

| Expected Reading (g/L) | Displayed Reading (g/L) | Tolerance (%) | Results |
|------------------------|-------------------------|---------------|--------------|
| 10 | 9.87 | -1.3 | Satisfactory |
| 20 | 19.76 | -1.2 | Satisfactory |
| 30 | 29.9 | -0.3 | 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 | -- | -- |
| 4 | 4.1 | 2.5 | Satisfactory |
| 20 | 20.2 | 1.0 | Satisfactory |
| 100 | 106.8 | 6.8 | Satisfactory |
| 800 | 862.3 | 7.8 | 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 from relevant international standards.



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120026
Date of Issue : 11 December 2017
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
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 : Dec 07, 2017
Date of Calibration : Dec 07, 2017 to Dec 07, 2017
Date of Next Calibration^(a) : Mar 07, 2018

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 | 4.04 | +0.04 | Satisfactory |
| 6.86 | 6.86 | +0.00 | Satisfactory |
| 7.42 | 7.48 | +0.06 | Satisfactory |
| 10.01 | 9.94 | -0.07 | Satisfactory |

Tolerance of pH should be less than ± 0.10 (pH unit)

(2) Temperature

| Reading of Ref. thermometer (°C) | Displayed Reading (°C) | Tolerance (°C) | Results |
|----------------------------------|------------------------|----------------|--------------|
| 16 | 16.40 | +0.4 | Satisfactory |
| 20 | 20.20 | +0.2 | Satisfactory |
| 35 | 33.40 | -1.6 | 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 from relevant international standards.
^(b) The results relate only to the calibrated equipment as received
^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY :


FUNG Yuen-ching Aries
Laboratory Manager



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

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PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) | Results |
|-------------------------|--------------------------|------------------|--------------|
| 0 | 0.06 | +0.06 | Satisfactory |
| 3.54 | 3.66 | +0.12 | Satisfactory |
| 8.7 | 8.68 | -0.02 | Satisfactory |

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

| Conc. of KCl (M) | Expected Reading ($\mu\text{S}/\text{cm}$) | Displayed Reading ($\mu\text{S}/\text{cm}$) | Tolerance (%) | Results |
|------------------|----------------------------------------------|-----------------------------------------------|---------------|--------------|
| 0.001 | 146.9 | 137 | -6.7 | Satisfactory |
| 0.01 | 1412 | 1386 | -1.8 | Satisfactory |
| 0.1 | 12890 | 12248 | -5.0 | Satisfactory |
| 0.5 | 58670 | 55482 | -5.4 | Satisfactory |
| 1.0 | 111900 | 111072 | -0.7 | Satisfactory |

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

(5) Salinity

| Expected Reading (g/L) | Displayed Reading (g/L) | Tolerance (%) | Results |
|------------------------|-------------------------|---------------|--------------|
| 10 | 9.88 | -1.2 | Satisfactory |
| 20 | 19.6 | -2.0 | Satisfactory |
| 30 | 30.0 | +0.0 | 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 | -- | -- |
| 4 | 4.2 | +5.0 | Satisfactory |
| 20 | 20.3 | +1.5 | Satisfactory |
| 100 | 104.7 | +4.7 | Satisfactory |
| 800 | 844.2 | +5.5 | 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 from relevant international standards.



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120028
Date of Issue : 11 December 2017
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
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 : Dec 07, 2017
Date of Calibration : Dec 07, 2017 to Dec 07, 2017
Date of Next Calibration^(a) : Mar 07, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

| <u>Parameter</u> | <u>Reference Method</u> |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | 4.02 | +0.02 | Satisfactory |
| 6.86 | 6.86 | +0.00 | Satisfactory |
| 7.42 | 7.38 | -0.04 | Satisfactory |
| 10.01 | 10.03 | +0.02 | Satisfactory |

Tolerance of pH should be less than ±0.10 (pH unit)

(2) Temperature

| Reading of Ref. thermometer (°C) | Displayed Reading (°C) | Tolerance (°C) | Results |
|----------------------------------|------------------------|----------------|--------------|
| 15 | 15.70 | +0.70 | Satisfactory |
| 20 | 20.12 | +0.12 | Satisfactory |
| 37 | 35.80 | -1.20 | 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 from relevant international standards.
^(b) The results relate only to the calibrated equipment as received.
^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY :


FUNG Yuen-ching Aries
Laboratory Manager



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

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PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) | Results |
|-------------------------|--------------------------|------------------|--------------|
| 0 | 0.02 | +0.02 | Satisfactory |
| 3.54 | 3.40 | -0.14 | Satisfactory |
| 8.7 | 8.73 | +0.03 | Satisfactory |

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

| Conc. of KCl (M) | Expected Reading ($\mu\text{S/cm}$) | Displayed Reading ($\mu\text{S/cm}$) | Tolerance (%) | Results |
|------------------|---------------------------------------|----------------------------------------|---------------|--------------|
| 0.001 | 146.9 | 152.3 | +3.7 | Satisfactory |
| 0.01 | 1412 | 1515 | +7.3 | Satisfactory |
| 0.1 | 12890 | 13408 | +4.0 | Satisfactory |
| 0.5 | 58670 | 56872 | -3.1 | Satisfactory |
| 1.0 | 111900 | 111144 | -0.7 | Satisfactory |

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

(5) Salinity

| Expected Reading (g/L) | Displayed Reading (g/L) | Tolerance (%) | Results |
|------------------------|-------------------------|---------------|--------------|
| 10 | 9.68 | -3.2 | Satisfactory |
| 20 | 18.98 | -5.1 | Satisfactory |
| 30 | 28.88 | -3.7 | Satisfactory |

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

(6) Turbidity

| Expected Reading (NTU) | Displayed Reading ^(f) (NTU) | Tolerance ^(g) (%) | Results |
|------------------------|----------------------------------------|------------------------------|--------------|
| 0 | 0.4 | -- | -- |
| 4 | 3.8 | -5.0 | Satisfactory |
| 20 | 19.8 | -1.0 | Satisfactory |
| 100 | 102.4 | +2.4 | Satisfactory |
| 800 | 828.4 | +3.6 | 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 from relevant international standards.



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120029
Date of Issue : 11 December 2017
Page No. : 1 of 2

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment : YSI 6920 (Multi-Parameters)
Manufacturer : YSI (a xylem brand)
Serial Number : 000109DF
Date of Received : Dec 07, 2017
Date of Calibration : Dec 07, 2017 to Dec 07, 2017
Date of Next Calibration^(a) : Mar 07, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS^(b,c)

(1) pH at 25°C

| Target (pH unit) | Displayed Reading ^(d) (pH Unit) | Tolerance ^(e) (pH Unit) | Results |
|------------------|--------------------------------------------|------------------------------------|--------------|
| 4.00 | 4.03 | +0.03 | Satisfactory |
| 6.86 | 6.86 | +0.00 | Satisfactory |
| 7.42 | 7.41 | -0.01 | Satisfactory |
| 10.01 | 10.05 | +0.04 | Satisfactory |

Tolerance of pH should be less than ± 0.10 (pH unit)

(2) Temperature

| Reading of Ref. thermometer (°C) | Displayed Reading (°C) | Tolerance (°C) | Results |
|----------------------------------|------------------------|----------------|--------------|
| 15 | 15.30 | +0.30 | Satisfactory |
| 20 | 20.13 | +0.13 | Satisfactory |
| 37 | 36.20 | -0.80 | 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 from relevant international standards.
^(b) The results relate only to the calibrated equipment as received
^(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
^(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY :


FUNG Yuen-ching Aries
Laboratory Manager



專業化驗有限公司

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120029
Date of Issue : 11 December 2017
Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) | Results |
|-------------------------|--------------------------|------------------|--------------|
| 0 | 0.06 | +0.06 | Satisfactory |
| 3.54 | 3.38 | -0.16 | Satisfactory |
| 8.7 | 8.66 | -0.04 | Satisfactory |

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

| Conc. of KCl (M) | Expected Reading ($\mu\text{S/cm}$) | Displayed Reading ($\mu\text{S/cm}$) | Tolerance (%) | Results |
|------------------|---------------------------------------|----------------------------------------|---------------|--------------|
| 0.001 | 146.9 | 152.8 | +4.0 | Satisfactory |
| 0.01 | 1412 | 1489 | +5.5 | Satisfactory |
| 0.1 | 12890 | 12672 | -1.7 | Satisfactory |
| 0.5 | 58670 | 54482 | -7.1 | Satisfactory |
| 1.0 | 111900 | 111086 | -0.7 | Satisfactory |

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

(5) Salinity

| Expected Reading (g/L) | Displayed Reading (g/L) | Tolerance (%) | Results |
|------------------------|-------------------------|---------------|--------------|
| 10 | 9.66 | -3.4 | Satisfactory |
| 20 | 18.78 | -6.1 | Satisfactory |
| 30 | 28.73 | -4.2 | Satisfactory |

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

(6) Turbidity

| Expected Reading (NTU) | Displayed Reading ^(f) (NTU) | Tolerance ^(g) (%) | Results |
|------------------------|----------------------------------------|------------------------------|--------------|
| 0 | 0.3 | -- | -- |
| 4 | 3.8 | -5.0 | Satisfactory |
| 20 | 21.2 | +6.0 | Satisfactory |
| 100 | 102.8 | +2.8 | Satisfactory |
| 800 | 846.4 | +5.8 | 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 from relevant international standards.



輝創工程有限公司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration 校正證書

Certificate No. : C175727
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC17-2277) Date of Receipt / 收件日期 : 3 October 2017

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 : (55 ± 20)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範


Calibration check


DATE OF TEST / 測試日期 : 13 October 2017

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 H C Chan
Engineer

Certified By : 
核證 K C Lee
Engineer

Date of Issue : 16 October 2017
簽發日期

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.
本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。

Certificate of Calibration

校正證書

Certificate No. : C175727

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 :

| <u>Equipment ID</u> | <u>Description</u> | <u>Certificate No.</u> |
|---------------------|-------------------------------------|------------------------|
| 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 |
| 1.9 | 1.7 | +0.2 | 0.2 | 2.0 |
| 4.0 | 3.8 | +0.2 | 0.2 | 2.0 |
| 6.0 | 5.9 | +0.1 | 0.3 | 2.0 |
| 8.0 | 8.0 | 0.0 | 0.3 | 2.0 |
| 10.0 | 10.1 | -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.

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

本證書所載校正用之測試器材均可溯源至國際標準。局部深印本證書需先獲本實驗室書面批准。

Sun Creation Engineering Limited Calibration & Testing Laboratory

c/o 4F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 校正及檢測實驗室

c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel 電話: 2927 2606

Fax 傳真: 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 : 18 October 2017

Brand of Test Meter: Global Water

Model: Speed Sensor: WE550 (S/N:E1337005099)

Direction Sensor: WE570 (S/N:153500564)

Location : Pak Mong, Siu Ho Wan

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

| Global Water (m/s) | Anemometer (m/s) |
|--------------------|------------------|
| 2.29 | 2.5 |
| 1.42 | 1.6 |
| 0.47 | 0.5 |

Wind Direction Test

| Global Water (o) | Marine Compass (o) |
|------------------|--------------------|
| 270.09 | 270 |
| 0.03 | 0 |
| 90.05 | 90 |
| 181.03 | 180 |

Calibrated by: *AP*
Yeung Ping Fai
(Technical Officer)

Checked by : *Fat*
Ho Kam Fat
(Senior Technical Officer)

Appendix F

EM&A Monitoring Schedules

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Noise Monitoring Schedule (1 to 31 December 2017)**

Alternative Noise Monitoring at Pak Mong Village Entrance

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

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Air Quality Monitoring Schedule (1 to 31 December 2017)**

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| | | | | | 01-Dec | 02-Dec |
| | | | | | | |
| 03-Dec | 04-Dec | 05-Dec | 06-Dec | 07-Dec | 08-Dec | 09-Dec |
| | | 1-hr TSP Monitoring 24-hr TSP Monitoring | | | | |
| 10-Dec | 11-Dec | 12-Dec | 13-Dec | 14-Dec | 15-Dec | 16-Dec |
| | 1-hr TSP Monitoring 24-hr TSP Monitoring | | | 1-hr TSP Monitoring 24-hr TSP Monitoring | | |
| 17-Dec | 18-Dec | 19-Dec | 20-Dec | 21-Dec | 22-Dec | 23-Dec |
| | | | 1-hr TSP Monitoring 24-hr TSP Monitoring | | | 1-hr TSP Monitoring 24-hr TSP Monitoring |
| 24-Dec | 25-Dec | 26-Dec | 27-Dec | 28-Dec | 29-Dec | 30-Dec |
| | | | | | 1-hr TSP Monitoring 24-hr TSP Monitoring | |
| 31-Dec | | | | | | |
| | | | | | | |

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Noise Monitoring Schedule (1 to 31 January 2018)**

Alternative Noise Monitoring at Pak Mong Village Entrance

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

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. Additional weekly noise impact monitoring for construction works undertaken between 19:00-07:00 will be supplemented after confirmation of construction schedule.

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Air Quality Monitoring Schedule (1 to 31 January 2018)**

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|--------|----------|
| | 01-Jan | 02-Jan | 03-Jan | 04-Jan | 05-Jan | 06-Jan |
| | | | | 1-hr TSP Monitoring 24-hr TSP Monitoring | | |
| 07-Jan | 08-Jan | 09-Jan | 10-Jan | 11-Jan | 12-Jan | 13-Jan |
| | | | 1-hr TSP Monitoring 24-hr TSP Monitoring | | | |
| 14-Jan | 15-Jan | 16-Jan | 17-Jan | 18-Jan | 19-Jan | 20-Jan |
| | | 1-hr TSP Monitoring 24-hr TSP Monitoring | | | | |
| 21-Jan | 22-Jan | 23-Jan | 24-Jan | 25-Jan | 26-Jan | 27-Jan |
| | 1-hr TSP Monitoring 24-hr TSP Monitoring | | | 1-hr TSP Monitoring 24-hr TSP Monitoring | | |
| 28-Jan | 29-Jan | 30-Jan | 31-Jan | | | |
| | | | 1-hr TSP Monitoring 24-hr TSP Monitoring | | | |

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/2012/07 - Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Marine Water Quality Monitoring (WQM) Schedule (December 2017)**

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|----------------------------------------------------|---------|---------------------------------------------------|----------|---------------------------------------------------|----------|
| | | | | | 1-Dec | 2-Dec |
| | | | | | ebb tide 9:02 - 12:32 flood tide 15:09 - 18:39 | |
| 3-Dec | 4-Dec | 5-Dec | 6-Dec | 7-Dec | 8-Dec | 9-Dec |
| | ebb tide 11:36 - 15:06 flood tide 6:04 - 9:34 | | ebb tide 13:16 - 16:46 flood tide 7:54 - 11:24 | | ebb tide 15:01 - 18:31 flood tide 9:44 - 13:14 | |
| 10-Dec | 11-Dec | 12-Dec | 13-Dec | 14-Dec | 15-Dec | 16-Dec |
| | ebb tide 5:19 - 8:49 flood tide 12:53 - 16:23 | | ebb tide 7:49 - 11:19 flood tide 14:12 - 17:42 | | ebb tide 9:39 - 13:09 flood tide 4:08 - 7:38 | |
| 17-Dec | 18-Dec | 19-Dec | 20-Dec | 21-Dec | 22-Dec | 23-Dec |
| | ebb tide 11:32 - 15:02 flood tide 6:15 - 9:45 | | ebb tide 12:40 - 16:10 flood tide 7:25 - 10:55 | | ebb tide 13:50 - 17:20 flood tide 8:34 - 12:04 | |
| 24-Dec | 25-Dec | 26-Dec | 27-Dec | 28-Dec | 29-Dec | 30-Dec |
| | ebb tide 16:29 - 19:59 flood tide 10:48 - 14:18 | | ebb tide 4:51 - 8:21 flood tide 12:24 - 15:54 | | ebb tide 7:27 - 10:57 flood tide 13:45 - 17:15 | |
| 31-Dec | | | | | | |
| | | | | | | |

**HY/2012/07 - Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Marine Water Quality Monitoring (WQM) Schedule (January 2018)**

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|----------------------------------------------------|---------|----------------------------------------------------|----------|---------------------------------------------------|----------|
| | 1-Jan | 2-Jan | 3-Jan | 4-Jan | 5-Jan | 6-Jan |
| | ebb tide 10:36 - 14:06 flood tide 5:11 - 8:41 | | ebb tide 12:17 - 15:47 flood tide 6:55 - 10:25 | | ebb tide 13:51 - 17:21 flood tide 8:29 - 11:59 | |
| 7-Jan | 8-Jan | 9-Jan | 10-Jan | 11-Jan | 12-Jan | 13-Jan |
| | ebb tide 16:50 - 20:20 flood tide 10:53 - 14:23 | | ebb tide 5:47 - 9:17 flood tide 12:33 - 16:03 | | ebb tide 8:25 - 11:55 flood tide 13:57 - 17:27 | |
| 14-Jan | 15-Jan | 16-Jan | 17-Jan | 18-Jan | 19-Jan | 20-Jan |
| | ebb tide 10:40 - 14:10 flood tide 5:31 - 9:01 | | ebb tide 11:47 - 15:17 flood tide 6:35 - 10:05 | | ebb tide 12:52 - 16:22 flood tide 7:32 - 11:02 | |
| 21-Jan | 22-Jan | 23-Jan | 24-Jan | 25-Jan | 26-Jan | 27-Jan |
| | ebb tide 14:45 - 18:15 flood tide 9:00 - 12:30 | | ebb tide 16:45 - 20:15 flood tide 10:20 - 13:50 | | ebb tide 5:30 - 9:00 flood tide 11:58 - 15:28 | |
| 28-Jan | 29-Jan | 30-Jan | 31-Jan | | | |
| | ebb tide 9:36 - 13:06 flood tide 4:16 - 7:46 | | ebb tide 11:19 - 14:49 flood tide 5:56 - 9:26 | | | |

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/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Dolphin Monitoring Survey Schedule (1 to 31 December 2017)**

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

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Dolphin Monitoring Survey Schedule (1 to 31 January 2018)**

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

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.

Appendix G

Impact Air Quality
Monitoring Results and
Graphical Presentation

1-hour TSP Monitoring Results at Air Quality Monitoring Station ASR8A

| Project | Works | Date(yyyy-mm-dd) | Station | Time (hh:mm, 24hour) | Parameter | Results (ug/m3) | Action Level (ug/m3) | Limit Level (ug/m3) | | |
|---------|------------|------------------|---------|----------------------|-----------|-----------------|----------------------|---------------------|--|--|
| TMCLKL | HY/2012/07 | 2017-12-05 | ASR8A | 8:35 | 1-hr TSP | 149 | 394 | 500 | | |
| TMCLKL | HY/2012/07 | 2017-12-05 | ASR8A | 9:37 | 1-hr TSP | 133 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-05 | ASR8A | 11:00 | 1-hr TSP | 112 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | ASR8A | 8:00 | 1-hr TSP | 83 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | ASR8A | 9:02 | 1-hr TSP | 73 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | ASR8A | 10:04 | 1-hr TSP | 65 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-14 | ASR8A | 8:10 | 1-hr TSP | 42 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-14 | ASR8A | 9:12 | 1-hr TSP | 31 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-14 | ASR8A | 10:14 | 1-hr TSP | 87 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | ASR8A | 8:05 | 1-hr TSP | 126 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | ASR8A | 9:07 | 1-hr TSP | 112 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | ASR8A | 10:09 | 1-hr TSP | 121 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-23 | ASR8A | 8:02 | 1-hr TSP | 69 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-23 | ASR8A | 9:04 | 1-hr TSP | 57 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-23 | ASR8A | 10:06 | 1-hr TSP | 45 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | ASR8A | 8:06 | 1-hr TSP | 133 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | ASR8A | 9:08 | 1-hr TSP | 93 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | ASR8A | 10:10 | 1-hr TSP | 92 | | | | |
| | | | | Average | | 90 | | | | |
| | | | | Min. | | 31 | | | | |
| | | | | Max. | | 149 | | | | |

1-hour TSP Monitoring Results at Air Quality Monitoring Station ASR9

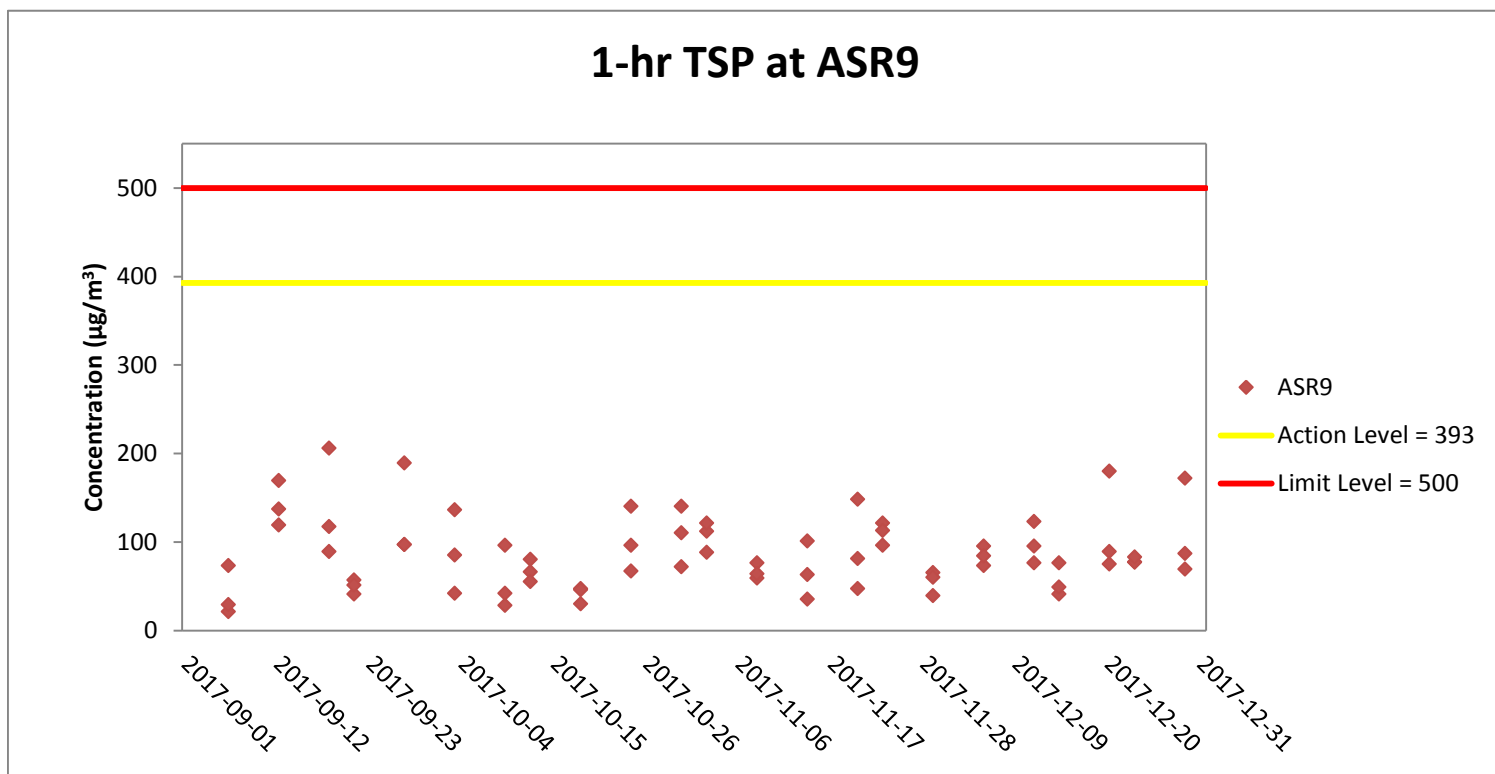
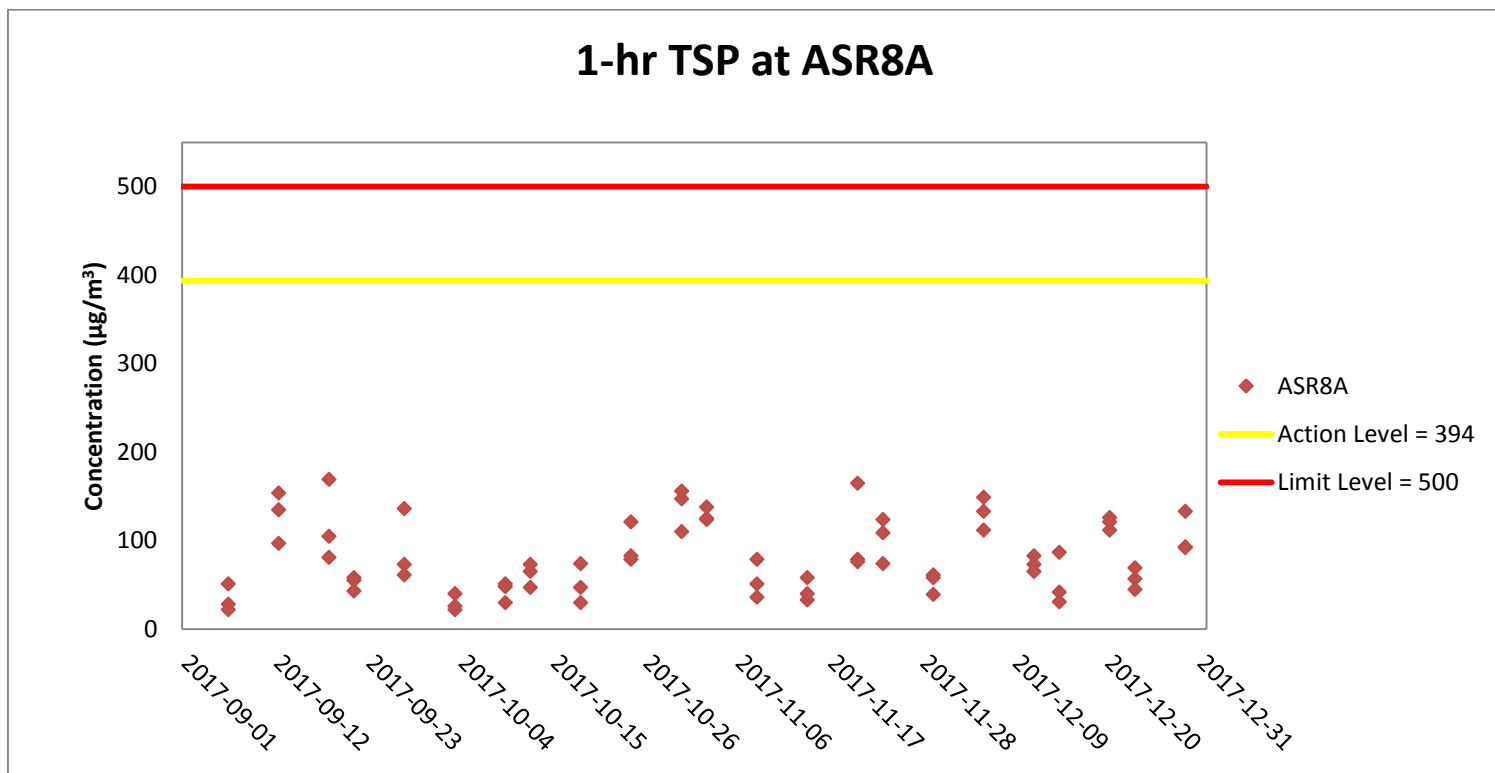
| Project | Works | Date(yyyy-mm-dd) | Station | Time (hh:mm, 24hour) | Parameter | Results (ug/m3) | Action Level (ug/m3) | Limit Level (ug/m3) | | |
|---------|------------|------------------|---------|----------------------|-----------|-----------------|----------------------|---------------------|--|--|
| TMCLKL | HY/2012/07 | 2017-12-05 | ASR9 | 8:46 | 1-hr TSP | 73 | 393 | 500 | | |
| TMCLKL | HY/2012/07 | 2017-12-05 | ASR9 | 9:48 | 1-hr TSP | 95 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-05 | ASR9 | 11:10 | 1-hr TSP | 84 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | ASR9 | 8:10 | 1-hr TSP | 123 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | ASR9 | 9:12 | 1-hr TSP | 76 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | ASR9 | 10:14 | 1-hr TSP | 95 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-14 | ASR9 | 8:22 | 1-hr TSP | 76 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-14 | ASR9 | 9:24 | 1-hr TSP | 41 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-14 | ASR9 | 10:26 | 1-hr TSP | 49 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | ASR9 | 8:16 | 1-hr TSP | 180 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | ASR9 | 9:18 | 1-hr TSP | 75 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | ASR9 | 10:20 | 1-hr TSP | 89 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-23 | ASR9 | 8:14 | 1-hr TSP | 77 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-23 | ASR9 | 9:16 | 1-hr TSP | 77 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-23 | ASR9 | 10:18 | 1-hr TSP | 83 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | ASR9 | 8:17 | 1-hr TSP | 172 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | ASR9 | 9:19 | 1-hr TSP | 87 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | ASR9 | 10:21 | 1-hr TSP | 69 | | | | |
| | | | | Average | | 90 | | | | |
| | | | | Min. | | 41 | | | | |
| | | | | Max. | | 180 | | | | |

24-hour TSP Monitoring Results at Air Quality Monitoring Station ASR8A

| Project | Works | Date(yyyy-mm-dd) | Station | Time (hh:mm, 24hour) | Parameter | Results (ug/m3) | Action Level (ug/m3) | Limit Level (ug/m3) |
|---------|------------|------------------|---------|----------------------|-----------|-----------------|----------------------|---------------------|
| TMCLKL | HY/2012/07 | 2017-12-05 | ASR8A | 12:02 | 24-hr TSP | 71 | 178 | 260 |
| TMCLKL | HY/2012/07 | 2017-12-11 | ASR8A | 11:40 | 24-hr TSP | 107 | | |
| TMCLKL | HY/2012/07 | 2017-12-14 | ASR8A | 11:52 | 24-hr TSP | 53 | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | ASR8A | 11:35 | 24-hr TSP | 98 | | |
| TMCLKL | HY/2012/07 | 2017-12-23 | ASR8A | 11:55 | 24-hr TSP | 151 | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | ASR8A | 11:15 | 24-hr TSP | 38 | | |
| | | | | | Average | 86 | | |
| | | | | | Min. | 38 | | |
| | | | | | Max. | 151 | | |

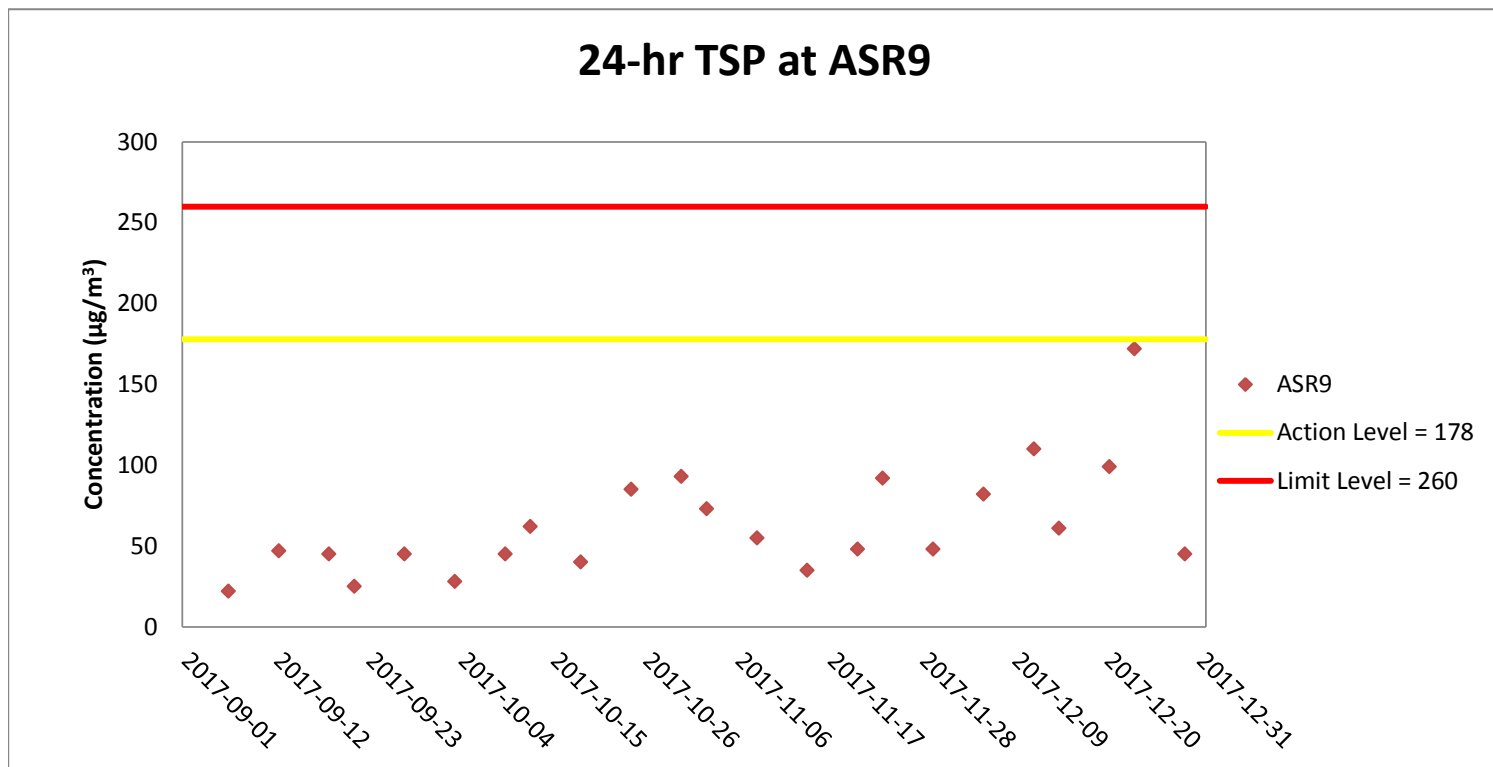
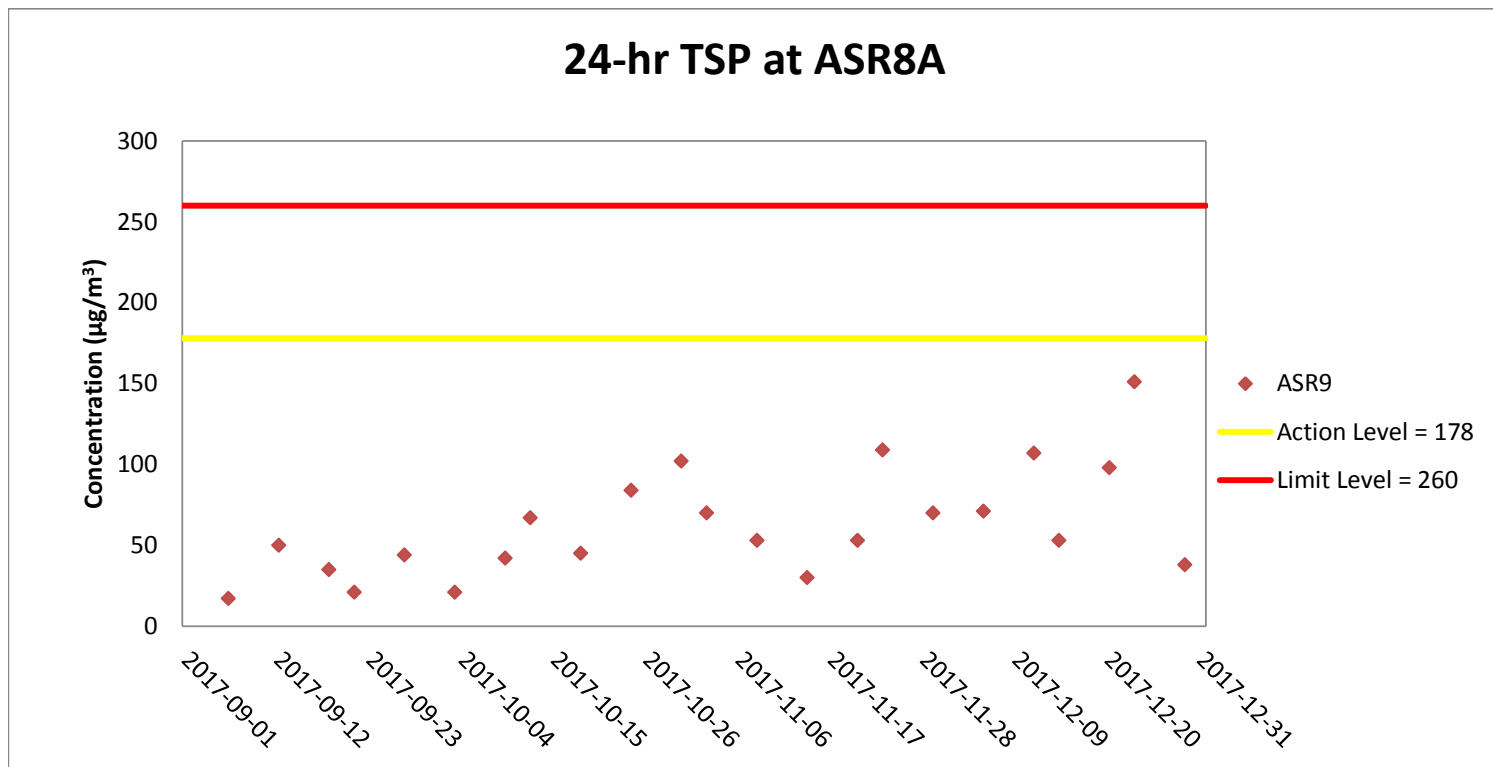
24-hour TSP Monitoring Results at Air Quality Monitoring Station ASR9

| Project | Works | Date(yyyy-mm-dd) | Station | Time (hh:mm, 24hour) | Parameter | Results (ug/m3) | Action Level (ug/m3) | Limit Level (ug/m3) |
|---------|------------|------------------|---------|----------------------|-----------|-----------------|----------------------|---------------------|
| TMCLKL | HY/2012/07 | 2017-12-05 | ASR9 | 12:12 | 24-hr TSP | 82 | 178 | 260 |
| TMCLKL | HY/2012/07 | 2017-12-11 | ASR9 | 11:52 | 24-hr TSP | 110 | | |
| TMCLKL | HY/2012/07 | 2017-12-14 | ASR9 | 12:05 | 24-hr TSP | 61 | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | ASR9 | 11:46 | 24-hr TSP | 99 | | |
| TMCLKL | HY/2012/07 | 2017-12-23 | ASR9 | 12:06 | 24-hr TSP | 172 | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | ASR9 | 11:26 | 24-hr TSP | 45 | | |
| | | | | | Average | 95 | | |
| | | | | | Min. | 45 | | |
| | | | | | Max. | 172 | | |



Weather condition within the reporting period varied between sunny to rainy.

Major construction works undertaken within the reporting period include Pier construction; Re-alignment of Cheung Tung Road; Road works along North Lantau Highway; Launching gantry operation;; Installation of pier head and deck segments; and Slope work of Viaducts A, B & C.



Weather condition within the reporting period varied between sunny to rainy.
 Major construction works undertaken within the reporting period include Pier construction; Re-alignment of Cheung Tung Road; Road works along North Lantau Highway; Launching gantry operation; Installation of pier head and deck segments; and Slope work of Viaducts A, B & C.

Appendix H

Meteorological Data for the Reporting Month

| Date | Time (HH) | Wind speed (m/s) | Wind direction (deg) |
|------------|-----------|------------------|----------------------|
| 2017/12/5 | 0 | 0.06 | 101 |
| 2017/12/5 | 1 | 0.13 | 61 |
| 2017/12/5 | 2 | 0.10 | 89 |
| 2017/12/5 | 3 | 0.09 | 98 |
| 2017/12/5 | 4 | 0.07 | 62 |
| 2017/12/5 | 5 | 0.14 | 162 |
| 2017/12/5 | 6 | 0.03 | 178 |
| 2017/12/5 | 7 | 0.03 | 193 |
| 2017/12/5 | 8 | 0.02 | 284 |
| 2017/12/5 | 9 | 0.07 | 245 |
| 2017/12/5 | 10 | 0.02 | 218 |
| 2017/12/5 | 11 | 0.02 | 259 |
| 2017/12/5 | 12 | 0.03 | 324 |
| 2017/12/5 | 13 | 0.03 | 297 |
| 2017/12/5 | 14 | 0.02 | 233 |
| 2017/12/5 | 15 | 0.05 | 268 |
| 2017/12/5 | 16 | 0.03 | 168 |
| 2017/12/5 | 17 | 0.07 | 93 |
| 2017/12/5 | 18 | 0.09 | 55 |
| 2017/12/5 | 19 | 0.02 | 106 |
| 2017/12/5 | 20 | 0.29 | 187 |
| 2017/12/5 | 21 | 0.34 | 186 |
| 2017/12/5 | 22 | 0.32 | 184 |
| 2017/12/5 | 23 | 0.08 | 181 |
| 2017/12/6 | 0 | 0.16 | 176 |
| 2017/12/6 | 1 | 0.11 | 182 |
| 2017/12/6 | 2 | 0.12 | 187 |
| 2017/12/6 | 3 | 0.05 | 171 |
| 2017/12/6 | 4 | 0.02 | 106 |
| 2017/12/6 | 5 | 0.02 | 119 |
| 2017/12/6 | 6 | 0.02 | 183 |
| 2017/12/6 | 7 | 0.02 | 174 |
| 2017/12/6 | 8 | 0.09 | 138 |
| 2017/12/6 | 9 | 0.24 | 163 |
| 2017/12/6 | 10 | 0.31 | 181 |
| 2017/12/6 | 11 | 0.21 | 93 |
| 2017/12/6 | 12 | 0.08 | 211 |
| 2017/12/6 | 13 | 0.01 | 221 |
| 2017/12/6 | 14 | 0.26 | 108 |
| 2017/12/6 | 15 | 2.14 | 180 |
| 2017/12/6 | 16 | 0.96 | 195 |
| 2017/12/6 | 17 | 0.95 | 188 |
| 2017/12/6 | 18 | 1.03 | 162 |
| 2017/12/6 | 19 | 0.30 | 192 |
| 2017/12/6 | 20 | 0.04 | 133 |
| 2017/12/6 | 21 | 0.10 | 157 |
| 2017/12/6 | 22 | 0.02 | 212 |
| 2017/12/6 | 23 | 0.06 | 100 |
| 2017/12/11 | 0 | 0.03 | 256 |
| 2017/12/11 | 1 | 0.03 | 247 |
| 2017/12/11 | 2 | 0.02 | 151 |
| 2017/12/11 | 3 | 0.02 | 192 |
| 2017/12/11 | 4 | 0.03 | 104 |
| 2017/12/11 | 5 | 0.28 | 174 |
| 2017/12/11 | 6 | 0.28 | 185 |
| 2017/12/11 | 7 | 0.02 | 146 |
| 2017/12/11 | 8 | 0.05 | 69 |
| 2017/12/11 | 9 | 0.05 | 197 |
| 2017/12/11 | 10 | 0.08 | 252 |
| 2017/12/11 | 11 | 0.02 | 148 |
| 2017/12/11 | 12 | 0.02 | 229 |
| 2017/12/11 | 13 | 0.05 | 167 |
| 2017/12/11 | 14 | 0.03 | 167 |
| 2017/12/11 | 15 | 0.02 | 156 |
| 2017/12/11 | 16 | 0.63 | 185 |
| 2017/12/11 | 17 | 0.64 | 184 |
| 2017/12/11 | 18 | 0.36 | 160 |
| 2017/12/11 | 19 | 0.36 | 167 |
| 2017/12/11 | 20 | 0.12 | 116 |
| 2017/12/11 | 21 | 0.17 | 113 |
| 2017/12/11 | 22 | 0.04 | 128 |
| 2017/12/11 | 23 | 0.03 | 199 |

| Date | Time (HH) | Wind speed (m/s) | Wind direction (deg) |
|------------|-----------|------------------|----------------------|
| 2017/12/12 | 0 | 0.02 | 229 |
| 2017/12/12 | 1 | 0.03 | 236 |
| 2017/12/12 | 2 | 0.11 | 156 |
| 2017/12/12 | 3 | 0.02 | 93 |
| 2017/12/12 | 4 | 0.02 | 84 |
| 2017/12/12 | 5 | 0.08 | 166 |
| 2017/12/12 | 6 | 0.02 | 183 |
| 2017/12/12 | 7 | 0.02 | 178 |
| 2017/12/12 | 8 | 0.04 | 257 |
| 2017/12/12 | 9 | 0.05 | 203 |
| 2017/12/12 | 10 | 0.12 | 179 |
| 2017/12/12 | 11 | 0.03 | 219 |
| 2017/12/12 | 12 | 0.02 | 190 |
| 2017/12/12 | 13 | 0.03 | 178 |
| 2017/12/12 | 14 | 0.04 | 184 |
| 2017/12/12 | 15 | 0.08 | 153 |
| 2017/12/12 | 16 | 0.90 | 147 |
| 2017/12/12 | 17 | 0.43 | 100 |
| 2017/12/12 | 18 | 0.78 | 142 |
| 2017/12/12 | 19 | 0.38 | 147 |
| 2017/12/12 | 20 | 0.33 | 167 |
| 2017/12/12 | 21 | 0.63 | 162 |
| 2017/12/12 | 22 | 1.31 | 160 |
| 2017/12/12 | 23 | 0.17 | 112 |
| 2017/12/14 | 0 | 1.90 | 151 |
| 2017/12/14 | 1 | 2.88 | 158 |
| 2017/12/14 | 2 | 0.70 | 174 |
| 2017/12/14 | 3 | 0.06 | 173 |
| 2017/12/14 | 4 | 0.02 | 95 |
| 2017/12/14 | 5 | 0.05 | 170 |
| 2017/12/14 | 6 | 0.81 | 136 |
| 2017/12/14 | 7 | 1.49 | 165 |
| 2017/12/14 | 8 | 0.22 | 169 |
| 2017/12/14 | 9 | 0.24 | 123 |
| 2017/12/14 | 10 | 0.81 | 169 |
| 2017/12/14 | 11 | 0.22 | 167 |
| 2017/12/14 | 12 | 0.10 | 177 |
| 2017/12/14 | 13 | 0.06 | 194 |
| 2017/12/14 | 14 | 0.73 | 180 |
| 2017/12/14 | 15 | 1.40 | 149 |
| 2017/12/14 | 16 | 0.95 | 167 |
| 2017/12/14 | 17 | 0.30 | 163 |
| 2017/12/14 | 18 | 0.94 | 154 |
| 2017/12/14 | 19 | 0.61 | 133 |
| 2017/12/14 | 20 | 0.52 | 159 |
| 2017/12/14 | 21 | 0.02 | 123 |
| 2017/12/14 | 22 | 0.08 | 104 |
| 2017/12/14 | 23 | 0.08 | 137 |
| 2017/12/15 | 0 | 0.78 | 169 |
| 2017/12/15 | 1 | 0.64 | 166 |
| 2017/12/15 | 2 | 0.42 | 176 |
| 2017/12/15 | 3 | 0.06 | 100 |
| 2017/12/15 | 4 | 0.09 | 140 |
| 2017/12/15 | 5 | 0.06 | 140 |
| 2017/12/15 | 6 | 0.09 | 112 |
| 2017/12/15 | 7 | 0.10 | 134 |
| 2017/12/15 | 8 | 0.41 | 184 |
| 2017/12/15 | 9 | 0.25 | 96 |
| 2017/12/15 | 10 | 0.49 | 158 |
| 2017/12/15 | 11 | 1.28 | 177 |
| 2017/12/15 | 12 | 0.09 | 216 |
| 2017/12/15 | 13 | 0.04 | 300 |
| 2017/12/15 | 14 | 0.02 | 252 |
| 2017/12/15 | 15 | 0.03 | 101 |
| 2017/12/15 | 16 | 0.02 | 94 |
| 2017/12/15 | 17 | 0.02 | 70 |
| 2017/12/15 | 18 | 0.03 | 151 |
| 2017/12/15 | 19 | 0.16 | 202 |
| 2017/12/15 | 20 | 0.22 | 197 |
| 2017/12/15 | 21 | 0.11 | 192 |
| 2017/12/15 | 22 | 0.09 | 167 |
| 2017/12/15 | 23 | 0.02 | 164 |

