

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

*Fifteenth Monthly EM&A Report*

11 February 2015

**Environmental Resources Management**  
16/F, Berkshire House  
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Quarry Bay, Hong Kong  
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*www.erm.com*





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

**Environmental Resources  
Management**

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*Fifteenth Monthly EM&A Report*

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Client:  Gammon		Project No:  0215660			
Summary:  This document presents the Fifteenth Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section.		Date: 11 February 2015			
		Approved by: 			
		Mr Craig Reid Partner			
		Certified by: 			
		Mr Jovy Tam ET Leader			
	Fifteenth Monthly EM&A Report	VAR	JT	CAR	11/02/15
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>			
		 			

Ref.: HYDHZMBEEM00\_0\_2714L.15

12 February 2015

AECOM  
Supervising Officer 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**

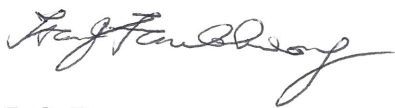
**Contract No. HY/2012/07  
Tuen Mun – Chek Lap Kok Link  
Southern Connection Viaduct Section  
Monthly EM&A report for January 2015 (EP-354/2009/C)**

Reference is made to the Monthly Environmental Monitoring and Audit (EM&A) Report (January 2015) certified by the ET Leader (ERM reference: 0215660\_15th Monthly EM&A 20150211.doc dated 11 February 2015) provided to us via email on 11 February 2015.

We are pleased to inform you that we have no adverse comment on the captioned monthly EM&A report. We write to verify the captioned submission in accordance with Condition 4.4 of EP-354/2009/C.

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

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. Matthew Fung (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, SLUI, ENPO Site

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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). 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* and *EP-354/2009/C*, were granted on 28 January 2014 and 10 December 2014, respectively.

The construction phase of the Contract commenced on 31 October 2013 and will tentatively be 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 Fifteenth Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 31 January 2015 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:

### ***Marine Works***

- Construction of Pile caps at Viaducts B, C & E;
- Marine piling platform installation for Viaducts A, B, C, D & E;
- Marine Piling at Viaducts B, C, D & E; and
- Additional marine ground investigation (GI) and laboratory testing.

### ***Land-based Works***

- Construction of pile cap superstructure of Viaducts B & C;
- Channel re-construction at Area 1;
- Land Piling at Viaducts B, C & D;
- Pre-drilling works at Viaduct A;
- Construction of pile cap at Viaducts B & D;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