| Date | Time (HH) | Wind speed (m/s) | Wind direction (deg) |
|------------|-----------|------------------|----------------------|
| 2017/12/20 | 0 | 0.09 | 255 |
| 2017/12/20 | 1 | 0.11 | 283 |
| 2017/12/20 | 2 | 0.13 | 269 |
| 2017/12/20 | 3 | 0.15 | 283 |
| 2017/12/20 | 4 | 0.18 | 292 |
| 2017/12/20 | 5 | 0.19 | 217 |
| 2017/12/20 | 6 | 0.08 | 271 |
| 2017/12/20 | 7 | 0.07 | 298 |
| 2017/12/20 | 8 | 0.18 | 306 |
| 2017/12/20 | 9 | 0.22 | 304 |
| 2017/12/20 | 10 | 0.21 | 229 |
| 2017/12/20 | 11 | 0.15 | 305 |
| 2017/12/20 | 12 | 0.22 | 277 |
| 2017/12/20 | 13 | 0.19 | 198 |
| 2017/12/20 | 14 | 0.14 | 253 |
| 2017/12/20 | 15 | 0.17 | 179 |
| 2017/12/20 | 16 | 0.11 | 296 |
| 2017/12/20 | 17 | 0.09 | 285 |
| 2017/12/20 | 18 | 0.05 | 292 |
| 2017/12/20 | 19 | 0.12 | 182 |
| 2017/12/20 | 20 | 0.04 | 194 |
| 2017/12/20 | 21 | 0.04 | 179 |
| 2017/12/20 | 22 | 0.12 | 283 |
| 2017/12/20 | 23 | 0.09 | 242 |
| 2017/12/21 | 0 | 0.03 | 168 |
| 2017/12/21 | 1 | 0.07 | 118 |
| 2017/12/21 | 2 | 0.11 | 149 |
| 2017/12/21 | 3 | 0.04 | 205 |
| 2017/12/21 | 4 | 0.10 | 292 |
| 2017/12/21 | 5 | 0.02 | 102 |
| 2017/12/21 | 6 | 0.03 | 185 |
| 2017/12/21 | 7 | 0.05 | 172 |
| 2017/12/21 | 8 | 0.04 | 129 |
| 2017/12/21 | 9 | 0.14 | 146 |
| 2017/12/21 | 10 | 0.08 | 142 |
| 2017/12/21 | 11 | 0.13 | 146 |
| 2017/12/21 | 12 | 1.75 | 151 |
| 2017/12/21 | 13 | 3.06 | 155 |
| 2017/12/21 | 14 | 3.78 | 169 |
| 2017/12/21 | 15 | 1.59 | 152 |
| 2017/12/21 | 16 | 1.33 | 171 |
| 2017/12/21 | 17 | 0.65 | 154 |
| 2017/12/21 | 18 | 0.06 | 51 |
| 2017/12/21 | 19 | 0.10 | 84 |
| 2017/12/21 | 20 | 0.06 | 45 |
| 2017/12/21 | 21 | 0.14 | 104 |
| 2017/12/21 | 22 | 0.05 | 187 |
| 2017/12/21 | 23 | 0.08 | 153 |
| 2017/12/23 | 0 | 0.68 | 144 |
| 2017/12/23 | 1 | 0.19 | 241 |
| 2017/12/23 | 2 | 1.19 | 198 |
| 2017/12/23 | 3 | 1.28 | 189 |
| 2017/12/23 | 4 | 0.80 | 186 |
| 2017/12/23 | 5 | 0.46 | 195 |
| 2017/12/23 | 6 | 0.02 | 186 |
| 2017/12/23 | 7 | 0.03 | 154 |
| 2017/12/23 | 8 | 0.02 | 102 |
| 2017/12/23 | 9 | 0.57 | 165 |
| 2017/12/23 | 10 | 0.30 | 129 |
| 2017/12/23 | 11 | 0.05 | 189 |
| 2017/12/23 | 12 | 0.18 | 282 |
| 2017/12/23 | 13 | 0.09 | 301 |
| 2017/12/23 | 14 | 0.03 | 232 |
| 2017/12/23 | 15 | 0.07 | 129 |
| 2017/12/23 | 16 | 0.07 | 126 |
| 2017/12/23 | 17 | 0.06 | 200 |
| 2017/12/23 | 18 | 0.02 | 177 |
| 2017/12/23 | 19 | 0.12 | 183 |
| 2017/12/23 | 20 | 0.23 | 187 |
| 2017/12/23 | 21 | 0.04 | 187 |
| 2017/12/23 | 22 | 0.10 | 109 |
| 2017/12/23 | 23 | 0.06 | 185 |

| Date | Time (HH) | Wind speed (m/s) | Wind direction (deg) |
|------------|-----------|------------------|----------------------|
| 2017/12/24 | 0 | 0.02 | 145 |
| 2017/12/24 | 1 | 0.02 | 83 |
| 2017/12/24 | 2 | 0.05 | 24 |
| 2017/12/24 | 3 | 0.02 | 30 |
| 2017/12/24 | 4 | 0.02 | 53 |
| 2017/12/24 | 5 | 0.05 | 81 |
| 2017/12/24 | 6 | 0.02 | 52 |
| 2017/12/24 | 7 | 0.06 | 66 |
| 2017/12/24 | 8 | 0.07 | 93 |
| 2017/12/24 | 9 | 0.04 | 157 |
| 2017/12/24 | 10 | 0.05 | 76 |
| 2017/12/24 | 11 | 0.06 | 180 |
| 2017/12/24 | 12 | 0.05 | 129 |
| 2017/12/24 | 13 | 0.08 | 202 |
| 2017/12/24 | 14 | 0.11 | 229 |
| 2017/12/24 | 15 | 0.11 | 276 |
| 2017/12/24 | 16 | 0.07 | 287 |
| 2017/12/24 | 17 | 0.04 | 328 |
| 2017/12/24 | 18 | 0.04 | 215 |
| 2017/12/24 | 19 | 0.03 | 180 |
| 2017/12/24 | 20 | 0.03 | 180 |
| 2017/12/24 | 21 | 0.04 | 208 |
| 2017/12/24 | 22 | 0.02 | 152 |
| 2017/12/24 | 23 | 0.02 | 210 |
| 2017/12/29 | 0 | 0.03 | 114 |
| 2017/12/29 | 1 | 0.02 | 125 |
| 2017/12/29 | 2 | 0.02 | 162 |
| 2017/12/29 | 3 | 0.02 | 162 |
| 2017/12/29 | 4 | 0.04 | 162 |
| 2017/12/29 | 5 | 0.08 | 174 |
| 2017/12/29 | 6 | 0.02 | 169 |
| 2017/12/29 | 7 | 0.02 | 169 |
| 2017/12/29 | 8 | 0.05 | 61 |
| 2017/12/29 | 9 | 0.03 | 81 |
| 2017/12/29 | 10 | 0.02 | 223 |
| 2017/12/29 | 11 | 0.46 | 188 |
| 2017/12/29 | 12 | 0.28 | 191 |
| 2017/12/29 | 13 | 0.29 | 250 |
| 2017/12/29 | 14 | 1.98 | 157 |
| 2017/12/29 | 15 | 2.95 | 170 |
| 2017/12/29 | 16 | 2.41 | 153 |
| 2017/12/29 | 17 | 3.19 | 162 |
| 2017/12/29 | 18 | 2.62 | 167 |
| 2017/12/29 | 19 | 2.43 | 161 |
| 2017/12/29 | 20 | 4.09 | 155 |
| 2017/12/29 | 21 | 3.07 | 173 |
| 2017/12/29 | 22 | 3.82 | 155 |
| 2017/12/29 | 23 | 2.27 | 168 |
| 2017/12/30 | 0 | 0.51 | 170 |
| 2017/12/30 | 1 | 0.17 | 180 |
| 2017/12/30 | 2 | 0.02 | 193 |
| 2017/12/30 | 3 | 0.09 | 146 |
| 2017/12/30 | 4 | 0.02 | 73 |
| 2017/12/30 | 5 | 0.02 | 128 |
| 2017/12/30 | 6 | 0.13 | 193 |
| 2017/12/30 | 7 | 0.04 | 141 |
| 2017/12/30 | 8 | 0.02 | 30 |
| 2017/12/30 | 9 | 0.08 | 288 |
| 2017/12/30 | 10 | 0.04 | 227 |
| 2017/12/30 | 11 | 0.02 | 207 |
| 2017/12/30 | 12 | 0.03 | 135 |
| 2017/12/30 | 13 | 0.06 | 168 |
| 2017/12/30 | 14 | 0.05 | 197 |
| 2017/12/30 | 15 | 0.07 | 177 |
| 2017/12/30 | 16 | 0.58 | 200 |
| 2017/12/30 | 17 | 0.43 | 191 |
| 2017/12/30 | 18 | 0.09 | 141 |
| 2017/12/30 | 19 | 0.28 | 176 |
| 2017/12/30 | 20 | 0.07 | 187 |
| 2017/12/30 | 21 | 0.11 | 255 |
| 2017/12/30 | 22 | 0.14 | 312 |
| 2017/12/30 | 23 | 0.05 | 218 |

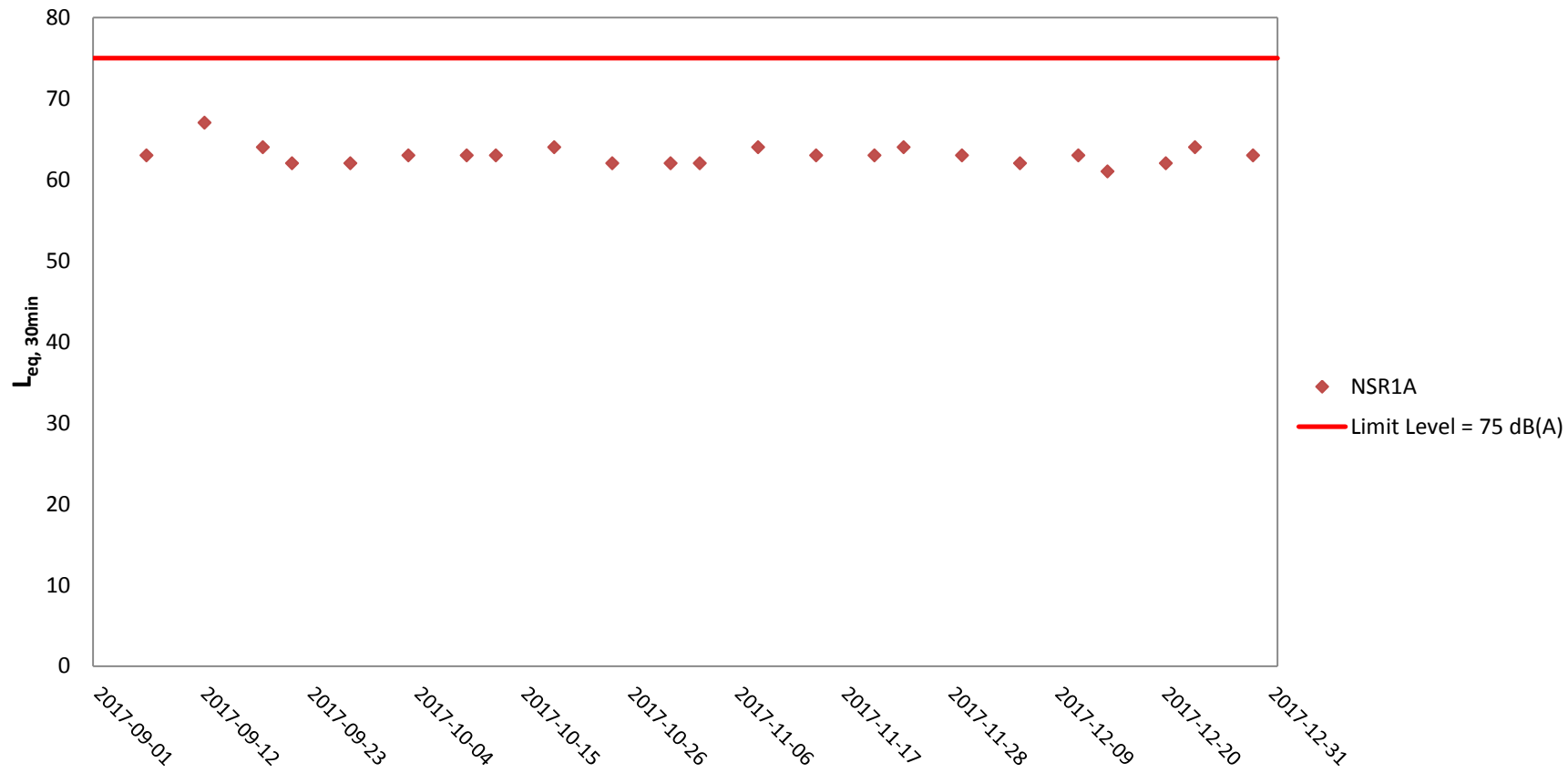
Appendix I

Impact Noise Monitoring
Results and Graphical
Presentation

Appendix I-1 Noise Monitoring Results

| Project | Works | Date (yyyy-mm-dd) | Station | Weather Condition | Time (hh:mm, 24hour) | Noise Level for 30-min, dB(A) | | | Limit Level dB(A) | Wind Speed (m/s) | Noise Meter Model/ID | Calibrator Model/ID |
|---------|------------|-------------------|---------|-------------------|----------------------|-------------------------------|-----|-----|----------------------|---------------------|-----------------------------|-----------------------------|
| | | | | | | Leq | L10 | L90 | | | | |
| TMCLKL | HY/2012/07 | 2017-12-05 | NSR1A | Sunny | 10:00 | 62 | 64 | 59 | 75 | 0.1 | RION NL52 (S/N 01010406) | RION NC73 (S/N 10486660) |
| TMCLKL | HY/2012/07 | 2017-12-11 | NSR1A | Sunny | 10:35 | 63 | 64 | 60 | 75 | 0.3 | RION NL52 (S/N 01010406) | RION NC73 (S/N 10486660) |
| TMCLKL | HY/2012/07 | 2017-12-14 | NSR1A | Sunny | 10:50 | 61 | 63 | 59 | 75 | 0.4 | RION NL52 (S/N 01010406) | RION NC73 (S/N 10486660) |
| TMCLKL | HY/2012/07 | 2017-12-20 | NSR1A | Sunny | 10:42 | 62 | 64 | 59 | 75 | 0.3 | RION NL52 (S/N 01010406) | RION NC73 (S/N 10486660) |
| TMCLKL | HY/2012/07 | 2017-12-23 | NSR1A | Cloudy | 10:50 | 64 | 65 | 60 | 75 | 0.3 | RION NL52 (S/N 01010406) | RION NC73 (S/N 10486660) |
| TMCLKL | HY/2012/07 | 2017-12-29 | NSR1A | Sunny | 10:33 | 63 | 64 | 59 | 75 | 0.2 | RION NL52 (S/N 01010406) | RION NC73 (S/N 10486660) |
| | | | | | | Min. | 61 | | | | | |
| | | | | | | Max. | 64 | | | | | |
| | | | | | | Average | 63 | | | | | |

Noise Monitoring Results at NSR 1A ($L_{eq, 30min}$)



Weather condition within the reporting period varied between sunny to rainy.

Major construction works undertaken within the reporting period include Pier construction; Re-alignment of Cheung Tung Road; Road works along North Lantau Highway; Launching gantry operation; Installation of pier head and deck segments; and Slope work of Viaducts A, B & C.

Appendix J

Impact Water Quality Monitoring Results and Graphical Presentation

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)5 | 10:09 | 11.8 | Surface | 1 | 1 | 22.5 | 8.0 | 32.6 | 6.2 | 6.2 | 10.0 | 10.3 | 8.2 | 8.3 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)5 | 10:09 | 11.8 | Surface | 1 | 2 | 22.4 | 8.0 | 32.7 | 6.2 | | 10.0 | | 8.7 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)5 | 10:09 | 11.8 | Middle | 2 | 1 | 22.5 | 8.0 | 32.6 | 6.2 | | 10.5 | | 7.6 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)5 | 10:09 | 11.8 | Middle | 2 | 2 | 22.4 | 8.0 | 32.7 | 6.2 | | 10.5 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)5 | 10:09 | 11.8 | Bottom | 3 | 1 | 22.5 | 8.0 | 32.6 | 6.2 | | 10.5 | | 7.9 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)5 | 10:09 | 11.8 | Bottom | 3 | 2 | 22.4 | 8.0 | 32.7 | 6.2 | | 10.5 | | 8.2 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)3(N) | 10:52 | 7.3 | Surface | 1 | 1 | 22.0 | 8.1 | 29.2 | 7.0 | 7.0 | 7.7 | 10.5 | 9.5 | 11.5 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)3(N) | 10:52 | 7.3 | Surface | 1 | 2 | 22.3 | 7.9 | 29.1 | 7.0 | | 7.0 | | 9.8 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)3(N) | 10:52 | 7.3 | Middle | 2 | 1 | 22.0 | 8.1 | 29.6 | 6.9 | | 11.1 | | 9.6 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)3(N) | 10:52 | 7.3 | Middle | 2 | 2 | 22.3 | 7.9 | 29.5 | 7.0 | | 11.4 | | 11.1 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)3(N) | 10:52 | 7.3 | Bottom | 3 | 1 | 22.0 | 8.1 | 29.6 | 6.9 | | 13.0 | | 14.7 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | CS(Mf)3(N) | 10:52 | 7.3 | Bottom | 3 | 2 | 22.3 | 7.9 | 29.6 | 7.0 | | 12.8 | | 14.0 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)16 | 10:35 | 5.7 | Surface | 1 | 1 | 22.3 | 8.1 | 32.1 | 6.9 | 6.9 | 13.0 | 13.1 | 10.4 | 10.6 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)16 | 10:35 | 5.7 | Surface | 1 | 2 | 22.2 | 8.1 | 32.3 | 6.9 | | 13.0 | | 10.7 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)16 | 10:35 | 5.7 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)16 | 10:35 | 5.7 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)16 | 10:35 | 5.7 | Bottom | 3 | 1 | 22.3 | 8.1 | 32.1 | 6.9 | | 13.1 | | 10.8 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)16 | 10:35 | 5.7 | Bottom | 3 | 2 | 22.2 | 8.1 | 32.3 | 6.9 | | 13.1 | | 10.3 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4a | 10:44 | 4.9 | Surface | 1 | 1 | 22.3 | 8.0 | 32.1 | 6.8 | 6.8 | 9.9 | 9.4 | 8.7 | 8.6 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4a | 10:44 | 4.9 | Surface | 1 | 2 | 22.2 | 8.1 | 32.2 | 6.8 | | 9.9 | | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4a | 10:44 | 4.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4a | 10:44 | 4.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4a | 10:44 | 4.9 | Bottom | 3 | 1 | 22.3 | 8.0 | 32.1 | 6.8 | | 8.9 | | 8.7 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4a | 10:44 | 4.9 | Bottom | 3 | 2 | 22.2 | 8.1 | 32.2 | 6.8 | | 8.9 | | 8.7 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4 | 10:49 | 3.6 | Surface | 1 | 1 | 22.3 | 8.0 | 32.1 | 6.8 | 6.8 | 13.1 | 12.1 | 8.5 | 7.7 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4 | 10:49 | 3.6 | Surface | 1 | 2 | 22.2 | 8.1 | 32.2 | 6.8 | | 13.1 | | 7.5 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4 | 10:49 | 3.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4 | 10:49 | 3.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4 | 10:49 | 3.6 | Bottom | 3 | 1 | 22.3 | 8.0 | 32.1 | 6.8 | | 11.1 | | 7.6 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | SR4 | 10:49 | 3.6 | Bottom | 3 | 2 | 22.2 | 8.1 | 32.2 | 6.8 | | 11.1 | | 7.2 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS8 | 10:59 | 4.4 | Surface | 1 | 1 | 22.3 | 8.0 | 32.1 | 6.9 | 6.9 | 18.3 | 19.5 | 15.0 | 15.2 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS8 | 10:59 | 4.4 | Surface | 1 | 2 | 22.2 | 8.1 | 32.3 | 6.9 | | 18.3 | | 15.7 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS8 | 10:59 | 4.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS8 | 10:59 | 4.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS8 | 10:59 | 4.4 | Bottom | 3 | 1 | 22.3 | 8.0 | 32.1 | 6.9 | | 20.7 | | 14.5 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS8 | 10:59 | 4.4 | Bottom | 3 | 2 | 22.2 | 8.1 | 32.3 | 6.9 | | 20.6 | | 15.5 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)9 | 11:07 | 3.5 | Surface | 1 | 1 | 22.4 | 8.0 | 32.2 | 6.9 | 7.0 | 11.5 | 11.9 | 8.2 | 10.7 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)9 | 11:07 | 3.5 | Surface | 1 | 2 | 22.3 | 8.1 | 32.3 | 7.0 | | 11.3 | | 9.1 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)9 | 11:07 | 3.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)9 | 11:07 | 3.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)9 | 11:07 | 3.5 | Bottom | 3 | 1 | 22.4 | 8.0 | 32.2 | 6.9 | | 12.4 | | 12.1 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Ebb | IS(Mf)9 | 11:07 | 3.5 | Bottom | 3 | 2 | 22.3 | 8.1 | 32.3 | 7.0 | | 12.4 | | 13.4 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)5 | 16:38 | 11.5 | Surface | 1 | 1 | 22.6 | 8.0 | 32.5 | 6.4 | 6.4 | 8.9 | 10.2 | 5.8 | 6.0 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)5 | 16:38 | 11.5 | Surface | 1 | 2 | 22.4 | 8.0 | 32.7 | 6.4 | | 8.9 | | 6.3 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)5 | 16:38 | 11.5 | Middle | 2 | 1 | 22.5 | 8.0 | 32.5 | 6.3 | | 10.7 | | 6.1 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)5 | 16:38 | 11.5 | Middle | 2 | 2 | 22.4 | 8.0 | 32.7 | 6.4 | | 10.7 | | 5.6 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)5 | 16:38 | 11.5 | Bottom | 3 | 1 | 22.5 | 8.0 | 32.5 | 6.4 | 6.4 | 11.0 | 5.6 | 6.8 | 6.2 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)5 | 16:38 | 11.5 | Bottom | 3 | 2 | 22.4 | 8.0 | 32.7 | 6.4 | | 11.0 | | 5.6 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)3(N) | 15:33 | 7.2 | Surface | 1 | 1 | 22.4 | 8.0 | 30.6 | 7.0 | 7.0 | 4.4 | 5.6 | 6.5 | 6.2 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)3(N) | 15:33 | 7.2 | Surface | 1 | 2 | 22.6 | 7.9 | 29.4 | 7.1 | | 4.6 | | 5.2 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)3(N) | 15:33 | 7.2 | Middle | 2 | 1 | 22.2 | 8.0 | 30.6 | 7.0 | | 6.0 | | 6.2 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)3(N) | 15:33 | 7.2 | Middle | 2 | 2 | 22.5 | 7.9 | 29.4 | 7.0 | | 5.7 | | 6.2 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)3(N) | 15:33 | 7.2 | Bottom | 3 | 1 | 22.2 | 8.0 | 29.6 | 6.9 | 7.0 | 6.9 | 6.3 | 7.0 | 6.2 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | CS(Mf)3(N) | 15:33 | 7.2 | Bottom | 3 | 2 | 22.5 | 7.9 | 29.3 | 7.0 | | 6.1 | | 6.3 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)16 | 16:11 | 5.5 | Surface | 1 | 1 | 22.5 | 8.0 | 32.1 | 6.9 | 7.0 | 11.3 | 11.8 | 9.3 | 11.3 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)16 | 16:11 | 5.5 | Surface | 1 | 2 | 22.4 | 8.1 | 32.3 | 7.0 | | 11.2 | | 10.4 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)16 | 16:11 | 5.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)16 | 16:11 | 5.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)16 | 16:11 | 5.5 | Bottom | 3 | 1 | 22.5 | 8.0 | 32.1 | 6.9 | 7.0 | 12.4 | 12.8 | 12.8 | 9.2 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)16 | 16:11 | 5.5 | Bottom | 3 | 2 | 22.4 | 8.1 | 32.3 | 7.0 | | 12.4 | | 12.7 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4a | 16:00 | 4.9 | Surface | 1 | 1 | 22.6 | 8.0 | 32.1 | 7.0 | 7.0 | 10.5 | 11.1 | 8.1 | 9.2 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4a | 16:00 | 4.9 | Surface | 1 | 2 | 22.4 | 8.1 | 32.3 | 7.0 | | 10.5 | | 9.6 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4a | 16:00 | 4.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4a | 16:00 | 4.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4a | 16:00 | 4.9 | Bottom | 3 | 1 | 22.6 | 8.0 | 32.1 | 7.0 | 7.0 | 11.6 | 10.0 | 9.0 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4a | 16:00 | 4.9 | Bottom | 3 | 2 | 22.4 | 8.1 | 32.3 | 7.0 | | 11.6 | | 10.0 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4 | 15:56 | 4 | Surface | 1 | 1 | 22.6 | 8.1 | 32.0 | 7.1 | 7.1 | 14.2 | 13.8 | 9.2 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4 | 15:56 | 4 | Surface | 1 | 2 | 22.4 | 8.1 | 32.3 | 7.1 | | 14.2 | | 10.8 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4 | 15:56 | 4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4 | 15:56 | 4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4 | 15:56 | 4 | Bottom | 3 | 1 | 22.6 | 8.0 | 32.0 | 7.0 | 7.1 | 13.4 | 12.4 | 11.6 | 15.8 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | SR4 | 15:56 | 4 | Bottom | 3 | 2 | 22.4 | 8.1 | 32.3 | 7.1 | | 13.4 | | 12.4 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS8 | 15:49 | 4 | Surface | 1 | 1 | 22.6 | 8.1 | 32.1 | 7.1 | 7.1 | 22.1 | 21.8 | 14.8 | 15.8 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS8 | 15:49 | 4 | Surface | 1 | 2 | 22.4 | 8.1 | 32.3 | 7.1 | | 22.1 | | 14.7 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS8 | 15:49 | 4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS8 | 15:49 | 4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS8 | 15:49 | 4 | Bottom | 3 | 1 | 22.6 | 8.1 | 32.1 | 7.1 | 7.1 | 21.4 | 16.9 | 16.9 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS8 | 15:49 | 4 | Bottom | 3 | 2 | 22.4 | 8.1 | 32.3 | 7.1 | | 21.4 | | 16.9 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)9 | 15:40 | 3.1 | Surface | 1 | 1 | 22.6 | 8.0 | 32.2 | 7.0 | 7.0 | 10.9 | 11.3 | 10.3 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)9 | 15:40 | 3.1 | Surface | 1 | 2 | 22.5 | 8.1 | 32.4 | 7.0 | | 10.9 | | 9.9 | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)9 | 15:40 | 3.1 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)9 | 15:40 | 3.1 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)9 | 15:40 | 3.1 | Bottom | 3 | 1 | 22.6 | 8.0 | 32.2 | 7.0 | 7.0 | 11.6 | 12.4 | 12.4 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-01 | Mid-Flood | IS(Mf)9 | 15:40 | 3.1 | Bottom | 3 | 2 | 22.5 | 8.1 | 32.4 | 7.0 | | 11.6 | | 11.3 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)5 | 12:58 | 12.6 | Surface | 1 | 1 | 22.5 | 8.0 | 32.5 | 6.6 | 6.5 | 2.8 | 3.3 | 5.6 | 5.2 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)5 | 12:58 | 12.6 | Surface | 1 | 2 | 22.3 | 8.1 | 32.7 | 6.5 | | 2.9 | | 6.0 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)5 | 12:58 | 12.6 | Middle | 2 | 1 | 22.3 | 8.0 | 32.4 | 6.5 | | 3.8 | | 5.8 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)5 | 12:58 | 12.6 | Middle | 2 | 2 | 22.2 | 8.1 | 32.6 | 6.5 | | 3.8 | | 4.2 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)5 | 12:58 | 12.6 | Bottom | 3 | 1 | 22.4 | 8.0 | 32.4 | 6.6 | 6.6 | 3.2 | 17.6 | 4.6 | 13.8 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)5 | 12:58 | 12.6 | Bottom | 3 | 2 | 22.3 | 8.1 | 32.6 | 6.6 | | 3.2 | | 5.2 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)3(N) | 12:02 | 6.9 | Surface | 1 | 1 | 22.3 | 8.0 | 29.7 | 6.9 | 6.9 | 15.0 | 17.6 | 14.5 | 13.8 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)3(N) | 12:02 | 6.9 | Surface | 1 | 2 | 22.0 | 8.1 | 32.1 | 6.9 | | 14.8 | | 14.6 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)3(N) | 12:02 | 6.9 | Middle | 2 | 1 | 22.1 | 8.0 | 29.7 | 6.9 | | 17.4 | | 16.9 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)3(N) | 12:02 | 6.9 | Middle | 2 | 2 | 21.9 | 8.1 | 32.1 | 6.8 | | 17.4 | | 17.3 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)3(N) | 12:02 | 6.9 | Bottom | 3 | 1 | 22.1 | 8.0 | 29.7 | 6.9 | 6.9 | 20.3 | 5.2 | 9.6 | 4.8 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | CS(Mf)3(N) | 12:02 | 6.9 | Bottom | 3 | 2 | 21.8 | 8.2 | 32.2 | 6.8 | | 20.9 | | 10.1 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)16 | 12:33 | 5.9 | Surface | 1 | 1 | 22.4 | 8.1 | 32.4 | 7.0 | 7.0 | 4.9 | 5.2 | 4.3 | 4.8 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)16 | 12:33 | 5.9 | Surface | 1 | 2 | 22.3 | 8.1 | 32.6 | 7.0 | | 4.9 | | 4.7 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)16 | 12:33 | 5.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)16 | 12:33 | 5.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)16 | 12:33 | 5.9 | Bottom | 3 | 1 | 22.4 | 8.1 | 32.3 | 7.0 | 7.0 | 5.5 | 5.8 | 4.7 | 9.2 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)16 | 12:33 | 5.9 | Bottom | 3 | 2 | 22.4 | 8.1 | 32.5 | 7.0 | | 5.5 | | 5.4 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4a | 12:22 | 5.2 | Surface | 1 | 1 | 22.4 | 8.1 | 32.4 | 6.9 | 6.9 | 4.6 | 9.1 | 8.1 | 5.6 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4a | 12:22 | 5.2 | Surface | 1 | 2 | 22.3 | 8.1 | 32.6 | 6.9 | | 4.8 | | 6.6 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4a | 12:22 | 5.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4a | 12:22 | 5.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4a | 12:22 | 5.2 | Bottom | 3 | 1 | 22.3 | 8.0 | 32.4 | 6.9 | 6.9 | 6.9 | 9.9 | 11.7 | 6.1 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4a | 12:22 | 5.2 | Bottom | 3 | 2 | 22.2 | 8.1 | 32.6 | 6.9 | | 6.9 | | 10.4 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4 | 12:18 | 4.2 | Surface | 1 | 1 | 22.5 | 8.0 | 32.3 | 6.9 | 6.9 | 9.0 | 9.9 | 5.2 | 7.0 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4 | 12:18 | 4.2 | Surface | 1 | 2 | 22.5 | 8.1 | 32.5 | 6.9 | | 9.0 | | 4.5 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4 | 12:18 | 4.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4 | 12:18 | 4.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4 | 12:18 | 4.2 | Bottom | 3 | 1 | 22.5 | 8.0 | 32.3 | 6.9 | 6.9 | 9.1 | 9.9 | 6.2 | 6.1 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | SR4 | 12:18 | 4.2 | Bottom | 3 | 2 | 22.4 | 8.1 | 32.5 | 6.9 | | 9.3 | | 6.5 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS8 | 12:11 | 3.8 | Surface | 1 | 1 | 22.3 | 8.1 | 32.4 | 7.1 | 7.1 | 9.9 | 9.9 | 6.0 | 6.1 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS8 | 12:11 | 3.8 | Surface | 1 | 2 | 22.2 | 8.1 | 32.6 | 7.1 | | 9.9 | | 6.6 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS8 | 12:11 | 3.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS8 | 12:11 | 3.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS8 | 12:11 | 3.8 | Bottom | 3 | 1 | 22.3 | 8.1 | 32.4 | 7.1 | 7.1 | 9.8 | 8.1 | 6.9 | 7.0 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS8 | 12:11 | 3.8 | Bottom | 3 | 2 | 22.2 | 8.1 | 32.6 | 7.1 | | 9.8 | | 5.0 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)9 | 12:03 | 3.7 | Surface | 1 | 1 | 22.2 | 8.1 | 32.4 | 7.0 | 7.0 | 7.1 | 8.1 | 8.0 | 7.0 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)9 | 12:03 | 3.7 | Surface | 1 | 2 | 22.1 | 8.1 | 32.6 | 7.0 | | 7.1 | | 9.9 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)9 | 12:03 | 3.7 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)9 | 12:03 | 3.7 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)9 | 12:03 | 3.7 | Bottom | 3 | 1 | 22.1 | 8.1 | 32.4 | 7.0 | 7.0 | 9.1 | 8.1 | 5.2 | 7.0 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Ebb | IS(Mf)9 | 12:03 | 3.7 | Bottom | 3 | 2 | 22.0 | 8.1 | 32.6 | 7.0 | | 9.1 | | 4.9 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)5 | 6:53 | 12 | Surface | 1 | 1 | 22.2 | 8.1 | 32.3 | 6.8 | 6.8 | 6.3 | 7.4 | 10.3 | 9.6 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)5 | 6:53 | 12 | Surface | 1 | 2 | 22.1 | 8.1 | 32.4 | 6.8 | | 6.3 | | 9.4 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)5 | 6:53 | 12 | Middle | 2 | 1 | 22.2 | 8.1 | 32.3 | 6.8 | 7.5 | 10.0 | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)5 | 6:53 | 12 | Middle | 2 | 2 | 22.1 | 8.1 | 32.5 | 6.8 | 7.5 | 9.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)5 | 6:53 | 12 | Bottom | 3 | 1 | 22.2 | 8.1 | 32.3 | 6.8 | 6.8 | 8.4 | | 9.3 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)5 | 6:53 | 12 | Bottom | 3 | 2 | 22.1 | 8.1 | 32.5 | 6.8 | 6.8 | 8.4 | | 8.4 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)3(N) | 7:54 | 7.1 | Surface | 1 | 1 | 22.3 | 7.9 | 28.9 | 6.7 | 6.7 | 23.3 | 24.3 | 27.3 | 27.0 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)3(N) | 7:54 | 7.1 | Surface | 1 | 2 | 22.0 | 8.0 | 31.4 | 6.6 | | 23.1 | | 26.2 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)3(N) | 7:54 | 7.1 | Middle | 2 | 1 | 22.3 | 7.9 | 28.9 | 6.7 | 24.5 | 27.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)3(N) | 7:54 | 7.1 | Middle | 2 | 2 | 22.0 | 8.0 | 31.4 | 6.6 | 24.2 | 26.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)3(N) | 7:54 | 7.1 | Bottom | 3 | 1 | 22.2 | 7.9 | 29.0 | 6.7 | 6.7 | 25.7 | | 27.0 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | CS(Mf)3(N) | 7:54 | 7.1 | Bottom | 3 | 2 | 22.0 | 8.0 | 31.4 | 6.6 | 6.7 | 25.1 | | 27.9 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)16 | 7:18 | 5 | Surface | 1 | 1 | 22.1 | 8.1 | 32.3 | 6.9 | 6.9 | 16.5 | 16.8 | 14.7 | 15.5 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)16 | 7:18 | 5 | Surface | 1 | 2 | 22.0 | 8.1 | 32.5 | 6.9 | | 16.6 | | 13.4 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)16 | 7:18 | 5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)16 | 7:18 | 5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)16 | 7:18 | 5 | Bottom | 3 | 1 | 22.1 | 8.1 | 32.3 | 6.9 | 6.9 | 17.0 | | 17.4 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)16 | 7:18 | 5 | Bottom | 3 | 2 | 22.0 | 8.1 | 32.5 | 6.9 | 6.9 | 17.0 | | 16.3 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4a | 7:26 | 4.5 | Surface | 1 | 1 | 22.1 | 8.1 | 32.4 | 6.7 | 6.7 | 17.3 | 15.2 | 14.3 | 15.2 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4a | 7:26 | 4.5 | Surface | 1 | 2 | 22.0 | 8.1 | 32.6 | 6.7 | | 17.4 | | 13.9 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4a | 7:26 | 4.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4a | 7:26 | 4.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4a | 7:26 | 4.5 | Bottom | 3 | 1 | 22.1 | 8.1 | 32.4 | 6.7 | 6.7 | 13.0 | | 15.6 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4a | 7:26 | 4.5 | Bottom | 3 | 2 | 22.0 | 8.1 | 32.6 | 6.7 | 6.7 | 13.0 | | 16.9 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4 | 7:30 | 3.6 | Surface | 1 | 1 | 22.1 | 8.0 | 32.3 | 6.6 | 6.6 | 11.1 | 11.1 | 7.9 | 8.0 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4 | 7:30 | 3.6 | Surface | 1 | 2 | 22.0 | 8.1 | 32.5 | 6.6 | | 11.1 | | 8.4 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4 | 7:30 | 3.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4 | 7:30 | 3.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4 | 7:30 | 3.6 | Bottom | 3 | 1 | 22.1 | 8.0 | 32.3 | 6.6 | 6.6 | 11.1 | | 7.6 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | SR4 | 7:30 | 3.6 | Bottom | 3 | 2 | 22.0 | 8.1 | 32.5 | 6.6 | 6.6 | 11.1 | | 8.0 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS8 | 7:42 | 3.8 | Surface | 1 | 1 | 22.1 | 8.1 | 32.3 | 6.7 | 6.7 | 6.7 | 6.6 | 8.4 | 10.0 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS8 | 7:42 | 3.8 | Surface | 1 | 2 | 22.0 | 8.1 | 32.5 | 6.7 | | 6.8 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS8 | 7:42 | 3.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS8 | 7:42 | 3.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS8 | 7:42 | 3.8 | Bottom | 3 | 1 | 22.1 | 8.1 | 32.3 | 6.7 | 6.7 | 6.4 | | 10.7 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS8 | 7:42 | 3.8 | Bottom | 3 | 2 | 22.0 | 8.1 | 32.5 | 6.7 | 6.7 | 6.4 | | 11.7 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)9 | 7:49 | 3.2 | Surface | 1 | 1 | 22.2 | 8.0 | 32.3 | 6.9 | 6.9 | 8.6 | 8.5 | 9.5 | 9.5 |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)9 | 7:49 | 3.2 | Surface | 1 | 2 | 22.1 | 8.1 | 32.5 | 6.9 | | 8.6 | | 8.9 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)9 | 7:49 | 3.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)9 | 7:49 | 3.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)9 | 7:49 | 3.2 | Bottom | 3 | 1 | 22.2 | 8.0 | 32.3 | 6.9 | 6.9 | 8.3 | | 9.7 | |
| TMCLKL | HY/2012/07 | 2017-12-04 | Mid-Flood | IS(Mf)9 | 7:49 | 3.2 | Bottom | 3 | 2 | 22.1 | 8.1 | 32.5 | 6.9 | 6.9 | 8.3 | | 9.9 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | 13.7 | Surface | 1 | 1 | 22.4 | 8.1 | 32.6 | 6.7 | 6.6 | 4.6 | 8.9 | 4.3 | 5.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | 13.7 | Surface | 1 | 2 | 22.5 | 8.0 | 32.4 | 6.7 | | 4.6 | | 4.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | 13.7 | Middle | 2 | 1 | 22.0 | 8.1 | 32.6 | 6.5 | | 3.3 | | 6.1 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | 13.7 | Middle | 2 | 2 | 22.1 | 8.0 | 32.4 | 6.5 | | 3.3 | | 5.7 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | 13.7 | Bottom | 3 | 1 | 21.9 | 8.1 | 32.6 | 6.5 | 6.5 | 18.9 | 19.0 | 6.5 | 20.1 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | 13.7 | Bottom | 3 | 2 | 22.0 | 8.0 | 32.5 | 6.4 | | 18.9 | | 8.1 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | 6.9 | Surface | 1 | 1 | 21.6 | 8.2 | 32.1 | 6.9 | 6.9 | 13.7 | 19.0 | 13.9 | 20.1 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | 6.9 | Surface | 1 | 2 | 21.9 | 8.0 | 30.3 | 6.9 | | 14.0 | | 12.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | 6.9 | Middle | 2 | 1 | 21.4 | 8.2 | 32.1 | 6.8 | | 20.6 | | 15.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | 6.9 | Middle | 2 | 2 | 21.7 | 8.0 | 30.3 | 6.9 | | 20.6 | | 15.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | 6.9 | Bottom | 3 | 1 | 21.4 | 8.2 | 32.1 | 6.8 | 6.9 | 22.5 | 19.0 | 31.3 | 20.1 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | 6.9 | Bottom | 3 | 2 | 21.6 | 8.0 | 30.2 | 6.9 | | 22.8 | | 32.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | 6.7 | Surface | 1 | 1 | 22.0 | 8.1 | 32.4 | 7.1 | 7.0 | 3.8 | 9.4 | 6.1 | 7.3 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | 6.7 | Surface | 1 | 2 | 22.1 | 8.0 | 32.2 | 7.1 | | 3.8 | | 5.7 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | 6.7 | Middle | 2 | 1 | 21.6 | 8.1 | 32.4 | 6.9 | | 6.2 | | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | 6.7 | Middle | 2 | 2 | 21.7 | 8.0 | 32.2 | 6.9 | | 6.2 | | 6.4 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | 6.7 | Bottom | 3 | 1 | 21.5 | 8.1 | 32.4 | 7.0 | 7.0 | 18.2 | 10.9 | 7.9 | 14.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | 6.7 | Bottom | 3 | 2 | 21.6 | 8.0 | 32.2 | 6.9 | | 18.2 | | 9.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | 5.8 | Surface | 1 | 1 | 21.8 | 8.1 | 32.5 | 6.9 | 6.9 | 9.3 | 10.9 | 13.7 | 14.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | 5.8 | Surface | 1 | 2 | 21.9 | 8.0 | 32.3 | 6.9 | | 10.8 | | 12.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | 5.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | 5.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | 5.8 | Bottom | 3 | 1 | 21.7 | 8.1 | 32.5 | 7.0 | 7.0 | 10.5 | 12.7 | 15.9 | 13.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | 5.8 | Bottom | 3 | 2 | 21.8 | 8.0 | 32.3 | 6.9 | | 13.0 | | 14.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | 4.5 | Surface | 1 | 1 | 21.9 | 8.1 | 32.5 | 6.8 | 6.8 | 10.9 | 12.7 | 10.8 | 13.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | 4.5 | Surface | 1 | 2 | 22.0 | 8.0 | 32.3 | 6.8 | | 10.0 | | 10.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | 4.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | 4.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | 4.5 | Bottom | 3 | 1 | 21.8 | 8.1 | 32.5 | 7.0 | 7.0 | 14.3 | 19.9 | 17.0 | 23.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | 4.5 | Bottom | 3 | 2 | 21.9 | 8.0 | 32.3 | 6.9 | | 15.5 | | 17.0 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | 5 | Surface | 1 | 1 | 21.7 | 8.1 | 32.4 | 6.9 | 6.9 | 19.6 | 19.9 | 22.7 | 23.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | 5 | Surface | 1 | 2 | 21.8 | 8.0 | 32.2 | 6.9 | | 20.1 | | 20.8 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | 5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | 5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | 5 | Bottom | 3 | 1 | 21.6 | 8.1 | 32.4 | 7.0 | 7.0 | 19.3 | 19.9 | 24.0 | 23.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | 5 | Bottom | 3 | 2 | 21.7 | 8.0 | 32.3 | 6.9 | | 20.4 | | 24.6 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | 4.2 | Surface | 1 | 1 | 21.8 | 8.1 | 32.5 | 7.0 | 7.0 | 8.2 | 9.1 | 8.1 | 8.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | 4.2 | Surface | 1 | 2 | 21.9 | 8.1 | 32.3 | 7.0 | | 8.9 | | 9.4 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | 4.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | 4.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | 4.2 | Bottom | 3 | 1 | 21.7 | 8.1 | 32.5 | 7.1 | 7.1 | 9.7 | 9.1 | 8.4 | 8.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | 4.2 | Bottom | 3 | 2 | 21.9 | 8.1 | 32.3 | 7.1 | | 9.5 | | 7.7 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | 10.3 | Surface | 1 | 1 | 21.8 | 8.1 | 32.4 | 6.7 | 6.7 | 5.4 | 9.4 | 11.9 | 12.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | 10.3 | Surface | 1 | 2 | 21.9 | 8.0 | 32.2 | 6.7 | | 5.8 | | 12.4 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | 10.3 | Middle | 2 | 1 | 21.7 | 8.1 | 32.4 | 6.7 | | 7.0 | | 12.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | 10.3 | Middle | 2 | 2 | 21.8 | 8.1 | 32.3 | 6.7 | | 7.7 | | 11.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | 10.3 | Bottom | 3 | 1 | 21.6 | 8.1 | 32.4 | 6.7 | 6.7 | 15.2 | 23.6 | 12.2 | 23.9 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | 10.3 | Bottom | 3 | 2 | 21.7 | 8.1 | 32.3 | 6.7 | | 15.4 | | 14.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | 7.1 | Surface | 1 | 1 | 21.6 | 8.0 | 31.6 | 6.6 | 6.7 | 22.4 | 23.6 | 24.4 | 23.9 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | 7.1 | Surface | 1 | 2 | 21.8 | 7.9 | 30.1 | 6.7 | | 22.7 | | 22.4 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | 7.1 | Middle | 2 | 1 | 21.6 | 8.0 | 31.6 | 6.6 | | 23.7 | | 24.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | 7.1 | Middle | 2 | 2 | 21.8 | 7.9 | 30.1 | 6.7 | | 23.6 | | 22.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | 7.1 | Bottom | 3 | 1 | 21.6 | 8.0 | 31.6 | 6.6 | 6.6 | 24.8 | 14.2 | 25.3 | 12.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | 7.1 | Bottom | 3 | 2 | 21.8 | 7.9 | 30.1 | 6.6 | | 24.5 | | 24.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | 5.7 | Surface | 1 | 1 | 21.4 | 8.1 | 32.3 | 6.9 | 6.9 | 11.3 | 14.2 | 11.8 | 12.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | 5.7 | Surface | 1 | 2 | 21.5 | 8.1 | 32.2 | 6.9 | | 12.4 | | 11.7 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | 5.7 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | 5.7 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | 5.7 | Bottom | 3 | 1 | 21.4 | 8.1 | 32.4 | 6.9 | 6.9 | 16.0 | 8.1 | 14.3 | 12.9 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | 5.7 | Bottom | 3 | 2 | 21.5 | 8.1 | 32.2 | 6.9 | | 17.1 | | 13.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | 4.8 | Surface | 1 | 1 | 21.5 | 8.1 | 32.5 | 6.7 | 6.7 | 8.9 | 10.2 | 11.3 | 11.6 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | 4.8 | Surface | 1 | 2 | 21.6 | 8.0 | 32.3 | 6.7 | | 8.9 | | 10.9 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | 4.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | 4.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | 4.8 | Bottom | 3 | 1 | 21.5 | 8.1 | 32.5 | 6.8 | 6.8 | 7.3 | 10.2 | 14.7 | 11.6 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | 4.8 | Bottom | 3 | 2 | 21.6 | 8.0 | 32.3 | 6.8 | | 7.3 | | 14.8 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | 4.6 | Surface | 1 | 1 | 21.5 | 8.1 | 32.5 | 6.7 | 6.7 | 9.2 | 22.9 | 10.6 | 23.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | 4.6 | Surface | 1 | 2 | 21.6 | 8.0 | 32.3 | 6.6 | | 10.1 | | 10.9 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | 4.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | 4.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | 4.6 | Bottom | 3 | 1 | 21.5 | 8.1 | 32.5 | 6.8 | 6.8 | 10.3 | 16.8 | 11.7 | 22.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | 4.6 | Bottom | 3 | 2 | 21.6 | 8.0 | 32.3 | 6.7 | | 11.0 | | 13.0 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | 3.8 | Surface | 1 | 1 | 21.5 | 8.1 | 32.5 | 6.7 | 6.7 | 19.7 | 22.9 | 22.4 | 23.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | 3.8 | Surface | 1 | 2 | 21.6 | 8.0 | 32.3 | 6.7 | | 19.8 | | 23.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | 3.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | 3.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | 3.8 | Bottom | 3 | 1 | 21.5 | 8.1 | 32.5 | 6.9 | 6.9 | 26.1 | 16.8 | 24.5 | 22.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | 3.8 | Bottom | 3 | 2 | 21.6 | 8.0 | 32.3 | 6.9 | | 25.8 | | 25.0 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | 3.4 | Surface | 1 | 1 | 21.5 | 8.1 | 32.5 | 6.8 | 6.8 | 15.2 | 16.8 | 22.7 | 22.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | 3.4 | Surface | 1 | 2 | 21.6 | 8.0 | 32.3 | 6.8 | | 17.2 | | 22.6 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | 3.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | 3.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | 3.4 | Bottom | 3 | 1 | 21.5 | 8.1 | 32.5 | 6.8 | 6.8 | 17.2 | 16.8 | 21.6 | 22.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | 3.4 | Bottom | 3 | 2 | 21.6 | 8.0 | 32.3 | 6.8 | | 17.5 | | 22.7 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | 13 | Surface | 1 | 1 | 21.6 | 8.1 | 32.1 | 6.7 | 6.7 | 4.1 | 4.2 | 10.9 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | 13 | Surface | 1 | 2 | 21.5 | 8.1 | 32.3 | 6.7 | | 4.1 | | 9.5 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | 13 | Middle | 2 | 1 | 21.6 | 8.1 | 32.2 | 6.7 | | 4.2 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | 13 | Middle | 2 | 2 | 21.5 | 8.1 | 32.4 | 6.8 | | 4.2 | | 9.1 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | 13 | Bottom | 3 | 1 | 21.5 | 8.1 | 32.1 | 6.8 | 6.8 | 4.1 | | 14.5 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | 13 | Bottom | 3 | 2 | 21.4 | 8.1 | 32.2 | 6.8 | | 4.2 | | 13.2 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | 7.2 | Surface | 1 | 1 | 21.1 | 8.2 | 31.2 | 6.9 | 6.9 | 22.5 | 25.1 | 24.6 | 25.8 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | 7.2 | Surface | 1 | 2 | 21.3 | 8.0 | 29.4 | 7.0 | | 22.9 | | 23.9 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | 7.2 | Middle | 2 | 1 | 21.0 | 8.2 | 31.3 | 6.9 | | 23.1 | | 25.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | 7.2 | Middle | 2 | 2 | 21.3 | 8.1 | 29.5 | 6.9 | | 24.3 | | 25.8 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | 7.2 | Bottom | 3 | 1 | 20.9 | 8.0 | 31.4 | 6.9 | 7.0 | 27.9 | | 27.7 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | 7.2 | Bottom | 3 | 2 | 21.1 | 8.0 | 29.5 | 7.0 | | 29.7 | | 27.5 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | 5.9 | Surface | 1 | 1 | 21.3 | 8.1 | 31.6 | 7.0 | 7.0 | 5.8 | 5.7 | 9.4 | 10.2 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | 5.9 | Surface | 1 | 2 | 21.2 | 8.1 | 31.8 | 7.0 | | 5.8 | | 8.9 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | 5.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | 5.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | 5.9 | Bottom | 3 | 1 | 21.3 | 8.1 | 31.6 | 7.0 | 7.0 | 5.5 | | 11.6 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | 5.9 | Bottom | 3 | 2 | 21.2 | 8.1 | 31.8 | 7.0 | | 5.6 | | 10.9 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | 5.6 | Surface | 1 | 1 | 21.2 | 8.1 | 31.6 | 7.1 | 7.1 | 7.6 | 7.6 | 13.0 | 13.4 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | 5.6 | Surface | 1 | 2 | 21.1 | 8.1 | 31.8 | 7.1 | | 7.6 | | 13.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | 5.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | 5.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | 5.6 | Bottom | 3 | 1 | 21.2 | 8.1 | 31.6 | 7.1 | 7.1 | 7.6 | | 13.9 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | 5.6 | Bottom | 3 | 2 | 21.1 | 8.1 | 31.7 | 7.1 | | 7.6 | | 13.2 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | 3.9 | Surface | 1 | 1 | 21.4 | 8.1 | 31.8 | 7.0 | 7.0 | 10.0 | 10.1 | 19.3 | 18.7 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | 3.9 | Surface | 1 | 2 | 21.3 | 8.1 | 31.9 | 7.0 | | 10.0 | | 18.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | 3.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | 3.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | 3.9 | Bottom | 3 | 1 | 21.4 | 8.1 | 31.8 | 7.0 | 7.0 | 10.1 | | 19.2 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | 3.9 | Bottom | 3 | 2 | 21.3 | 8.1 | 31.9 | 7.0 | | 10.1 | | 17.8 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | 5.8 | Surface | 1 | 1 | 21.4 | 8.1 | 31.7 | 7.0 | 7.0 | 19.3 | 19.5 | 13.9 | 15.4 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | 5.8 | Surface | 1 | 2 | 21.3 | 8.1 | 31.8 | 7.0 | | 19.4 | | 12.1 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | 5.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | 5.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | 5.8 | Bottom | 3 | 1 | 21.4 | 8.1 | 31.6 | 7.0 | 7.0 | 19.6 | | 17.1 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | 5.8 | Bottom | 3 | 2 | 21.3 | 8.1 | 31.8 | 7.0 | | 19.6 | | 18.5 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | 3.4 | Surface | 1 | 1 | 21.3 | 8.1 | 31.8 | 7.0 | 7.0 | 6.5 | 6.6 | 12.9 | 13.7 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | 3.4 | Surface | 1 | 2 | 21.2 | 8.1 | 32.0 | 7.0 | | 6.5 | | 13.0 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | 3.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | 3.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | 3.4 | Bottom | 3 | 1 | 21.3 | 8.1 | 31.9 | 7.1 | 7.1 | 6.6 | | 14.0 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | 3.4 | Bottom | 3 | 2 | 21.2 | 8.1 | 32.0 | 7.0 | | 6.7 | | 14.8 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | 12.9 | Surface | 1 | 1 | 21.4 | 8.2 | 31.7 | 6.8 | 6.8 | 8.0 | 7.6 | 14.0 | 14.5 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | 12.9 | Surface | 1 | 2 | 21.3 | 8.1 | 31.9 | 6.8 | | 7.4 | | 15.2 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | 12.9 | Middle | 2 | 1 | 21.4 | 8.2 | 31.7 | 6.8 | 8.2 | 14.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | 12.9 | Middle | 2 | 2 | 21.3 | 8.1 | 31.9 | 6.8 | 7.4 | 14.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | 12.9 | Bottom | 3 | 1 | 21.4 | 8.2 | 31.7 | 6.8 | 7.7 | 14.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | 12.9 | Bottom | 3 | 2 | 21.3 | 8.1 | 31.9 | 6.8 | 7.1 | 13.8 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | 7.1 | Surface | 1 | 1 | 21.1 | 8.1 | 31.1 | 6.8 | 6.8 | 21.6 | 23.9 | 24.7 | 25.3 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | 7.1 | Surface | 1 | 2 | 21.4 | 7.9 | 30.1 | 6.8 | | 21.2 | | 25.6 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | 7.1 | Middle | 2 | 1 | 21.1 | 8.1 | 31.2 | 6.8 | 24.1 | 24.8 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | 7.1 | Middle | 2 | 2 | 21.4 | 7.9 | 30.1 | 6.8 | 23.1 | 25.0 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | 7.1 | Bottom | 3 | 1 | 21.1 | 8.1 | 31.2 | 6.7 | 27.1 | 25.3 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | 7.1 | Bottom | 3 | 2 | 21.4 | 7.9 | 30.1 | 6.8 | 26.4 | 26.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | 5.7 | Surface | 1 | 1 | 21.2 | 8.1 | 31.6 | 6.9 | 6.9 | 9.0 | 8.8 | 11.2 | 13.2 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | 5.7 | Surface | 1 | 2 | 21.1 | 8.1 | 31.8 | 6.9 | | 9.0 | | 10.4 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | 5.7 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | 5.7 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | 5.7 | Bottom | 3 | 1 | 21.2 | 8.1 | 31.6 | 6.9 | 8.5 | 15.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | 5.7 | Bottom | 3 | 2 | 21.1 | 8.1 | 31.8 | 6.9 | 8.8 | 15.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | 5.2 | Surface | 1 | 1 | 21.2 | 8.1 | 31.8 | 6.9 | 6.9 | 11.4 | 11.4 | 15.4 | 16.0 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | 5.2 | Surface | 1 | 2 | 21.1 | 8.1 | 32.0 | 6.9 | | 11.8 | | 15.2 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | 5.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | 5.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | 5.2 | Bottom | 3 | 1 | 21.2 | 8.1 | 31.8 | 6.9 | 11.1 | 16.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | 5.2 | Bottom | 3 | 2 | 21.1 | 8.1 | 32.0 | 6.9 | 11.1 | 16.3 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | 4 | Surface | 1 | 1 | 21.1 | 8.1 | 32.0 | 6.8 | 6.8 | 15.5 | 15.4 | 21.1 | 21.7 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | 4 | Surface | 1 | 2 | 21.0 | 8.1 | 32.1 | 6.8 | | 15.5 | | 21.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | 4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | 4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | 4 | Bottom | 3 | 1 | 21.1 | 8.1 | 32.0 | 6.8 | 15.3 | 22.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | 4 | Bottom | 3 | 2 | 21.0 | 8.1 | 32.1 | 6.8 | 15.3 | 22.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | 5.6 | Surface | 1 | 1 | 21.2 | 8.1 | 32.0 | 6.9 | 6.9 | 21.8 | 22.0 | 32.7 | 32.8 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | 5.6 | Surface | 1 | 2 | 21.1 | 8.1 | 32.2 | 6.9 | | 21.8 | | 32.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | 5.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | 5.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | 5.6 | Bottom | 3 | 1 | 21.2 | 8.1 | 32.0 | 6.9 | 22.1 | 33.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | 5.6 | Bottom | 3 | 2 | 21.1 | 8.1 | 32.2 | 6.9 | 22.1 | 32.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | 11:20 | 3.3 | Surface | 1 | 1 | | | | | 7.0 | | 10.6 | | 14.0 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | 11:20 | 3.3 | Surface | 1 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | 11:20 | 3.3 | Middle | 2 | 1 | 21.2 | 8.1 | 32.1 | 7.0 | 10.6 | 14.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | 11:20 | 3.3 | Middle | 2 | 2 | 21.1 | 8.1 | 32.2 | 7.0 | 10.6 | 13.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | 11:20 | 3.3 | Bottom | 3 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | 11:20 | 3.3 | Bottom | 3 | 2 | | | | | | | | | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)5 | 6:32 | | Surface | 1 | 1 | 20.9 | 8.1 | 32.5 | 6.6 | 6.6 | 0.6 | 0.6 | 8.2 | 8.5 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)5 | 6:32 | | Surface | 1 | 2 | 21.0 | 8.1 | 32.4 | 6.6 | | 0.6 | | 8.6 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)5 | 6:32 | | Middle | 2 | 1 | 20.9 | 8.1 | 32.5 | 6.6 | 0.7 | 8.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)5 | 6:32 | | Middle | 2 | 2 | 21.0 | 8.1 | 32.4 | 6.6 | 0.7 | 8.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)5 | 6:32 | | Bottom | 3 | 1 | 20.9 | 8.1 | 32.5 | 6.6 | 0.6 | 7.8 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)5 | 6:32 | | Bottom | 3 | 2 | 21.0 | 8.1 | 32.4 | 6.6 | 0.6 | 8.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)3(N) | 7:10 | | Surface | 1 | 1 | 19.7 | 8.0 | 31.6 | 7.1 | 7.2 | 7.2 | 8.2 | 11.8 | 11.5 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)3(N) | 7:10 | | Surface | 1 | 2 | 19.9 | 8.0 | 29.0 | 7.2 | | 7.1 | | 11.7 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)3(N) | 7:10 | | Middle | 2 | 1 | 19.8 | 8.0 | 31.7 | 7.1 | 8.7 | 10.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)3(N) | 7:10 | | Middle | 2 | 2 | 20.0 | 8.0 | 29.0 | 7.2 | 8.4 | 10.7 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)3(N) | 7:10 | | Bottom | 3 | 1 | 19.9 | 8.0 | 31.9 | 7.1 | 9.0 | 11.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | CS(Mf)3(N) | 7:10 | | Bottom | 3 | 2 | 20.1 | 8.0 | 29.4 | 7.2 | 8.7 | 12.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)16 | 6:58 | | Surface | 1 | 1 | 20.2 | 8.1 | 32.1 | 7.0 | 7.0 | 7.8 | 7.8 | 10.5 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)16 | 6:58 | | Surface | 1 | 2 | 20.3 | 8.1 | 31.9 | 7.0 | | 7.9 | | 10.7 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)16 | 6:58 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)16 | 6:58 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)16 | 6:58 | | Bottom | 3 | 1 | 20.2 | 8.1 | 32.1 | 7.0 | 7.7 | 11.0 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)16 | 6:58 | | Bottom | 3 | 2 | 20.3 | 8.1 | 31.9 | 7.0 | 7.7 | 11.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4a | 7:06 | | Surface | 1 | 1 | 20.2 | 8.1 | 32.1 | 7.0 | 7.0 | 5.7 | 7.7 | 6.8 | 7.8 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4a | 7:06 | | Surface | 1 | 2 | 20.3 | 8.1 | 31.9 | 7.0 | | 5.7 | | 6.8 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4a | 7:06 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4a | 7:06 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4a | 7:06 | | Bottom | 3 | 1 | 20.2 | 8.1 | 32.1 | 7.0 | 9.7 | 9.3 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4a | 7:06 | | Bottom | 3 | 2 | 20.3 | 8.1 | 31.9 | 7.0 | 9.7 | 8.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4 | 7:10 | | Surface | 1 | 1 | 20.1 | 8.1 | 32.1 | 7.0 | 7.0 | 7.7 | 8.9 | 8.3 | 7.9 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4 | 7:10 | | Surface | 1 | 2 | 20.2 | 8.1 | 31.9 | 6.9 | | 7.8 | | 8.1 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4 | 7:10 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4 | 7:10 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4 | 7:10 | | Bottom | 3 | 1 | 20.1 | 8.1 | 32.1 | 7.2 | 10.0 | 8.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | SR4 | 7:10 | | Bottom | 3 | 2 | 20.2 | 8.1 | 31.9 | 7.1 | 10.0 | 7.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS8 | 7:19 | | Surface | 1 | 1 | 19.9 | 8.1 | 32.1 | 7.1 | 7.1 | 5.0 | 5.1 | 6.9 | 8.6 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS8 | 7:19 | | Surface | 1 | 2 | 20.0 | 8.1 | 31.9 | 7.1 | | 5.0 | | 7.7 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS8 | 7:19 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS8 | 7:19 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS8 | 7:19 | | Bottom | 3 | 1 | 19.9 | 8.1 | 32.1 | 7.1 | 5.1 | 9.7 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS8 | 7:19 | | Bottom | 3 | 2 | 20.0 | 8.1 | 31.9 | 7.1 | 5.1 | 9.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)9 | 7:26 | | Surface | 1 | 1 | 19.9 | 8.1 | 32.1 | 7.1 | 7.1 | 8.8 | 8.0 | 9.9 | 10.3 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)9 | 7:26 | | Surface | 1 | 2 | 20.0 | 8.1 | 31.9 | 7.1 | | 8.8 | | 9.8 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)9 | 7:26 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)9 | 7:26 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)9 | 7:26 | | Bottom | 3 | 1 | 19.9 | 8.1 | 32.1 | 7.1 | 7.1 | 11.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Ebb | IS(Mf)9 | 7:26 | | Bottom | 3 | 2 | 20.0 | 8.1 | 31.9 | 7.2 | 7.2 | 10.0 | | | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)5 | 14:27 | | Surface | 1 | 1 | 21.2 | 8.0 | 32.3 | 6.7 | 6.6 | 1.1 | 2.7 | 5.8 | 5.5 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)5 | 14:27 | | Surface | 1 | 2 | 21.1 | 8.1 | 32.5 | 6.6 | | 1.1 | | 4.5 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)5 | 14:27 | | Middle | 2 | 1 | 21.2 | 8.0 | 32.4 | 6.6 | 3.5 | 6.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)5 | 14:27 | | Middle | 2 | 2 | 21.1 | 8.1 | 32.6 | 6.6 | 3.6 | 5.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)5 | 14:27 | | Bottom | 3 | 1 | 21.2 | 8.0 | 32.4 | 6.6 | 3.4 | 6.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)5 | 14:27 | | Bottom | 3 | 2 | 21.1 | 8.1 | 32.6 | 6.6 | 3.4 | 5.3 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)3(N) | 13:24 | | Surface | 1 | 1 | 20.2 | 8.0 | 31.6 | 7.1 | 7.1 | 9.0 | 11.0 | 9.3 | 9.8 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)3(N) | 13:24 | | Surface | 1 | 2 | 20.5 | 7.9 | 29.1 | 7.2 | | 9.2 | | 9.3 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)3(N) | 13:24 | | Middle | 2 | 1 | 20.2 | 8.0 | 31.6 | 7.1 | 11.1 | 8.3 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)3(N) | 13:24 | | Middle | 2 | 2 | 20.4 | 7.9 | 29.1 | 7.1 | 10.5 | 9.7 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)3(N) | 13:24 | | Bottom | 3 | 1 | 20.2 | 8.0 | 31.7 | 7.0 | 13.1 | 11.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | CS(Mf)3(N) | 13:24 | | Bottom | 3 | 2 | 20.4 | 7.9 | 29.1 | 7.1 | 13.0 | 10.8 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)16 | 14:01 | | Surface | 1 | 1 | 20.5 | 8.1 | 31.9 | 7.0 | 7.0 | 7.7 | 9.5 | 5.9 | 6.4 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)16 | 14:01 | | Surface | 1 | 2 | 20.5 | 8.1 | 32.1 | 7.0 | | 7.8 | | 4.7 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)16 | 14:01 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)16 | 14:01 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)16 | 14:01 | | Bottom | 3 | 1 | 20.5 | 8.1 | 31.9 | 7.0 | 11.2 | 7.7 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)16 | 14:01 | | Bottom | 3 | 2 | 20.4 | 8.1 | 32.1 | 7.0 | 11.2 | 7.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4a | 13:51 | | Surface | 1 | 1 | 20.9 | 8.1 | 31.9 | 7.1 | 7.1 | 3.0 | 4.0 | 5.3 | 6.9 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4a | 13:51 | | Surface | 1 | 2 | 20.8 | 8.1 | 32.1 | 7.1 | | 3.0 | | 5.7 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4a | 13:51 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4a | 13:51 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4a | 13:51 | | Bottom | 3 | 1 | 20.9 | 8.1 | 31.9 | 7.2 | 5.0 | 8.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4a | 13:51 | | Bottom | 3 | 2 | 20.8 | 8.1 | 32.1 | 7.2 | 5.0 | 8.0 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4 | 13:46 | | Surface | 1 | 1 | 20.7 | 8.1 | 31.9 | 7.1 | 7.1 | 6.1 | 6.3 | 8.0 | 10.8 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4 | 13:46 | | Surface | 1 | 2 | 20.6 | 8.1 | 32.1 | 7.1 | | 6.1 | | 8.4 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4 | 13:46 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4 | 13:46 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4 | 13:46 | | Bottom | 3 | 1 | 20.6 | 8.1 | 31.9 | 7.1 | 6.5 | 13.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | SR4 | 13:46 | | Bottom | 3 | 2 | 20.6 | 8.1 | 32.1 | 7.1 | 6.5 | 13.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS8 | 13:38 | | Surface | 1 | 1 | 20.6 | 8.1 | 32.0 | 7.1 | 7.1 | 9.8 | 9.8 | 10.0 | 11.4 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS8 | 13:38 | | Surface | 1 | 2 | 20.6 | 8.1 | 32.1 | 7.1 | | 9.9 | | 10.3 | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS8 | 13:38 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS8 | 13:38 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS8 | 13:38 | | Bottom | 3 | 1 | 20.7 | 8.1 | 32.0 | 7.1 | 9.7 | 13.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS8 | 13:38 | | Bottom | 3 | 2 | 20.6 | 8.1 | 32.1 | 7.1 | 9.7 | 12.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)9 | 13:30 | | Surface | 1 | 1 | | | | | 7.2 | | 13.8 | | 13.8 |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)9 | 13:30 | | Surface | 1 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)9 | 13:30 | | Middle | 2 | 1 | 20.4 | 8.1 | 31.9 | 7.2 | 13.7 | 14.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)9 | 13:30 | | Middle | 2 | 2 | 20.3 | 8.1 | 32.1 | 7.2 | 13.9 | 13.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)9 | 13:30 | | Bottom | 3 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-11 | Mid-Flood | IS(Mf)9 | 13:30 | | Bottom | 3 | 2 | | | | | | | | | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)5 | 8:48 | | Surface | 1 | 1 | 21.1 | 8.0 | 32.7 | 6.4 | 6.4 | 2.2 | 2.2 | 6.8 | 6.0 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)5 | 8:48 | | Surface | 1 | 2 | 21.2 | 8.1 | 32.5 | 6.4 | | 2.2 | | 6.6 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)5 | 8:48 | | Middle | 2 | 1 | 21.1 | 8.0 | 32.7 | 6.4 | | 2.4 | | 6.4 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)5 | 8:48 | | Middle | 2 | 2 | 21.1 | 8.1 | 32.5 | 6.4 | | 2.4 | | 5.3 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)5 | 8:48 | | Bottom | 3 | 1 | 21.1 | 8.0 | 32.7 | 6.4 | 6.4 | 2.1 | 2.1 | 5.0 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)5 | 8:48 | | Bottom | 3 | 2 | 21.2 | 8.1 | 32.5 | 6.4 | | 2.1 | | 6.0 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)3(N) | 9:38 | | Surface | 1 | 1 | 19.8 | 8.0 | 32.0 | 7.2 | 7.2 | 4.7 | 6.8 | 6.4 | 7.5 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)3(N) | 9:38 | | Surface | 1 | 2 | 20.1 | 8.0 | 31.4 | 7.2 | | 4.4 | | 6.9 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)3(N) | 9:38 | | Middle | 2 | 1 | 19.8 | 8.0 | 32.1 | 7.2 | | 6.8 | | 6.4 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)3(N) | 9:38 | | Middle | 2 | 2 | 20.1 | 8.0 | 31.5 | 7.2 | | 6.9 | | 5.4 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)3(N) | 9:38 | | Bottom | 3 | 1 | 19.9 | 8.0 | 32.3 | 7.2 | 7.2 | 9.1 | 7.2 | 10.1 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | CS(Mf)3(N) | 9:38 | | Bottom | 3 | 2 | 20.1 | 8.0 | 31.7 | 7.2 | | 9.1 | | 10.0 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)16 | 9:12 | | Surface | 1 | 1 | 20.7 | 8.1 | 32.6 | 6.7 | 6.7 | 7.1 | 7.4 | 7.7 | 7.8 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)16 | 9:12 | | Surface | 1 | 2 | 20.7 | 8.1 | 32.4 | 6.7 | | 7.3 | | 6.8 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)16 | 9:12 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)16 | 9:12 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)16 | 9:12 | | Bottom | 3 | 1 | 20.7 | 8.1 | 32.6 | 6.7 | 6.7 | 7.5 | 6.7 | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)16 | 9:12 | | Bottom | 3 | 2 | 20.7 | 8.1 | 32.4 | 6.7 | | 7.5 | | 8.5 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4a | 9:22 | | Surface | 1 | 1 | 20.5 | 8.1 | 32.4 | 6.7 | 6.7 | 6.4 | 6.4 | 10.0 | 9.9 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4a | 9:22 | | Surface | 1 | 2 | 20.5 | 8.1 | 32.3 | 6.7 | | 6.4 | | 9.3 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4a | 9:22 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4a | 9:22 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4a | 9:22 | | Bottom | 3 | 1 | 20.5 | 8.1 | 32.4 | 6.7 | 6.7 | 6.4 | 6.7 | 10.0 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4a | 9:22 | | Bottom | 3 | 2 | 20.5 | 8.1 | 32.3 | 6.7 | | 6.4 | | 10.3 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4 | 9:26 | | Surface | 1 | 1 | 20.2 | 8.1 | 32.2 | 6.7 | 6.7 | 10.1 | 11.8 | 9.1 | 8.7 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4 | 9:26 | | Surface | 1 | 2 | 20.3 | 8.1 | 32.0 | 6.7 | | 10.2 | | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4 | 9:26 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4 | 9:26 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4 | 9:26 | | Bottom | 3 | 1 | 20.3 | 8.1 | 32.3 | 6.7 | 6.7 | 13.3 | 6.7 | 9.1 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | SR4 | 9:26 | | Bottom | 3 | 2 | 20.4 | 8.1 | 32.1 | 6.7 | | 13.5 | | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS8 | 9:35 | | Surface | 1 | 1 | 20.2 | 8.1 | 32.3 | 7.0 | 7.0 | 20.0 | 23.2 | 10.2 | 15.3 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS8 | 9:35 | | Surface | 1 | 2 | 20.2 | 8.1 | 32.1 | 7.0 | | 20.0 | | 11.1 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS8 | 9:35 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS8 | 9:35 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS8 | 9:35 | | Bottom | 3 | 1 | 20.2 | 8.1 | 32.3 | 7.0 | 7.0 | 26.2 | 7.0 | 19.4 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS8 | 9:35 | | Bottom | 3 | 2 | 20.3 | 8.1 | 32.1 | 7.0 | | 26.4 | | 20.3 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)9 | 9:46 | | Surface | 1 | 1 | 20.1 | 8.1 | 32.2 | 7.1 | 7.1 | 15.6 | 15.3 | 12.1 | 12.3 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)9 | 9:46 | | Surface | 1 | 2 | 20.2 | 8.1 | 32.0 | 7.1 | | 15.6 | | 12.8 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)9 | 9:46 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)9 | 9:46 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)9 | 9:46 | | Bottom | 3 | 1 | 20.1 | 8.1 | 32.2 | 7.1 | 7.1 | 14.9 | 7.1 | 12.3 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Ebb | IS(Mf)9 | 9:46 | | Bottom | 3 | 2 | 20.2 | 8.1 | 32.0 | 7.1 | | 14.9 | | 12.1 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)5 | 15:42 | | Surface | 1 | 1 | 21.0 | 8.1 | 32.7 | 6.5 | 6.5 | 5.3 | 5.7 | 7.4 | 6.7 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)5 | 15:42 | | Surface | 1 | 2 | 21.1 | 8.0 | 32.5 | 6.5 | | 5.3 | | 7.2 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)5 | 15:42 | | Middle | 2 | 1 | 21.0 | 8.1 | 32.7 | 6.5 | 5.7 | 7.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)5 | 15:42 | | Middle | 2 | 2 | 21.1 | 8.0 | 32.5 | 6.5 | 5.8 | 6.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)5 | 15:42 | | Bottom | 3 | 1 | 21.0 | 8.1 | 32.7 | 6.5 | 6.0 | 6.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)5 | 15:42 | | Bottom | 3 | 2 | 21.1 | 8.0 | 32.5 | 6.5 | 6.0 | 6.0 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)3(N) | 14:33 | | Surface | 1 | 1 | 20.6 | 8.1 | 28.7 | 7.3 | 7.2 | 4.0 | 5.5 | 4.7 | 7.4 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)3(N) | 14:33 | | Surface | 1 | 2 | 20.3 | 8.0 | 31.8 | 7.2 | | 4.4 | | 5.2 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)3(N) | 14:33 | | Middle | 2 | 1 | 20.5 | 8.1 | 28.7 | 7.2 | 4.9 | 5.7 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)3(N) | 14:33 | | Middle | 2 | 2 | 20.3 | 8.0 | 31.8 | 7.1 | 5.2 | 5.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)3(N) | 14:33 | | Bottom | 3 | 1 | 20.4 | 8.1 | 28.7 | 7.2 | 7.3 | 11.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | CS(Mf)3(N) | 14:33 | | Bottom | 3 | 2 | 20.2 | 8.0 | 31.9 | 7.1 | 7.4 | 11.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)16 | 15:15 | | Surface | 1 | 1 | 20.4 | 8.1 | 32.4 | 7.0 | 7.0 | 11.1 | 11.8 | 10.7 | 11.2 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)16 | 15:15 | | Surface | 1 | 2 | 20.5 | 8.1 | 32.3 | 7.0 | | 11.1 | | 10.5 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)16 | 15:15 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)16 | 15:15 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)16 | 15:15 | | Bottom | 3 | 1 | 20.4 | 8.1 | 32.4 | 7.0 | 12.6 | 11.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)16 | 15:15 | | Bottom | 3 | 2 | 20.5 | 8.1 | 32.3 | 7.0 | 12.5 | 11.7 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4a | 15:02 | | Surface | 1 | 1 | 20.6 | 8.1 | 32.5 | 6.8 | 6.8 | 13.0 | 13.2 | 10.2 | 11.3 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4a | 15:02 | | Surface | 1 | 2 | 20.7 | 8.1 | 32.3 | 6.8 | | 13.1 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4a | 15:02 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4a | 15:02 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4a | 15:02 | | Bottom | 3 | 1 | 20.6 | 8.1 | 32.5 | 6.8 | 13.4 | 13.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4a | 15:02 | | Bottom | 3 | 2 | 20.7 | 8.1 | 32.3 | 6.8 | 13.4 | 12.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4 | 14:57 | | Surface | 1 | 1 | 20.6 | 8.1 | 32.5 | 6.8 | 6.8 | 9.6 | 10.0 | 10.6 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4 | 14:57 | | Surface | 1 | 2 | 20.6 | 8.1 | 32.3 | 6.8 | | 9.6 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4 | 14:57 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4 | 14:57 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4 | 14:57 | | Bottom | 3 | 1 | 20.6 | 8.1 | 32.5 | 6.8 | 10.3 | 12.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | SR4 | 14:57 | | Bottom | 3 | 2 | 20.6 | 8.1 | 32.3 | 6.8 | 10.3 | 11.8 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS8 | 14:48 | | Surface | 1 | 1 | 20.6 | 8.1 | 32.5 | 6.8 | 6.8 | 15.1 | 15.5 | 18.2 | 18.5 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS8 | 14:48 | | Surface | 1 | 2 | 20.6 | 8.1 | 32.3 | 6.8 | | 15.1 | | 17.3 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS8 | 14:48 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS8 | 14:48 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS8 | 14:48 | | Bottom | 3 | 1 | 20.6 | 8.1 | 32.5 | 6.8 | 15.9 | 19.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS8 | 14:48 | | Bottom | 3 | 2 | 20.6 | 8.1 | 32.3 | 6.8 | 15.9 | 18.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)9 | 14:41 | | Surface | 1 | 1 | 20.1 | 8.1 | 32.2 | 7.2 | 7.2 | 12.4 | 13.5 | 14.2 | 16.3 |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)9 | 14:41 | | Surface | 1 | 2 | 20.2 | 8.1 | 32.1 | 7.2 | | 12.4 | | 15.9 | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)9 | 14:41 | | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)9 | 14:41 | | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)9 | 14:41 | | Bottom | 3 | 1 | 20.1 | 8.1 | 32.2 | 7.2 | 14.5 | 17.0 | | | |
| TMCLKL | HY/2012/07 | 2017-12-13 | Mid-Flood | IS(Mf)9 | 14:41 | | Bottom | 3 | 2 | 20.2 | 8.1 | 32.1 | 7.2 | 14.5 | 18.0 | | | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)5 | 10:59 | 13.6 | Surface | 1 | 1 | 21.0 | 8.0 | 32.5 | 6.4 | 6.4 | 3.0 | 3.2 | 6.8 | 6.0 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)5 | 10:59 | 13.6 | Surface | 1 | 2 | 21.0 | 8.0 | 32.7 | 6.4 | | 3.0 | | 6.6 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)5 | 10:59 | 13.6 | Middle | 2 | 1 | 21.0 | 8.0 | 32.5 | 6.4 | | 3.4 | | 6.4 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)5 | 10:59 | 13.6 | Middle | 2 | 2 | 20.9 | 8.0 | 32.7 | 6.4 | | 3.4 | | 5.3 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)5 | 10:59 | 13.6 | Bottom | 3 | 1 | 21.0 | 8.0 | 32.5 | 6.4 | 6.4 | 3.3 | 3.2 | 5.0 | 6.0 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)5 | 10:59 | 13.6 | Bottom | 3 | 2 | 20.9 | 8.0 | 32.7 | 6.4 | | 3.3 | | 6.0 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)3(N) | 10:05 | 7.5 | Surface | 1 | 1 | 20.2 | 8.3 | 32.0 | 7.1 | 7.2 | 10.1 | 12.5 | 6.4 | 7.5 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)3(N) | 10:05 | 7.5 | Surface | 1 | 2 | 20.5 | 8.2 | 29.4 | 7.2 | | 10.3 | | 6.9 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)3(N) | 10:05 | 7.5 | Middle | 2 | 1 | 20.2 | 8.2 | 32.4 | 7.1 | | 11.9 | | 6.4 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)3(N) | 10:05 | 7.5 | Middle | 2 | 2 | 20.4 | 8.2 | 29.7 | 7.2 | | 13.0 | | 5.4 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)3(N) | 10:05 | 7.5 | Bottom | 3 | 1 | 20.2 | 8.3 | 32.5 | 7.1 | 7.2 | 14.4 | 12.5 | 10.1 | 7.5 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | CS(Mf)3(N) | 10:05 | 7.5 | Bottom | 3 | 2 | 20.4 | 8.2 | 29.9 | 7.2 | | 15.2 | | 10.0 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)16 | 10:34 | 5.9 | Surface | 1 | 1 | 20.5 | 8.1 | 32.5 | 7.0 | 7.0 | 5.2 | 5.2 | 7.7 | 7.8 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)16 | 10:34 | 5.9 | Surface | 1 | 2 | 20.5 | 8.1 | 32.6 | 7.0 | | 5.2 | | 6.8 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)16 | 10:34 | 5.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)16 | 10:34 | 5.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)16 | 10:34 | 5.9 | Bottom | 3 | 1 | 20.5 | 8.1 | 32.4 | 7.0 | 7.0 | 5.1 | 5.2 | 8.3 | 7.8 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)16 | 10:34 | 5.9 | Bottom | 3 | 2 | 20.5 | 8.1 | 32.6 | 7.0 | | 5.1 | | 8.5 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4a | 10:24 | 5.5 | Surface | 1 | 1 | 20.6 | 8.1 | 32.4 | 6.8 | 6.8 | 8.8 | 9.0 | 10.0 | 9.9 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4a | 10:24 | 5.5 | Surface | 1 | 2 | 20.5 | 8.1 | 32.6 | 6.8 | | 8.7 | | 9.3 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4a | 10:24 | 5.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4a | 10:24 | 5.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4a | 10:24 | 5.5 | Bottom | 3 | 1 | 20.6 | 8.1 | 32.4 | 6.9 | 6.9 | 9.2 | 9.0 | 10.0 | 9.9 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4a | 10:24 | 5.5 | Bottom | 3 | 2 | 20.5 | 8.1 | 32.6 | 6.9 | | 9.2 | | 10.3 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4 | 10:20 | 4.3 | Surface | 1 | 1 | 20.6 | 8.1 | 32.4 | 6.7 | 6.7 | 5.0 | 4.9 | 9.1 | 8.7 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4 | 10:20 | 4.3 | Surface | 1 | 2 | 20.6 | 8.1 | 32.6 | 6.7 | | 5.0 | | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4 | 10:20 | 4.3 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4 | 10:20 | 4.3 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4 | 10:20 | 4.3 | Bottom | 3 | 1 | 20.6 | 8.1 | 32.4 | 6.8 | 6.8 | 4.9 | 4.9 | 9.1 | 8.7 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | SR4 | 10:20 | 4.3 | Bottom | 3 | 2 | 20.6 | 8.1 | 32.6 | 6.8 | | 4.8 | | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS8 | 10:13 | 5.9 | Surface | 1 | 1 | 20.6 | 8.1 | 32.4 | 6.9 | 6.9 | 17.5 | 17.5 | 10.2 | 15.3 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS8 | 10:13 | 5.9 | Surface | 1 | 2 | 20.5 | 8.1 | 32.6 | 6.9 | | 17.3 | | 11.1 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS8 | 10:13 | 5.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS8 | 10:13 | 5.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS8 | 10:13 | 5.9 | Bottom | 3 | 1 | 20.6 | 8.1 | 32.4 | 6.9 | 6.9 | 17.7 | 17.5 | 19.4 | 15.3 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS8 | 10:13 | 5.9 | Bottom | 3 | 2 | 20.5 | 8.1 | 32.6 | 6.8 | | 17.5 | | 20.3 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)9 | 10:07 | 3.5 | Surface | 1 | 1 | 20.6 | 8.1 | 32.4 | 6.9 | 6.9 | 8.0 | 8.1 | 12.1 | 12.3 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)9 | 10:07 | 3.5 | Surface | 1 | 2 | 20.5 | 8.1 | 32.6 | 6.9 | | 8.0 | | 12.8 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)9 | 10:07 | 3.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)9 | 10:07 | 3.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)9 | 10:07 | 3.5 | Bottom | 3 | 1 | 20.6 | 8.1 | 32.4 | 6.9 | 6.9 | 8.1 | 8.1 | 12.3 | 12.3 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Ebb | IS(Mf)9 | 10:07 | 3.5 | Bottom | 3 | 2 | 20.5 | 8.1 | 32.6 | 6.9 | | 8.1 | | 12.1 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)5 | 4:43 | 13.4 | Surface | 1 | 1 | 20.6 | 8.1 | 32.6 | 6.8 | 6.8 | 6.7 | 10.7 | 7.4 | 6.7 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)5 | 4:43 | 13.4 | Surface | 1 | 2 | 20.7 | 8.1 | 32.4 | 6.8 | | 6.6 | | 7.2 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)5 | 4:43 | 13.4 | Middle | 2 | 1 | 20.6 | 8.1 | 32.6 | 6.8 | | 12.1 | | 7.1 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)5 | 4:43 | 13.4 | Middle | 2 | 2 | 20.7 | 8.1 | 32.4 | 6.8 | | 12.1 | | 6.4 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)5 | 4:43 | 13.4 | Bottom | 3 | 1 | 20.6 | 8.1 | 32.6 | 6.8 | 6.8 | 13.4 | 5.2 | 6.1 | 7.4 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)5 | 4:43 | 13.4 | Bottom | 3 | 2 | 20.7 | 8.1 | 32.4 | 6.8 | | 13.2 | | 6.0 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)3(N) | 6:50 | 7.3 | Surface | 1 | 1 | 20.2 | 8.1 | 31.3 | 7.0 | 7.1 | 4.6 | 5.2 | 4.7 | 7.4 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)3(N) | 6:50 | 7.3 | Surface | 1 | 2 | 20.4 | 8.1 | 27.4 | 7.2 | | 4.2 | | 5.2 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)3(N) | 6:50 | 7.3 | Middle | 2 | 1 | 20.2 | 8.2 | 31.6 | 7.0 | | 5.5 | | 5.7 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)3(N) | 6:50 | 7.3 | Middle | 2 | 2 | 20.5 | 8.1 | 27.8 | 7.2 | | 5.3 | | 5.2 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)3(N) | 6:50 | 7.3 | Bottom | 3 | 1 | 20.3 | 8.2 | 31.9 | 7.0 | 7.1 | 6.0 | 5.5 | 11.9 | 11.2 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | CS(Mf)3(N) | 6:50 | 7.3 | Bottom | 3 | 2 | 20.5 | 8.1 | 27.9 | 7.2 | | 5.8 | | 11.9 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)16 | 5:08 | 5.5 | Surface | 1 | 1 | 20.5 | 8.1 | 32.5 | 6.7 | 6.8 | 7.2 | 7.2 | 10.7 | 11.2 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)16 | 5:08 | 5.5 | Surface | 1 | 2 | 20.6 | 8.1 | 32.4 | 6.8 | | 7.2 | | 10.5 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)16 | 5:08 | 5.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)16 | 5:08 | 5.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)16 | 5:08 | 5.5 | Bottom | 3 | 1 | 20.6 | 8.1 | 32.5 | 6.7 | 6.7 | 7.2 | 5.5 | 11.9 | 11.3 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)16 | 5:08 | 5.5 | Bottom | 3 | 2 | 20.6 | 8.1 | 32.4 | 6.7 | | 7.1 | | 11.7 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4a | 5:16 | 5.6 | Surface | 1 | 1 | 20.6 | 8.1 | 32.6 | 6.7 | 6.7 | 5.1 | 5.5 | 10.2 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4a | 5:16 | 5.6 | Surface | 1 | 2 | 20.7 | 8.1 | 32.4 | 6.7 | | 5.1 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4a | 5:16 | 5.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4a | 5:16 | 5.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4a | 5:16 | 5.6 | Bottom | 3 | 1 | 20.6 | 8.0 | 32.6 | 6.7 | 6.8 | 5.8 | 7.8 | 13.4 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4a | 5:16 | 5.6 | Bottom | 3 | 2 | 20.7 | 8.0 | 32.4 | 6.8 | | 5.8 | | 12.4 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4 | 5:21 | 4.2 | Surface | 1 | 1 | 20.6 | 8.1 | 32.5 | 6.7 | 6.7 | 5.9 | 8.7 | 10.6 | 18.5 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4 | 5:21 | 4.2 | Surface | 1 | 2 | 20.6 | 8.1 | 32.4 | 6.7 | | 5.9 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4 | 5:21 | 4.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4 | 5:21 | 4.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4 | 5:21 | 4.2 | Bottom | 3 | 1 | 20.6 | 8.1 | 32.5 | 6.7 | 6.7 | 9.8 | 8.7 | 12.5 | 16.3 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | SR4 | 5:21 | 4.2 | Bottom | 3 | 2 | 20.6 | 8.1 | 32.4 | 6.7 | | 9.7 | | 11.8 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS8 | 5:31 | 5.8 | Surface | 1 | 1 | 20.4 | 8.1 | 32.5 | 6.8 | 6.8 | 8.6 | 8.7 | 18.2 | 18.5 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS8 | 5:31 | 5.8 | Surface | 1 | 2 | 20.5 | 8.1 | 32.4 | 6.8 | | 8.6 | | 17.3 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS8 | 5:31 | 5.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS8 | 5:31 | 5.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS8 | 5:31 | 5.8 | Bottom | 3 | 1 | 20.4 | 8.1 | 32.5 | 6.8 | 6.8 | 8.7 | 14.1 | 19.9 | 16.3 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS8 | 5:31 | 5.8 | Bottom | 3 | 2 | 20.5 | 8.1 | 32.4 | 6.8 | | 8.7 | | 18.4 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)9 | 5:39 | 3.3 | Surface | 1 | 1 | 20.2 | 8.1 | 32.5 | 7.0 | 7.0 | 14.2 | 14.1 | 14.2 | 16.3 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)9 | 5:39 | 3.3 | Surface | 1 | 2 | 20.3 | 8.1 | 32.3 | 7.0 | | 14.1 | | 15.9 | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)9 | 5:39 | 3.3 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)9 | 5:39 | 3.3 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)9 | 5:39 | 3.3 | Bottom | 3 | 1 | 20.2 | 8.1 | 32.4 | 7.0 | 7.0 | 14.1 | 14.1 | 17.0 | 16.3 |
| TMCLKL | HY/2012/07 | 2017-12-15 | Mid-Flood | IS(Mf)9 | 5:39 | 3.3 | Bottom | 3 | 2 | 20.3 | 8.1 | 32.3 | 7.0 | | 14.0 | | 18.0 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)5 | 13:18 | 13.8 | Surface | 1 | 1 | 19.8 | 8.1 | 32.6 | 7.0 | 7.0 | 4.5 | 4.6 | 6.4 | 8.1 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)5 | 13:18 | 13.8 | Surface | 1 | 2 | 19.7 | 8.1 | 32.8 | 7.0 | | 4.5 | | 7.1 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)5 | 13:18 | 13.8 | Middle | 2 | 1 | 19.8 | 8.1 | 32.6 | 7.0 | | 4.7 | | 8.1 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)5 | 13:18 | 13.8 | Middle | 2 | 2 | 19.7 | 8.1 | 32.8 | 7.0 | | 4.7 | | 9.5 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)5 | 13:18 | 13.8 | Bottom | 3 | 1 | 19.8 | 8.1 | 32.6 | 7.0 | 7.0 | 4.6 | 4.6 | 8.4 | 8.8 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)5 | 13:18 | 13.8 | Bottom | 3 | 2 | 19.7 | 8.1 | 32.7 | 7.0 | | 4.6 | | 8.8 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)3(N) | 11:53 | 7.2 | Surface | 1 | 1 | 18.9 | 8.1 | 32.2 | 7.5 | 7.4 | 7.4 | 11.1 | 10.5 | 11.4 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)3(N) | 11:53 | 7.2 | Surface | 1 | 2 | 18.9 | 8.1 | 27.8 | 7.5 | | 7.3 | | 11.4 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)3(N) | 11:53 | 7.2 | Middle | 2 | 1 | 18.7 | 8.1 | 32.2 | 7.2 | | 11.5 | | 9.9 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)3(N) | 11:53 | 7.2 | Middle | 2 | 2 | 18.9 | 8.1 | 28.0 | 7.5 | | 11.0 | | 9.6 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)3(N) | 11:53 | 7.2 | Bottom | 3 | 1 | 18.5 | 8.2 | 32.3 | 7.2 | 7.4 | 14.4 | 7.4 | 13.4 | 13.8 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | CS(Mf)3(N) | 11:53 | 7.2 | Bottom | 3 | 2 | 18.8 | 8.2 | 28.1 | 7.5 | | 14.9 | | 13.8 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)16 | 12:53 | 5.9 | Surface | 1 | 1 | 18.9 | 8.1 | 32.3 | 7.3 | 7.3 | 9.7 | 10.7 | 10.6 | 10.3 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)16 | 12:53 | 5.9 | Surface | 1 | 2 | 18.8 | 8.1 | 32.5 | 7.3 | | 9.7 | | 10.1 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)16 | 12:53 | 5.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)16 | 12:53 | 5.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)16 | 12:53 | 5.9 | Bottom | 3 | 1 | 18.9 | 8.1 | 32.3 | 7.3 | 7.3 | 11.8 | 7.3 | 10.0 | 10.3 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)16 | 12:53 | 5.9 | Bottom | 3 | 2 | 18.8 | 8.1 | 32.5 | 7.3 | | 11.6 | | 10.3 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4a | 12:43 | 4.6 | Surface | 1 | 1 | 19.2 | 8.1 | 32.5 | 7.2 | 7.3 | 6.5 | 6.5 | 9.4 | 10.5 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4a | 12:43 | 4.6 | Surface | 1 | 2 | 19.2 | 8.1 | 32.7 | 7.3 | | 6.5 | | 8.8 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4a | 12:43 | 4.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4a | 12:43 | 4.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4a | 12:43 | 4.6 | Bottom | 3 | 1 | 19.2 | 8.1 | 32.5 | 7.3 | 7.4 | 6.5 | 7.4 | 12.3 | 11.4 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4a | 12:43 | 4.6 | Bottom | 3 | 2 | 19.1 | 8.1 | 32.7 | 7.4 | | 6.5 | | 11.4 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4 | 12:38 | 3.8 | Surface | 1 | 1 | 19.1 | 8.1 | 32.5 | 7.2 | 7.3 | 4.0 | 4.1 | 8.3 | 9.3 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4 | 12:38 | 3.8 | Surface | 1 | 2 | 19.0 | 8.1 | 32.7 | 7.3 | | 4.0 | | 7.5 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4 | 12:38 | 3.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4 | 12:38 | 3.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4 | 12:38 | 3.8 | Bottom | 3 | 1 | 19.1 | 8.1 | 32.5 | 7.4 | 7.4 | 4.1 | 7.4 | 11.2 | 10.3 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | SR4 | 12:38 | 3.8 | Bottom | 3 | 2 | 19.0 | 8.1 | 32.7 | 7.4 | | 4.1 | | 10.3 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS8 | 12:32 | 4.4 | Surface | 1 | 1 | 19.3 | 8.1 | 32.5 | 7.1 | 7.1 | 8.0 | 8.1 | 11.2 | 12.7 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS8 | 12:32 | 4.4 | Surface | 1 | 2 | 19.2 | 8.1 | 32.7 | 7.1 | | 8.0 | | 9.8 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS8 | 12:32 | 4.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS8 | 12:32 | 4.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS8 | 12:32 | 4.4 | Bottom | 3 | 1 | 19.3 | 8.1 | 32.5 | 7.1 | 7.1 | 8.2 | 7.1 | 15.0 | 14.9 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS8 | 12:32 | 4.4 | Bottom | 3 | 2 | 19.2 | 8.1 | 32.7 | 7.1 | | 8.2 | | 14.9 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)9 | 12:25 | 3.5 | Surface | 1 | 1 | 19.0 | 8.1 | 32.5 | 7.0 | 7.0 | 8.6 | 8.5 | 9.2 | 12.2 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)9 | 12:25 | 3.5 | Surface | 1 | 2 | 19.0 | 8.1 | 32.7 | 7.0 | | 8.5 | | 9.6 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)9 | 12:25 | 3.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)9 | 12:25 | 3.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)9 | 12:25 | 3.5 | Bottom | 3 | 1 | 19.0 | 8.1 | 32.5 | 7.0 | 7.0 | 8.5 | 7.0 | 15.3 | 14.8 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Ebb | IS(Mf)9 | 12:25 | 3.5 | Bottom | 3 | 2 | 18.9 | 8.1 | 32.7 | 7.0 | | 8.5 | | 14.8 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)5 | 7:04 | 13.7 | Surface | 1 | 1 | 19.4 | 8.1 | 32.4 | 7.1 | 7.2 | 8.7 | 8.7 | 9.5 | 12.4 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)5 | 7:04 | 13.7 | Surface | 1 | 2 | 19.3 | 8.1 | 32.6 | 7.2 | | 8.7 | | 10.2 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)5 | 7:04 | 13.7 | Middle | 2 | 1 | 19.4 | 8.1 | 32.4 | 7.1 | 8.8 | 13.7 | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)5 | 7:04 | 13.7 | Middle | 2 | 2 | 19.3 | 8.1 | 32.6 | 7.2 | 8.7 | 12.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)5 | 7:04 | 13.7 | Bottom | 3 | 1 | 19.4 | 8.1 | 32.4 | 7.1 | 7.2 | 8.5 | | 14.0 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)5 | 7:04 | 13.7 | Bottom | 3 | 2 | 19.3 | 8.1 | 32.6 | 7.2 | | 8.5 | | 15.0 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)3(N) | 9:17 | 7.1 | Surface | 1 | 1 | 18.9 | 8.1 | 32.3 | 7.1 | 7.2 | 9.0 | 9.7 | 9.2 | 10.4 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)3(N) | 9:17 | 7.1 | Surface | 1 | 2 | 19.2 | 8.1 | 28.7 | 7.2 | | 8.6 | | 10.7 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)3(N) | 9:17 | 7.1 | Middle | 2 | 1 | 18.9 | 8.1 | 32.3 | 7.1 | 9.3 | 11.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)3(N) | 9:17 | 7.1 | Middle | 2 | 2 | 19.2 | 8.1 | 28.7 | 7.2 | 9.4 | 10.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)3(N) | 9:17 | 7.1 | Bottom | 3 | 1 | 18.9 | 8.1 | 32.3 | 7.1 | 7.2 | 11.0 | | 10.6 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | CS(Mf)3(N) | 9:17 | 7.1 | Bottom | 3 | 2 | 19.1 | 8.1 | 28.9 | 7.2 | | 10.8 | | 10.2 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)16 | 7:28 | 5.4 | Surface | 1 | 1 | 19.4 | 8.1 | 32.6 | 6.8 | 6.9 | 8.1 | 7.9 | 9.0 | 10.2 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)16 | 7:28 | 5.4 | Surface | 1 | 2 | 19.3 | 8.1 | 32.7 | 6.9 | | 8.1 | | 9.8 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)16 | 7:28 | 5.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)16 | 7:28 | 5.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)16 | 7:28 | 5.4 | Bottom | 3 | 1 | 19.4 | 8.1 | 32.6 | 6.8 | 6.8 | 7.8 | | 11.4 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)16 | 7:28 | 5.4 | Bottom | 3 | 2 | 19.3 | 8.1 | 32.7 | 6.8 | | 7.7 | | 10.5 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4a | 7:38 | 5.2 | Surface | 1 | 1 | 19.0 | 8.1 | 32.5 | 6.9 | 7.0 | 4.9 | 4.9 | 8.2 | 9.2 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4a | 7:38 | 5.2 | Surface | 1 | 2 | 18.9 | 8.0 | 32.7 | 7.0 | | 4.9 | | 7.5 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4a | 7:38 | 5.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4a | 7:38 | 5.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4a | 7:38 | 5.2 | Bottom | 3 | 1 | 19.0 | 8.1 | 32.5 | 7.0 | 7.1 | 4.9 | | 10.0 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4a | 7:38 | 5.2 | Bottom | 3 | 2 | 18.9 | 8.1 | 32.7 | 7.1 | | 4.9 | | 11.0 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4 | 7:42 | 3.7 | Surface | 1 | 1 | 18.8 | 8.0 | 32.5 | 6.9 | 6.9 | 10.2 | 10.3 | 5.8 | 7.4 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4 | 7:42 | 3.7 | Surface | 1 | 2 | 18.7 | 8.0 | 32.7 | 6.9 | | 10.2 | | 5.7 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4 | 7:42 | 3.7 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4 | 7:42 | 3.7 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4 | 7:42 | 3.7 | Bottom | 3 | 1 | 18.8 | 8.0 | 32.5 | 6.9 | 6.9 | 10.3 | | 8.8 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | SR4 | 7:42 | 3.7 | Bottom | 3 | 2 | 18.7 | 8.0 | 32.7 | 6.9 | | 10.3 | | 9.4 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS8 | 7:52 | 4.2 | Surface | 1 | 1 | 18.8 | 8.1 | 32.5 | 7.0 | 7.0 | 10.2 | 10.2 | 12.4 | 13.9 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS8 | 7:52 | 4.2 | Surface | 1 | 2 | 18.7 | 8.1 | 32.7 | 7.0 | | 10.2 | | 12.6 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS8 | 7:52 | 4.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS8 | 7:52 | 4.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS8 | 7:52 | 4.2 | Bottom | 3 | 1 | 18.8 | 8.1 | 32.5 | 7.0 | 7.0 | 10.2 | | 15.6 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS8 | 7:52 | 4.2 | Bottom | 3 | 2 | 18.7 | 8.1 | 32.7 | 7.0 | | 10.1 | | 15.0 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)9 | 8:00 | 3 | Surface | 1 | 1 | 18.4 | 8.1 | 32.5 | 7.2 | 7.2 | 10.5 | 10.6 | 10.4 | 10.8 |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)9 | 8:00 | 3 | Surface | 1 | 2 | 18.3 | 8.1 | 32.7 | 7.2 | | 10.5 | | 9.1 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)9 | 8:00 | 3 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)9 | 8:00 | 3 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)9 | 8:00 | 3 | Bottom | 3 | 1 | 18.4 | 8.1 | 32.5 | 7.2 | 7.2 | 10.7 | | 11.4 | |
| TMCLKL | HY/2012/07 | 2017-12-18 | Mid-Flood | IS(Mf)9 | 8:00 | 3 | Bottom | 3 | 2 | 18.3 | 8.1 | 32.7 | 7.2 | | 10.7 | | 12.3 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)5 | 14:12 | 12.7 | Surface | 1 | 1 | 18.9 | 8.1 | 32.6 | 7.3 | 7.3 | 2.8 | 3.0 | 8.2 | 10.2 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)5 | 14:12 | 12.7 | Surface | 1 | 2 | 19.0 | 8.1 | 32.4 | 7.2 | | 2.9 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)5 | 14:12 | 12.7 | Middle | 2 | 1 | 18.9 | 8.1 | 32.6 | 7.3 | 3.1 | 8.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)5 | 14:12 | 12.7 | Middle | 2 | 2 | 19.0 | 8.1 | 32.4 | 7.2 | 3.1 | 10.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)5 | 14:12 | 12.7 | Bottom | 3 | 1 | 18.9 | 8.1 | 32.6 | 7.3 | 7.3 | 3.1 | | 13.2 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)5 | 14:12 | 12.7 | Bottom | 3 | 2 | 19.0 | 8.1 | 32.4 | 7.2 | 7.3 | 3.1 | | 12.0 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)3(N) | 13:02 | 7.3 | Surface | 1 | 1 | 18.1 | 8.1 | 32.5 | 7.5 | 7.6 | 9.6 | 11.7 | 8.6 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)3(N) | 13:02 | 7.3 | Surface | 1 | 2 | 18.4 | 8.2 | 28.7 | 7.6 | | 9.0 | | 8.6 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)3(N) | 13:02 | 7.3 | Middle | 2 | 1 | 18.1 | 8.1 | 32.5 | 7.5 | 10.3 | 10.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)3(N) | 13:02 | 7.3 | Middle | 2 | 2 | 18.3 | 8.2 | 28.7 | 7.6 | 9.4 | 10.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)3(N) | 13:02 | 7.3 | Bottom | 3 | 1 | 17.4 | 8.2 | 32.6 | 7.5 | 7.6 | 15.9 | | 14.7 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | CS(Mf)3(N) | 13:02 | 7.3 | Bottom | 3 | 2 | 17.7 | 8.2 | 28.9 | 7.6 | 7.6 | 16.2 | | 12.9 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)16 | 13:42 | 5.9 | Surface | 1 | 1 | 18.3 | 8.1 | 32.8 | 7.6 | 7.6 | 4.6 | 4.9 | 10.3 | 10.9 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)16 | 13:42 | 5.9 | Surface | 1 | 2 | 18.4 | 8.2 | 32.6 | 7.6 | | 4.6 | | 10.8 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)16 | 13:42 | 5.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)16 | 13:42 | 5.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)16 | 13:42 | 5.9 | Bottom | 3 | 1 | 18.1 | 8.1 | 32.8 | 7.5 | 7.5 | 5.2 | | 11.4 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)16 | 13:42 | 5.9 | Bottom | 3 | 2 | 18.2 | 8.2 | 32.6 | 7.5 | 7.5 | 5.2 | | 11.1 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4a | 13:30 | 5.2 | Surface | 1 | 1 | 18.2 | 8.2 | 32.8 | 7.6 | 7.6 | 8.4 | 9.3 | 12.4 | 13.0 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4a | 13:30 | 5.2 | Surface | 1 | 2 | 18.3 | 8.2 | 32.6 | 7.6 | | 8.4 | | 13.2 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4a | 13:30 | 5.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4a | 13:30 | 5.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4a | 13:30 | 5.2 | Bottom | 3 | 1 | 18.0 | 8.2 | 32.8 | 7.6 | 7.6 | 10.1 | | 13.0 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4a | 13:30 | 5.2 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.6 | 7.6 | 7.6 | 10.3 | | 13.5 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4 | 13:27 | 5 | Surface | 1 | 1 | 18.2 | 8.1 | 32.7 | 7.5 | 7.5 | 9.0 | 9.5 | 8.8 | 8.5 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4 | 13:27 | 5 | Surface | 1 | 2 | 18.3 | 8.2 | 32.5 | 7.5 | | 9.0 | | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4 | 13:27 | 5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4 | 13:27 | 5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4 | 13:27 | 5 | Bottom | 3 | 1 | 18.0 | 8.1 | 32.7 | 7.7 | 7.7 | 10.0 | | 9.4 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | SR4 | 13:27 | 5 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.5 | 7.6 | 7.7 | 10.0 | | 7.5 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS8 | 13:20 | 4.4 | Surface | 1 | 1 | 18.0 | 8.2 | 32.8 | 7.6 | 7.6 | 16.4 | 17.4 | 7.4 | 9.4 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS8 | 13:20 | 4.4 | Surface | 1 | 2 | 18.1 | 8.2 | 32.6 | 7.6 | | 16.4 | | 7.8 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS8 | 13:20 | 4.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS8 | 13:20 | 4.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS8 | 13:20 | 4.4 | Bottom | 3 | 1 | 18.0 | 8.2 | 32.8 | 7.6 | 7.6 | 18.4 | | 10.6 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS8 | 13:20 | 4.4 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.6 | 7.6 | 7.6 | 18.5 | | 11.6 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)9 | 13:11 | 3.4 | Surface | 1 | 1 | 18.3 | 8.1 | 32.7 | 7.5 | 7.5 | 6.7 | 6.8 | 11.1 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)9 | 13:11 | 3.4 | Surface | 1 | 2 | 18.4 | 8.2 | 32.6 | 7.5 | | 6.7 | | 11.0 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)9 | 13:11 | 3.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)9 | 13:11 | 3.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)9 | 13:11 | 3.4 | Bottom | 3 | 1 | 18.3 | 8.1 | 32.7 | 7.5 | 7.5 | 6.8 | | 10.7 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Ebb | IS(Mf)9 | 13:11 | 3.4 | Bottom | 3 | 2 | 18.4 | 8.2 | 32.6 | 7.5 | 7.5 | 6.9 | | 11.0 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)5 | 8:07 | 12.5 | Surface | 1 | 1 | 18.7 | 8.2 | 32.5 | 7.3 | 7.3 | 7.1 | 7.9 | 4.9 | 5.4 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)5 | 8:07 | 12.5 | Surface | 1 | 2 | 18.6 | 8.1 | 32.7 | 7.3 | | 7.1 | | 4.5 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)5 | 8:07 | 12.5 | Middle | 2 | 1 | 18.6 | 8.2 | 32.5 | 7.3 | 6.9 | 6.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)5 | 8:07 | 12.5 | Middle | 2 | 2 | 18.5 | 8.1 | 32.7 | 7.3 | 6.7 | 5.3 | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)5 | 8:07 | 12.5 | Bottom | 3 | 1 | 18.6 | 8.2 | 32.5 | 7.3 | 7.3 | 9.7 | | 5.6 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)5 | 8:07 | 12.5 | Bottom | 3 | 2 | 18.5 | 8.1 | 32.7 | 7.3 | 7.3 | 9.6 | | 5.4 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)3(N) | 10:07 | 7.2 | Surface | 1 | 1 | 17.9 | 8.1 | 32.5 | 7.4 | 7.5 | 13.9 | 14.5 | 15.3 | 17.1 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)3(N) | 10:07 | 7.2 | Surface | 1 | 2 | 18.2 | 8.1 | 28.9 | 7.5 | | 7.5 | | 13.0 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)3(N) | 10:07 | 7.2 | Middle | 2 | 1 | 17.9 | 8.1 | 32.5 | 7.4 | 7.5 | 14.6 | | 15.0 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)3(N) | 10:07 | 7.2 | Middle | 2 | 2 | 18.2 | 8.1 | 29.0 | 7.5 | 7.5 | 14.2 | | 15.7 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)3(N) | 10:07 | 7.2 | Bottom | 3 | 1 | 17.9 | 8.1 | 32.5 | 7.4 | 7.5 | 15.2 | | 20.5 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | CS(Mf)3(N) | 10:07 | 7.2 | Bottom | 3 | 2 | 18.2 | 8.1 | 29.0 | 7.5 | 7.5 | 15.8 | | 21.4 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)16 | 8:34 | 5.2 | Surface | 1 | 1 | 18.5 | 8.2 | 32.5 | 7.3 | 7.3 | 9.3 | 8.9 | 4.9 | 6.2 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)16 | 8:34 | 5.2 | Surface | 1 | 2 | 18.4 | 8.1 | 32.7 | 7.3 | | 7.3 | | 9.3 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)16 | 8:34 | 5.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)16 | 8:34 | 5.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)16 | 8:34 | 5.2 | Bottom | 3 | 1 | 18.5 | 8.2 | 32.5 | 7.3 | 7.3 | 8.6 | | 6.1 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)16 | 8:34 | 5.2 | Bottom | 3 | 2 | 18.4 | 8.1 | 32.7 | 7.3 | 7.3 | 8.5 | | 7.8 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4a | 8:42 | 4.6 | Surface | 1 | 1 | 18.3 | 8.1 | 32.5 | 7.3 | 7.4 | 7.8 | 8.2 | 8.8 | 11.6 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4a | 8:42 | 4.6 | Surface | 1 | 2 | 18.2 | 8.1 | 32.7 | 7.4 | | 7.4 | | 7.8 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4a | 8:42 | 4.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4a | 8:42 | 4.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4a | 8:42 | 4.6 | Bottom | 3 | 1 | 18.3 | 8.1 | 32.5 | 7.4 | 7.5 | 8.6 | | 14.5 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4a | 8:42 | 4.6 | Bottom | 3 | 2 | 18.2 | 8.1 | 32.7 | 7.5 | 7.5 | 8.6 | | 13.8 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4 | 8:47 | 4.2 | Surface | 1 | 1 | 18.2 | 8.1 | 32.4 | 7.4 | 7.5 | 8.6 | 8.8 | 10.6 | 11.9 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4 | 8:47 | 4.2 | Surface | 1 | 2 | 18.1 | 8.1 | 32.6 | 7.5 | | 7.5 | | 8.6 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4 | 8:47 | 4.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4 | 8:47 | 4.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4 | 8:47 | 4.2 | Bottom | 3 | 1 | 18.1 | 8.1 | 32.4 | 7.5 | 7.6 | 9.0 | | 13.3 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | SR4 | 8:47 | 4.2 | Bottom | 3 | 2 | 18.0 | 8.1 | 32.6 | 7.6 | 7.6 | 9.0 | | 12.8 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS8 | 8:58 | 3.9 | Surface | 1 | 1 | 18.2 | 8.1 | 32.5 | 7.4 | 7.4 | 4.8 | 4.9 | 16.6 | 17.4 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS8 | 8:58 | 3.9 | Surface | 1 | 2 | 18.1 | 8.1 | 32.7 | 7.4 | | 7.4 | | 4.8 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS8 | 8:58 | 3.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS8 | 8:58 | 3.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS8 | 8:58 | 3.9 | Bottom | 3 | 1 | 18.2 | 8.1 | 32.5 | 7.4 | 7.4 | 4.9 | | 17.3 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS8 | 8:58 | 3.9 | Bottom | 3 | 2 | 18.1 | 8.1 | 32.7 | 7.4 | 7.4 | 4.9 | | 18.1 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)9 | 9:06 | 3.1 | Surface | 1 | 1 | 17.9 | 8.1 | 32.6 | 7.5 | 7.5 | 10.8 | 11.3 | 7.5 | 7.9 |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)9 | 9:06 | 3.1 | Surface | 1 | 2 | 17.8 | 8.1 | 32.7 | 7.5 | | 7.5 | | 10.8 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)9 | 9:06 | 3.1 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)9 | 9:06 | 3.1 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)9 | 9:06 | 3.1 | Bottom | 3 | 1 | 17.9 | 8.1 | 32.6 | 7.5 | 7.5 | 11.8 | | 7.8 | |
| TMCLKL | HY/2012/07 | 2017-12-20 | Mid-Flood | IS(Mf)9 | 9:06 | 3.1 | Bottom | 3 | 2 | 17.8 | 8.1 | 32.7 | 7.5 | 7.5 | 11.6 | | 9.2 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)5 | 15:15 | 12.6 | Surface | 1 | 1 | 18.9 | 8.1 | 32.4 | 7.4 | 7.4 | 2.1 | 2.7 | 5.8 | 4.9 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)5 | 15:15 | 12.6 | Surface | 1 | 2 | 18.9 | 8.1 | 32.6 | 7.4 | | 2.1 | | 4.2 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)5 | 15:15 | 12.6 | Middle | 2 | 1 | 18.3 | 8.1 | 32.5 | 7.4 | 3.0 | 4.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)5 | 15:15 | 12.6 | Middle | 2 | 2 | 18.2 | 8.1 | 32.7 | 7.4 | 3.0 | 3.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)5 | 15:15 | 12.6 | Bottom | 3 | 1 | 18.3 | 8.1 | 32.5 | 7.3 | 7.4 | 2.9 | | 5.6 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)5 | 15:15 | 12.6 | Bottom | 3 | 2 | 18.2 | 8.1 | 32.7 | 7.4 | | 2.9 | | 5.3 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)3(N) | 14:11 | 7.5 | Surface | 1 | 1 | 17.5 | 8.2 | 32.1 | 7.8 | 7.8 | 10.9 | 13.2 | 12.2 | 12.3 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)3(N) | 14:11 | 7.5 | Surface | 1 | 2 | 17.8 | 8.2 | 30.3 | 7.8 | | 10.4 | | 11.6 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)3(N) | 14:11 | 7.5 | Middle | 2 | 1 | 17.4 | 8.2 | 32.1 | 7.7 | 13.3 | 11.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)3(N) | 14:11 | 7.5 | Middle | 2 | 2 | 17.7 | 8.2 | 30.3 | 7.8 | 13.5 | 12.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)3(N) | 14:11 | 7.5 | Bottom | 3 | 1 | 17.4 | 8.2 | 32.1 | 7.7 | 7.8 | 15.9 | | 13.1 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | CS(Mf)3(N) | 14:11 | 7.5 | Bottom | 3 | 2 | 17.6 | 8.2 | 30.3 | 7.8 | | 15.3 | | 13.3 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)16 | 14:49 | 5.9 | Surface | 1 | 1 | 18.7 | 8.2 | 32.6 | 7.8 | 7.8 | 3.2 | 3.4 | 4.8 | 5.5 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)16 | 14:49 | 5.9 | Surface | 1 | 2 | 18.6 | 8.2 | 32.8 | 7.8 | | 3.2 | | 3.8 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)16 | 14:49 | 5.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)16 | 14:49 | 5.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)16 | 14:49 | 5.9 | Bottom | 3 | 1 | 18.4 | 8.2 | 32.6 | 7.7 | 7.7 | 3.6 | | 7.2 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)16 | 14:49 | 5.9 | Bottom | 3 | 2 | 18.4 | 8.2 | 32.8 | 7.7 | | 3.6 | | 6.0 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4a | 14:39 | 5.3 | Surface | 1 | 1 | 18.3 | 8.2 | 32.5 | 7.6 | 7.6 | 7.5 | 7.7 | 8.5 | 9.4 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4a | 14:39 | 5.3 | Surface | 1 | 2 | 18.2 | 8.1 | 32.7 | 7.6 | | 7.5 | | 8.6 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4a | 14:39 | 5.3 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4a | 14:39 | 5.3 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4a | 14:39 | 5.3 | Bottom | 3 | 1 | 18.2 | 8.2 | 32.5 | 7.6 | 7.6 | 7.8 | | 9.8 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4a | 14:39 | 5.3 | Bottom | 3 | 2 | 18.2 | 8.1 | 32.7 | 7.6 | | 7.8 | | 10.6 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4 | 14:35 | 4 | Surface | 1 | 1 | 18.3 | 8.1 | 32.5 | 7.6 | 7.6 | 5.5 | 5.6 | 5.6 | 6.4 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4 | 14:35 | 4 | Surface | 1 | 2 | 18.2 | 8.1 | 32.7 | 7.6 | | 5.5 | | 6.1 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4 | 14:35 | 4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4 | 14:35 | 4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4 | 14:35 | 4 | Bottom | 3 | 1 | 18.2 | 8.1 | 32.5 | 7.6 | 7.6 | 5.6 | | 6.9 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | SR4 | 14:35 | 4 | Bottom | 3 | 2 | 18.2 | 8.1 | 32.7 | 7.6 | | 5.6 | | 6.8 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS8 | 14:28 | 4.1 | Surface | 1 | 1 | 18.3 | 8.2 | 32.5 | 7.6 | 7.6 | 8.3 | 8.7 | 14.7 | 14.8 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS8 | 14:28 | 4.1 | Surface | 1 | 2 | 18.2 | 8.1 | 32.7 | 7.6 | | 8.3 | | 15.3 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS8 | 14:28 | 4.1 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS8 | 14:28 | 4.1 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS8 | 14:28 | 4.1 | Bottom | 3 | 1 | 18.3 | 8.2 | 32.5 | 7.6 | 7.6 | 9.1 | | 14.6 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS8 | 14:28 | 4.1 | Bottom | 3 | 2 | 18.2 | 8.1 | 32.7 | 7.6 | | 9.1 | | 14.4 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)9 | 14:21 | 3.5 | Surface | 1 | 1 | 18.2 | 8.2 | 32.5 | 7.8 | 7.8 | 6.7 | 7.1 | 7.0 | 8.1 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)9 | 14:21 | 3.5 | Surface | 1 | 2 | 18.1 | 8.1 | 32.7 | 7.8 | | 6.7 | | 7.8 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)9 | 14:21 | 3.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)9 | 14:21 | 3.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)9 | 14:21 | 3.5 | Bottom | 3 | 1 | 18.2 | 8.2 | 32.5 | 7.8 | 7.8 | 7.4 | | 8.8 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Ebb | IS(Mf)9 | 14:21 | 3.5 | Bottom | 3 | 2 | 18.1 | 8.1 | 32.7 | 7.8 | | 7.4 | | 8.7 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)5 | 9:17 | 12.1 | Surface | 1 | 1 | 18.1 | 8.2 | 32.5 | 7.4 | 7.4 | 4.7 | 5.0 | 9.8 | 9.4 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)5 | 9:17 | 12.1 | Surface | 1 | 2 | 18.1 | 8.1 | 32.7 | 7.4 | | 4.7 | | 7.7 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)5 | 9:17 | 12.1 | Middle | 2 | 1 | 18.1 | 8.2 | 32.5 | 7.4 | 5.2 | 8.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)5 | 9:17 | 12.1 | Middle | 2 | 2 | 18.0 | 8.1 | 32.7 | 7.4 | 5.2 | 7.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)5 | 9:17 | 12.1 | Bottom | 3 | 1 | 18.1 | 8.2 | 32.5 | 7.4 | 7.4 | 5.1 | | 12.0 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)5 | 9:17 | 12.1 | Bottom | 3 | 2 | 18.0 | 8.1 | 32.7 | 7.4 | 7.4 | 5.1 | | 10.9 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)3(N) | 11:33 | 7.4 | Surface | 1 | 1 | 17.9 | 8.2 | 32.1 | 7.6 | 7.6 | 11.7 | 11.5 | 13.0 | 14.8 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)3(N) | 11:33 | 7.4 | Surface | 1 | 2 | 18.2 | 8.2 | 30.0 | 7.6 | | 11.3 | | 13.3 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)3(N) | 11:33 | 7.4 | Middle | 2 | 1 | 17.9 | 8.1 | 32.1 | 7.5 | 11.2 | 13.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)3(N) | 11:33 | 7.4 | Middle | 2 | 2 | 18.1 | 8.2 | 30.0 | 7.6 | 11.4 | 14.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)3(N) | 11:33 | 7.4 | Bottom | 3 | 1 | 17.9 | 8.1 | 32.1 | 7.5 | 7.6 | 11.6 | | 17.2 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | CS(Mf)3(N) | 11:33 | 7.4 | Bottom | 3 | 2 | 18.1 | 8.2 | 30.0 | 7.6 | 7.6 | 12.0 | | 17.4 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)16 | 9:40 | 5.4 | Surface | 1 | 1 | 18.0 | 8.2 | 32.5 | 7.5 | 7.5 | 5.3 | 5.3 | 11.2 | 12.9 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)16 | 9:40 | 5.4 | Surface | 1 | 2 | 17.9 | 8.1 | 32.7 | 7.5 | | 5.3 | | 11.4 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)16 | 9:40 | 5.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)16 | 9:40 | 5.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)16 | 9:40 | 5.4 | Bottom | 3 | 1 | 18.0 | 8.2 | 32.5 | 7.5 | 7.5 | 5.2 | | 15.7 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)16 | 9:40 | 5.4 | Bottom | 3 | 2 | 17.9 | 8.1 | 32.7 | 7.5 | 7.5 | 5.2 | | 13.3 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4a | 9:51 | 4.8 | Surface | 1 | 1 | 18.0 | 8.2 | 32.5 | 7.4 | 7.4 | 6.2 | 6.3 | 8.5 | 9.0 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4a | 9:51 | 4.8 | Surface | 1 | 2 | 17.9 | 8.1 | 32.7 | 7.4 | | 6.2 | | 9.3 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4a | 9:51 | 4.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4a | 9:51 | 4.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4a | 9:51 | 4.8 | Bottom | 3 | 1 | 18.0 | 8.2 | 32.5 | 7.4 | 7.5 | 6.3 | | 8.9 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4a | 9:51 | 4.8 | Bottom | 3 | 2 | 17.9 | 8.1 | 32.7 | 7.5 | 7.5 | 6.3 | | 9.2 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4 | 9:55 | 3.6 | Surface | 1 | 1 | 17.9 | 8.1 | 32.5 | 7.5 | 7.5 | 11.4 | 12.1 | 10.6 | 13.3 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4 | 9:55 | 3.6 | Surface | 1 | 2 | 17.8 | 8.1 | 32.7 | 7.5 | | 11.4 | | 10.6 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4 | 9:55 | 3.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4 | 9:55 | 3.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4 | 9:55 | 3.6 | Bottom | 3 | 1 | 17.9 | 8.2 | 32.5 | 7.5 | 7.5 | 12.8 | | 15.5 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | SR4 | 9:55 | 3.6 | Bottom | 3 | 2 | 17.8 | 8.1 | 32.7 | 7.5 | 7.5 | 12.8 | | 16.6 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS8 | 10:03 | 3.8 | Surface | 1 | 1 | 18.0 | 8.2 | 32.5 | 7.6 | 7.6 | 7.8 | 8.3 | 9.0 | 8.3 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS8 | 10:03 | 3.8 | Surface | 1 | 2 | 17.9 | 8.1 | 32.7 | 7.6 | | 7.8 | | 7.7 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS8 | 10:03 | 3.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS8 | 10:03 | 3.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS8 | 10:03 | 3.8 | Bottom | 3 | 1 | 17.9 | 8.2 | 32.5 | 7.6 | 7.6 | 8.8 | | 7.5 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS8 | 10:03 | 3.8 | Bottom | 3 | 2 | 17.8 | 8.1 | 32.7 | 7.6 | 7.6 | 8.8 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)9 | 10:10 | 3.1 | Surface | 1 | 1 | 17.7 | 8.1 | 32.5 | 7.7 | 7.7 | 6.8 | 6.8 | 12.9 | 12.2 |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)9 | 10:10 | 3.1 | Surface | 1 | 2 | 17.6 | 8.1 | 32.7 | 7.7 | | 6.8 | | 12.5 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)9 | 10:10 | 3.1 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)9 | 10:10 | 3.1 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)9 | 10:10 | 3.1 | Bottom | 3 | 1 | 17.6 | 8.1 | 32.5 | 7.7 | 7.7 | 6.7 | | 12.2 | |
| TMCLKL | HY/2012/07 | 2017-12-22 | Mid-Flood | IS(Mf)9 | 10:10 | 3.1 | Bottom | 3 | 2 | 17.6 | 8.1 | 32.7 | 7.7 | 7.7 | 6.7 | | 11.2 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)5 | 17:52 | 11.4 | Surface | 1 | 1 | 18.4 | 8.1 | 32.4 | 7.2 | 7.2 | 2.4 | 2.4 | 4.9 | 5.6 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)5 | 17:52 | 11.4 | Surface | 1 | 2 | 18.4 | 8.2 | 32.6 | 7.2 | | 2.4 | | 5.0 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)5 | 17:52 | 11.4 | Middle | 2 | 1 | 18.4 | 8.1 | 32.4 | 7.2 | | 2.4 | | 3.1 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)5 | 17:52 | 11.4 | Middle | 2 | 2 | 18.4 | 8.2 | 32.6 | 7.2 | | 2.4 | | 4.7 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)5 | 17:52 | 11.4 | Bottom | 3 | 1 | 18.4 | 8.1 | 32.4 | 7.2 | 7.2 | 2.3 | 2.3 | 8.6 | 7.2 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)5 | 17:52 | 11.4 | Bottom | 3 | 2 | 18.4 | 8.2 | 32.6 | 7.2 | | 2.3 | | 7.2 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)3(N) | 16:51 | 7.3 | Surface | 1 | 1 | 17.5 | 8.1 | 30.8 | 7.9 | 7.9 | 6.7 | 7.7 | 7.9 | 9.7 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)3(N) | 16:51 | 7.3 | Surface | 1 | 2 | 17.7 | 8.1 | 28.8 | 8.0 | | 7.1 | | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)3(N) | 16:51 | 7.3 | Middle | 2 | 1 | 17.5 | 8.1 | 30.8 | 7.9 | | 7.9 | | 9.8 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)3(N) | 16:51 | 7.3 | Middle | 2 | 2 | 17.8 | 8.1 | 29.0 | 7.9 | | 7.2 | | 10.2 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)3(N) | 16:51 | 7.3 | Bottom | 3 | 1 | 17.5 | 8.1 | 30.9 | 7.8 | 7.9 | 8.3 | 7.9 | 11.6 | 10.6 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | CS(Mf)3(N) | 16:51 | 7.3 | Bottom | 3 | 2 | 17.8 | 8.1 | 28.8 | 7.9 | | 8.8 | | 10.6 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)16 | 17:25 | 5.9 | Surface | 1 | 1 | 18.0 | 8.2 | 31.9 | 8.0 | 8.0 | 4.3 | 5.0 | 6.6 | 6.3 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)16 | 17:25 | 5.9 | Surface | 1 | 2 | 18.0 | 8.2 | 32.1 | 8.0 | | 4.3 | | 6.2 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)16 | 17:25 | 5.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)16 | 17:25 | 5.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)16 | 17:25 | 5.9 | Bottom | 3 | 1 | 18.0 | 8.2 | 32.0 | 7.9 | 7.9 | 5.7 | 7.9 | 6.8 | 5.4 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)16 | 17:25 | 5.9 | Bottom | 3 | 2 | 18.0 | 8.2 | 32.1 | 7.9 | | 5.7 | | 5.4 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4a | 17:13 | 5.1 | Surface | 1 | 1 | 18.2 | 8.2 | 32.0 | 7.9 | 7.9 | 6.4 | 7.1 | 5.7 | 7.4 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4a | 17:13 | 5.1 | Surface | 1 | 2 | 18.1 | 8.2 | 32.1 | 7.9 | | 6.4 | | 6.4 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4a | 17:13 | 5.1 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4a | 17:13 | 5.1 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4a | 17:13 | 5.1 | Bottom | 3 | 1 | 18.1 | 8.2 | 32.1 | 7.8 | 7.8 | 7.8 | 7.8 | 9.5 | 8.0 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4a | 17:13 | 5.1 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.2 | 7.8 | | 7.7 | | 8.0 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4 | 17:10 | 4.1 | Surface | 1 | 1 | 18.3 | 8.2 | 32.0 | 8.0 | 8.0 | 8.5 | 7.2 | 5.3 | 5.9 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4 | 17:10 | 4.1 | Surface | 1 | 2 | 18.3 | 8.2 | 32.1 | 8.0 | | 8.5 | | 4.7 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4 | 17:10 | 4.1 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4 | 17:10 | 4.1 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4 | 17:10 | 4.1 | Bottom | 3 | 1 | 18.3 | 8.2 | 32.1 | 7.9 | 7.9 | 5.9 | 7.9 | 7.5 | 6.2 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | SR4 | 17:10 | 4.1 | Bottom | 3 | 2 | 18.2 | 8.2 | 32.2 | 7.9 | | 5.9 | | 6.2 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS8 | 17:03 | 4.1 | Surface | 1 | 1 | 18.2 | 8.2 | 32.0 | 8.0 | 8.0 | 4.4 | 4.7 | 5.2 | 5.0 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS8 | 17:03 | 4.1 | Surface | 1 | 2 | 18.2 | 8.2 | 32.2 | 8.0 | | 4.4 | | 4.5 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS8 | 17:03 | 4.1 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS8 | 17:03 | 4.1 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS8 | 17:03 | 4.1 | Bottom | 3 | 1 | 18.3 | 8.2 | 32.1 | 8.0 | 8.0 | 4.9 | 8.0 | 4.6 | 5.6 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS8 | 17:03 | 4.1 | Bottom | 3 | 2 | 18.2 | 8.2 | 32.2 | 8.0 | | 4.9 | | 5.6 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)9 | 16:56 | 3.7 | Surface | 1 | 1 | 18.2 | 8.2 | 32.3 | 8.1 | 8.1 | 5.4 | 6.3 | 5.5 | 6.4 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)9 | 16:56 | 3.7 | Surface | 1 | 2 | 18.1 | 8.2 | 32.4 | 8.1 | | 5.4 | | 5.8 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)9 | 16:56 | 3.7 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)9 | 16:56 | 3.7 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)9 | 16:56 | 3.7 | Bottom | 3 | 1 | 18.2 | 8.2 | 32.3 | 8.1 | 8.1 | 7.1 | 8.1 | 7.9 | 6.2 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Ebb | IS(Mf)9 | 16:56 | 3.7 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.4 | 8.1 | | 7.1 | | 6.2 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)5 | 11:28 | 10.9 | Surface | 1 | 1 | 18.0 | 8.2 | 32.3 | 7.5 | 7.5 | 3.2 | 4.0 | 6.3 | 6.8 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)5 | 11:28 | 10.9 | Surface | 1 | 2 | 18.0 | 8.2 | 32.4 | 7.5 | | 3.2 | | 6.4 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)5 | 11:28 | 10.9 | Middle | 2 | 1 | 18.0 | 8.2 | 32.4 | 7.5 | 4.5 | 7.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)5 | 11:28 | 10.9 | Middle | 2 | 2 | 18.0 | 8.2 | 32.5 | 7.5 | 4.5 | 6.8 | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)5 | 11:28 | 10.9 | Bottom | 3 | 1 | 18.0 | 8.2 | 32.3 | 7.5 | 7.5 | 4.2 | | 6.1 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)5 | 11:28 | 10.9 | Bottom | 3 | 2 | 18.0 | 8.2 | 32.5 | 7.5 | | 4.2 | | 7.9 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)3(N) | 13:50 | 7.2 | Surface | 1 | 1 | 17.7 | 8.1 | 30.9 | 7.9 | 7.9 | 8.2 | 8.7 | 5.9 | 6.3 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)3(N) | 13:50 | 7.2 | Surface | 1 | 2 | 18.0 | 8.2 | 28.9 | 7.9 | | 8.3 | | 5.7 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)3(N) | 13:50 | 7.2 | Middle | 2 | 1 | 17.7 | 8.2 | 30.9 | 7.8 | 8.6 | 5.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)3(N) | 13:50 | 7.2 | Middle | 2 | 2 | 18.0 | 8.2 | 28.9 | 7.9 | 8.4 | 5.7 | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)3(N) | 13:50 | 7.2 | Bottom | 3 | 1 | 17.7 | 8.2 | 31.0 | 7.8 | 7.9 | 9.4 | | 6.9 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | CS(Mf)3(N) | 13:50 | 7.2 | Bottom | 3 | 2 | 18.0 | 8.2 | 28.9 | 7.9 | | 9.2 | | 7.9 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)16 | 11:53 | 5.3 | Surface | 1 | 1 | 17.9 | 8.2 | 31.9 | 7.8 | 7.8 | 4.3 | 4.6 | 6.9 | 7.9 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)16 | 11:53 | 5.3 | Surface | 1 | 2 | 17.8 | 8.2 | 32.0 | 7.8 | | 4.3 | | 7.5 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)16 | 11:53 | 5.3 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)16 | 11:53 | 5.3 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)16 | 11:53 | 5.3 | Bottom | 3 | 1 | 17.9 | 8.2 | 31.9 | 7.8 | 7.8 | 4.9 | | 8.6 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)16 | 11:53 | 5.3 | Bottom | 3 | 2 | 17.8 | 8.2 | 32.1 | 7.8 | | 4.9 | | 8.5 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4a | 12:01 | 4.5 | Surface | 1 | 1 | 18.0 | 8.2 | 31.9 | 7.8 | 7.8 | 4.3 | 4.5 | 6.6 | 6.1 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4a | 12:01 | 4.5 | Surface | 1 | 2 | 18.0 | 8.2 | 32.0 | 7.8 | | 4.3 | | 5.2 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4a | 12:01 | 4.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4a | 12:01 | 4.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4a | 12:01 | 4.5 | Bottom | 3 | 1 | 18.0 | 8.2 | 31.9 | 7.8 | 7.8 | 4.7 | | 5.9 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4a | 12:01 | 4.5 | Bottom | 3 | 2 | 17.9 | 8.2 | 32.1 | 7.8 | | 4.7 | | 6.6 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4 | 12:06 | 3.4 | Surface | 1 | 1 | 18.0 | 8.2 | 32.2 | 7.8 | 7.8 | 8.6 | 7.1 | 7.5 | 9.2 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4 | 12:06 | 3.4 | Surface | 1 | 2 | 17.9 | 8.2 | 32.4 | 7.8 | | 8.4 | | 6.9 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4 | 12:06 | 3.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4 | 12:06 | 3.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4 | 12:06 | 3.4 | Bottom | 3 | 1 | 18.1 | 8.2 | 32.1 | 7.8 | 7.8 | 5.6 | | 10.5 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | SR4 | 12:06 | 3.4 | Bottom | 3 | 2 | 18.0 | 8.2 | 32.3 | 7.8 | | 5.6 | | 11.8 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS8 | 12:17 | 3.7 | Surface | 1 | 1 | 18.1 | 8.2 | 32.1 | 7.9 | 7.9 | 18.0 | 17.3 | 16.6 | 17.7 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS8 | 12:17 | 3.7 | Surface | 1 | 2 | 18.1 | 8.2 | 32.2 | 7.9 | | 18.0 | | 16.7 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS8 | 12:17 | 3.7 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS8 | 12:17 | 3.7 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS8 | 12:17 | 3.7 | Bottom | 3 | 1 | 18.1 | 8.2 | 32.1 | 7.9 | 7.9 | 16.6 | | 18.9 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS8 | 12:17 | 3.7 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.2 | 7.9 | | 16.4 | | 18.7 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)9 | 12:25 | 3 | Surface | 1 | 1 | 18.1 | 8.2 | 32.3 | 7.9 | 7.9 | 12.5 | 13.1 | 10.5 | 10.9 |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)9 | 12:25 | 3 | Surface | 1 | 2 | 18.0 | 8.2 | 32.4 | 7.9 | | 12.5 | | 10.7 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)9 | 12:25 | 3 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)9 | 12:25 | 3 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)9 | 12:25 | 3 | Bottom | 3 | 1 | 18.1 | 8.2 | 32.3 | 7.9 | 7.9 | 13.8 | | 10.8 | |
| TMCLKL | HY/2012/07 | 2017-12-25 | Mid-Flood | IS(Mf)9 | 12:25 | 3 | Bottom | 3 | 2 | 18.0 | 8.2 | 32.4 | 7.9 | | 13.6 | | 11.4 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)5 | 5:41 | 12 | Surface | 1 | 1 | 17.9 | 8.2 | 32.0 | 7.4 | 7.4 | 5.8 | 5.7 | <0.5 | 2.5 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)5 | 5:41 | 12 | Surface | 1 | 2 | 17.9 | 8.2 | 32.1 | 7.4 | | 5.6 | | <0.5 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)5 | 5:41 | 12 | Middle | 2 | 1 | 18.1 | 8.2 | 32.1 | 7.3 | 5.5 | 1.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)5 | 5:41 | 12 | Middle | 2 | 2 | 18.1 | 8.2 | 32.2 | 7.3 | 5.5 | 1.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)5 | 5:41 | 12 | Bottom | 3 | 1 | 18.2 | 8.2 | 32.2 | 7.4 | 7.4 | 5.8 | | 3.2 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)5 | 5:41 | 12 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.3 | 7.4 | 7.4 | 5.7 | | 3.3 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)3(N) | 6:49 | 7 | Surface | 1 | 1 | 17.8 | 8.1 | 29.0 | 7.8 | 7.8 | 5.0 | 4.9 | 6.5 | 6.7 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)3(N) | 6:49 | 7 | Surface | 1 | 2 | 17.5 | 8.1 | 30.9 | 7.8 | | 4.2 | | 6.2 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)3(N) | 6:49 | 7 | Middle | 2 | 1 | 17.8 | 8.1 | 29.1 | 7.8 | 5.3 | 5.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)3(N) | 6:49 | 7 | Middle | 2 | 2 | 17.5 | 8.1 | 30.9 | 7.7 | 4.4 | 6.8 | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)3(N) | 6:49 | 7 | Bottom | 3 | 1 | 17.8 | 8.1 | 29.2 | 7.8 | 7.8 | 5.6 | | 7.7 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | CS(Mf)3(N) | 6:49 | 7 | Bottom | 3 | 2 | 17.6 | 8.1 | 31.1 | 7.7 | 7.8 | 4.8 | | 7.8 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)16 | 6:09 | 5.8 | Surface | 1 | 1 | 18.0 | 8.2 | 32.0 | 7.9 | 7.9 | 6.0 | 7.2 | 5.6 | 6.6 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)16 | 6:09 | 5.8 | Surface | 1 | 2 | 17.9 | 8.2 | 32.1 | 7.9 | | 6.0 | | 4.4 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)16 | 6:09 | 5.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)16 | 6:09 | 5.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)16 | 6:09 | 5.8 | Bottom | 3 | 1 | 18.1 | 8.2 | 32.0 | 7.9 | 7.9 | 8.5 | | 8.7 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)16 | 6:09 | 5.8 | Bottom | 3 | 2 | 18.0 | 8.2 | 32.2 | 7.9 | 7.9 | 8.4 | | 7.5 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4a | 6:19 | 4.9 | Surface | 1 | 1 | 18.1 | 8.2 | 31.8 | 7.6 | 7.6 | 8.5 | 10.5 | 3.0 | 2.8 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4a | 6:19 | 4.9 | Surface | 1 | 2 | 18.0 | 8.2 | 32.0 | 7.6 | | 8.5 | | 3.2 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4a | 6:19 | 4.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4a | 6:19 | 4.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4a | 6:19 | 4.9 | Bottom | 3 | 1 | 18.2 | 8.2 | 31.9 | 7.6 | 7.6 | 12.5 | | 2.4 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4a | 6:19 | 4.9 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.0 | 7.6 | 7.6 | 12.5 | | 2.5 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4 | 6:23 | 3.5 | Surface | 1 | 1 | 18.0 | 8.2 | 31.8 | 7.6 | 7.6 | 2.3 | 2.3 | 2.2 | 2.9 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4 | 6:23 | 3.5 | Surface | 1 | 2 | 18.0 | 8.2 | 32.0 | 7.5 | | 2.3 | | 2.8 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4 | 6:23 | 3.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4 | 6:23 | 3.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4 | 6:23 | 3.5 | Bottom | 3 | 1 | 18.0 | 8.2 | 31.8 | 7.5 | 7.5 | 2.3 | | 3.6 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | SR4 | 6:23 | 3.5 | Bottom | 3 | 2 | 17.9 | 8.2 | 32.0 | 7.5 | 7.5 | 2.3 | | 3.0 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS8 | 6:33 | 3.8 | Surface | 1 | 1 | 18.1 | 8.2 | 32.0 | 7.8 | 7.8 | 9.5 | 10.4 | 8.8 | 8.5 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS8 | 6:33 | 3.8 | Surface | 1 | 2 | 18.0 | 8.2 | 32.2 | 7.8 | | 9.5 | | 8.6 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS8 | 6:33 | 3.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS8 | 6:33 | 3.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS8 | 6:33 | 3.8 | Bottom | 3 | 1 | 18.1 | 8.2 | 32.0 | 7.8 | 7.8 | 11.3 | | 8.6 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS8 | 6:33 | 3.8 | Bottom | 3 | 2 | 18.0 | 8.2 | 32.2 | 7.8 | 7.8 | 11.1 | | 7.8 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)9 | 6:39 | 3.4 | Surface | 1 | 1 | 17.8 | 8.1 | 31.9 | 7.7 | 7.7 | 8.2 | 9.2 | 6.4 | 7.9 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)9 | 6:39 | 3.4 | Surface | 1 | 2 | 17.8 | 8.2 | 32.0 | 7.7 | | 8.2 | | 7.5 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)9 | 6:39 | 3.4 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)9 | 6:39 | 3.4 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)9 | 6:39 | 3.4 | Bottom | 3 | 1 | 17.8 | 8.1 | 31.9 | 7.7 | 7.7 | 10.2 | | 8.8 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Ebb | IS(Mf)9 | 6:39 | 3.4 | Bottom | 3 | 2 | 17.8 | 8.2 | 32.0 | 7.7 | 7.7 | 10.1 | | 8.8 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)5 | 13:56 | 11.6 | Surface | 1 | 1 | 18.2 | 8.1 | 31.9 | 7.6 | 7.5 | 5.7 | 5.9 | 3.1 | 5.2 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)5 | 13:56 | 11.6 | Surface | 1 | 2 | 18.1 | 8.2 | 32.1 | 7.5 | | 5.7 | | 4.1 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)5 | 13:56 | 11.6 | Middle | 2 | 1 | 18.1 | 8.1 | 32.0 | 7.5 | | 6.1 | | 5.3 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)5 | 13:56 | 11.6 | Middle | 2 | 2 | 18.1 | 8.2 | 32.2 | 7.5 | | 6.1 | | 4.0 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)5 | 13:56 | 11.6 | Bottom | 3 | 1 | 18.1 | 8.1 | 32.0 | 7.6 | 7.6 | 6.0 | 6.4 | 7.6 | 5.8 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)5 | 13:56 | 11.6 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.1 | 7.6 | | 6.0 | | 6.8 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)3(N) | 12:52 | 7 | Surface | 1 | 1 | 18.3 | 8.1 | 28.7 | 7.9 | 7.9 | 4.8 | 6.4 | 5.3 | 5.8 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)3(N) | 12:52 | 7 | Surface | 1 | 2 | 18.0 | 8.1 | 30.4 | 7.9 | | 4.6 | | 3.8 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)3(N) | 12:52 | 7 | Middle | 2 | 1 | 18.0 | 8.1 | 28.8 | 7.8 | | 7.0 | | 6.2 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)3(N) | 12:52 | 7 | Middle | 2 | 2 | 17.8 | 8.1 | 30.6 | 7.8 | | 7.1 | | 5.2 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)3(N) | 12:52 | 7 | Bottom | 3 | 1 | 18.0 | 8.1 | 28.8 | 7.8 | 7.8 | 7.4 | 8.2 | 6.8 | 6.0 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | CS(Mf)3(N) | 12:52 | 7 | Bottom | 3 | 2 | 17.8 | 8.1 | 30.6 | 7.8 | | 7.2 | | 7.5 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)16 | 13:29 | 5.7 | Surface | 1 | 1 | 18.1 | 8.2 | 31.6 | 7.9 | 7.9 | 8.0 | 8.2 | 6.3 | 6.0 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)16 | 13:29 | 5.7 | Surface | 1 | 2 | 18.1 | 8.2 | 31.8 | 7.9 | | 8.0 | | 6.1 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)16 | 13:29 | 5.7 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)16 | 13:29 | 5.7 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)16 | 13:29 | 5.7 | Bottom | 3 | 1 | 18.1 | 8.2 | 31.7 | 7.9 | 7.9 | 8.5 | 7.4 | 5.9 | 8.4 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)16 | 13:29 | 5.7 | Bottom | 3 | 2 | 18.1 | 8.2 | 31.9 | 7.9 | | 8.4 | | 5.6 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4a | 13:19 | 4.8 | Surface | 1 | 1 | 18.1 | 8.2 | 31.8 | 7.7 | 7.7 | 7.7 | 11.7 | 7.7 | 10.6 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4a | 13:19 | 4.8 | Surface | 1 | 2 | 18.0 | 8.2 | 31.9 | 7.7 | | 7.7 | | 6.8 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4a | 13:19 | 4.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4a | 13:19 | 4.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4a | 13:19 | 4.8 | Bottom | 3 | 1 | 18.0 | 8.2 | 31.8 | 7.6 | 7.6 | 7.1 | 9.3 | 10.1 | 9.4 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4a | 13:19 | 4.8 | Bottom | 3 | 2 | 18.0 | 8.2 | 31.9 | 7.6 | | 7.1 | | 9.1 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4 | 13:14 | 3.9 | Surface | 1 | 1 | 18.2 | 8.2 | 31.8 | 7.7 | 7.7 | 11.9 | 11.7 | 10.5 | 10.6 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4 | 13:14 | 3.9 | Surface | 1 | 2 | 18.2 | 8.2 | 31.9 | 7.7 | | 11.7 | | 9.3 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4 | 13:14 | 3.9 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4 | 13:14 | 3.9 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4 | 13:14 | 3.9 | Bottom | 3 | 1 | 18.2 | 8.2 | 31.8 | 7.7 | 7.7 | 11.7 | 9.3 | 10.9 | 9.4 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | SR4 | 13:14 | 3.9 | Bottom | 3 | 2 | 18.2 | 8.2 | 31.9 | 7.6 | | 11.5 | | 11.6 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS8 | 13:07 | 3.7 | Surface | 1 | 1 | 18.2 | 8.2 | 31.8 | 8.0 | 8.0 | 9.3 | 9.3 | 8.5 | 9.4 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS8 | 13:07 | 3.7 | Surface | 1 | 2 | 18.1 | 8.2 | 31.9 | 7.9 | | 9.3 | | 9.1 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS8 | 13:07 | 3.7 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS8 | 13:07 | 3.7 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS8 | 13:07 | 3.7 | Bottom | 3 | 1 | 18.2 | 8.2 | 31.8 | 7.9 | 7.9 | 9.2 | 11.3 | 9.4 | 17.1 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS8 | 13:07 | 3.7 | Bottom | 3 | 2 | 18.1 | 8.2 | 32.0 | 7.9 | | 9.2 | | 10.4 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)9 | 13:00 | 3.2 | Surface | 1 | 1 | 18.1 | 8.2 | 31.9 | 8.0 | 8.0 | 11.1 | 11.3 | 16.4 | 17.1 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)9 | 13:00 | 3.2 | Surface | 1 | 2 | 18.1 | 8.2 | 32.1 | 7.9 | | 11.1 | | 17.1 | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)9 | 13:00 | 3.2 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)9 | 13:00 | 3.2 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)9 | 13:00 | 3.2 | Bottom | 3 | 1 | 18.1 | 8.2 | 31.9 | 7.9 | 8.0 | 11.5 | 11.3 | 17.3 | 17.1 |
| TMCLKL | HY/2012/07 | 2017-12-27 | Mid-Flood | IS(Mf)9 | 13:00 | 3.2 | Bottom | 3 | 2 | 18.0 | 8.2 | 32.1 | 7.9 | | 11.5 | | 17.5 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Depth (m) | Level | Level Code | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|-----------|---------|------------|-----------|------------------|-----|----------------|-----------|------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)5 | 8:41 | 11.4 | Surface | 1 | 1 | 18.2 | 8.2 | 31.9 | 7.4 | 7.4 | 0.7 | 0.6 | 3.8 | 3.4 |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)5 | 8:41 | 11.4 | Surface | 1 | 2 | 18.3 | 8.2 | 31.8 | 7.4 | | 0.7 | | 2.9 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)5 | 8:41 | 11.4 | Middle | 2 | 1 | 18.3 | 8.1 | 32.1 | 7.3 | | 0.5 | | 3.5 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)5 | 8:41 | 11.4 | Middle | 2 | 2 | 18.3 | 8.2 | 32.0 | 7.3 | | 0.5 | | 3.3 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)5 | 8:41 | 11.4 | Bottom | 3 | 1 | 18.3 | 8.2 | 32.1 | 7.5 | 7.5 | 0.5 | | 3.4 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)5 | 8:41 | 11.4 | Bottom | 3 | 2 | 18.3 | 8.2 | 32.0 | 7.4 | | 0.5 | | 3.2 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)3(N) | 9:41 | 7.2 | Surface | 1 | 1 | 18.2 | 8.0 | 29.3 | 7.9 | 7.8 | 3.5 | 5.3 | 4.0 | 5.2 |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)3(N) | 9:41 | 7.2 | Surface | 1 | 2 | 18.4 | 8.0 | 29.5 | 7.8 | | 4.0 | | 4.1 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)3(N) | 9:41 | 7.2 | Middle | 2 | 1 | 18.0 | 8.1 | 30.0 | 7.8 | | 5.7 | | 5.0 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)3(N) | 9:41 | 7.2 | Middle | 2 | 2 | 18.3 | 8.1 | 30.3 | 7.7 | | 6.8 | | 5.8 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)3(N) | 9:41 | 7.2 | Bottom | 3 | 1 | 18.0 | 8.1 | 30.4 | 7.8 | 7.8 | 5.9 | | 5.5 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | CS(Mf)3(N) | 9:41 | 7.2 | Bottom | 3 | 2 | 18.2 | 8.1 | 30.8 | 7.7 | | 6.0 | | 6.5 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)16 | 9:10 | 5.5 | Surface | 1 | 1 | 18.2 | 8.2 | 31.6 | 7.8 | 7.8 | 3.3 | 4.2 | 4.0 | 3.4 |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)16 | 9:10 | 5.5 | Surface | 1 | 2 | 18.2 | 8.2 | 31.5 | 7.8 | | 3.3 | | 2.8 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)16 | 9:10 | 5.5 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)16 | 9:10 | 5.5 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)16 | 9:10 | 5.5 | Bottom | 3 | 1 | 18.2 | 8.2 | 31.7 | 7.8 | 7.8 | 5.0 | | 3.0 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)16 | 9:10 | 5.5 | Bottom | 3 | 2 | 18.2 | 8.2 | 31.6 | 7.8 | | 5.0 | | 3.8 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4a | 9:19 | 4.8 | Surface | 1 | 1 | 18.2 | 8.2 | 31.8 | 7.6 | 7.6 | 5.7 | 8.5 | 4.3 | 5.2 |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4a | 9:19 | 4.8 | Surface | 1 | 2 | 18.3 | 8.2 | 31.6 | 7.6 | | 5.7 | | 5.1 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4a | 9:19 | 4.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4a | 9:19 | 4.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4a | 9:19 | 4.8 | Bottom | 3 | 1 | 18.2 | 8.2 | 31.8 | 7.6 | 7.6 | 11.1 | | 5.0 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4a | 9:19 | 4.8 | Bottom | 3 | 2 | 18.3 | 8.2 | 31.6 | 7.6 | | 11.3 | | 6.4 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4 | 9:24 | 3.6 | Surface | 1 | 1 | 18.3 | 8.2 | 31.8 | 7.6 | 7.6 | 14.8 | 11.5 | 8.3 | 9.7 |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4 | 9:24 | 3.6 | Surface | 1 | 2 | 18.4 | 8.2 | 31.6 | 7.6 | | 15.0 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4 | 9:24 | 3.6 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4 | 9:24 | 3.6 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4 | 9:24 | 3.6 | Bottom | 3 | 1 | 18.3 | 8.2 | 31.8 | 7.6 | 7.6 | 8.1 | | 10.2 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | SR4 | 9:24 | 3.6 | Bottom | 3 | 2 | 18.4 | 8.2 | 31.6 | 7.6 | | 8.1 | | 11.3 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS8 | 9:33 | 3.8 | Surface | 1 | 1 | 18.3 | 8.2 | 32.0 | 7.9 | 7.9 | 7.8 | 7.5 | 8.1 | 8.9 |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS8 | 9:33 | 3.8 | Surface | 1 | 2 | 18.4 | 8.2 | 31.8 | 7.9 | | 7.8 | | 8.5 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS8 | 9:33 | 3.8 | Middle | 2 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS8 | 9:33 | 3.8 | Middle | 2 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS8 | 9:33 | 3.8 | Bottom | 3 | 1 | 18.3 | 8.2 | 32.0 | 7.9 | 7.9 | 7.1 | | 9.7 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS8 | 9:33 | 3.8 | Bottom | 3 | 2 | 18.4 | 8.2 | 31.8 | 7.9 | | 7.1 | | 9.3 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)9 | 9:41 | 2.9 | Surface | 1 | 1 | | | | | 7.9 | | 6.0 | | 6.6 |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)9 | 9:41 | 2.9 | Surface | 1 | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)9 | 9:41 | 2.9 | Middle | 2 | 1 | 18.3 | 8.2 | 32.0 | 7.9 | | 6.0 | | 6.8 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)9 | 9:41 | 2.9 | Middle | 2 | 2 | 18.4 | 8.2 | 31.9 | 7.9 | | 6.0 | | 6.3 | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)9 | 9:41 | 2.9 | Bottom | 3 | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-29 | Mid-Ebb | IS(Mf)9 | 9:41 | 2.9 | Bottom | 3 | 2 | | | | | | | | | |