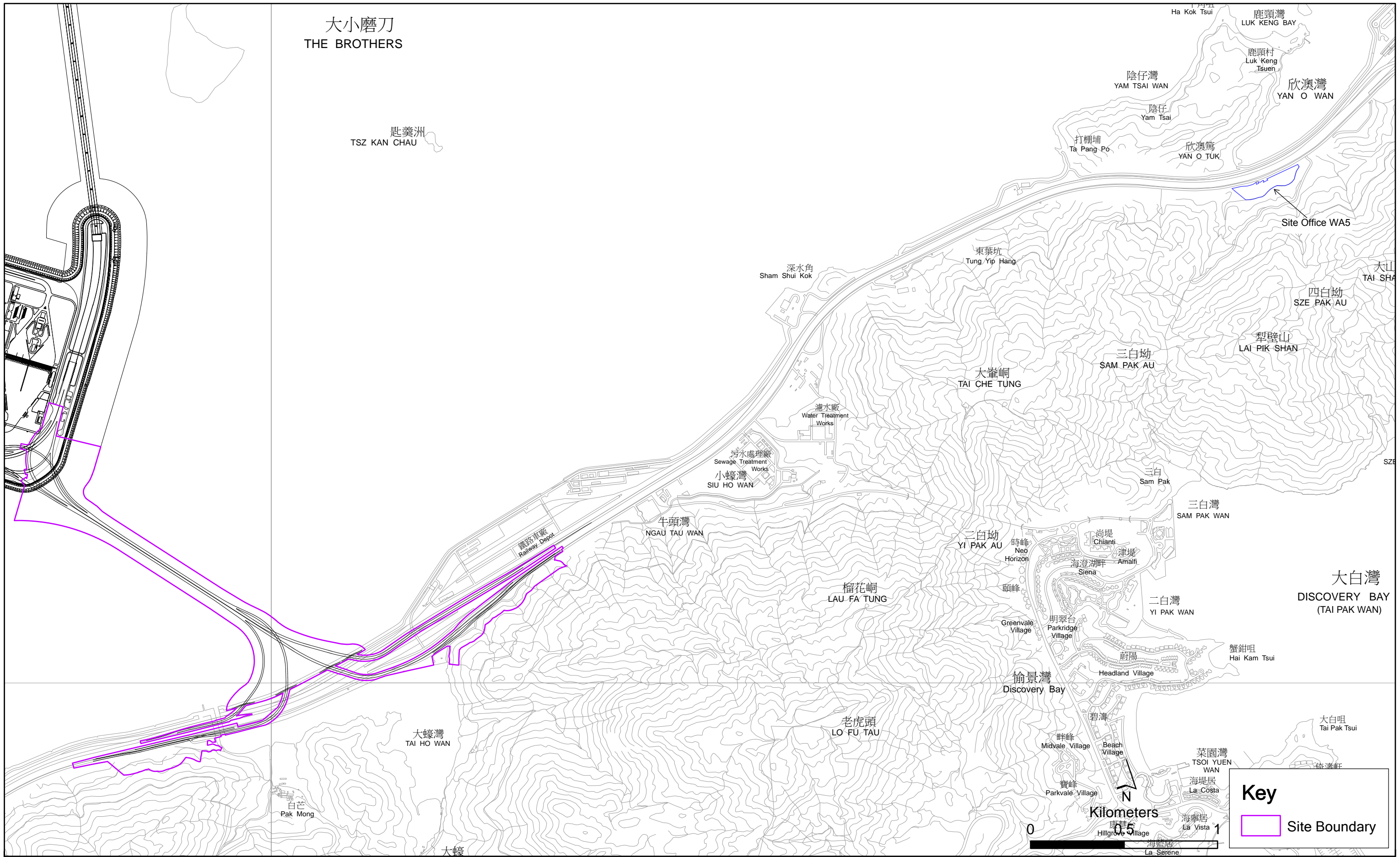