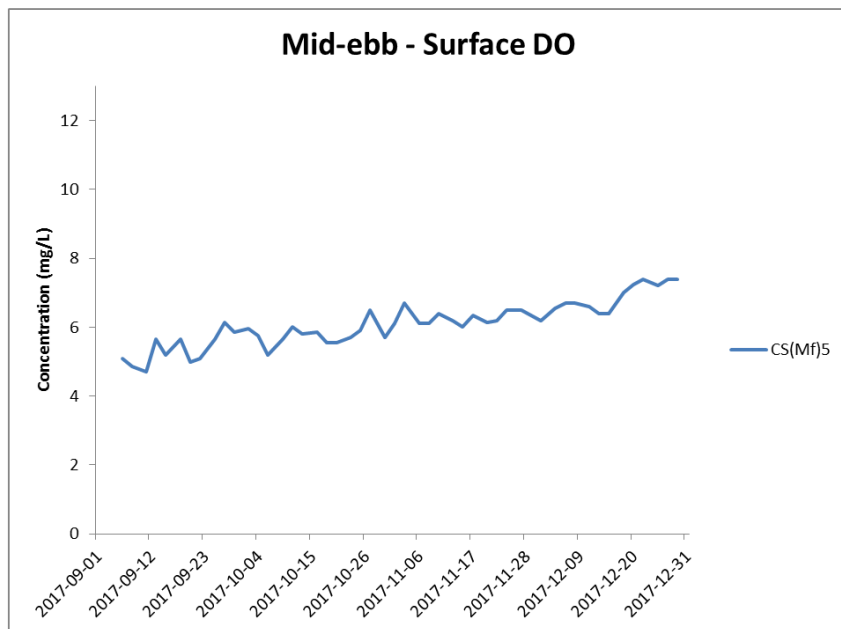
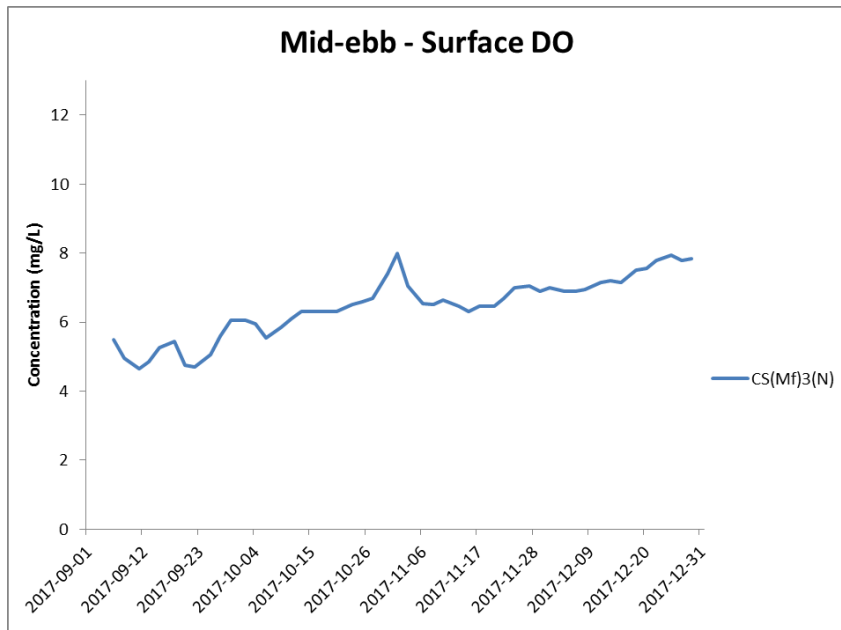


Figure J1 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(Mf)5.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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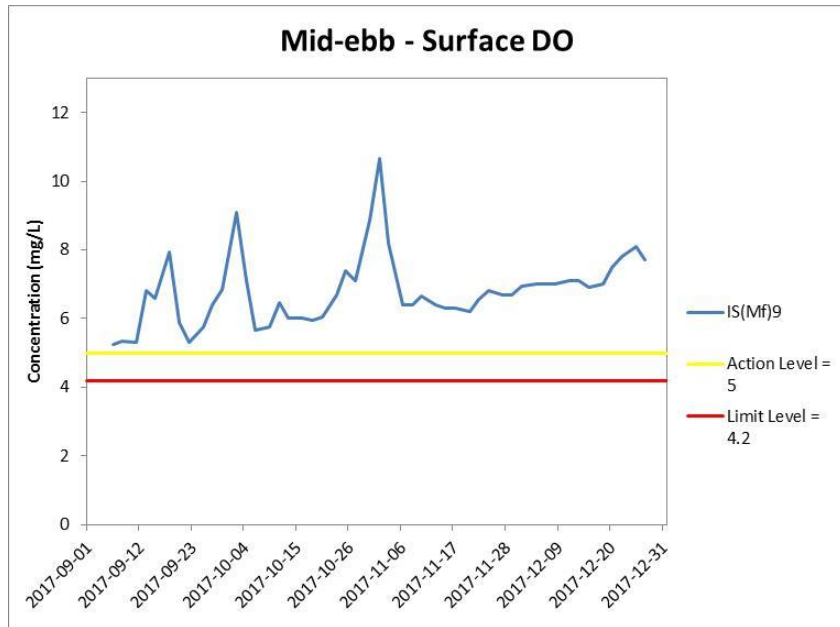
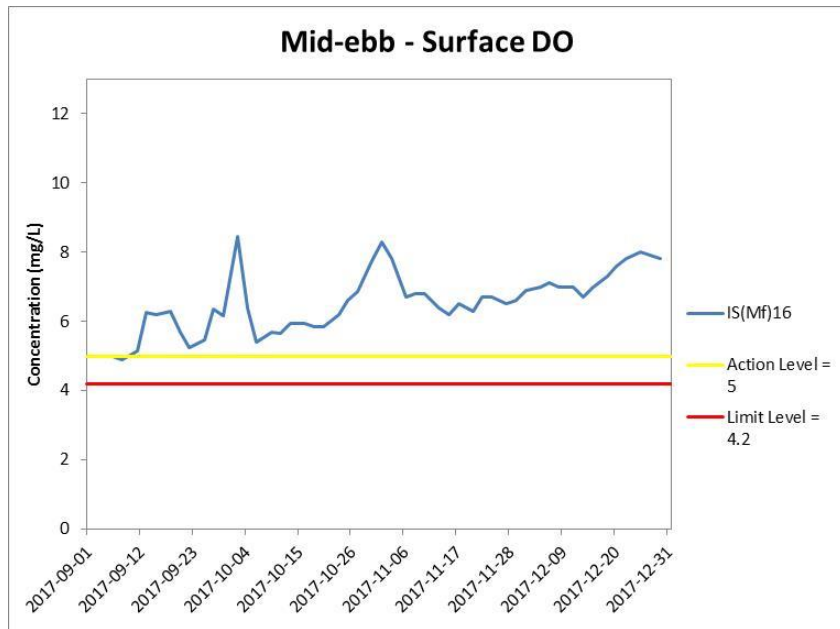


Figure J2 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at IS(Mf)16 and IS(Mf)9.

*(Weather condition varied between sunny to rainy within the reporting period.)
In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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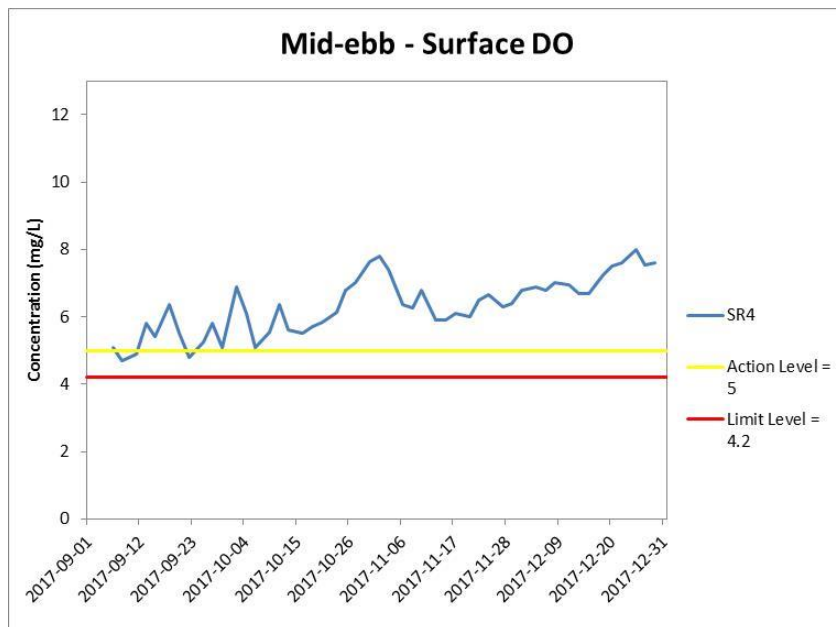
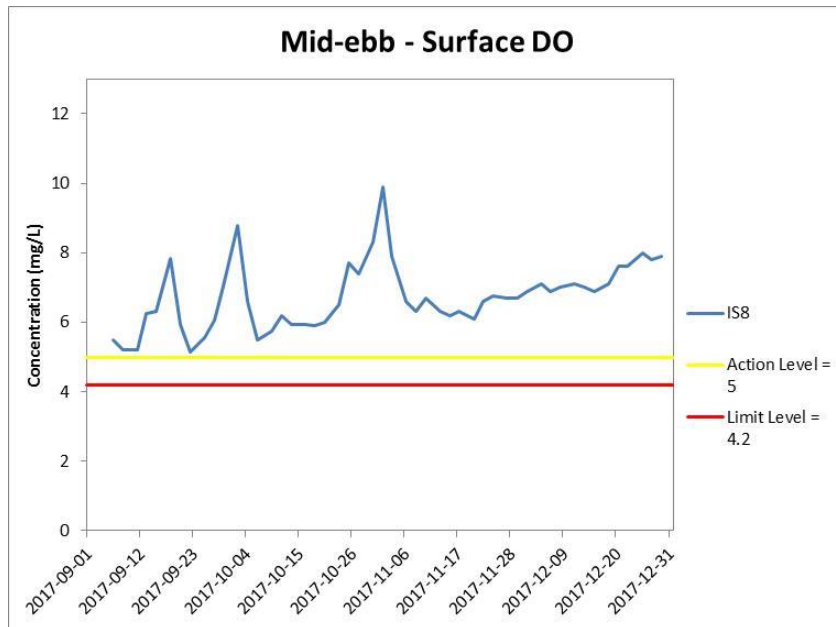


Figure J3 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at IS8 and SR4.

*(Weather condition varied between sunny to rainy within the reporting period.)
In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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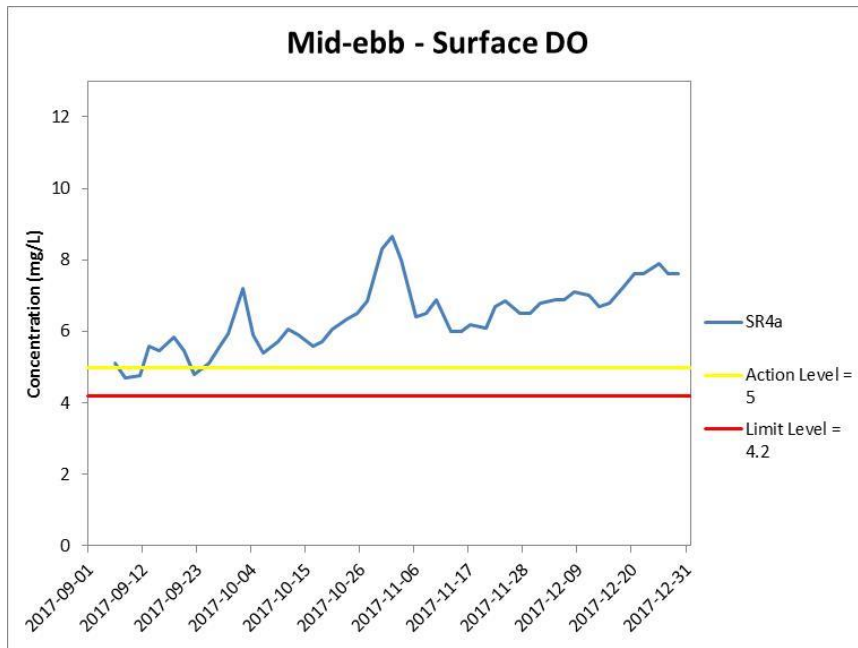


Figure J4 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at SR4a.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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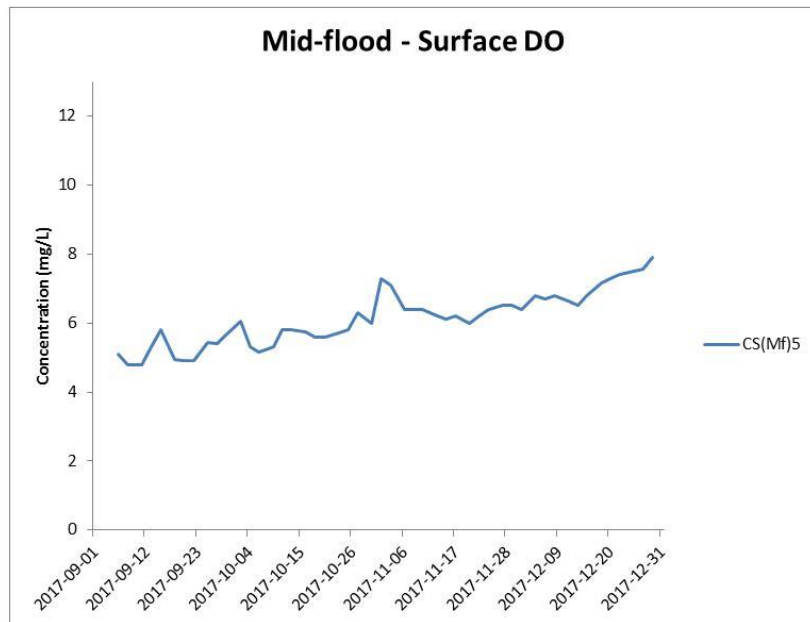
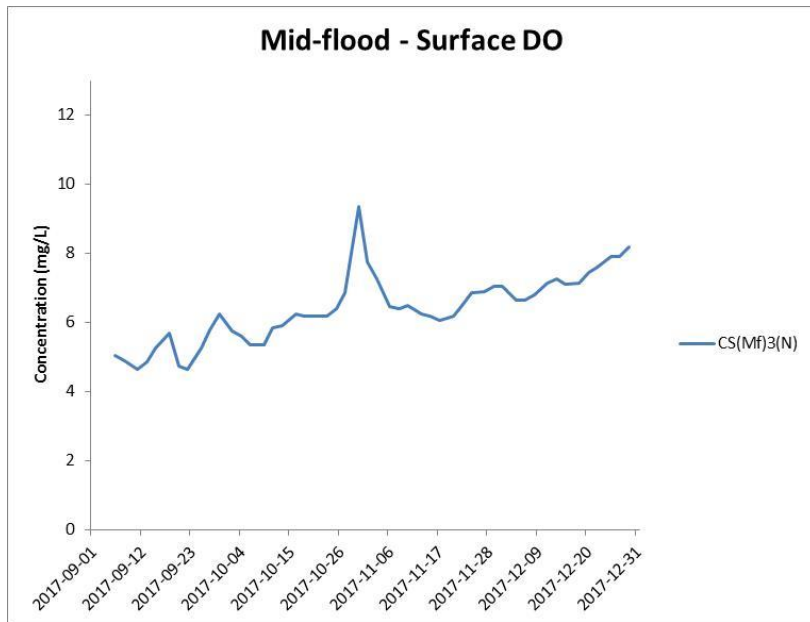


Figure J5 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(Mf)5.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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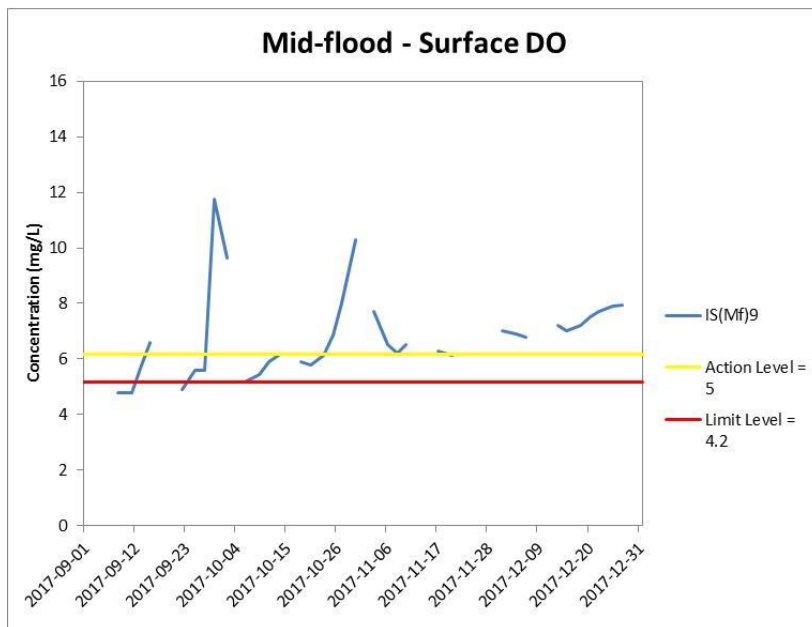
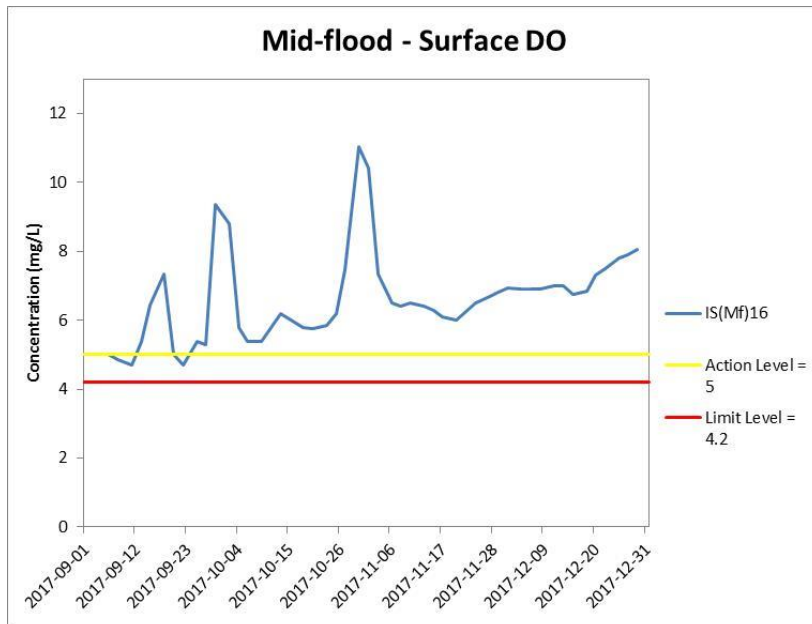


Figure J6 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 September 2017 and 31 December 2017 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.)

In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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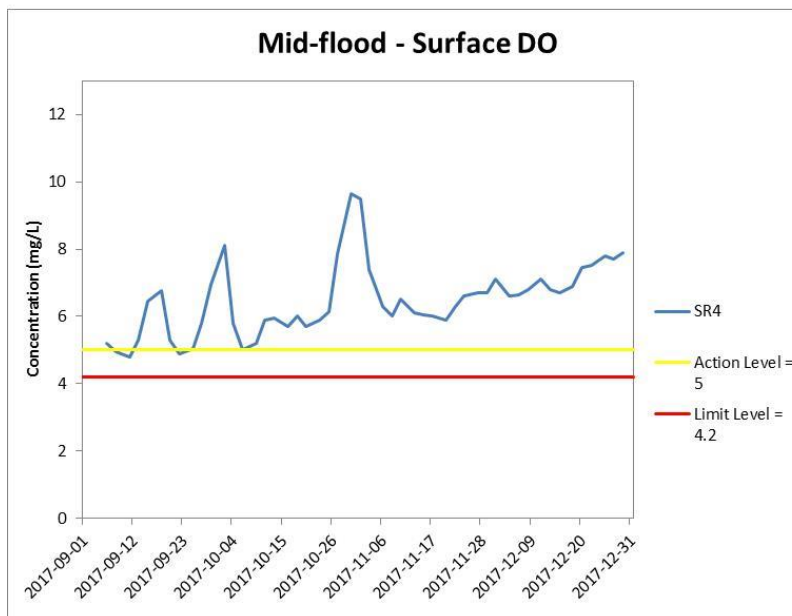
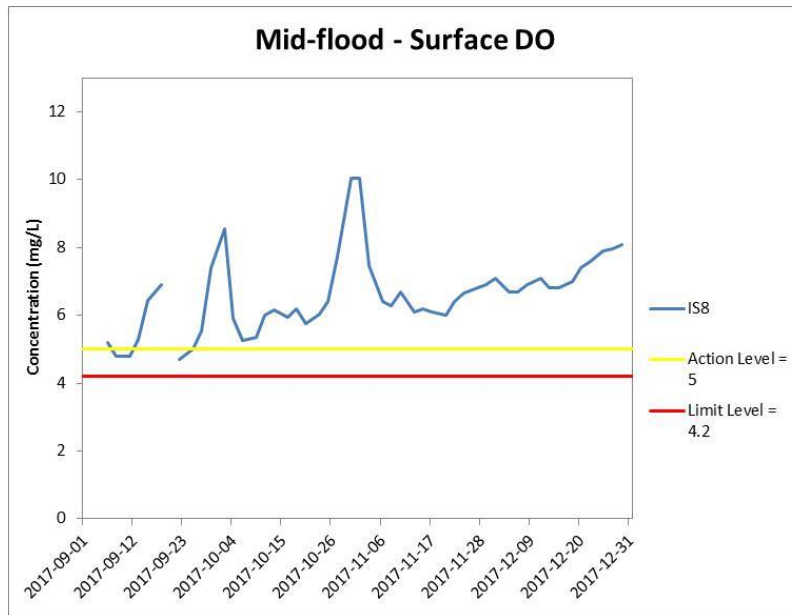


Figure J7 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 September 2017 and 31 December 2017 at IS8 and SR4.

*(Weather condition varied between sunny to rainy within the reporting period.)
In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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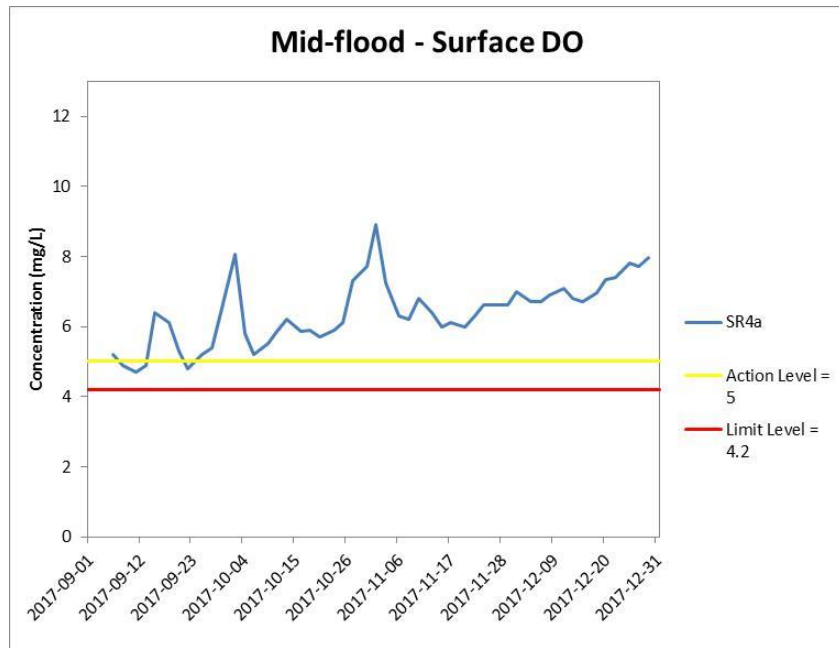


Figure J8 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 September 2017 and 31 December 2017 at SR4a.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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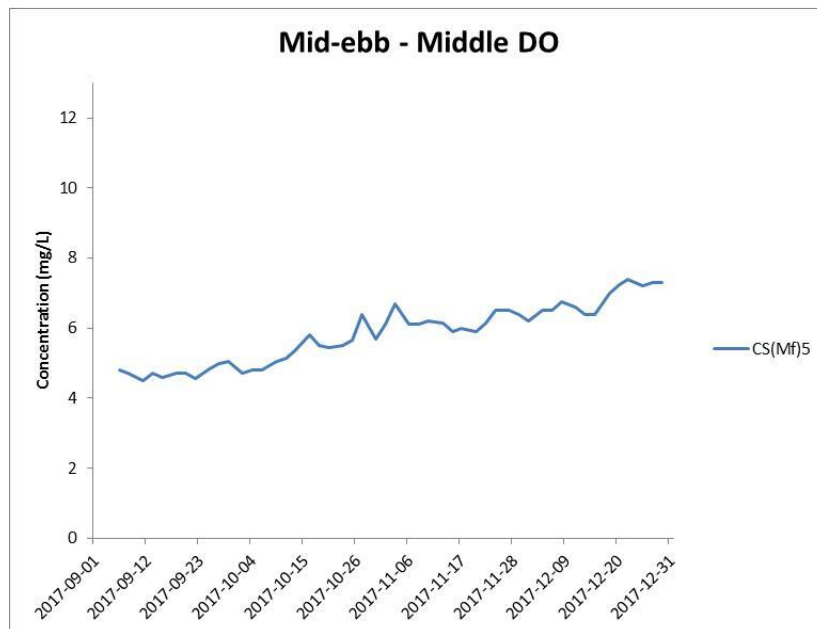
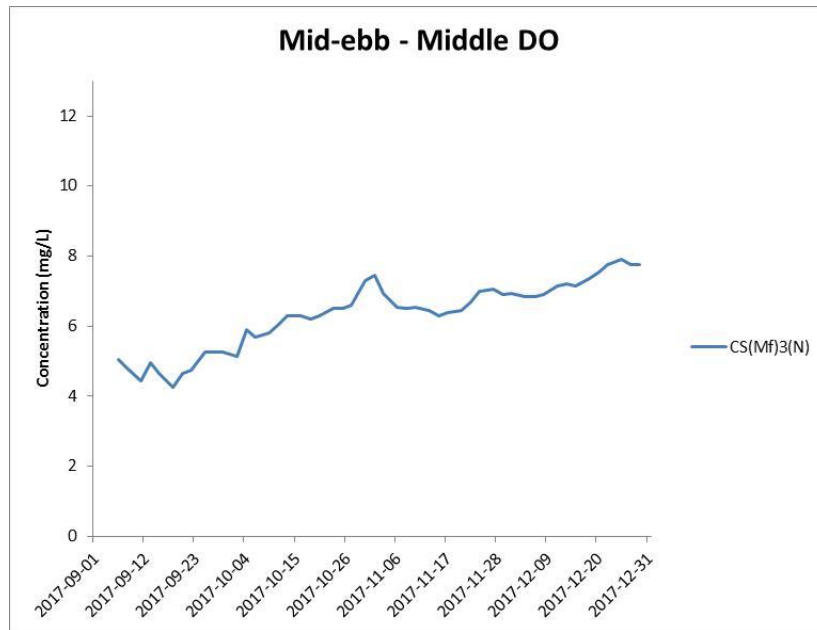


Figure J9 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(Mf)5.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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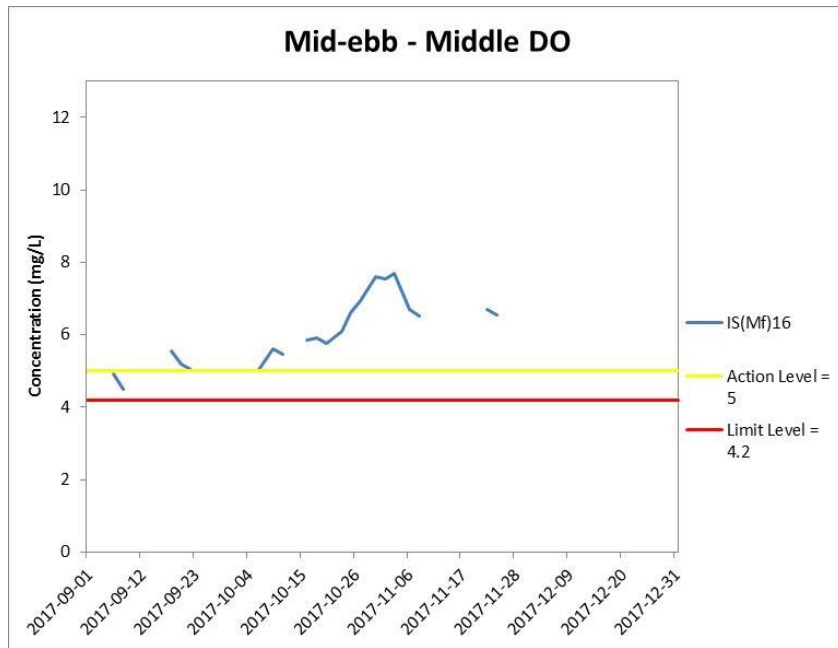


Figure J10 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at IS(Mf)16.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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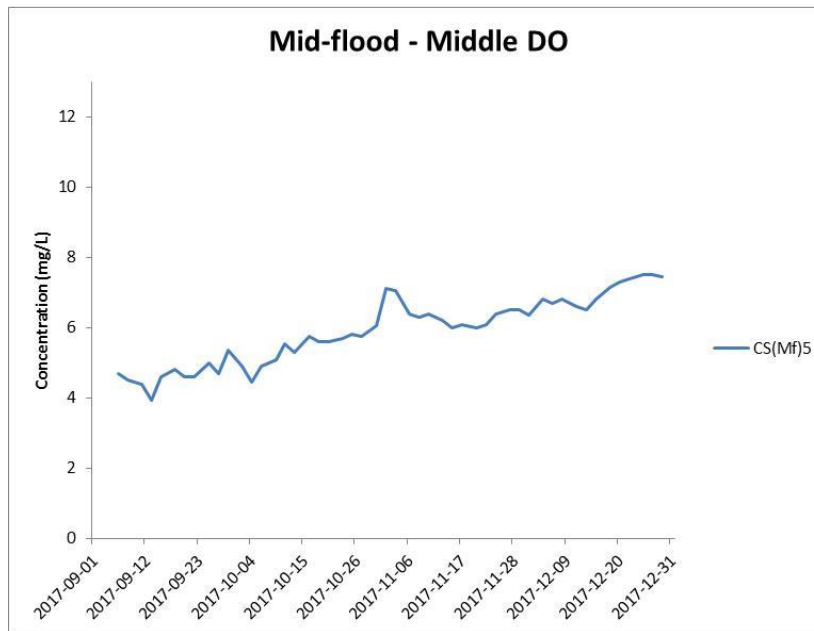
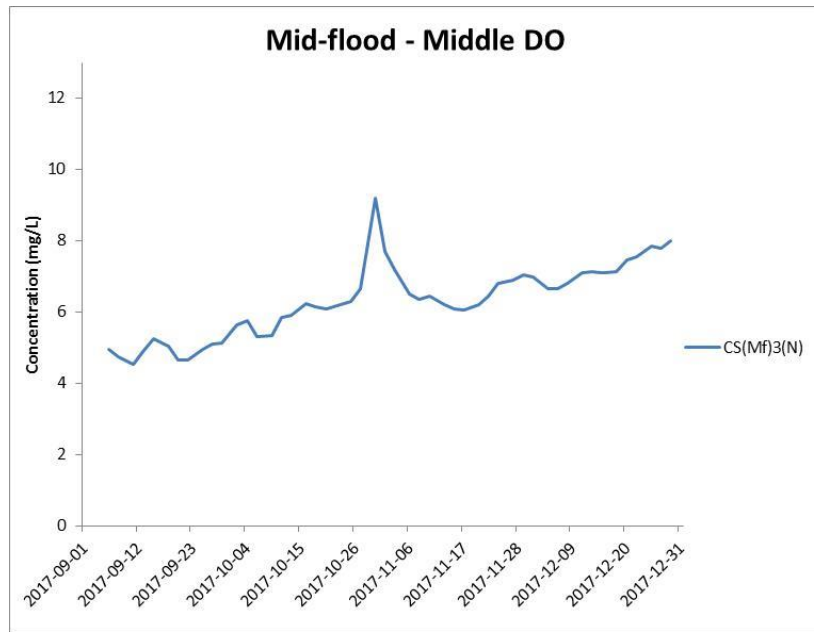


Figure J11 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(Mf)5.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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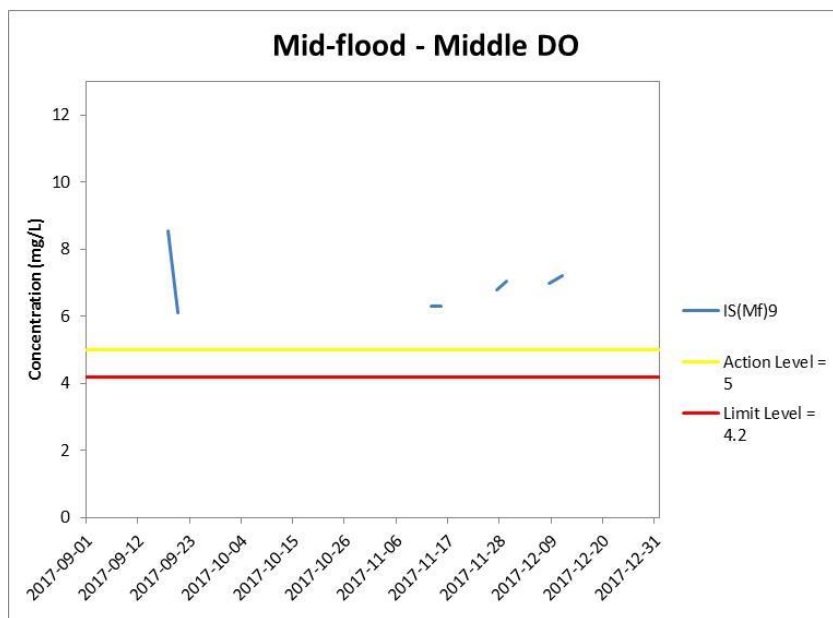
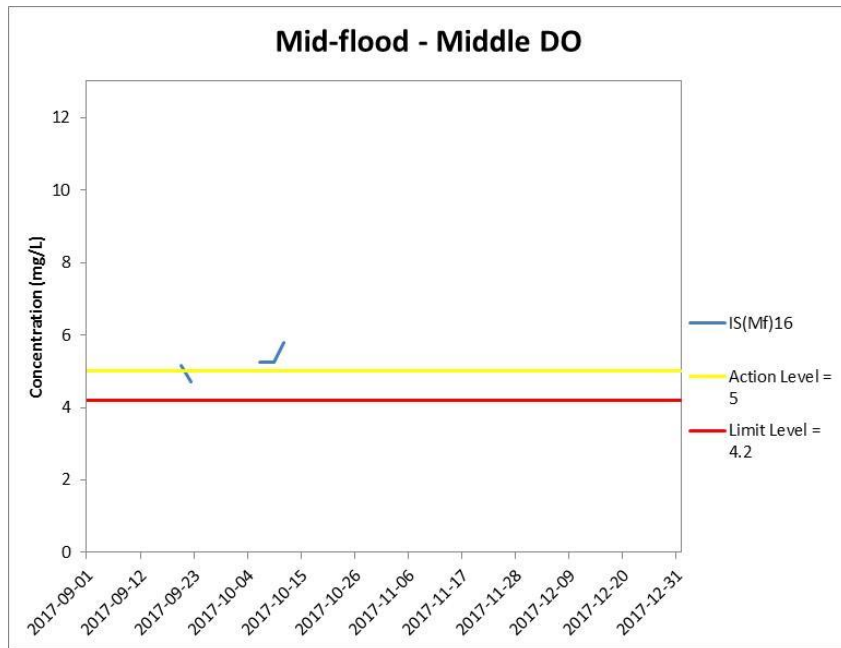


Figure J12 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between 1 September 2017 and 31 December 2017 at IS(Mf)16 and IS(Mf)9.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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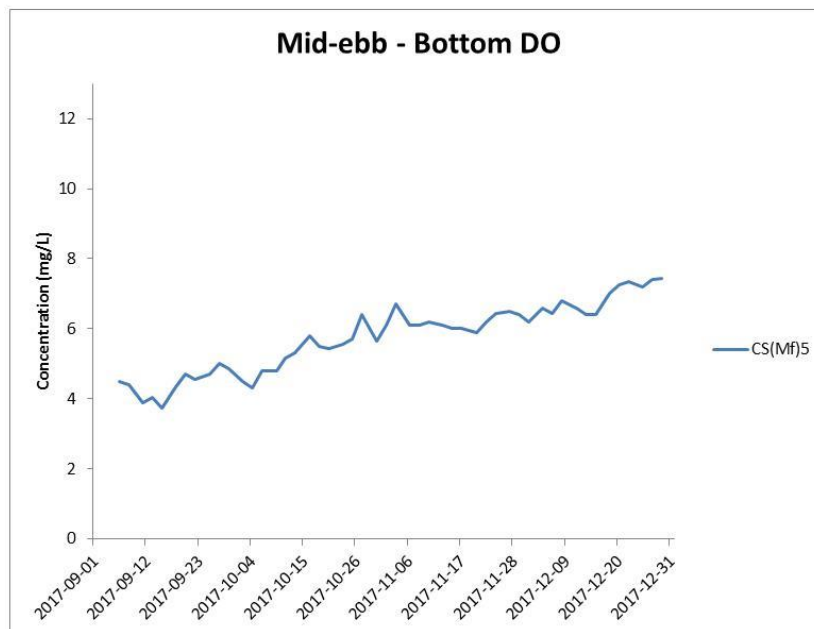
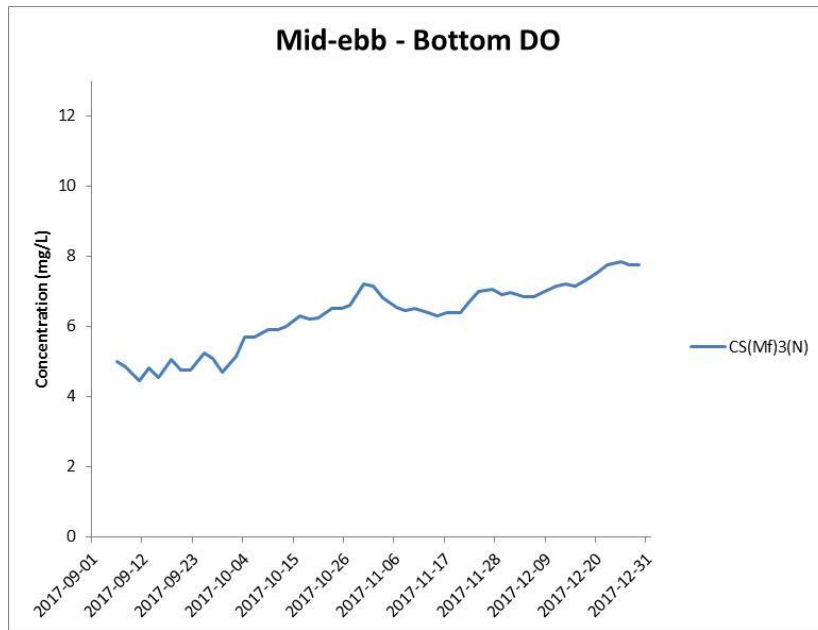


Figure J13 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(Mf)5.