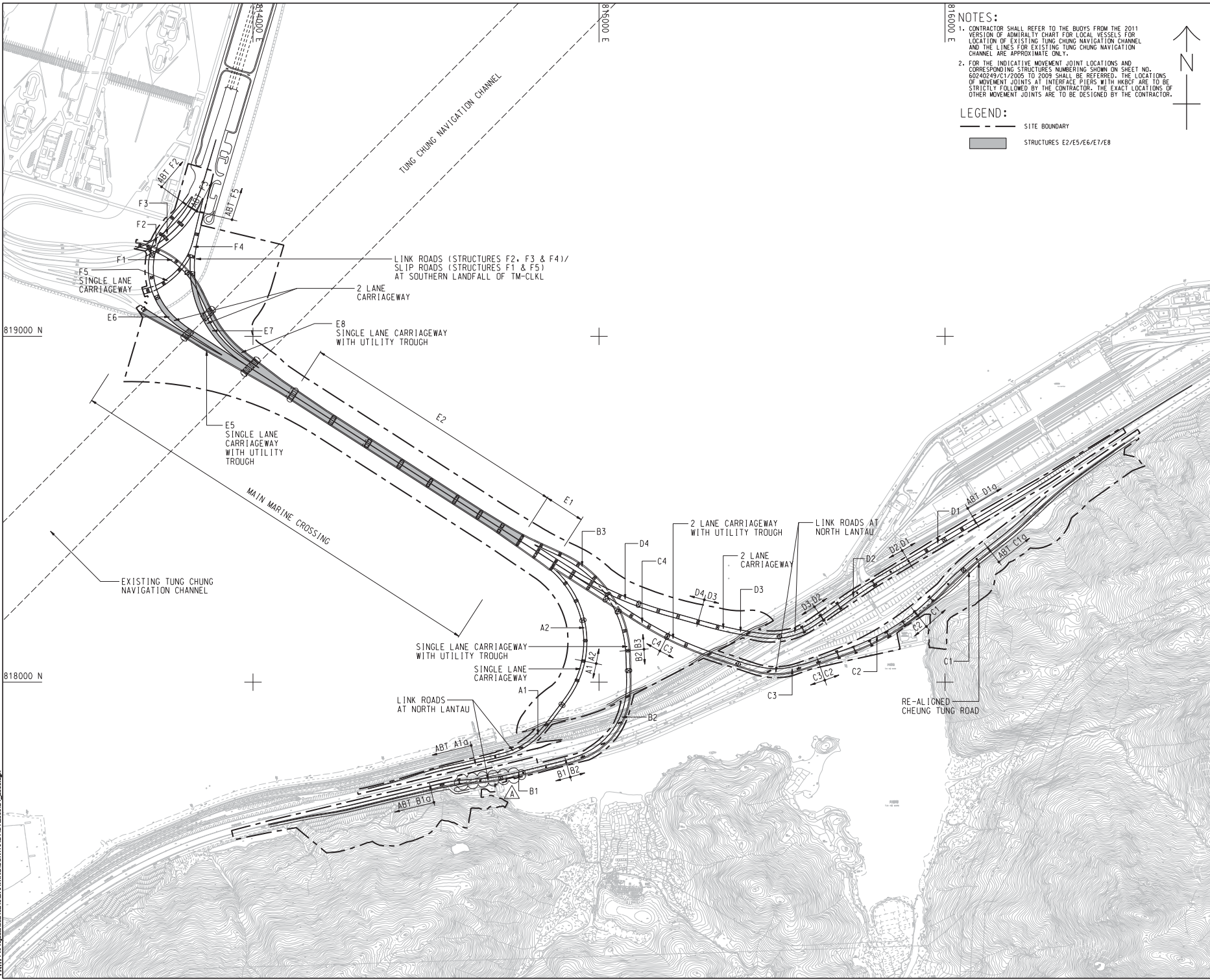