*(Weather condition varied between sunny to rainy within the reporting period.)
In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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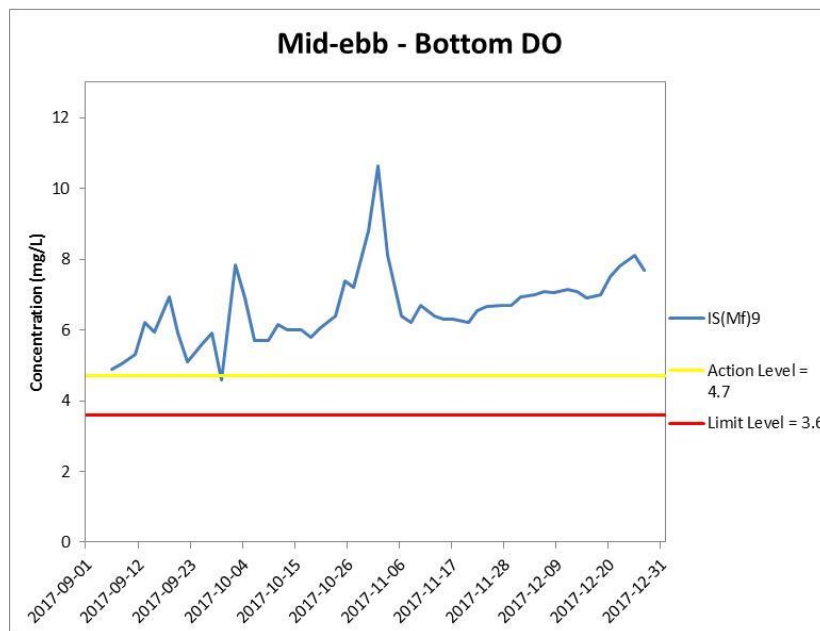
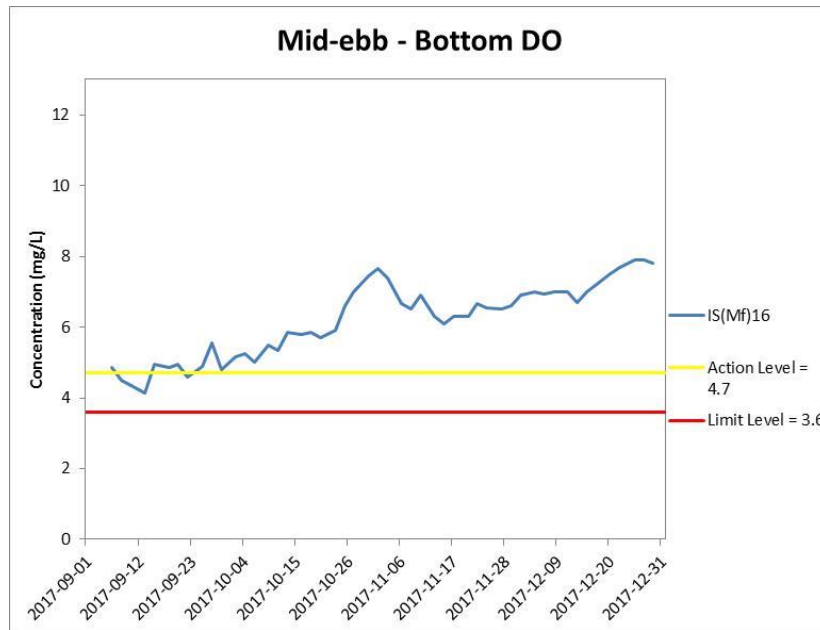


Figure J14 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at IS(Mf)16 and IS(Mf)9.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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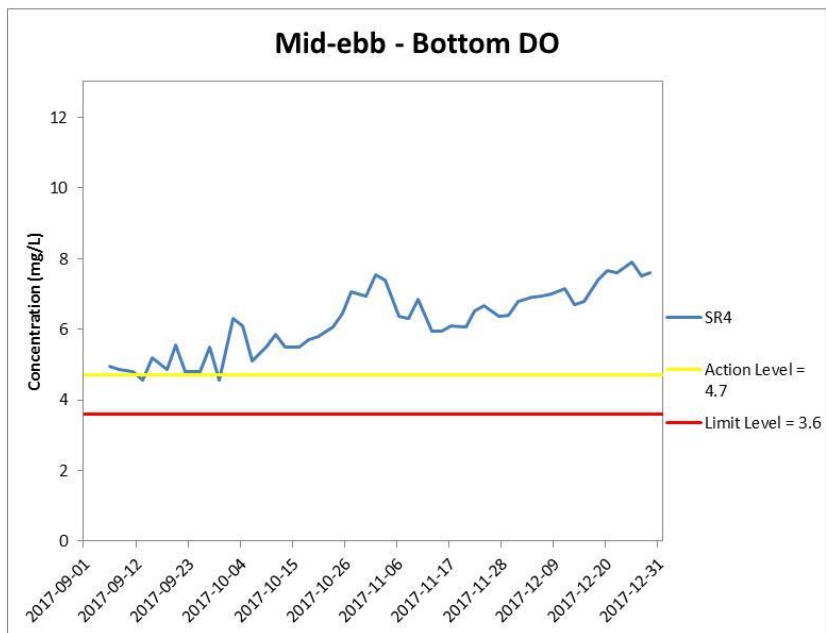
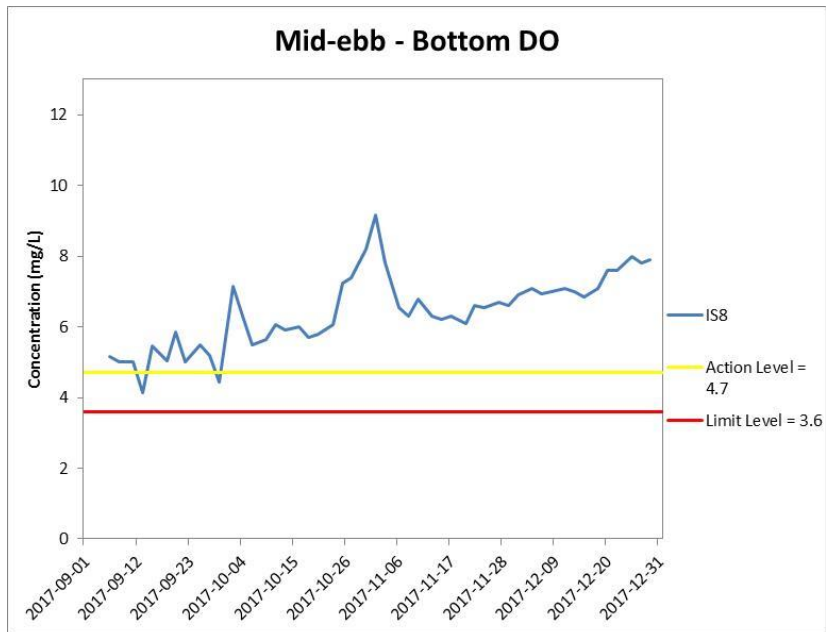


Figure J15 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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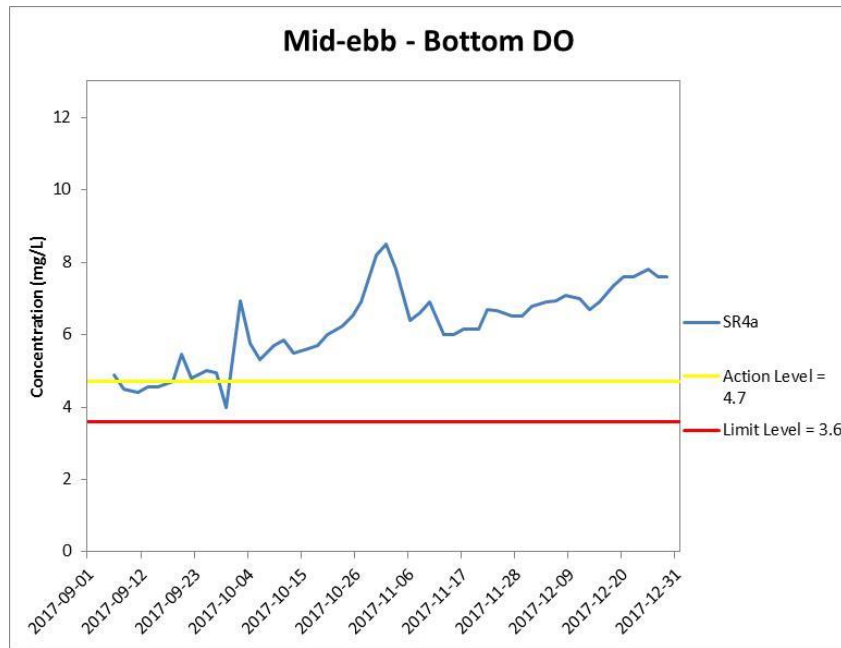


Figure J16 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 September 2017 and 31 December 2017 at SR4a.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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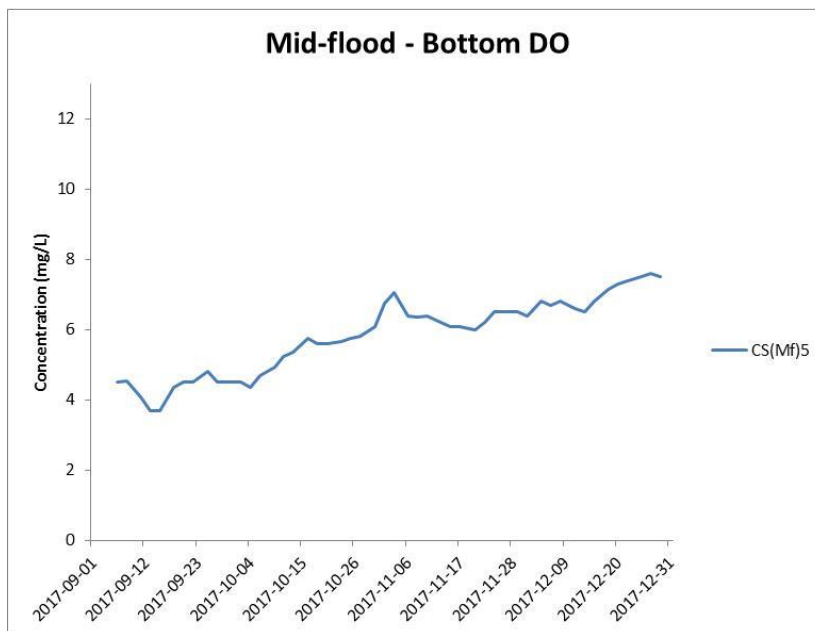
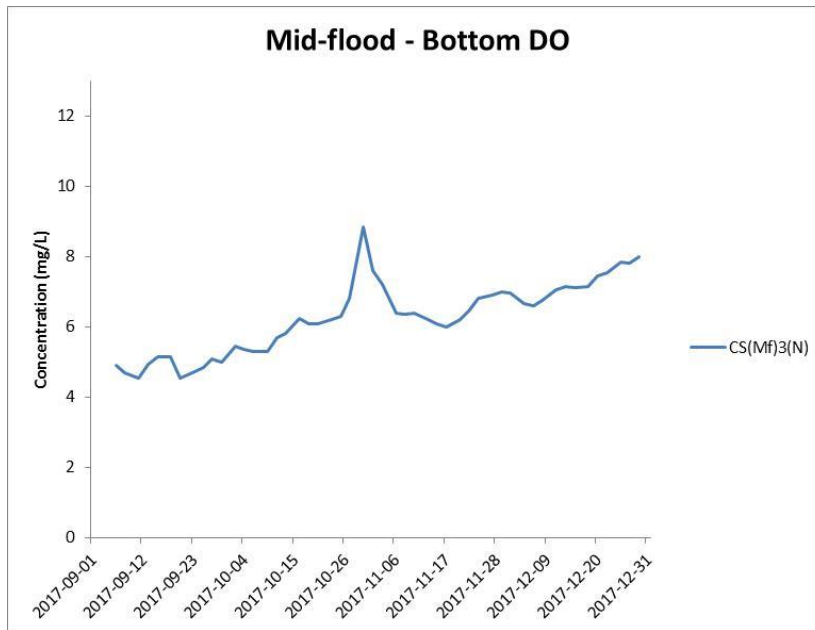


Figure J17 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(Mf)5.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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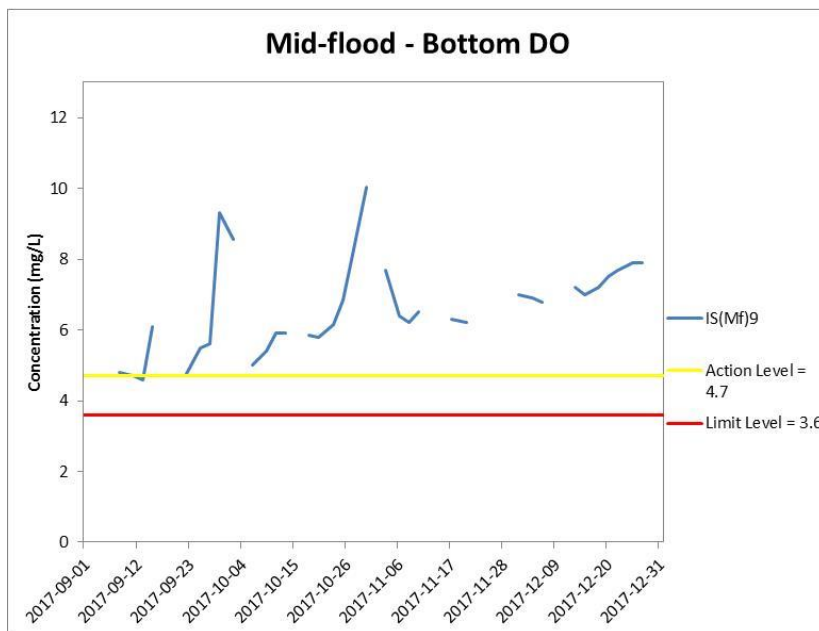
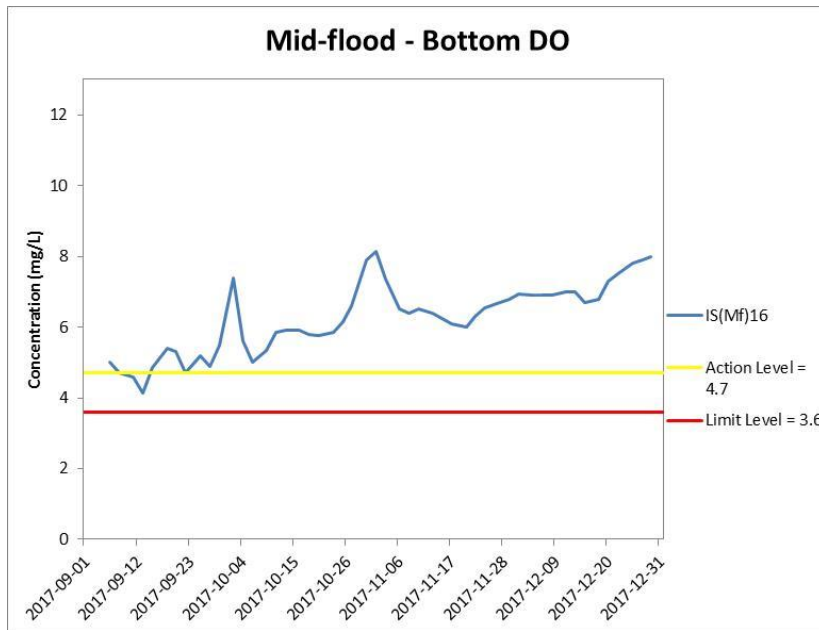
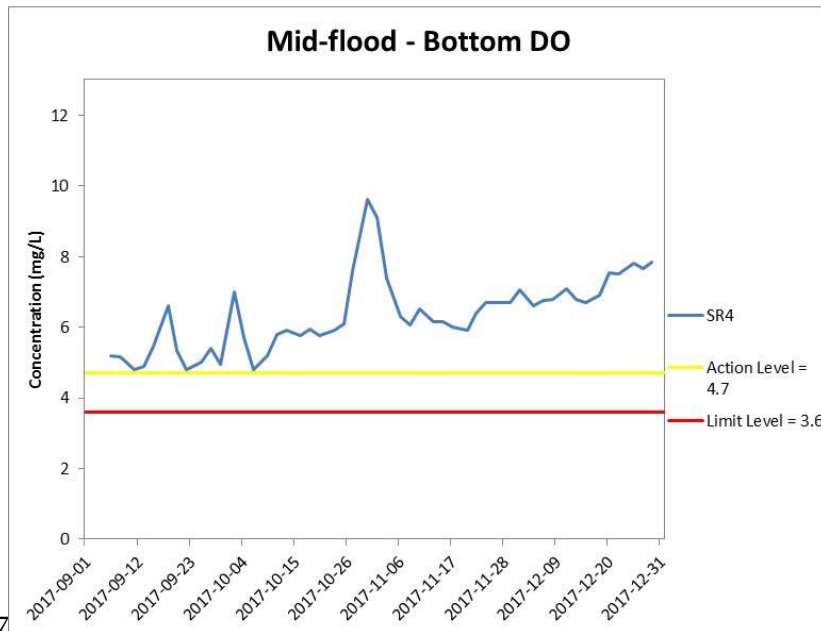
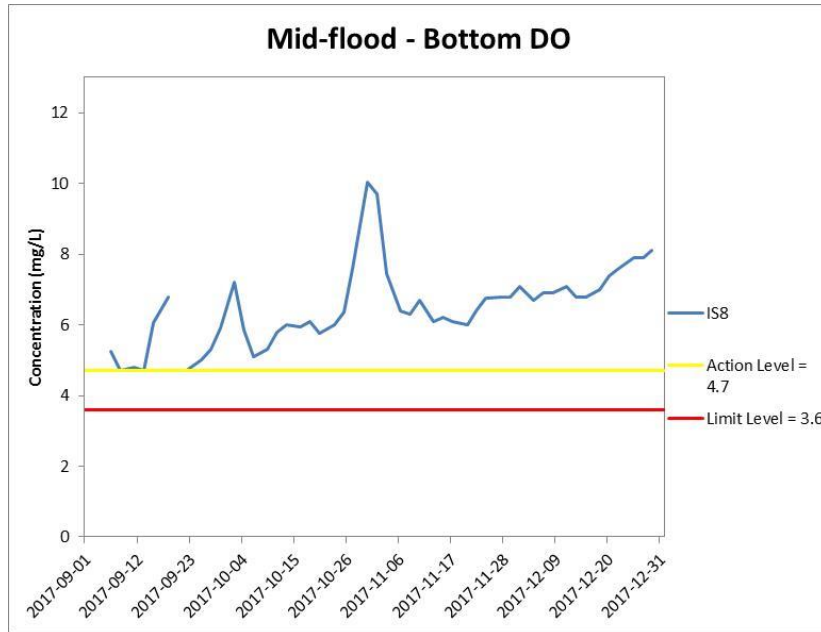


Figure J18 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 September 2017 and 31 December 2017 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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Figure J19 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 September 2017 and 31 December 2017 at IS8 and SR4.

*(Weather condition varied between sunny to rainy within the reporting period.)
In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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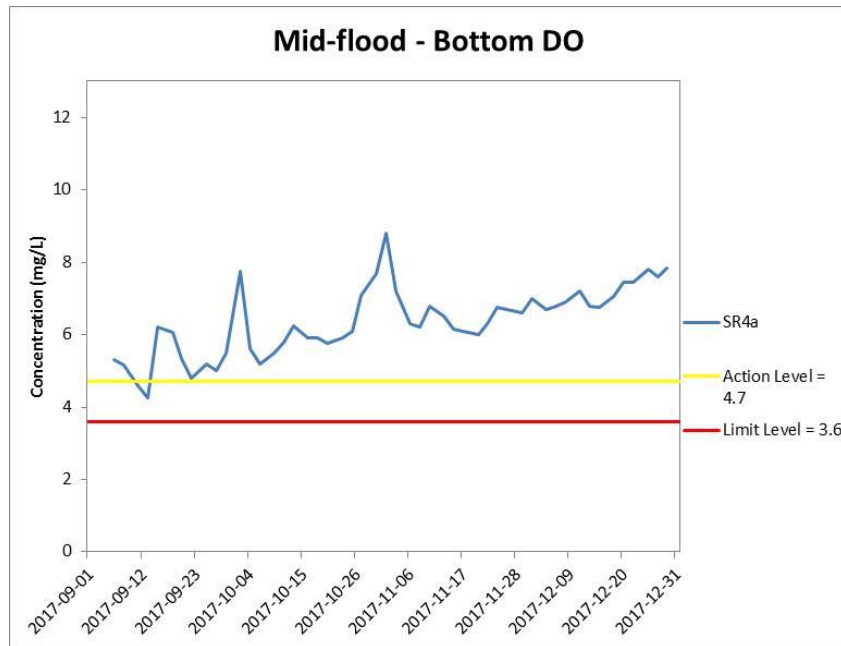


Figure J20 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 September 2017 and 31 December 2017 at SR4a.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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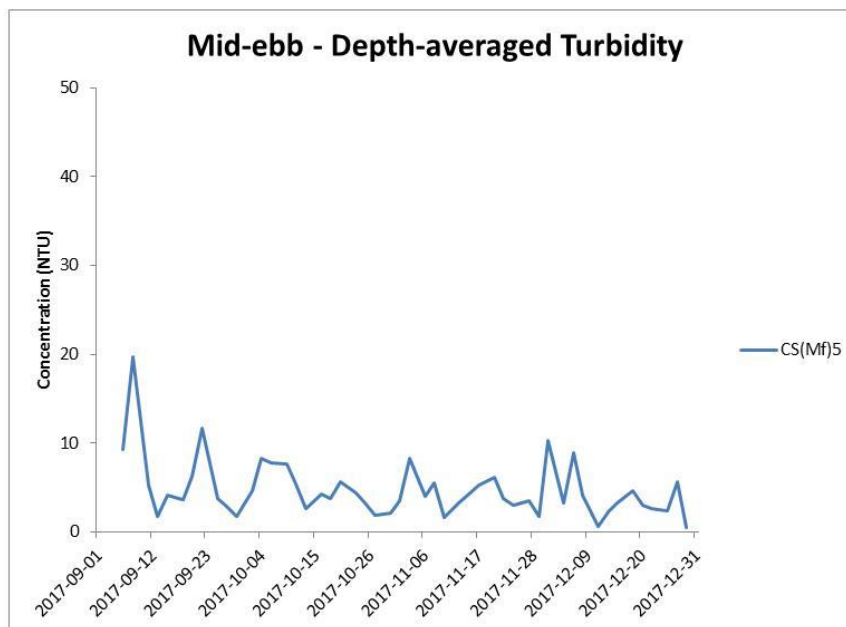
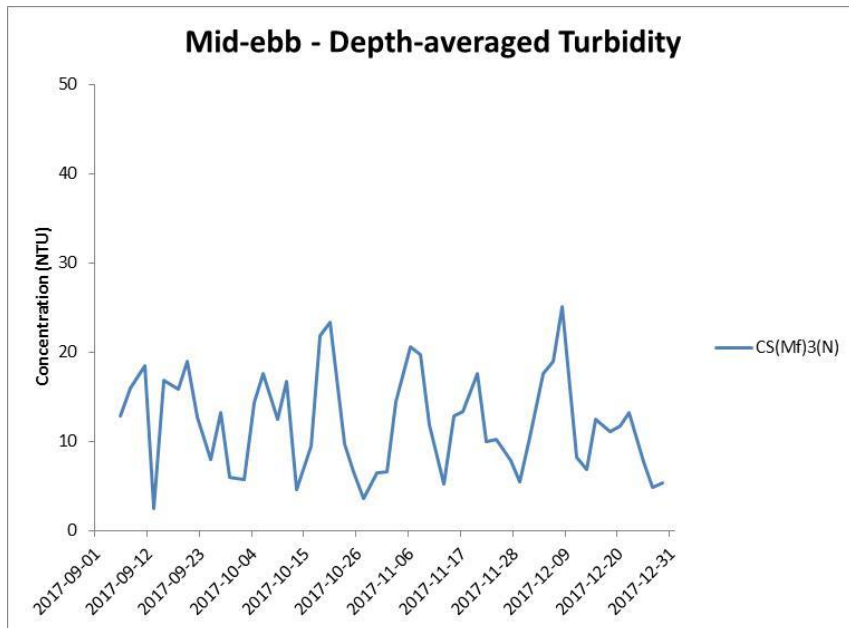


Figure J21 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(Mf)5.

*(Weather condition varied between sunny to rainy within the reporting period.)
In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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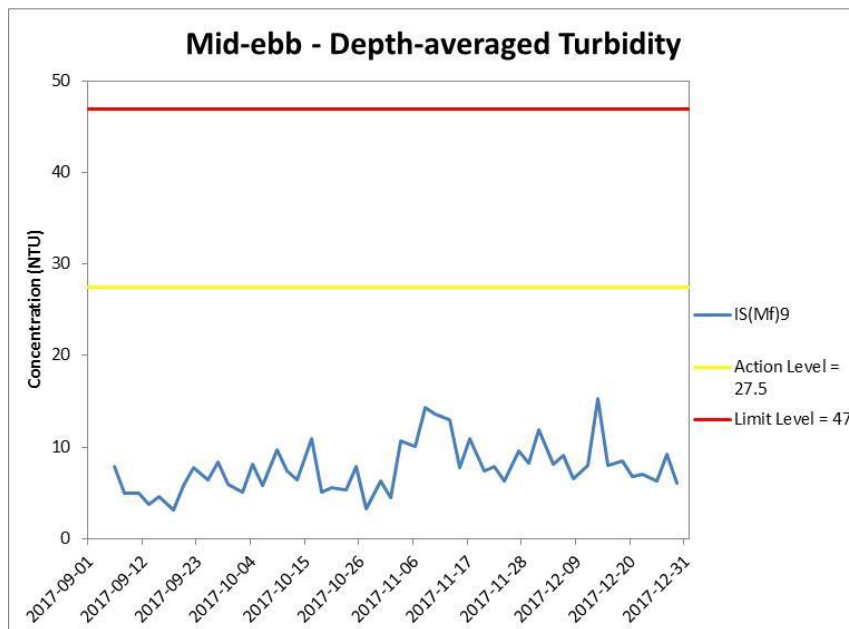
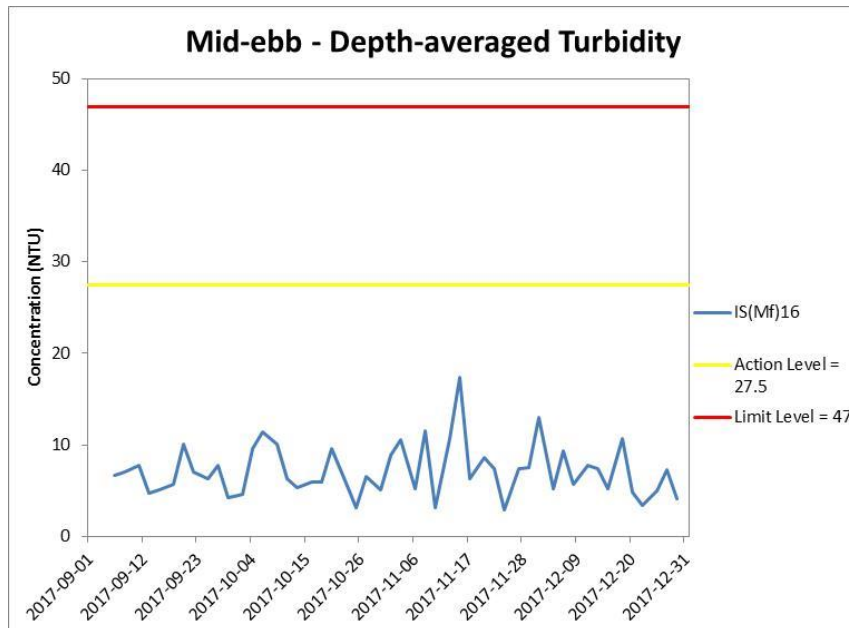
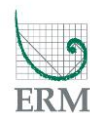


Figure J22 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 September 2017 and 31 December 2017 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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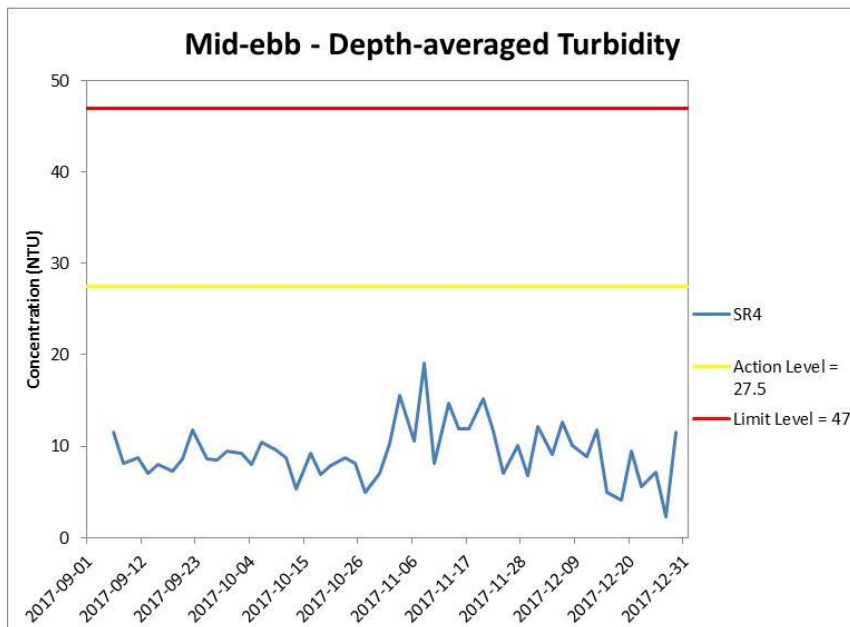
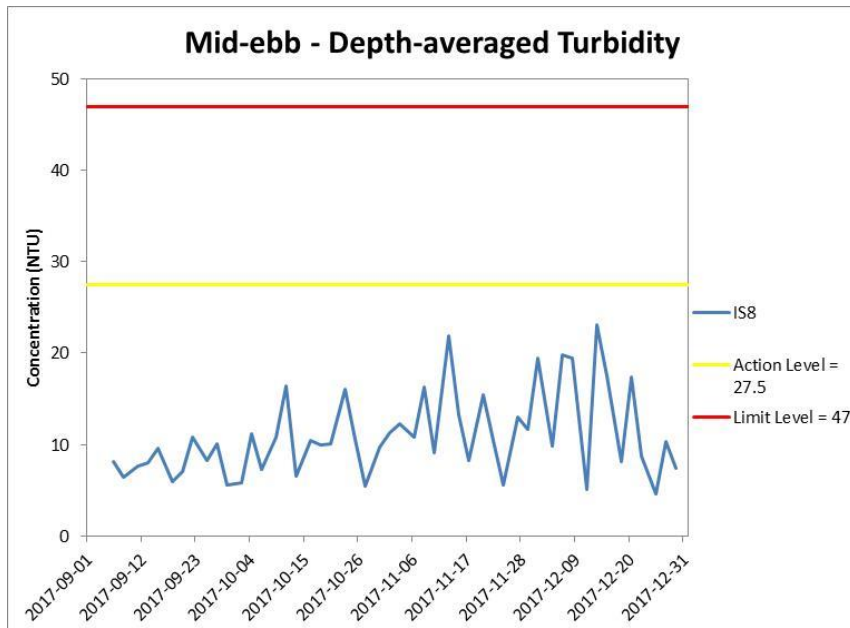


Figure J23 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 September 2017 and 31 December 2017 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

**Environmental
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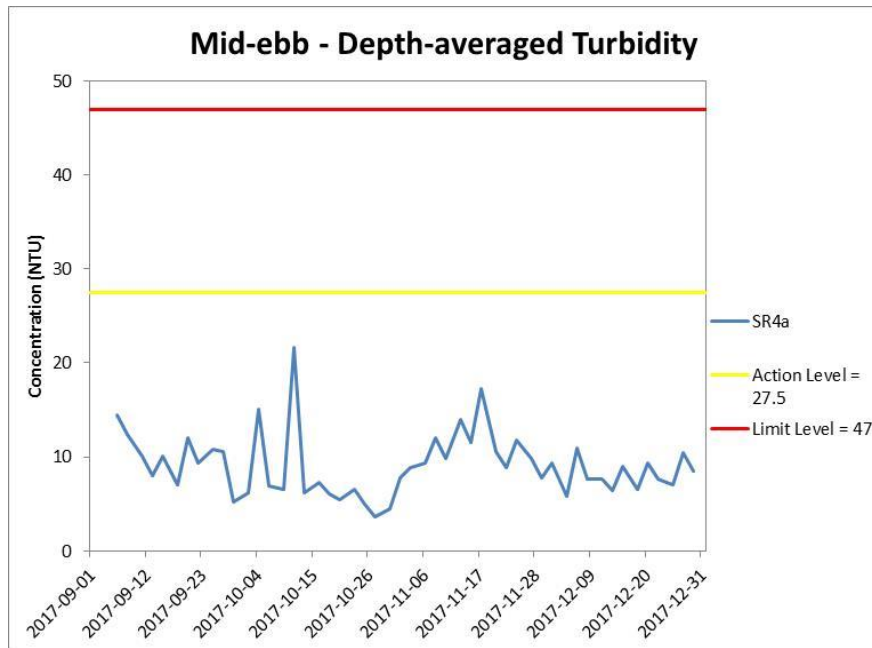


Figure J24 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 September 2017 and 31 December 2017 at SR4a.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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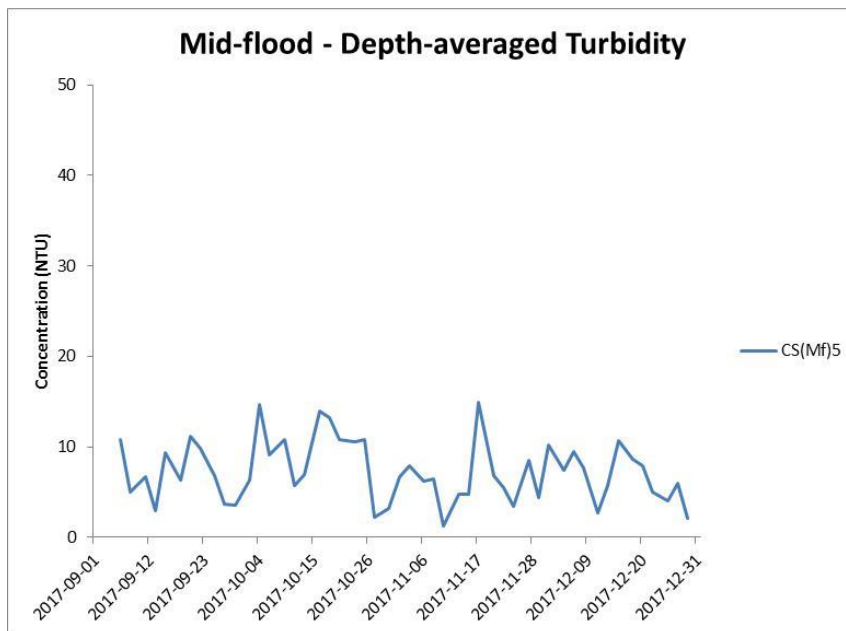
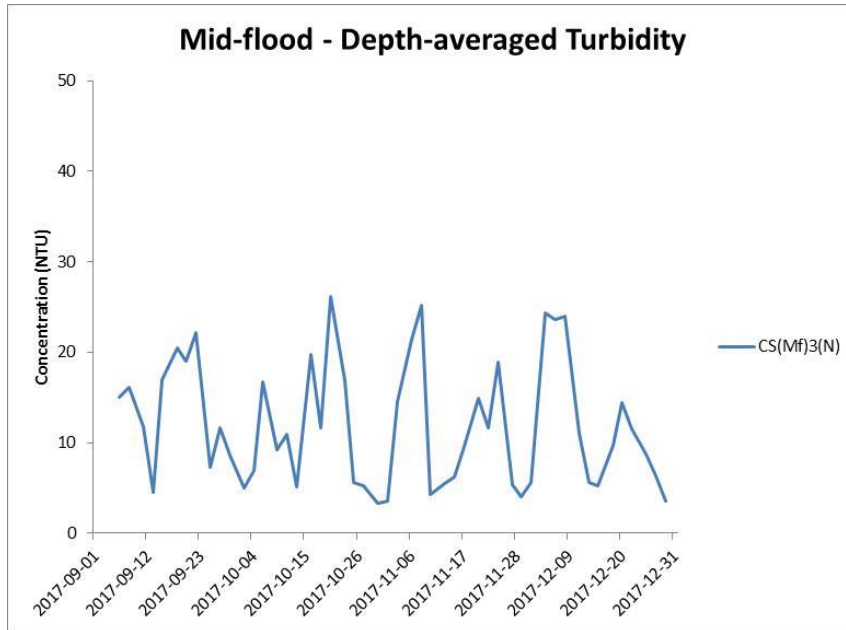


Figure J25 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(MF)5.

*(Weather condition varied between sunny to rainy within the reporting period.)
In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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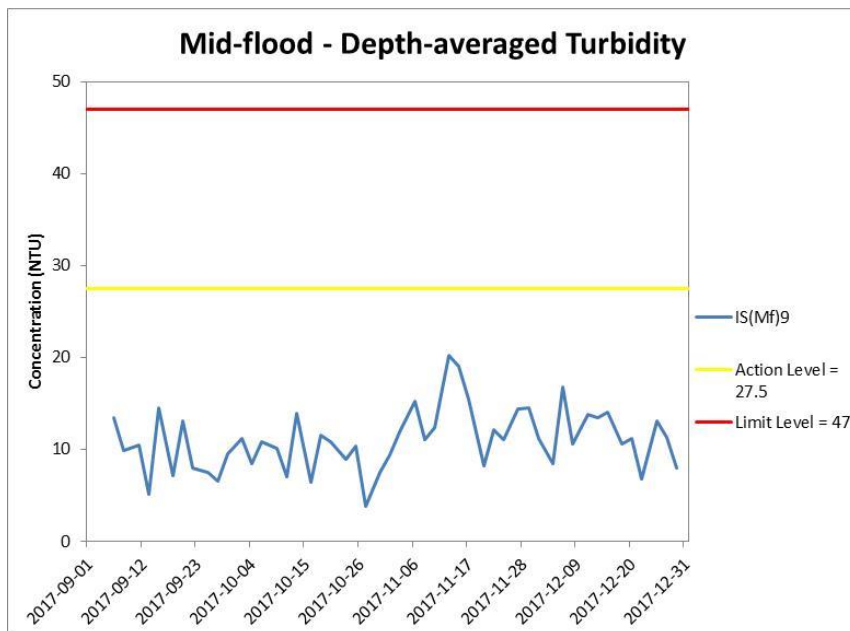
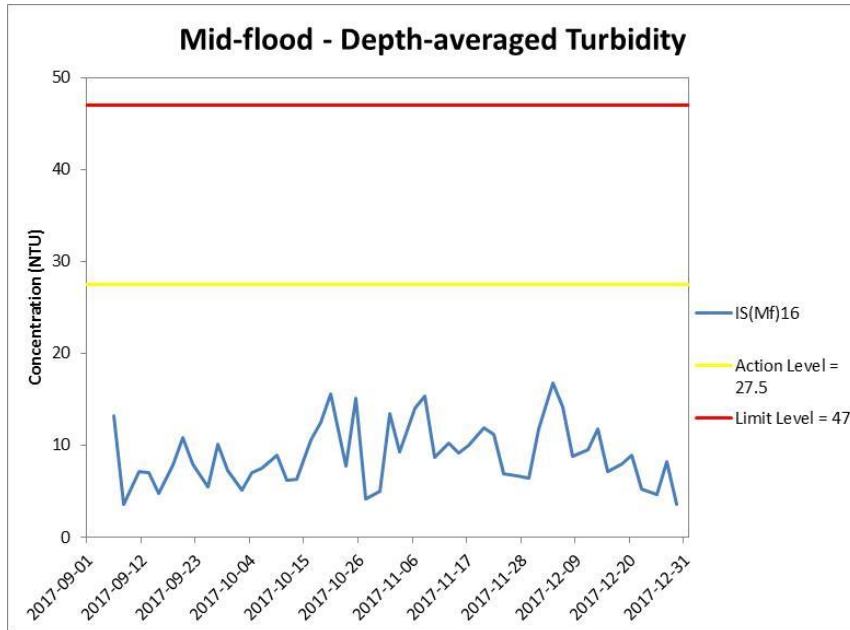


Figure J26 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 September 2017 and 31 December 2017 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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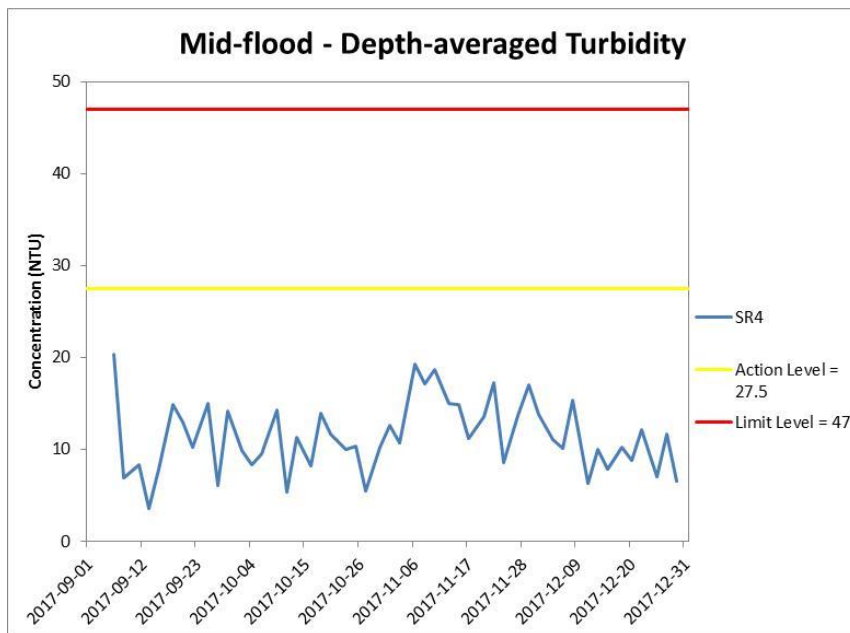
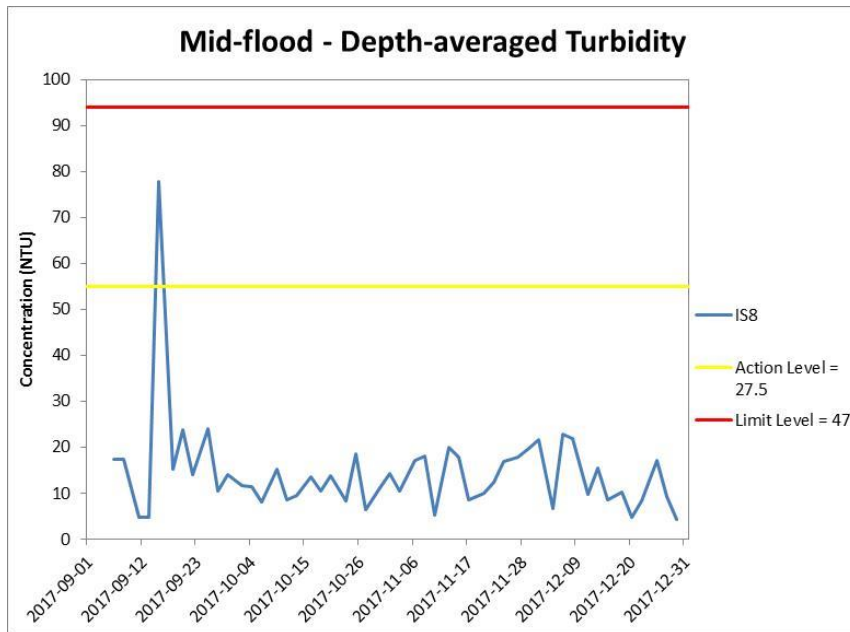


Figure J27 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 September 2017 and 31 December 2017 at IS8 and SR4.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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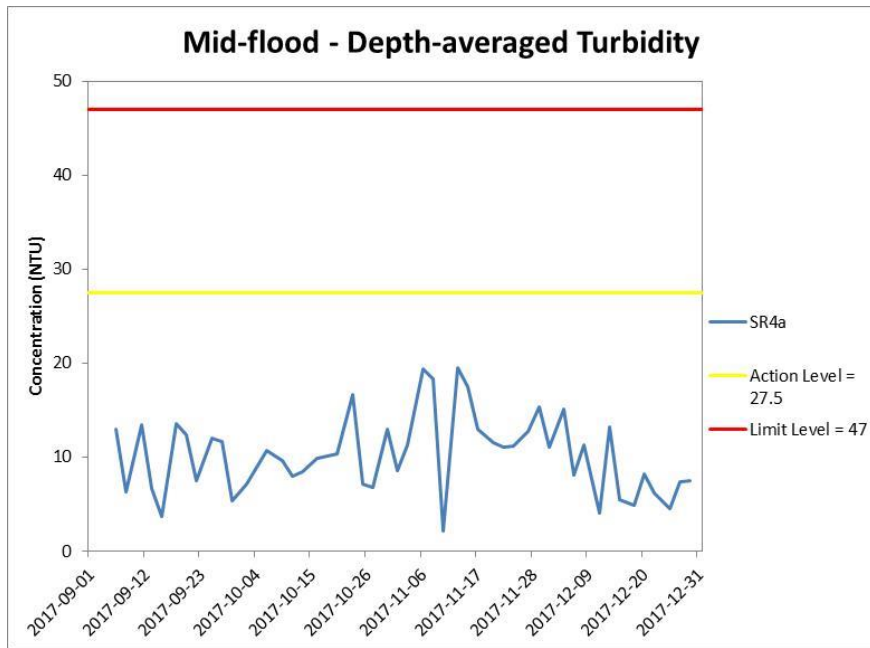


Figure J28 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 September 2017 and 31 December 2017 at SR4a.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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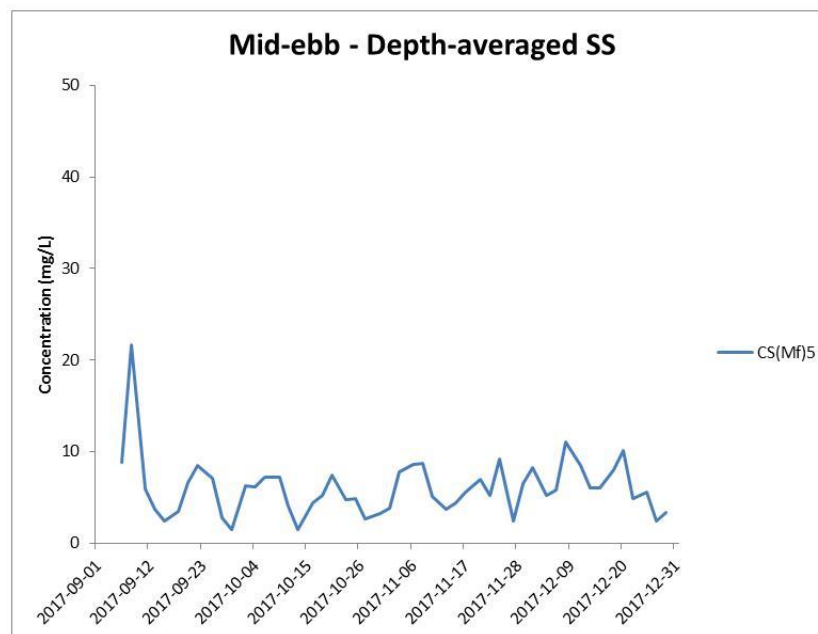
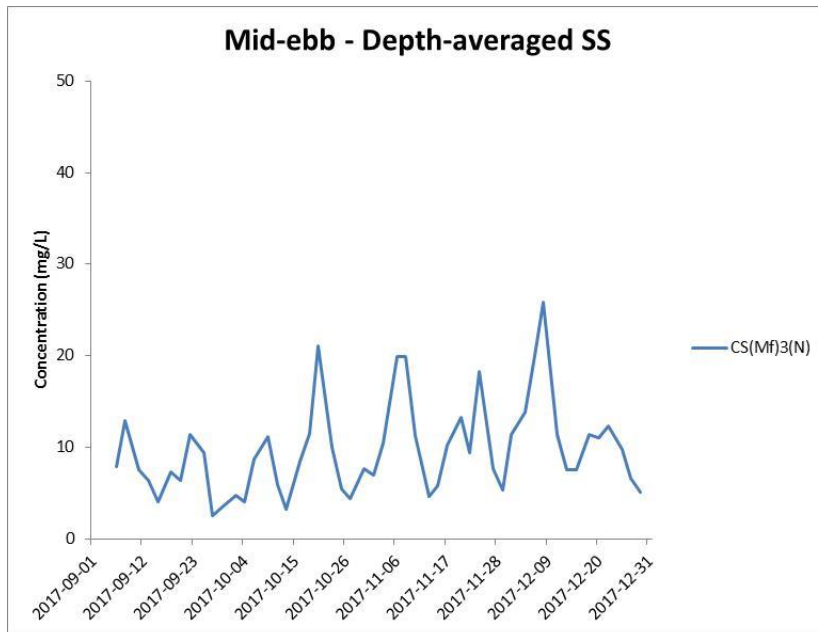


Figure J29 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(Mf)5.

*(Weather condition varied between sunny to rainy within the reporting period.)
In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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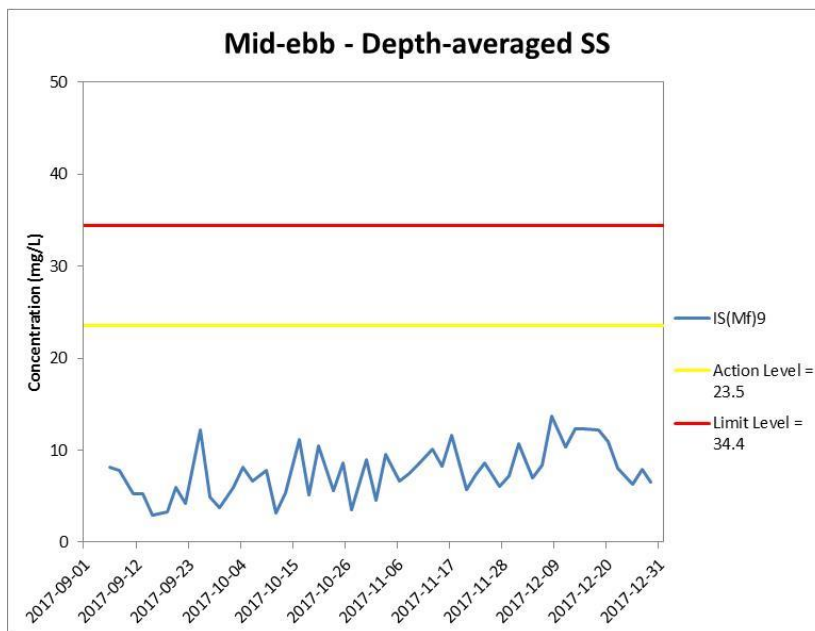
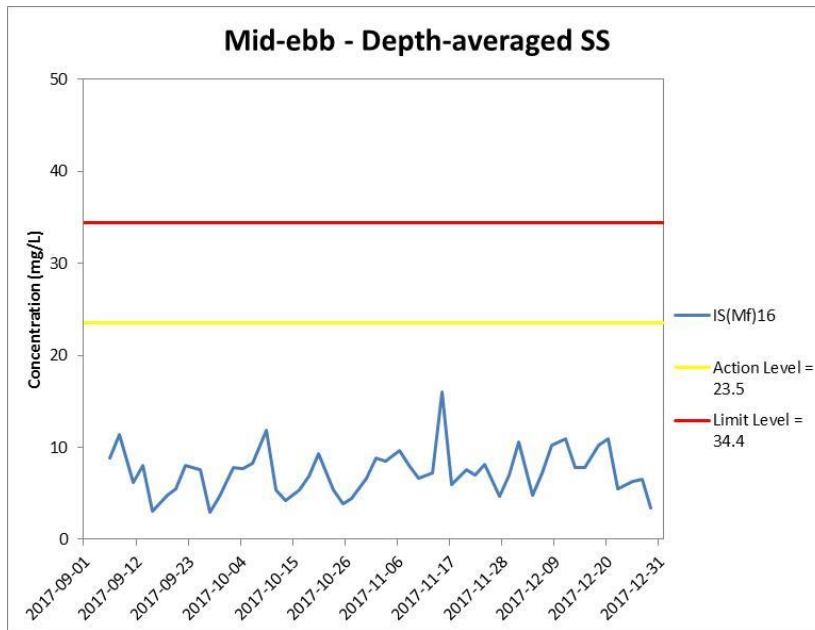


Figure J30 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 September 2017 and 31 December 2017 at IS(Mf)16 and IS(Mf)9.

*(Weather condition varied between sunny to rainy within the reporting period.)
In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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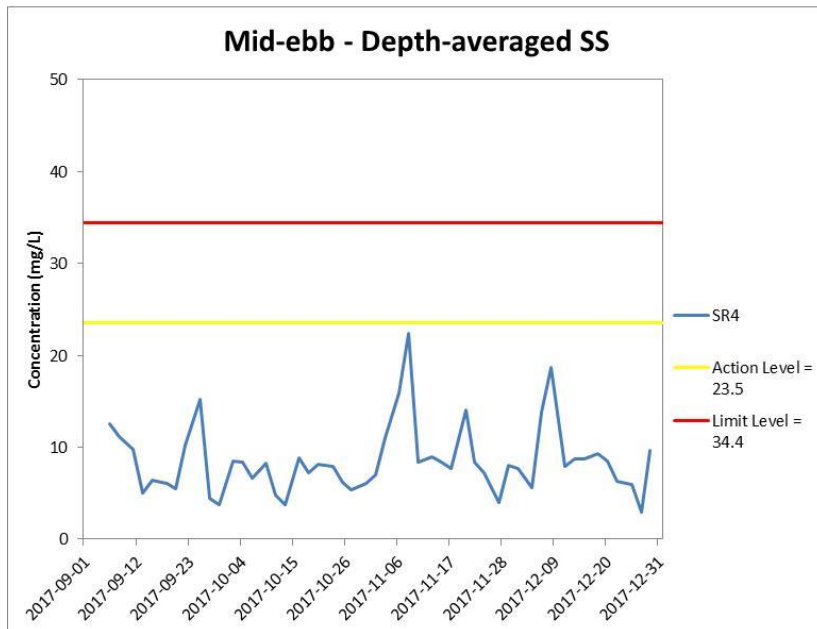
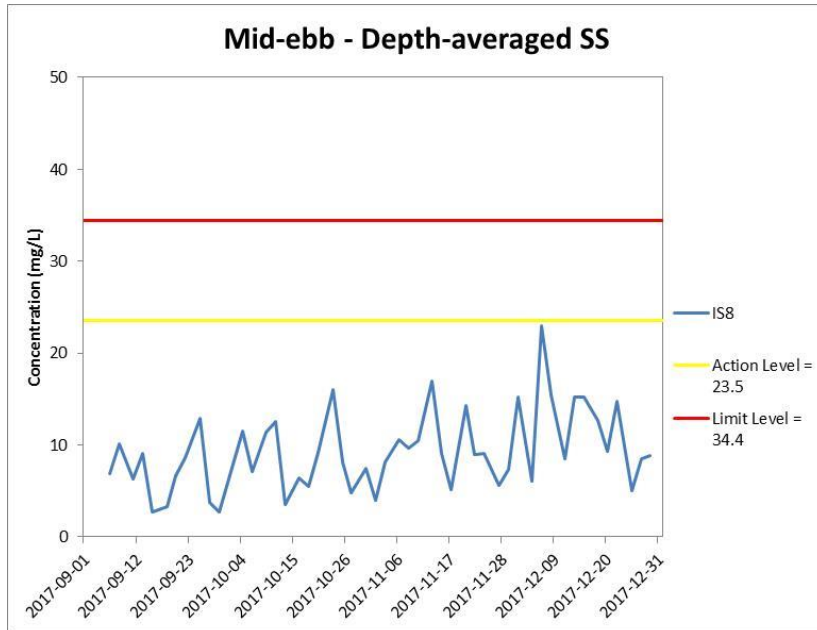


Figure J31 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 September 2017 and 31 December 2017 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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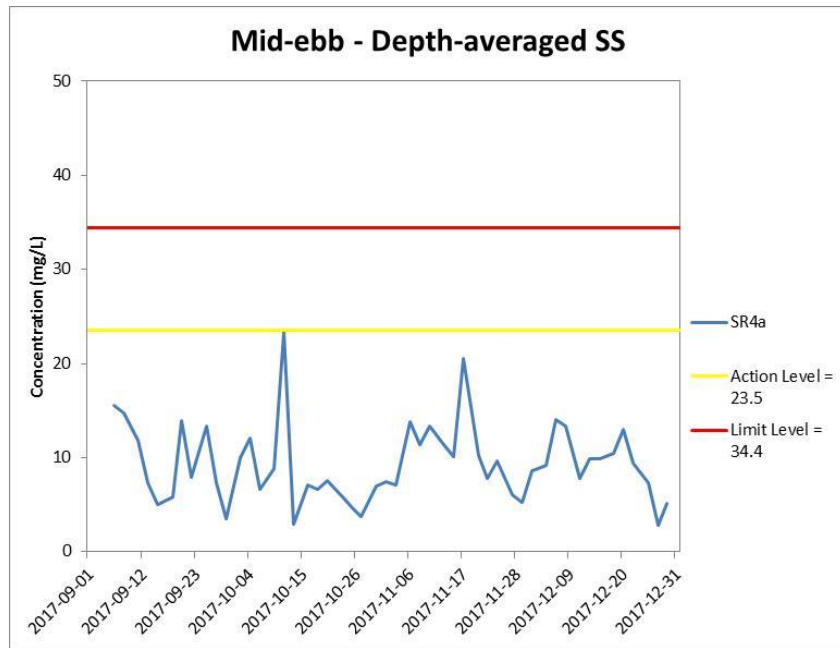


Figure J32 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 September 2017 and 31 December 2017 at SR4a.

*(Weather condition varied between sunny to rainy within the reporting period.)
 In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.*

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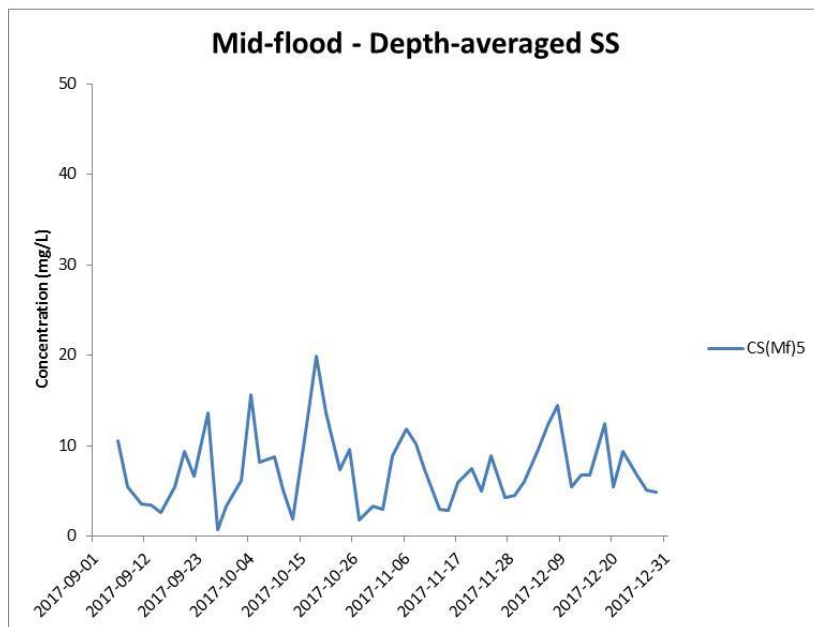
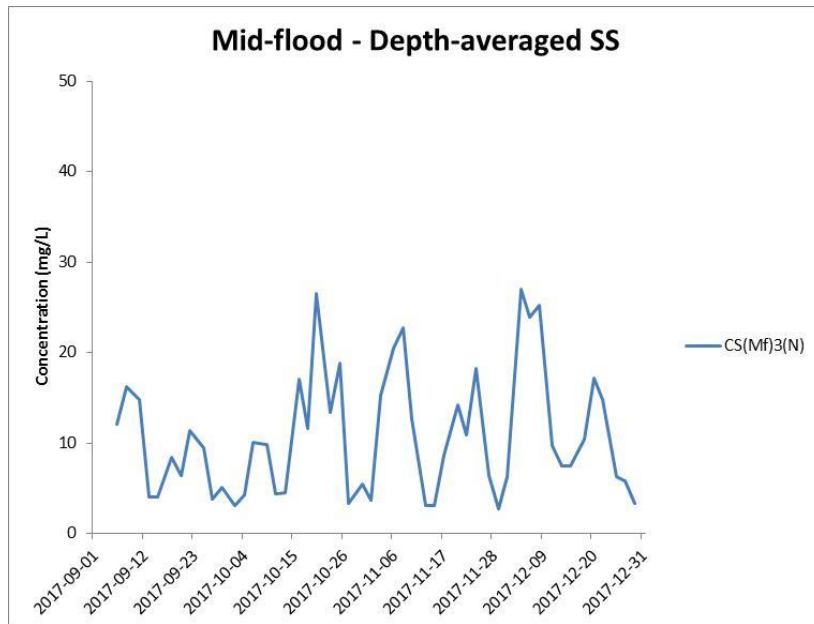


Figure J33 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 September 2017 and 31 December 2017 at CS(Mf)3(N) and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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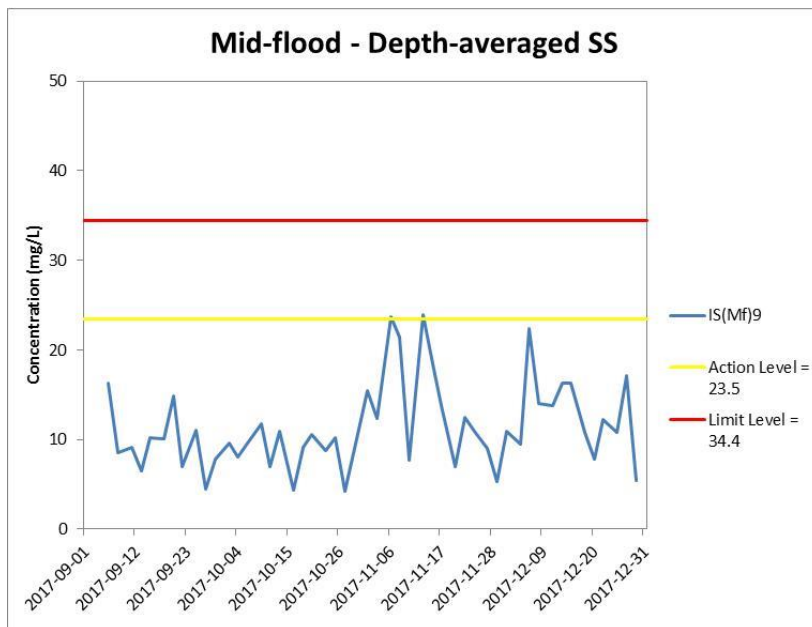
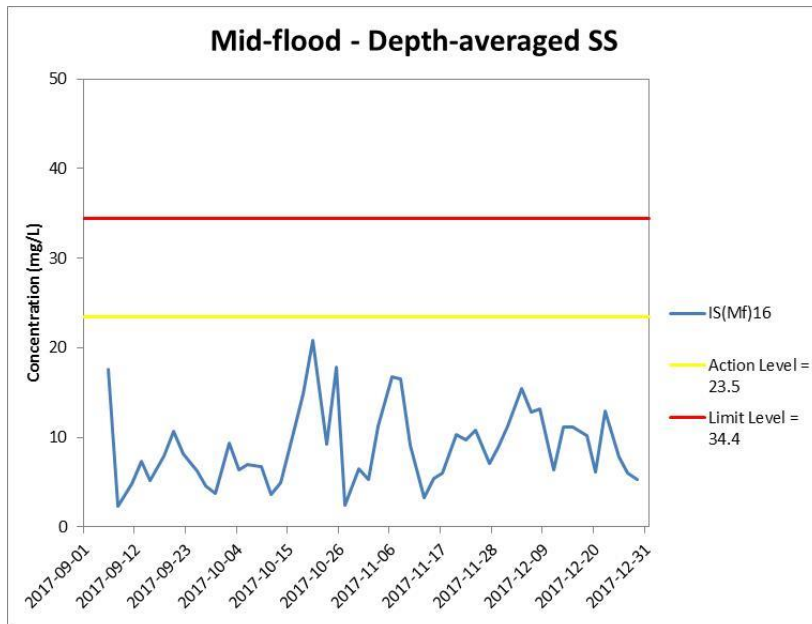


Figure J34 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 September 2017 and 31 December 2017 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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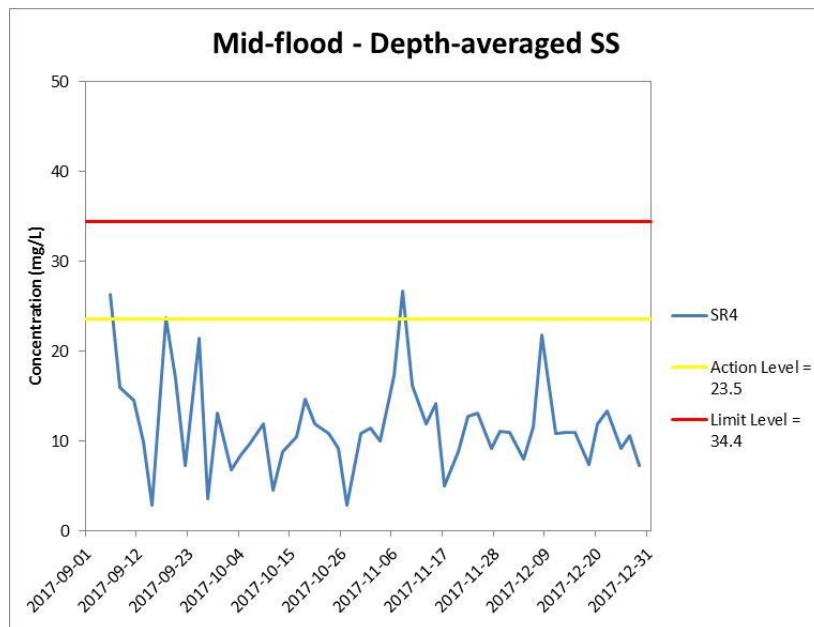
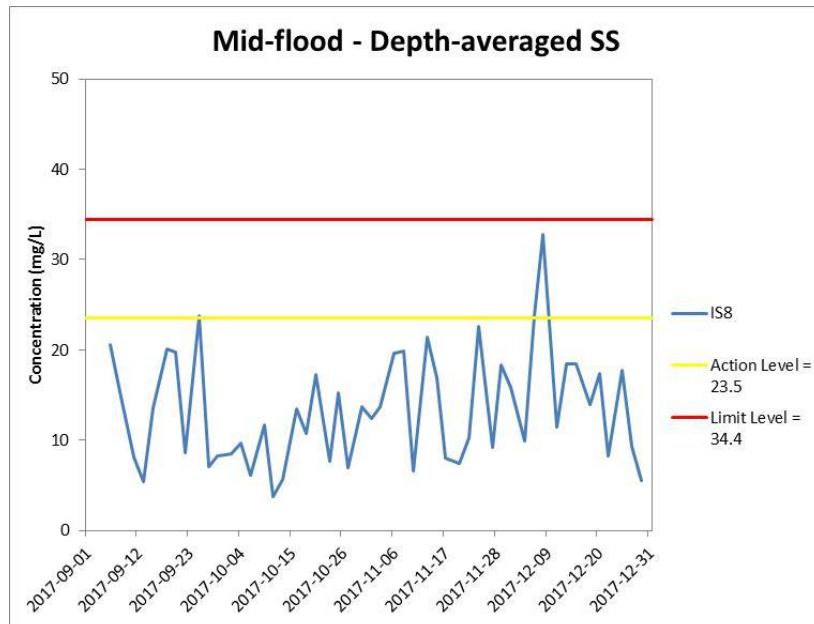


Figure J35 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 September 2017 and 31 December 2017 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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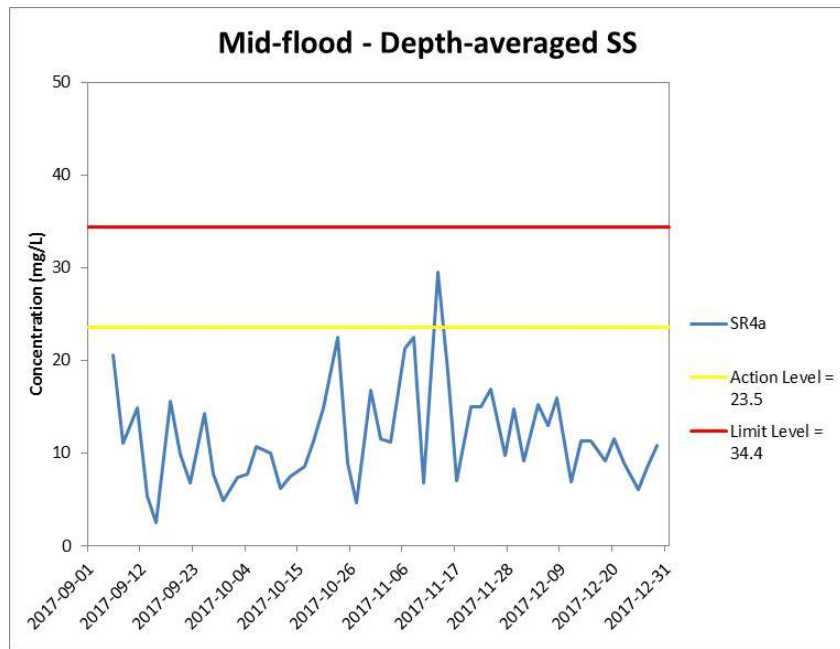


Figure J36 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 September 2017 and 31 December 2017 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period.) In-situ monitoring is taken according to the requirement specified in the EM&A Manual, i.e. 3 water depth namely 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.

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Appendix K

Impact Dolphin Monitoring Survey Results

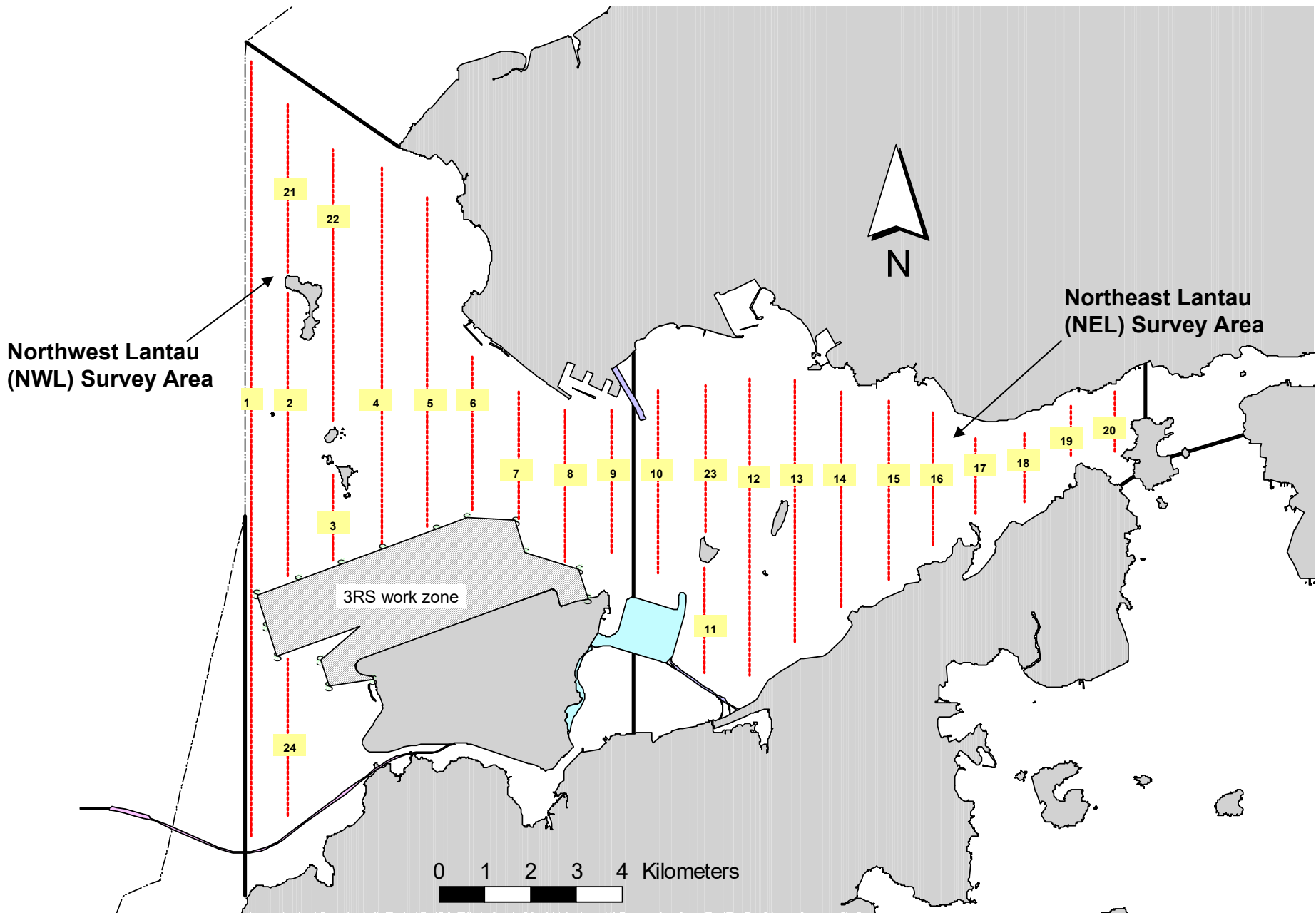


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas

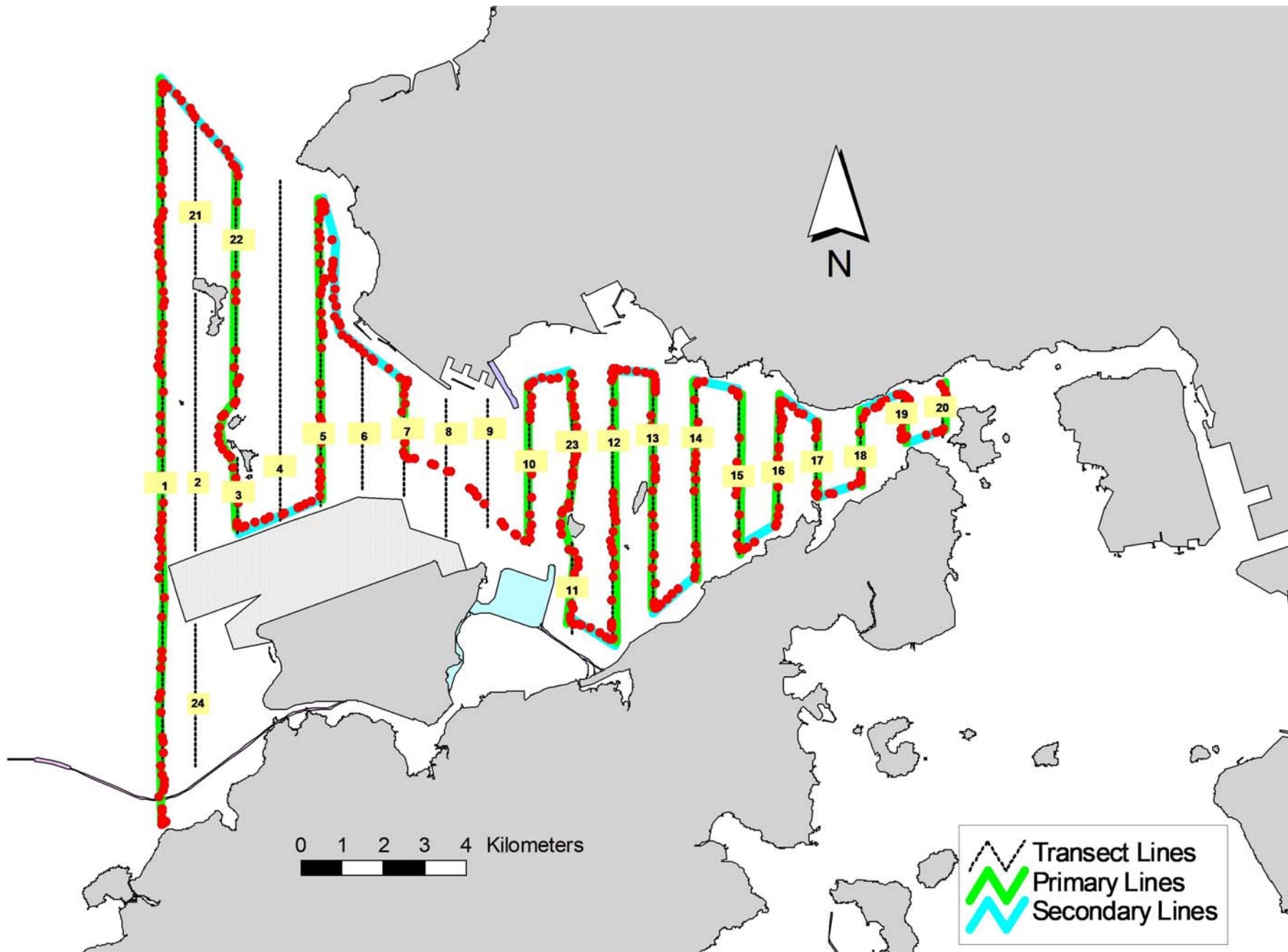


Figure 2. Survey Route on December 5th, 2017 (from HKLR03 project)

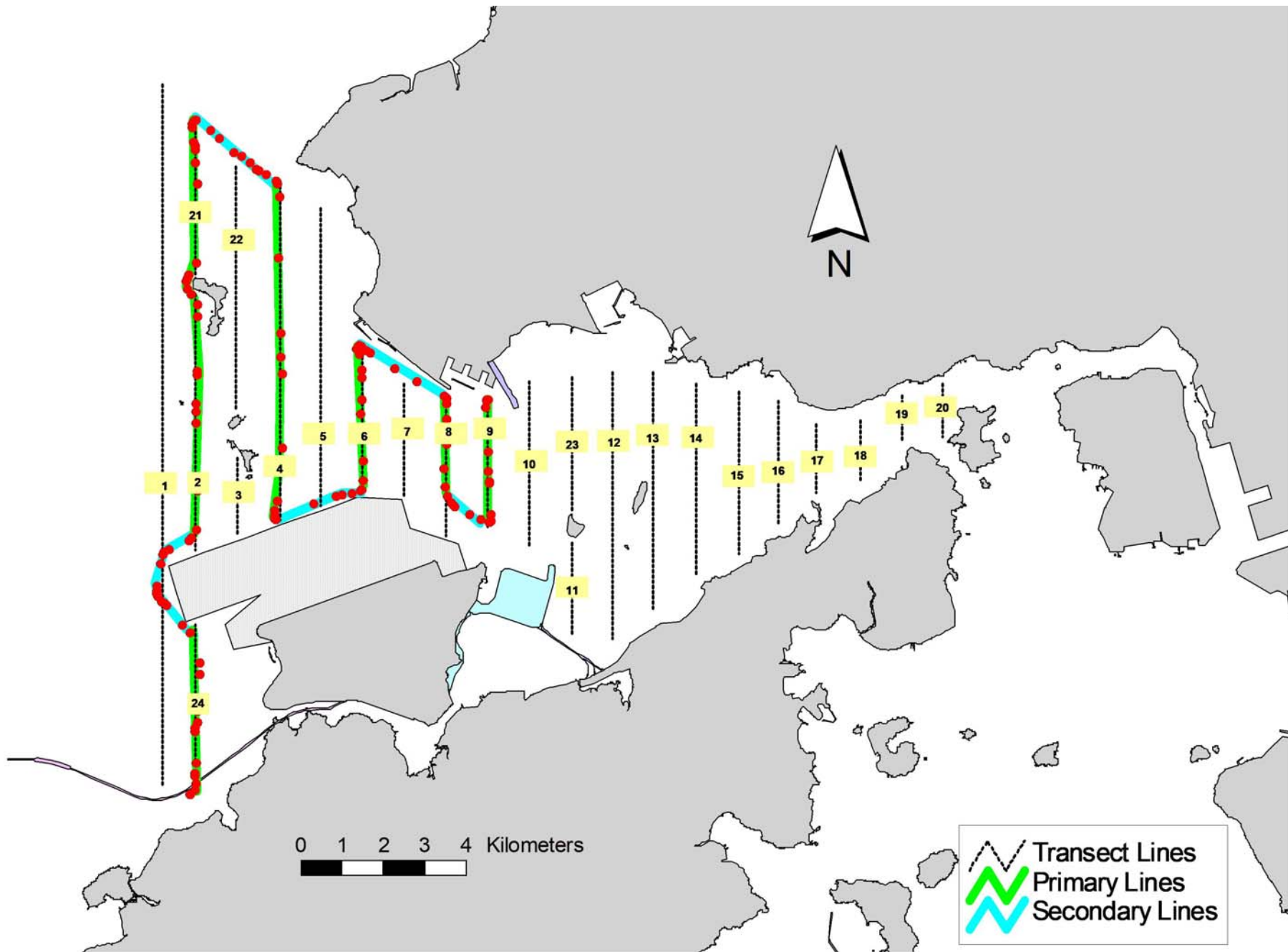


Figure 3. Survey Route on December 12th, 2017 (from HKLR03 project)

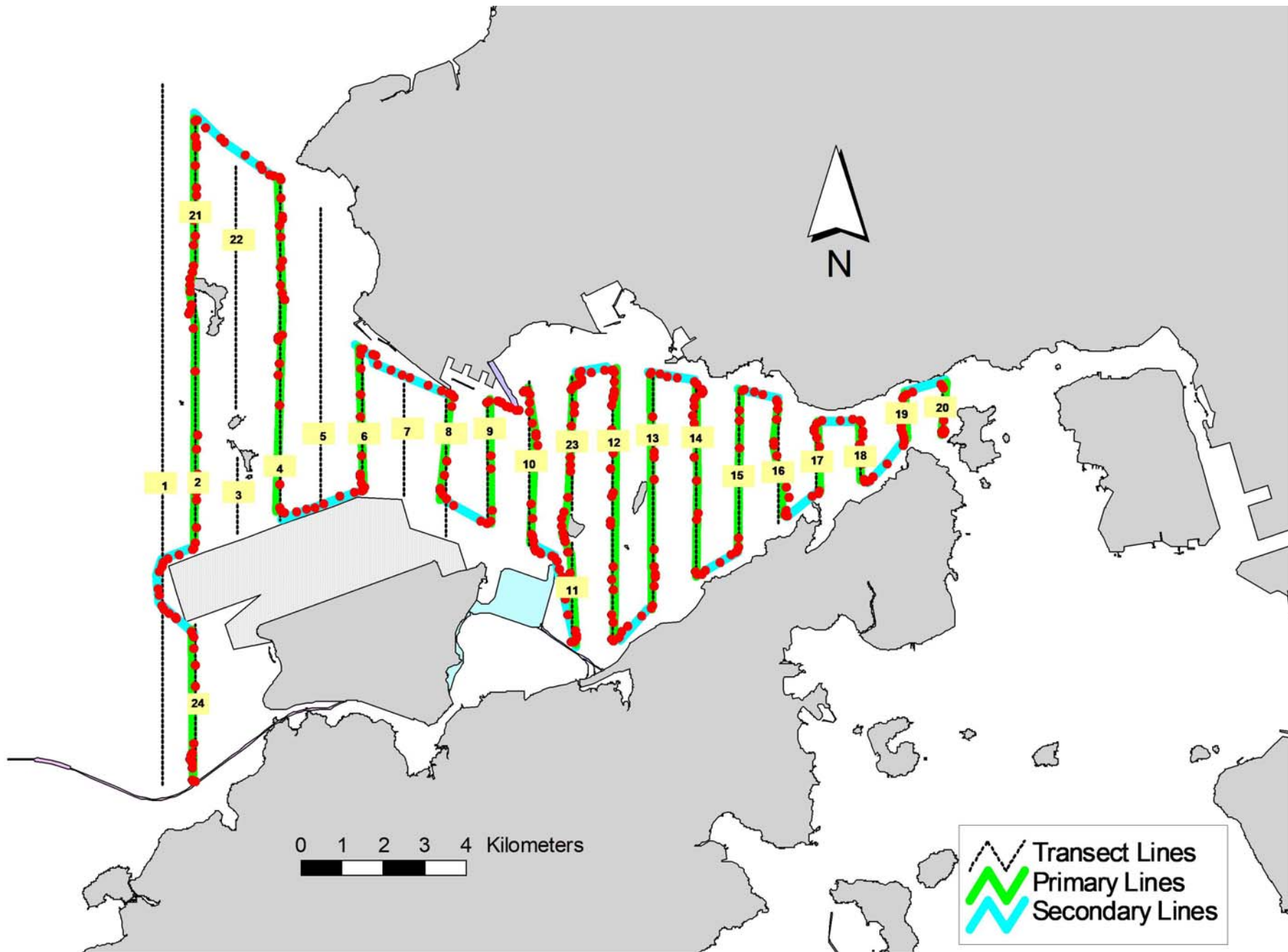


Figure 4. Survey Route on December 15th, 2017 (from HKLR03 project)

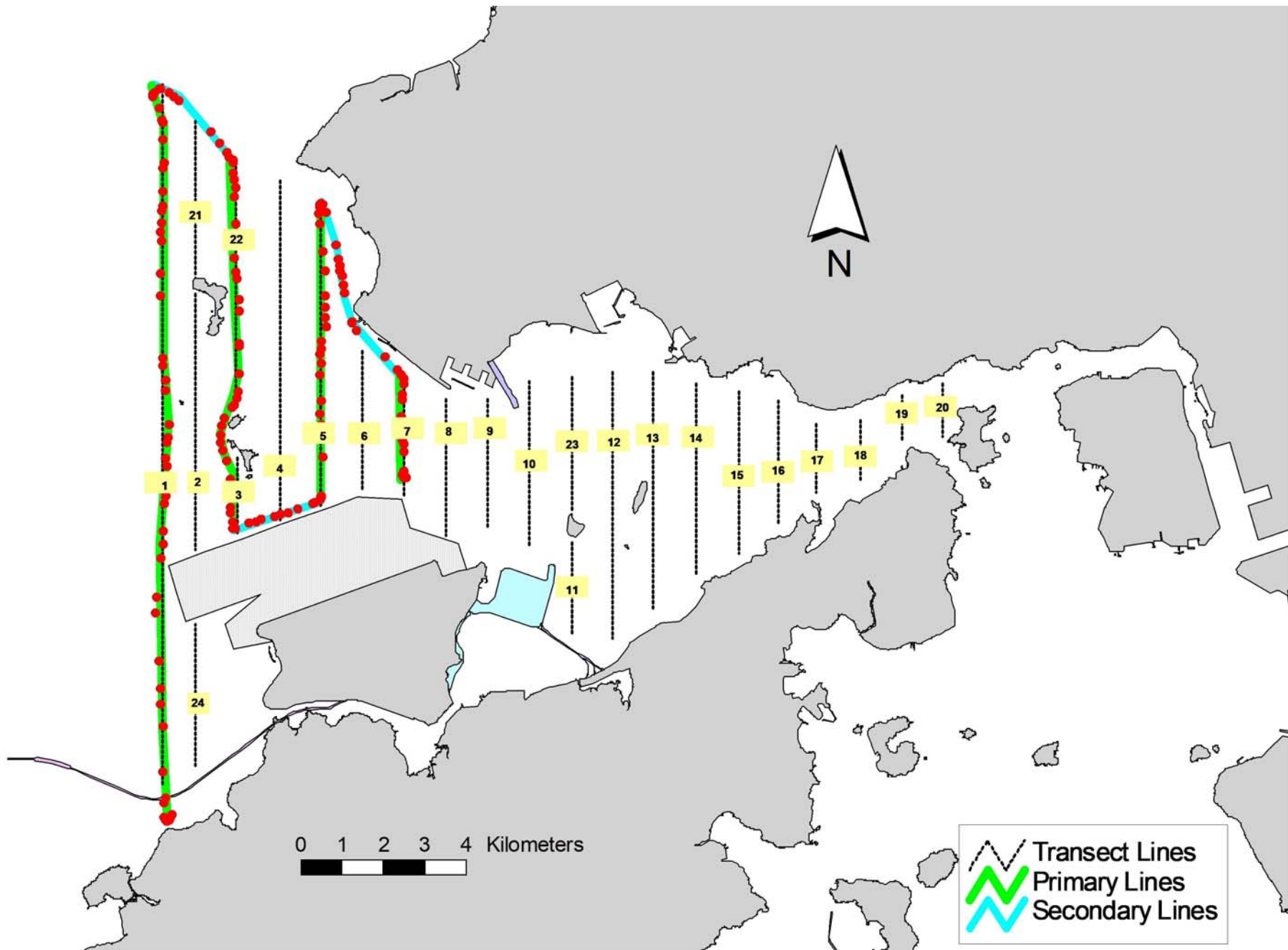


Figure 5. Survey Route on December 20th, 2017 (from HKLR03 project)

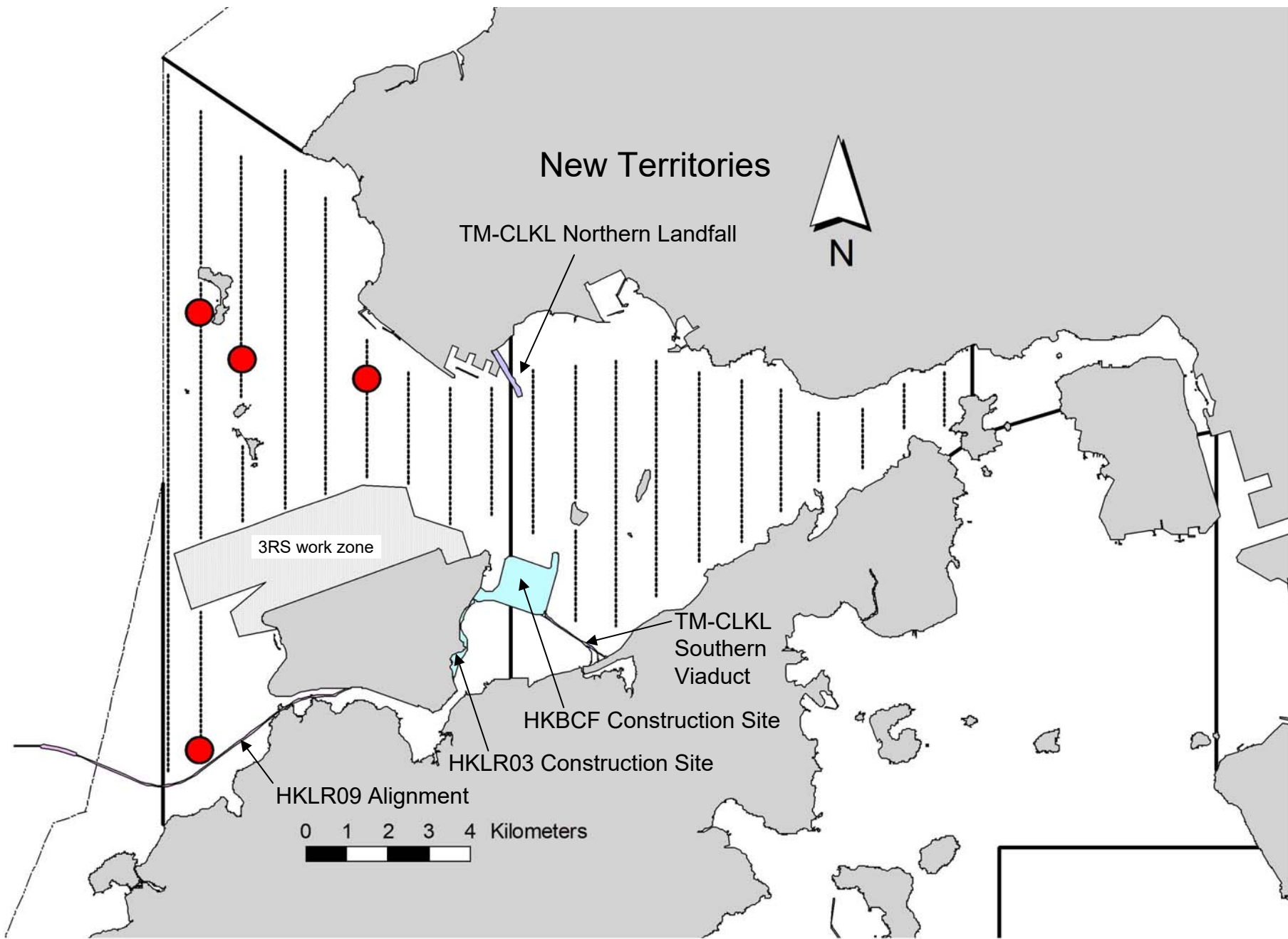


Figure 6. Distribution of Chinese White Dolphin Sightings during December 2017 HKLR03 Monitoring Surveys

Appendix I. HKLR03 Survey Effort Database (December 2017)

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

| DATE | AREA | BEAU | EFFORT | SEASON | VESSEL | TYPE | P/S |
|-----------|-----------|------|--------|--------|---------------|------|-----|
| 5-Dec-17 | NW LANTAU | 2 | 17.27 | WINTER | STANDARD36826 | HKLR | P |
| 5-Dec-17 | NW LANTAU | 3 | 15.02 | WINTER | STANDARD36826 | HKLR | P |
| 5-Dec-17 | NW LANTAU | 2 | 7.80 | WINTER | STANDARD36826 | HKLR | S |
| 5-Dec-17 | NW LANTAU | 3 | 3.81 | WINTER | STANDARD36826 | HKLR | S |
| 5-Dec-17 | NE LANTAU | 2 | 33.41 | WINTER | STANDARD36826 | HKLR | P |
| 5-Dec-17 | NE LANTAU | 3 | 2.11 | WINTER | STANDARD36826 | HKLR | P |
| 5-Dec-17 | NE LANTAU | 2 | 13.18 | WINTER | STANDARD36826 | HKLR | S |
| 5-Dec-17 | NE LANTAU | 3 | 0.60 | WINTER | STANDARD36826 | HKLR | S |
| 12-Dec-17 | NW LANTAU | 2 | 24.51 | WINTER | STANDARD36826 | HKLR | P |
| 12-Dec-17 | NW LANTAU | 3 | 3.30 | WINTER | STANDARD36826 | HKLR | P |
| 12-Dec-17 | NW LANTAU | 2 | 11.89 | WINTER | STANDARD36826 | HKLR | S |
| 12-Dec-17 | NW LANTAU | 3 | 0.90 | WINTER | STANDARD36826 | HKLR | S |
| 15-Dec-17 | NW LANTAU | 1 | 3.85 | WINTER | STANDARD36826 | HKLR | P |
| 15-Dec-17 | NW LANTAU | 2 | 21.86 | WINTER | STANDARD36826 | HKLR | P |
| 15-Dec-17 | NW LANTAU | 3 | 2.68 | WINTER | STANDARD36826 | HKLR | P |
| 15-Dec-17 | NW LANTAU | 1 | 2.79 | WINTER | STANDARD36826 | HKLR | S |
| 15-Dec-17 | NW LANTAU | 2 | 6.92 | WINTER | STANDARD36826 | HKLR | S |
| 15-Dec-17 | NW LANTAU | 3 | 2.43 | WINTER | STANDARD36826 | HKLR | S |
| 15-Dec-17 | NE LANTAU | 1 | 11.59 | WINTER | STANDARD36826 | HKLR | P |
| 15-Dec-17 | NE LANTAU | 2 | 21.70 | WINTER | STANDARD36826 | HKLR | P |
| 15-Dec-17 | NE LANTAU | 3 | 4.60 | WINTER | STANDARD36826 | HKLR | P |
| 15-Dec-17 | NE LANTAU | 1 | 3.31 | WINTER | STANDARD36826 | HKLR | S |
| 15-Dec-17 | NE LANTAU | 2 | 6.80 | WINTER | STANDARD36826 | HKLR | S |
| 15-Dec-17 | NE LANTAU | 3 | 1.90 | WINTER | STANDARD36826 | HKLR | S |
| 20-Dec-17 | NW LANTAU | 2 | 1.39 | WINTER | STANDARD36826 | HKLR | P |
| 20-Dec-17 | NW LANTAU | 3 | 5.99 | WINTER | STANDARD36826 | HKLR | P |
| 20-Dec-17 | NW LANTAU | 4 | 25.69 | WINTER | STANDARD36826 | HKLR | P |
| 20-Dec-17 | NW LANTAU | 3 | 5.43 | WINTER | STANDARD36826 | HKLR | S |
| 20-Dec-17 | NW LANTAU | 4 | 5.50 | WINTER | STANDARD36826 | HKLR | S |

Appendix II. HKLR03 Chinese White Dolphin Sighting Database (December 2017)

(Abbreviations: 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 Line)

| DATE | STG # | TIME | HRD SZ | AREA | BEAU | PSD | EFFORT | TYPE | NORTHING | EASTING | SEASON | BOAT ASSOC. | P/S |
|-----------|-------|------|--------|-----------|------|-----|--------|------|----------|---------|--------|-------------|-----|
| 5-Dec-17 | 1 | 1150 | 5 | NW LANTAU | 3 | 155 | ON | HKLR | 824890 | 806432 | WINTER | NONE | P |
| 15-Dec-17 | 1 | 1011 | 1 | NW LANTAU | 2 | 7 | ON | HKLR | 815955 | 805415 | WINTER | NONE | P |
| 15-Dec-17 | 2 | 1106 | 6 | NW LANTAU | 2 | 151 | ON | HKLR | 825966 | 805414 | WINTER | NONE | P |
| 15-Dec-17 | 3 | 1242 | 1 | NW LANTAU | 1 | 176 | ON | HKLR | 824441 | 809449 | WINTER | NONE | P |

Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in December 2017

| ID# | DATE | STG# | AREA |
|------------|-------------|-------------|-------------|
| CH34 | 15/12/17 | 2 | NW LANTAU |
| NL33 | 15/12/17 | 2 | NW LANTAU |
| NL46 | 05/12/17 | 1 | NW LANTAU |
| NL136 | 15/12/17 | 2 | NW LANTAU |
| NL182 | 15/12/17 | 2 | NW LANTAU |
| NL242 | 05/12/17 | 1 | NW LANTAU |
| NL259 | 05/12/17 | 1 | NW LANTAU |
| NL261 | 15/12/17 | 2 | NW LANTAU |
| NL296 | 05/12/17 | 1 | NW LANTAU |
| NL322 | 15/12/17 | 2 | NW LANTAU |
| WL62 | 15/12/17 | 3 | NW LANTAU |
| WL273 | 05/12/17 | 1 | NW LANTAU |



Appendix IV. Photographs of Identified Individual Dolphins in December 2017 (HKLR03)



Appendix IV. (cont'd)

Appendix L

Event Action Plan

Appendix L1 Event/ Action Plan for Air Quality

| EVENT | ET ⁽¹⁾ | ACTION | | |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | IEC ⁽¹⁾ | SOR ⁽¹⁾ | Contractor |
| Action Level | | | | |
| 1. Exceedance for one sample | <ol style="list-style-type: none"> 1. Identify the source. 2. Inform the IEC and the SOR. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily. | <ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check Contractor's working method. | <ol style="list-style-type: none"> 1. Notify Contractor. | <ol style="list-style-type: none"> 1. Rectify any unacceptable practice 2. Amend working methods if appropriate |
| 2. Exceedance for two or more consecutive samples | <ol style="list-style-type: none"> 1. Identify the source. 2. Inform the IEC and the SOR. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Discuss with the IEC and the Contractor on remedial actions required. 6. If exceedance continues, arrange meeting with the IEC and the SOR. 7. If exceedance stops, cease additional monitoring. | <ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check the Contractor's working method. 3. Discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented. | <ol style="list-style-type: none"> 1. Submit proposals for remedial actions to IEC within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate |

| EVENT | ET ⁽¹⁾ | ACTION | | |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | IEC ⁽¹⁾ | SOR ⁽¹⁾ | Contractor |
| Limit Level | | | | |
| 1. Exceedance for one sample | <ol style="list-style-type: none"> 1. Identify the source. 2. Inform the SOR and the DEP. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily. 5. Assess effectiveness of Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of the results. | <ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check Contractor's working method. 3. Discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures are properly implemented. | <ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Amend proposal if appropriate |
| 2. Exceedance for two or more consecutive samples | <ol style="list-style-type: none"> 1. Notify the IEC, the SOR, the DEP and the Contractor. 2. Identify the source. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented. 6. Arrange meeting with the IEC and the SOR to discuss the remedial actions to be taken. 7. Assess effectiveness of the Contractor's remedial actions | <ol style="list-style-type: none"> 1. Discuss amongst the SOR, ET and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the SOR accordingly. 3. Supervise the implementation of remedial measures. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. 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. | <ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial actions to IEC within 3 working days of notification. 3. Implement the agreed proposals. 4. Resubmit proposals if problem still not under control. 5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated. |

and keep the IEC, the DEP and
the SOR informed of the results.

8. If the exceedance stops, cease
additional monitoring.

Appendix L2 Event/ Action Plan for Construction Noise

| ACTION | | | | | |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| EVENT | ET | IEC | SOR | Contractor | |
| Action Level | <ol style="list-style-type: none"> 1. Notify the IEC and the Contractor. 2. Carry out investigation. 3. Report the results of investigation to the IEC and the Contractor. 4. Discuss with the Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation effectiveness. | <ol style="list-style-type: none"> 1. Review the analysed results submitted by the ET. 2. Review the proposed remedial measures by the Contractor and advise the SOR accordingly. 3. Supervise the implementation of remedial measures. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. | <ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC 2. Implement noise mitigation proposals | |
| Limit Level | <ol style="list-style-type: none"> 1. Notify the IEC, the SOR, the DEP and the Contractor. 2. Identify the source. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency. 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. Inform the IEC, the SOR and the DEP the causes & actions taken for the exceedances. 7. Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of the results. 8. If exceedance stops, cease additional monitoring. | <ol style="list-style-type: none"> 1. Discuss amongst the SOR, the ET and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the SOR accordingly. 3. Supervise the implementation of remedial measures. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 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. | <ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated. | |

Appendix L3 *Event/ Action Plan for Water Quality*

| Event | ET Leader | IEC | SOR | Contractor |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action level being exceeded by one sampling day | <ol style="list-style-type: none"> Repeat in situ measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor and SOR; Check monitoring data, all plant, equipment and Contractor's working methods. | <ol style="list-style-type: none"> Check monitoring data submitted by ET and Contractor's working methods. | <ol style="list-style-type: none"> Confirm receipt of notification of non-compliance in writing; Notify Contractor. | <ol style="list-style-type: none"> Inform the SOR and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Amend working methods if appropriate. |
| Action level being exceeded by two or more consecutive sampling days | <ol style="list-style-type: none"> Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor, SOR and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, SOR and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Action level; | <ol style="list-style-type: none"> Check monitoring data submitted by ET and Contractor's working method; Discuss with ET and Contractor on possible remedial actions; Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly; Supervise the implementation of mitigation measures. | <ol style="list-style-type: none"> Discuss with IEC on the proposed mitigation measures; Ensure mitigation measures are properly implemented; Assess the effectiveness of the implemented mitigation measures. | <ol style="list-style-type: none"> Inform the Supervising Officer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment and consider changes of working methods; Submit proposal of additional mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; Implement the agreed mitigation measures. |
| Limit level being exceeded by one sampling day | <ol style="list-style-type: none"> Repeat measurement on next day of exceedance to confirm findings; | <ol style="list-style-type: none"> Check monitoring data submitted by ET and Contractor's working method; | <ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; | <ol style="list-style-type: none"> Inform the SOR and confirm notification of the non-compliance in writing; |

| Event | ET Leader | IEC | SOR | Contractor |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| | 2. Identify source(s) of impact; | | 2. Discuss with IEC, ET and Contractor on the proposed mitigation measures; | 2. Rectify unacceptable practice; |
| | 3. Inform IEC, contractor, SOR and EPD; | 2. Discuss with ET and Contractor on possible remedial actions; | | 3. Check all plant and equipment and consider changes of working methods; |
| | 4. Check monitoring data, all plant, equipment and Contractor's working methods; | 3. Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly. | 3. Request Contractor to review the working methods. | 4. Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR. |
| | 5. Discuss mitigation measures with IEC, SOR and Contractor; | | | |
| Limit level being exceeded by two or more consecutive sampling days | 1. Repeat measurement on next day of exceedance to confirm findings; | 1. Check monitoring data submitted by ET and Contractor's working method; | 1. Discuss with IEC, ET and Contractor on the proposed mitigation measures; | 1. Take immediate action to avoid further exceedance; |
| | 2. Identify source(s) of impact; | | | 2. Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; |
| | 3. Inform IEC, contractor, SOR and EPD; | 2. Discuss with ET and Contractor on possible remedial actions; | 2. Request Contractor to critically review the working methods; | 3. Implement the agreed mitigation measures; |
| | 4. Check monitoring data, all plant, equipment and Contractor's working methods; | 3. Review the Contractor's mitigation measures whenever necessary to assure their effectiveness and advise the SOR accordingly; | 3. Make agreement on the mitigation measures to be implemented; | 4. Resubmit proposals of mitigation measures if problem still not under control; |
| | 5. Discuss mitigation measures with IEC, SOR and Contractor; | | 4. Ensure mitigation measures are properly implemented; | |
| | 6. Ensure mitigation measures are implemented; | 4. Supervise the implementation of mitigation measures. | 6. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the construction activities until no exceedance of Limit level. | 5. As directed by the Supervising Officer, to slow down or to stop all or part of the construction activities until no exceedance of Limit level. |
| | 7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days; | | | |

Appendix L4 Implementation of Event-Action Plan for Dolphin Monitoring

| Event | ET Leader | IEC | SOR | Contractor |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action Level | <ol style="list-style-type: none"> 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. | <ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and findings with the ET and the Contractor. | <ol style="list-style-type: none"> 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. | <ol style="list-style-type: none"> 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. |

| Event | ET Leader | IEC | SOR | Contractor |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Limit Level | <ol style="list-style-type: none"> 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, ER/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, ER/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. | <ol style="list-style-type: none"> 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, ER/SOR and 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 ER/SOR of the results and findings accordingly; 5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise ER/SOR the results and findings accordingly. | <ol style="list-style-type: none"> 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 ER/SOR is satisfied with the proposals for additional dolphin monitoring and/or any other mitigation measures submitted by ET and Contractor and verified by IEC, ER/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. | <ol style="list-style-type: none"> 1. Inform the ER/SOR and confirm notification of the non-compliance in writing; 2. Attend the meeting to discuss with ET, IEC and ER/SOR the necessity of additional dolphin monitoring and any other 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. |

Appendix L5 Event and Action Plan on Dolphin Acoustic Behaviour

| EVENT | ACTION | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | ET Leader | IEC | SO | Contractor |
| <p><u>Action Level</u></p> <p>With the numerical values presented in <i>Table 5.7 of Baseline Monitoring Report</i>, when any of the response variable for dolphin acoustic behaviour recorded in the construction phase monitoring is 20% lower or higher than that recorded in the baseline monitoring (see <i>Table 5.8 of Baseline Monitoring Report</i>), or when there is a difference of 20% in dolphin acoustic signal detection at nighttime period at Site C1 only, the action level should be triggered</p> | <ol style="list-style-type: none"> 1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SO and Contractor; 5. Check monitoring data; 6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary | <ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring with the ET and the Contractor; | <ol style="list-style-type: none"> 1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented. | <ol style="list-style-type: none"> 1. Inform the SO 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 SO; 3. Implement the agreed measures. |

| EVENT | ACTION | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | ET Leader | IEC | SO | Contractor |
| <p><u>Limit Level</u></p> <p>With the numerical values presented in Table 5.7 of <i>Baseline Monitoring Report</i>, when any of the response variable for dolphin acoustic behaviour recorded in the construction phase monitoring is 40% lower or higher than that recorded in the baseline monitoring (see Table 5.8 of <i>Baseline Monitoring Report</i>), or when there is a difference of 40% in dolphin acoustic signal detection at nighttime at Site C1 only, the limit level should be triggered</p> | <ol style="list-style-type: none"> 1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SO and Contractor; 5. Check monitoring data; 6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary 7. Discuss additional dolphin monitoring and any other potential mitigation measures (eg consider to temporarily stop relevant portion of construction activity) with the IEC and Contractor. | <ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring with the ET and the Contractor; 3. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise ER accordingly. | <ol style="list-style-type: none"> 1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented. | <ol style="list-style-type: none"> 1. Inform the SO 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 SO; 3. Implement the agreed measures. |

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, SO – Supervising Office, DEP – Director of Environmental Protection

Appendix M

Monthly Summary of Waste Flow Table

Contract No. : HY/2012/07

Tuen Mun Chek Lap Kok Link – Southern Connection Viaduct Section

Monthly Summary Waste Flow Table for 2017 (Year)

| Month/Material | Actual Quantities of Inert C&D Materials Generation | | | | | | Actual Quantities of C&D wastes Generation | | | | | | Actual Quantities of Recyclables Generation | | | |
|-------------------------------|-----------------------------------------------------|-------------------------------------|------------------------|--------------------------|--------------------------|-----------------------|--------------------------------------------|--------------------------|--------------------------|-------------------------|----------------|------------------|---------------------------------------------|---------------|----------------------------|------------|
| | Total Quantity Generated | Hard Rock and Large Broken Concrete | Reused in the Contract | Reused in other Projects | Disposed as Public Fills | Imported Fill | Marine Sediment, Cat. L | Marine Sediment, Cat. Mp | Marine Sediment, Cat. Mf | Marine Sediment, Cat. H | Chemical Waste | General Refuse | Metals | Felled trees | Paper/ cardboard packaging | Plastics |
| | sub-total | sub-total | sub-total | sub-total | sub-total | sub-total | | | | | | | | | 7kg/bag | 5kg/number |
| Location | | | | | | | | | | | | | | | | |
| Density (ton/m ³) | | | | | | | | | | | | | | | | |
| ID no. | | | | | | | | | | | (web record) | | | | | |
| Unit | ('000m ³) | ('000m ³) | ('000m ³) | ('000m ³) | ('000m ³) | ('000m ³) | ('000m ³) | ('000m ³) | ('000m ³) | ('000m ³) | ('000Kg) | ('000Kg) | ('000Kg) | ('000Kg) | ('000Kg) | ('000Kg) |
| Jan | 4.591 | 0.717 | 0.474 | - | 4.118 | - | - | - | - | 3.521 | 99.840 | - | - | 0.140 | - | - |
| Feb | 5.034 | 1.585 | 0.166 | - | 4.869 | - | 0.857 | - | - | - | 127.720 | - | - | 0.091 | - | - |
| Mar | 6.575 | 0.937 | 0.498 | - | 6.077 | - | 0.771 | - | - | 6.000 | 87.910 | - | - | 0.077 | - | - |
| Apr | 5.467 | 0.791 | 1.058 | - | 4.409 | - | - | - | - | - | 130.680 | - | 5.170 | 0.063 | - | - |
| May | 4.960 | 0.537 | 0.826 | - | 4.134 | - | 0.672 | - | - | - | 171.870 | - | - | 0.056 | - | - |
| Jun | 4.491 | 0.567 | 0.098 | - | 4.394 | - | - | - | - | - | 148.600 | - | - | 0.063 | - | - |
| SUB-TOTAL | 31.118 | 5.133 | 3.118 | - | 28.000 | 0.000 | 2.300 | - | - | 9.521 | 766.620 | - | 5.170 | 0.490 | - | - |
| Jul | 5.618 | 0.426 | 0.696 | 0.002 | 4.921 | - | 1.056 | - | - | 0.800 | 159.980 | - | - | 0.091 | - | - |
| Aug | 3.897 | 0.232 | - | - | 3.897 | - | - | - | - | - | 159.230 | - | - | 0.056 | - | - |
| Sep | 3.142 | 0.676 | - | - | 3.142 | - | 1.517 | 1.047 | 0.127 | - | 185.420 | - | 18.030 | 0.070 | - | - |
| Oct | 3.239 | 0.385 | 0.559 | - | 2.680 | - | - | - | - | - | 172.690 | - | - | 0.063 | - | - |
| Nov | 3.354 | 0.814 | 0.023 | - | 3.331 | - | - | - | - | 5.400 | 159.650 | - | 5.840 | 0.028 | - | - |
| Dec | 3.054 | 0.755 | 0.160 | 0.004 | 2.890 | - | - | - | - | 2.400 | 181.710 | - | 15.580 | 0.056 | - | - |
| TOTAL | 53.422 | 8.422 | 4.555 | 0.006 | 48.861 | - | 4.873 | 1.047 | - | 0.127 | 18.121 | 1,785.300 | - | 44.620 | 0.854 | - |

Notes :

- 1 - The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- 2 - Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- 3 - Broken concrete for recycling into aggregates.
- 4 - Assumed 5 kg per damaged water-filled barrier.
- 5 - Disposed as Public Fills includes Hard Rock and Large Broken Concrete.

Appendix N

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

Appendix N1 Cumulative Statistics on Exceedances

| | | Total No. recorded in this reporting month | Total No. recorded since project commencement |
|------------------------------|--------|-----------------------------------------------|-----------------------------------------------------|
| 1-Hr TSP | Action | 0 | 0 |
| | Limit | 0 | 0 |
| 24-Hr TSP | Action | 0 | 2 |
| | Limit | 0 | 0 |
| Noise | Action | 0 | 0 |
| | Limit | 0 | 0 |
| Water Quality | Action | 2 | 134 |
| | Limit | 0 | 15 |
| Impact Dolphin Monitoring | Action | 0 | 9 |
| | Limit | 0 | 11 |

Appendix N2 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

| Reporting Period | Cumulative Statistics | | |
|-----------------------------------------------------|-----------------------|-----------------------------|----------------------------|
| | Complaints | Notifications of Summons | Successful Prosecutions |
| This Reporting Month (December 2017) | 0 | 0 | 0 |
| Total No. received since project commencement | 11 | 0 | 0 |

Email
message

Environmental
Resources
Management

To Ramboll Environ – Hong Kong, Limited (ENPO)

16/F Berkshire House,
25 Westlands Road
Quarry Bay, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jovy.tam@erm.com

From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2012/07
Tuen Mun – Chek Lap Kok Link – Southern
Connection Viaduct Section

Subject Notification of Exceedance for Marine Water
Quality Impact Monitoring



ERM

Date 12 December 2017

Dear Sir/ Madam,

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

Action Level Exceedance
0215660_6 December 2017_Depth-averaged SS_F_Station IS8

A total of one (1) exceedance was recorded on 6 December 2017.

Regards,

A handwritten signature in black ink, appearing to be 'Jovy Tam', written in a cursive style.

Mr Jovy Tam
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/07

TUEN MUN - CHEK LAP KOK LINK -
SOUTHERN CONNECTION VIADUCT SECTION

Marine Water Quality Impact Monitoring

Notification of Exceedance

| | | |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Log No. | <p><u>Action Level Exceedance</u> 0215660_6 December 2017_Depth-averaged SS_F_Station IS8</p> <p>[Total No. of Exceedances = 1]</p> | |
| Date | <p>6 December 2017 (Measured) 7 December 2017 (<i>In situ</i> results received by ERM) 12 December 2017 (Laboratory results received by ERM)</p> | |
| Monitoring Station | <p>CS(Mf)5, SR4a, SR4, IS8, IS(Mf)16, IS(Mf)9, CS(Mf)3(N)</p> | |
| Parameter(s) with Exceedance(s) | <p>Depth-averaged Suspended Solids (SS)</p> | |
| Action Levels for SS | SS | 120% of upstream control station at the same tide of the same day and 95%-ile of baseline data (i.e., 23.5 mg/L). |
| Limit Levels for SS | SS | 130% of upstream control station at the same tide of the same day and 99%-ile of baseline data. (i.e., 34.4 mg/L) |
| Measured Levels | <p><u>Action Level Exceedance</u> 1. Mid-flood at IS8 (Depth-averaged SS = 23.8mg/L).</p> | |
| Works Undertaken (at the time of monitoring event) | <p>No major marine works was undertaken under this Contract on 6 December 2017.</p> | |
| Possible Reason for Action or Limit Level Exceedance(s) | <p>The exceedances of depth-averaged SS are unlikely to be due to the Project, in view of the following:</p> <ul style="list-style-type: none"> • No marine works was undertaken under this Contract on 6 December 2017. • Apart from IS8, depth-averaged SS levels at all other monitoring stations were in compliance with the Action and Limit Levels during both mid-flood and mid-ebb tides on the same day. • Depth-averaged Turbidity levels and average DO levels at all stations were in compliance with the Action and Limit Levels during both mid-ebb and mid-flood tides on the same day. | |
| Actions Taken/ To Be Taken | <p>No immediate action is considered necessary. The ET will monitor for future trends in exceedances.</p> | |
| Remarks | <p>The monitoring results on 6 December 2017 and locations of water quality monitoring stations are attached. Site photo record on 6 December 2017 is attached.</p> | |

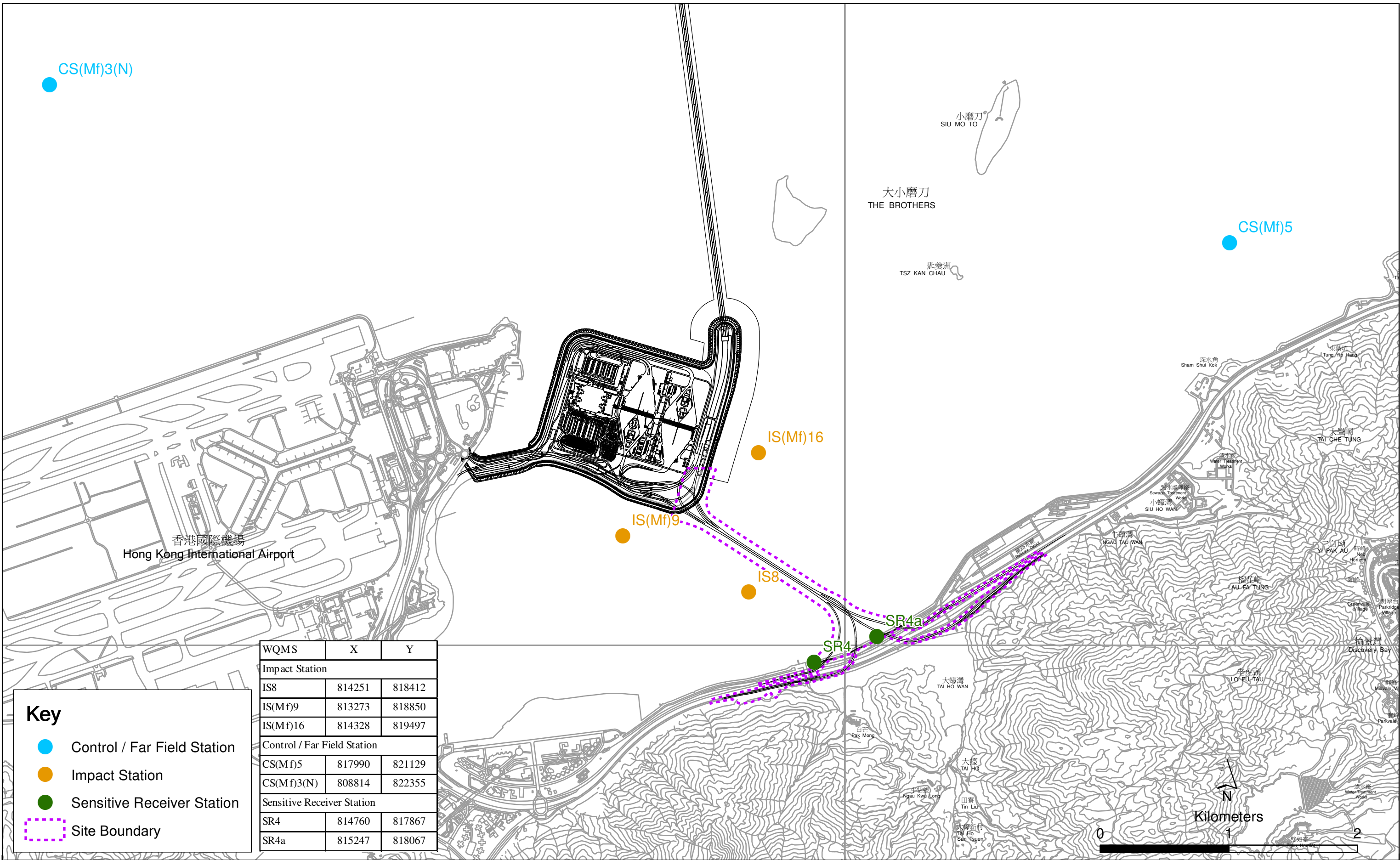
| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Level | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO (mg/L) | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|---------|-----------|------------------|-----|----------------|-----------|-------------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | Surface | 1 | 22.4 | 8.1 | 32.6 | 6.7 | 6.6 | 4.6 | 8.9 | 4.3 | 5.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | Surface | 2 | 22.5 | 8.0 | 32.4 | 6.7 | | 4.6 | | 4.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | Middle | 1 | 22.0 | 8.1 | 32.6 | 6.5 | | 3.3 | | 6.1 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | Middle | 2 | 22.1 | 8.0 | 32.4 | 6.5 | 6.5 | 3.3 | 19.0 | 5.7 | 20.1 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | Bottom | 1 | 21.9 | 8.1 | 32.6 | 6.5 | | 18.9 | | 6.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)5 | 14:56 | Bottom | 2 | 22.0 | 8.0 | 32.5 | 6.4 | 6.9 | 18.9 | 19.0 | 8.1 | 20.1 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | Surface | 1 | 21.6 | 8.2 | 32.1 | 6.9 | | 13.7 | | 13.9 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | Surface | 2 | 21.9 | 8.0 | 30.3 | 6.9 | | 14.0 | | 12.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | Middle | 1 | 21.4 | 8.2 | 32.1 | 6.8 | 6.9 | 20.6 | 19.0 | 15.3 | 20.1 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | Middle | 2 | 21.7 | 8.0 | 30.3 | 6.9 | | 20.6 | | 15.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | Bottom | 1 | 21.4 | 8.2 | 32.1 | 6.8 | 6.9 | 22.5 | 19.0 | 31.3 | 20.1 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | CS(Mf)3(N) | 13:38 | Bottom | 2 | 21.6 | 8.0 | 30.2 | 6.9 | | 22.8 | | 32.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | Surface | 1 | 22.0 | 8.1 | 32.4 | 7.1 | 7.0 | 3.8 | 9.4 | 6.1 | 7.3 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | Surface | 2 | 22.1 | 8.0 | 32.2 | 7.1 | | 3.8 | | 5.7 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | Middle | 1 | 21.6 | 8.1 | 32.4 | 6.9 | | 6.2 | | 8.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | Middle | 2 | 21.7 | 8.0 | 32.2 | 6.9 | 7.0 | 6.2 | 9.4 | 6.4 | 7.3 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | Bottom | 1 | 21.5 | 8.1 | 32.4 | 7.0 | | 18.2 | | 7.9 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)16 | 14:24 | Bottom | 2 | 21.6 | 8.0 | 32.2 | 6.9 | 7.0 | 18.2 | 9.4 | 9.2 | 7.3 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | Surface | 1 | 21.8 | 8.1 | 32.5 | 6.9 | | 9.3 | | 13.7 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | Surface | 2 | 21.9 | 8.0 | 32.3 | 6.9 | 6.9 | 10.8 | 10.9 | 12.2 | 14.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | Bottom | 1 | 21.7 | 8.1 | 32.5 | 7.0 | 7.0 | 10.5 | 10.9 | 15.9 | 14.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4a | 14:11 | Bottom | 2 | 21.8 | 8.0 | 32.3 | 6.9 | | 13.0 | | 14.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | Surface | 1 | 21.9 | 8.1 | 32.5 | 6.8 | 6.8 | 10.9 | 12.7 | 10.8 | 13.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | Surface | 2 | 22.0 | 8.0 | 32.3 | 6.8 | | 10.0 | | 10.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | | Middle | 2 | | | | | 7.0 | | 12.7 | | 13.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | Bottom | 1 | 21.8 | 8.1 | 32.5 | 7.0 | | 14.3 | | 17.0 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | SR4 | 14:06 | Bottom | 2 | 21.9 | 8.0 | 32.3 | 6.9 | 6.9 | 15.5 | 19.9 | 17.0 | 23.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | Surface | 1 | 21.7 | 8.1 | 32.4 | 6.9 | | 19.6 | | 22.7 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | Surface | 2 | 21.8 | 8.0 | 32.2 | 6.9 | | 20.1 | | 20.8 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | | Middle | 1 | | | | | 7.0 | | 19.9 | | 23.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | Bottom | 1 | 21.6 | 8.1 | 32.4 | 7.0 | 7.0 | 19.3 | 19.9 | 24.0 | 23.0 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS8 | 13:57 | Bottom | 2 | 21.7 | 8.0 | 32.3 | 6.9 | | 20.4 | | 24.6 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | Surface | 1 | 21.8 | 8.1 | 32.5 | 7.0 | 7.0 | 8.2 | 9.1 | 8.1 | 8.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | Surface | 2 | 21.9 | 8.1 | 32.3 | 7.0 | | 8.9 | | 9.4 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | | Middle | 2 | | | | | 7.1 | | 9.1 | | 8.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | Bottom | 1 | 21.7 | 8.1 | 32.5 | 7.1 | | 9.7 | | 8.4 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Ebb | IS(Mf)9 | 13:47 | Bottom | 2 | 21.9 | 8.1 | 32.3 | 7.1 | 7.1 | 9.5 | 7.7 | | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Level | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO (mg/L) | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|---------|-----------|------------------|-----|----------------|-----------|-------------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | Surface | 1 | 21.8 | 8.1 | 32.4 | 6.7 | 6.7 | 5.4 | 9.4 | 11.9 | 12.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | Surface | 2 | 21.9 | 8.0 | 32.2 | 6.7 | | 5.8 | | 12.4 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | Middle | 1 | 21.7 | 8.1 | 32.4 | 6.7 | | 7.0 | | 12.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | Middle | 2 | 21.8 | 8.1 | 32.3 | 6.7 | | 7.7 | | 11.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | Bottom | 1 | 21.6 | 8.1 | 32.4 | 6.7 | | 15.2 | | 12.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)5 | 8:56 | Bottom | 2 | 21.7 | 8.1 | 32.3 | 6.7 | | 15.4 | | 14.2 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | Surface | 1 | 21.6 | 8.0 | 31.6 | 6.6 | 6.7 | 22.4 | 23.6 | 24.4 | 23.9 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | Surface | 2 | 21.8 | 7.9 | 30.1 | 6.7 | | 22.7 | | 22.4 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | Middle | 1 | 21.6 | 8.0 | 31.6 | 6.6 | | 23.7 | | 24.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | Middle | 2 | 21.8 | 7.9 | 30.1 | 6.7 | | 23.6 | | 22.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | Bottom | 1 | 21.6 | 8.0 | 31.6 | 6.6 | | 24.8 | | 25.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | CS(Mf)3(N) | 9:48 | Bottom | 2 | 21.8 | 7.9 | 30.1 | 6.6 | | 24.5 | | 24.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | Surface | 1 | 21.4 | 8.1 | 32.3 | 6.9 | 6.9 | 11.3 | 14.2 | 11.8 | 12.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | Surface | 2 | 21.5 | 8.1 | 32.2 | 6.9 | | 12.4 | | 11.7 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | Bottom | 1 | 21.4 | 8.1 | 32.4 | 6.9 | | 16.0 | | 14.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)16 | 9:20 | Bottom | 2 | 21.5 | 8.1 | 32.2 | 6.9 | | 17.1 | | 13.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | Surface | 1 | 21.5 | 8.1 | 32.5 | 6.7 | 6.7 | 8.9 | 8.1 | 11.3 | 12.9 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | Surface | 2 | 21.6 | 8.0 | 32.3 | 6.7 | | 8.9 | | 10.9 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | Bottom | 1 | 21.5 | 8.1 | 32.5 | 6.8 | | 7.3 | | 14.7 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4a | 9:29 | Bottom | 2 | 21.6 | 8.0 | 32.3 | 6.8 | | 7.3 | | 14.8 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | Surface | 1 | 21.5 | 8.1 | 32.5 | 6.7 | 6.7 | 9.2 | 10.2 | 10.6 | 11.6 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | Surface | 2 | 21.6 | 8.0 | 32.3 | 6.6 | | 10.1 | | 10.9 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | Bottom | 1 | 21.5 | 8.1 | 32.5 | 6.8 | | 10.3 | | 11.7 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | SR4 | 9:34 | Bottom | 2 | 21.6 | 8.0 | 32.3 | 6.7 | | 11.0 | | 13.0 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | Surface | 1 | 21.5 | 8.1 | 32.5 | 6.7 | 6.7 | 19.7 | 22.9 | 22.4 | 23.8 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | Surface | 2 | 21.6 | 8.0 | 32.3 | 6.7 | | 19.8 | | 23.3 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | Bottom | 1 | 21.5 | 8.1 | 32.5 | 6.9 | | 26.1 | | 24.5 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS8 | 9:43 | Bottom | 2 | 21.6 | 8.0 | 32.3 | 6.9 | | 25.8 | | 25.0 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | Surface | 1 | 21.5 | 8.1 | 32.5 | 6.8 | 6.8 | 15.2 | 16.8 | 22.7 | 22.4 |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | Surface | 2 | 21.6 | 8.0 | 32.3 | 6.8 | | 17.2 | | 22.6 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | Bottom | 1 | 21.5 | 8.1 | 32.5 | 6.8 | | 17.2 | | 21.6 | |
| TMCLKL | HY/2012/07 | 2017-12-06 | Mid-Flood | IS(Mf)9 | 9:53 | Bottom | 2 | 21.6 | 8.0 | 32.3 | 6.8 | | 17.5 | | 22.7 | |

Note: Indicates Exceedance of Action Level
Indicates Exceedance of Limit Level

Photo 1 - Mid-Flood at IS8 on 6 December 2017





| WQMS | X | Y |
|-----------------------------|--------|--------|
| Impact Station | | |
| IS8 | 814251 | 818412 |
| IS(Mf)9 | 813273 | 818850 |
| IS(Mf)16 | 814328 | 819497 |
| Control / Far Field Station | | |
| CS(Mf)5 | 817990 | 821129 |
| CS(Mf)3(N) | 808814 | 822355 |
| Sensitive Receiver Station | | |
| SR4 | 814760 | 817867 |
| SR4a | 815247 | 818067 |

Key

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary

Locations of Water Quality Monitoring Stations

Email
message

Environmental
Resources
Management

To Ramboll Environ – Hong Kong, Limited (ENPO)

16/F Berkshire House,
25 Westlands Road
Quarry Bay, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jovy.tam@erm.com

From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2012/07
Tuen Mun – Chek Lap Kok Link – Southern
Connection Viaduct Section

Subject Notification of Exceedance for Marine Water
Quality Impact Monitoring



ERM

Date 15 December 2017

Dear Sir/ Madam,

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

Action Level Exceedance
0215660_8 December 2017_Depth-averaged SS_F_Station IS8

A total of one (1) exceedance was recorded on 8 December 2017.

Regards,

A handwritten signature in black ink, appearing to be 'Jovy Tam', written in a cursive style.

Mr Jovy Tam
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/07

TUEN MUN – CHEK LAP KOK LINK –
SOUTHERN CONNECTION VIADUCT SECTION

Marine Water Quality Impact Monitoring

Notification of Exceedance

| | | |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Log No. | <u>Action Level Exceedance</u> 0215660_8 December 2017_Depth-averaged SS_F_Station IS8 [Total No. of Exceedances = 1] | |
| Date | 8 December 2017 (Measured) 9 December 2017 (<i>In situ</i> results received by ERM) 14 December 2017 (Laboratory results received by ERM) | |
| Monitoring Station | CS(Mf)5, SR4a, SR4, IS8, IS(Mf)16, IS(Mf)9, CS(Mf)3(N) | |
| Parameter(s) with Exceedance(s) | Depth-averaged Suspended Solids (SS) | |
| Action Levels for SS | SS | 120% of upstream control station at the same tide of the same day and 95%-ile of baseline data (i.e., 23.5 mg/L). |
| Limit Levels for SS | SS | 130% of upstream control station at the same tide of the same day and 99%-ile of baseline data. (i.e., 34.4 mg/L) |
| Measured Levels | <u>Action Level Exceedance</u> 1. Mid-flood at IS8 (Depth-averaged SS = 32.8mg/L). | |
| Works Undertaken (at the time of monitoring event) | No major marine works was undertaken under this Contract on 8 December 2017. | |
| Possible Reason for Action or Limit Level Exceedance(s) | The exceedances of depth-averaged SS are unlikely to be due to the Project, in view of the following: <ul style="list-style-type: none"> • No marine works was undertaken under this Contract on 8 December 2017. • Apart from IS8, depth-averaged SS levels at all other sensitive receiver stations and impact stations were in compliance with the Action and Limit Levels during both mid-flood and mid-ebb tides on the same day. • Depth-averaged Turbidity levels and average DO levels at all stations were in compliance with the Action and Limit Levels during both mid-ebb and mid-flood tides on the same day. | |
| Actions Taken/ To Be Taken | No immediate action is considered necessary. The ET will monitor for future trends in exceedances. | |
| Remarks | The monitoring results on 8 December 2017 and locations of water quality monitoring stations are attached. Site photo record on 8 December 2017 is attached. | |

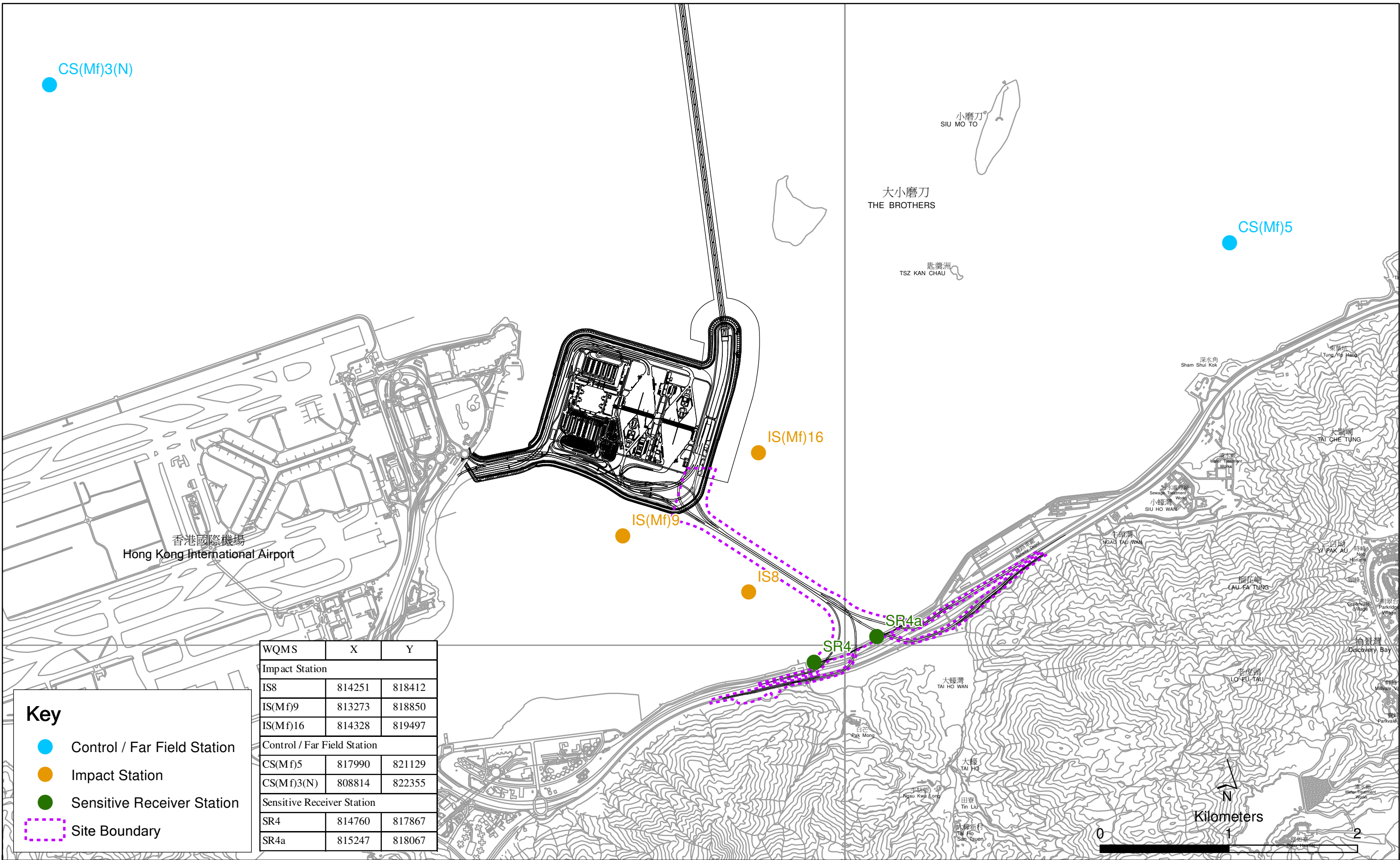
| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Level | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO (mg/L) | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|---------|------------|------------|---------|-----------|------------------|-----|----------------|-----------|-------------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | Surface | 1 | 21.6 | 8.1 | 32.1 | 6.7 | 6.7 | 4.1 | 4.2 | 10.9 | 11.0 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | Surface | 2 | 21.5 | 8.1 | 32.3 | 6.7 | | 4.1 | | 9.5 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | Middle | 1 | 21.6 | 8.1 | 32.2 | 6.7 | | 4.2 | | 9.0 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | Middle | 2 | 21.5 | 8.1 | 32.4 | 6.8 | 6.8 | 4.2 | 4.2 | 9.1 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | Bottom | 1 | 21.5 | 8.1 | 32.1 | 6.8 | | 4.1 | | 14.5 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)5 | 16:28 | Bottom | 2 | 21.4 | 8.1 | 32.2 | 6.8 | 6.9 | 4.2 | 25.1 | 13.2 | 25.8 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | Surface | 1 | 21.1 | 8.2 | 31.2 | 6.9 | | 22.5 | | 24.6 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | Surface | 2 | 21.3 | 8.0 | 29.4 | 7.0 | | 22.9 | | 23.9 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | Middle | 1 | 21.0 | 8.2 | 31.3 | 6.9 | 7.0 | 23.1 | 25.1 | 25.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | Middle | 2 | 21.3 | 8.1 | 29.5 | 6.9 | | 24.3 | | 25.8 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | Bottom | 1 | 20.9 | 8.0 | 31.4 | 6.9 | 7.0 | 27.9 | 25.1 | 27.7 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | CS(Mf)3(N) | 15:19 | Bottom | 2 | 21.1 | 8.0 | 29.5 | 7.0 | | 29.7 | | 27.5 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | Surface | 1 | 21.3 | 8.1 | 31.6 | 7.0 | 7.0 | 5.8 | 5.7 | 9.4 | 10.2 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | Surface | 2 | 21.2 | 8.1 | 31.8 | 7.0 | | 5.8 | | 8.9 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | | Middle | 2 | | | | | 7.0 | | 5.7 | | 10.2 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | Bottom | 1 | 21.3 | 8.1 | 31.6 | 7.0 | | 5.5 | | 11.6 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)16 | 16:04 | Bottom | 2 | 21.2 | 8.1 | 31.8 | 7.0 | | 5.6 | | 10.9 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | Surface | 1 | 21.2 | 8.1 | 31.6 | 7.1 | 7.1 | 7.6 | 7.6 | 13.0 | 13.4 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | Surface | 2 | 21.1 | 8.1 | 31.8 | 7.1 | | 7.6 | | 13.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | | Middle | 2 | | | | | 7.1 | | 7.6 | | 13.4 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | Bottom | 1 | 21.2 | 8.1 | 31.6 | 7.1 | | 7.6 | | 13.9 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4a | 15:53 | Bottom | 2 | 21.1 | 8.1 | 31.7 | 7.1 | | 7.6 | | 13.2 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | Surface | 1 | 21.4 | 8.1 | 31.8 | 7.0 | 7.0 | 10.0 | 10.1 | 19.3 | 18.7 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | Surface | 2 | 21.3 | 8.1 | 31.9 | 7.0 | | 10.0 | | 18.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | | Middle | 2 | | | | | 7.0 | | 10.1 | | 18.7 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | Bottom | 1 | 21.4 | 8.1 | 31.8 | 7.0 | | 10.1 | | 19.2 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | SR4 | 15:48 | Bottom | 2 | 21.3 | 8.1 | 31.9 | 7.0 | | 10.1 | | 17.8 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | Surface | 1 | 21.4 | 8.1 | 31.7 | 7.0 | 7.0 | 19.3 | 19.5 | 13.9 | 15.4 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | Surface | 2 | 21.3 | 8.1 | 31.8 | 7.0 | | 19.4 | | 12.1 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | | Middle | 2 | | | | | 7.0 | | 19.5 | | 15.4 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | Bottom | 1 | 21.4 | 8.1 | 31.6 | 7.0 | | 19.6 | | 17.1 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS8 | 15:41 | Bottom | 2 | 21.3 | 8.1 | 31.8 | 7.0 | | 19.6 | | 18.5 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | Surface | 1 | 21.3 | 8.1 | 31.8 | 7.0 | 7.0 | 6.5 | 6.6 | 12.9 | 13.7 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | Surface | 2 | 21.2 | 8.1 | 32.0 | 7.0 | | 6.5 | | 13.0 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | | Middle | 2 | | | | | 7.1 | | 6.6 | | 13.7 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | Bottom | 1 | 21.3 | 8.1 | 31.9 | 7.1 | | 6.6 | | 14.0 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Ebb | IS(Mf)9 | 15:31 | Bottom | 2 | 21.2 | 8.1 | 32.0 | 7.0 | | 6.7 | | 14.8 | |

| Project | Works | Date (yyyy-mm-dd) | Tide | Station | Start Time | Level | Replicate | Temperature (°C) | pH | Salinity (ppt) | DO (mg/L) | Average DO (mg/L) | Turbidity (NTU) | Depth-Averaged Turbidity | SS (mg/L) | Depth-Averaged SS |
|---------|------------|-------------------|-----------|------------|------------|---------|-----------|------------------|-----|----------------|-----------|-------------------|-----------------|--------------------------|-----------|-------------------|
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | Surface | 1 | 21.4 | 8.2 | 31.7 | 6.8 | 6.8 | 8.0 | 7.6 | 14.0 | 14.5 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | Surface | 2 | 21.3 | 8.1 | 31.9 | 6.8 | | 7.4 | | 15.2 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | Middle | 1 | 21.4 | 8.2 | 31.7 | 6.8 | 8.2 | 14.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | Middle | 2 | 21.3 | 8.1 | 31.9 | 6.8 | 7.4 | 14.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | Bottom | 1 | 21.4 | 8.2 | 31.7 | 6.8 | 7.7 | 14.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)5 | 10:22 | Bottom | 2 | 21.3 | 8.1 | 31.9 | 6.8 | 7.1 | 13.8 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | Surface | 1 | 21.1 | 8.1 | 31.1 | 6.8 | 6.8 | 21.6 | 23.9 | 24.7 | 25.3 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | Surface | 2 | 21.4 | 7.9 | 30.1 | 6.8 | | 21.2 | | 25.6 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | Middle | 1 | 21.1 | 8.1 | 31.2 | 6.8 | 24.1 | 24.8 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | Middle | 2 | 21.4 | 7.9 | 30.1 | 6.8 | 23.1 | 25.0 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | Bottom | 1 | 21.1 | 8.1 | 31.2 | 6.7 | 27.1 | 25.3 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | CS(Mf)3(N) | 12:16 | Bottom | 2 | 21.4 | 7.9 | 30.1 | 6.8 | 26.4 | 26.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | Surface | 1 | 21.2 | 8.1 | 31.6 | 6.9 | 6.9 | 9.0 | 8.8 | 11.2 | 13.2 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | Surface | 2 | 21.1 | 8.1 | 31.8 | 6.9 | | 9.0 | | 10.4 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | Bottom | 1 | 21.2 | 8.1 | 31.6 | 6.9 | 8.5 | 15.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)16 | 10:48 | Bottom | 2 | 21.1 | 8.1 | 31.8 | 6.9 | 8.8 | 15.2 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | Surface | 1 | 21.2 | 8.1 | 31.8 | 6.9 | 6.9 | 11.4 | 11.4 | 15.4 | 16.0 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | Surface | 2 | 21.1 | 8.1 | 32.0 | 6.9 | | 11.8 | | 15.2 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | Bottom | 1 | 21.2 | 8.1 | 31.8 | 6.9 | 11.1 | 16.9 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4a | 10:56 | Bottom | 2 | 21.1 | 8.1 | 32.0 | 6.9 | 11.1 | 16.3 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | Surface | 1 | 21.1 | 8.1 | 32.0 | 6.8 | 6.8 | 15.5 | 15.4 | 21.1 | 21.7 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | Surface | 2 | 21.0 | 8.1 | 32.1 | 6.8 | | 15.5 | | 21.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | Bottom | 1 | 21.1 | 8.1 | 32.0 | 6.8 | 15.3 | 22.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | SR4 | 11:00 | Bottom | 2 | 21.0 | 8.1 | 32.1 | 6.8 | 15.3 | 22.1 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | Surface | 1 | 21.2 | 8.1 | 32.0 | 6.9 | 6.9 | 21.8 | 22.0 | 32.7 | 32.8 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | Surface | 2 | 21.1 | 8.1 | 32.2 | 6.9 | | 21.8 | | 32.3 | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | | Middle | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | | Middle | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | Bottom | 1 | 21.2 | 8.1 | 32.0 | 6.9 | 22.1 | 33.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS8 | 11:12 | Bottom | 2 | 21.1 | 8.1 | 32.2 | 6.9 | 22.1 | 32.5 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | | Surface | 1 | | | | | 7.0 | | 10.6 | | 14.0 |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | | Surface | 2 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | 11:20 | Middle | 1 | 21.2 | 8.1 | 32.1 | 7.0 | 10.6 | 14.4 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | 11:20 | Middle | 2 | 21.1 | 8.1 | 32.2 | 7.0 | 10.6 | 13.6 | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | | Bottom | 1 | | | | | | | | | |
| TMCLKL | HY/2012/07 | 2017-12-08 | Mid-Flood | IS(Mf)9 | | Bottom | 2 | | | | | | | | | |

Note: Indicates Exceedance of Action Level
Indicates Exceedance of Limit Level

Photo 1 - Mid-Flood at IS8 on 8 December 2017





| WQMS | X | Y |
|-----------------------------|--------|--------|
| Impact Station | | |
| IS8 | 814251 | 818412 |
| IS(Mf)9 | 813273 | 818850 |
| IS(Mf)16 | 814328 | 819497 |
| Control / Far Field Station | | |
| CS(Mf)5 | 817990 | 821129 |
| CS(Mf)3(N) | 808814 | 822355 |
| Sensitive Receiver Station | | |
| SR4 | 814760 | 817867 |
| SR4a | 815247 | 818067 |

Key

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary

Locations of Water Quality Monitoring Stations