Figure 1.1

### General Layout Plan of the Project





**NOTES:**  
 1. 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.  
 2. 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  
 港務局  
 HONG KONG PROJECT MANAGEMENT OFFICE

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**

**Figure 1.2a**

**ISSUE/REVISION**

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A	NOV. 12	TENDER ADDENDUM NO. 1	CWN
-	OCT. 12	TENDER DRAWING	CWN
HR	DATE	DESCRIPTION	CHK.
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**KEY PLAN**

**PROJECT NO.**  
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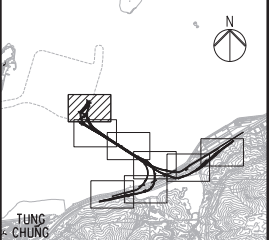
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 HY/2012/07

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 SOUTHERN CONNECTION GENERAL LAYOUT PLAN

**SHEET NUMBER**  
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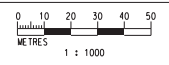


**KEY PLAN**

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- SITE BOUNDARY
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    - ⊕ 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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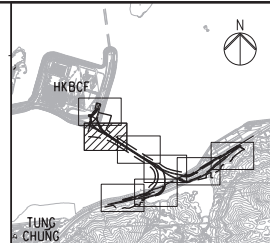
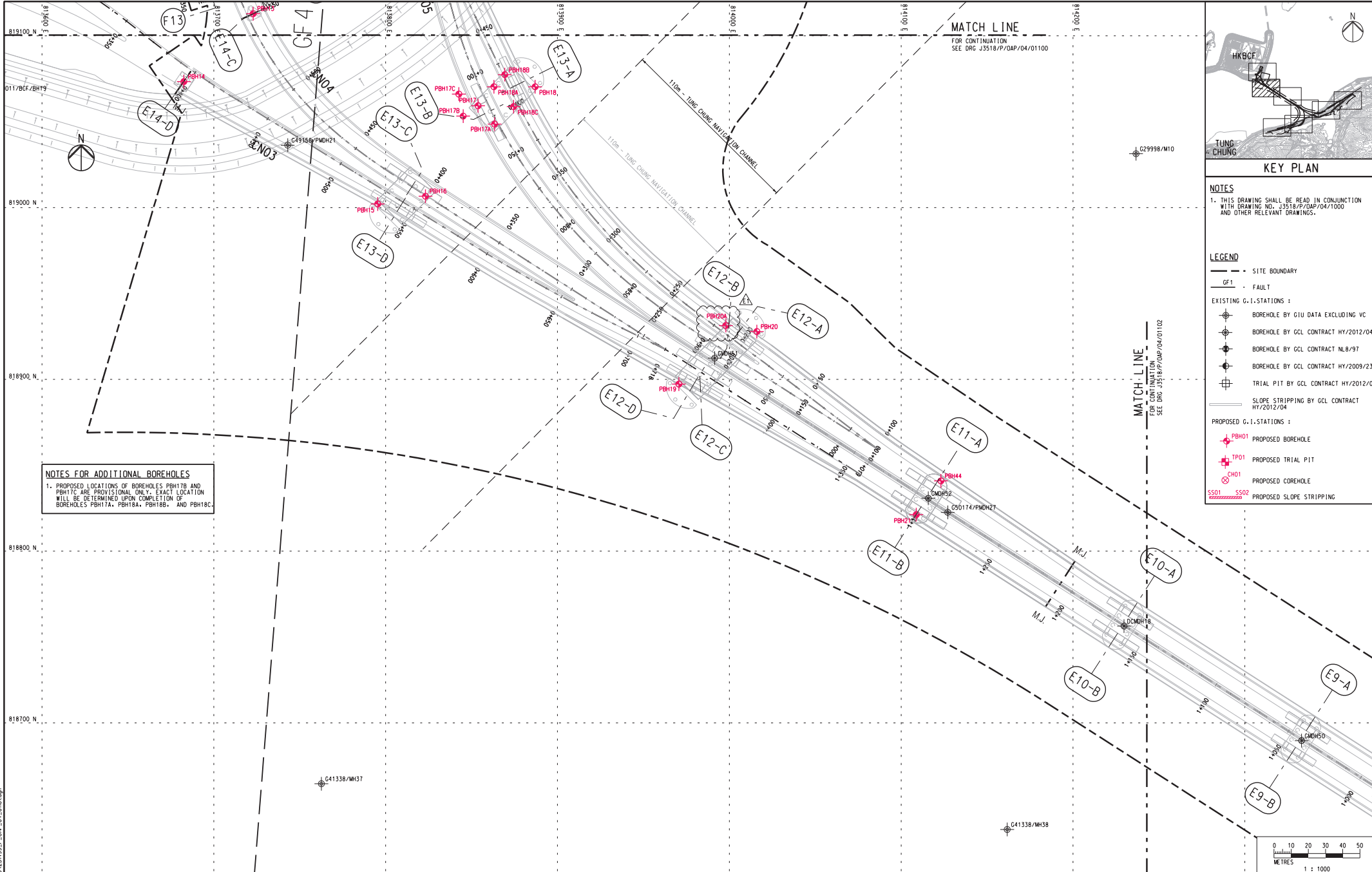
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Checked	Approved	
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Supervising Officer: \_\_\_\_\_ Contractor: \_\_\_\_\_  
 Project Title: Tuen Mun - Chek Lap Kok Link Southern Connection Viaduct Section

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**KEY PLAN**

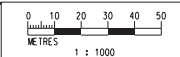
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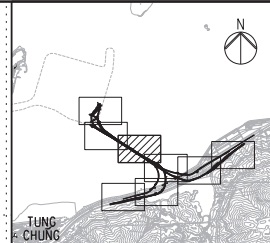
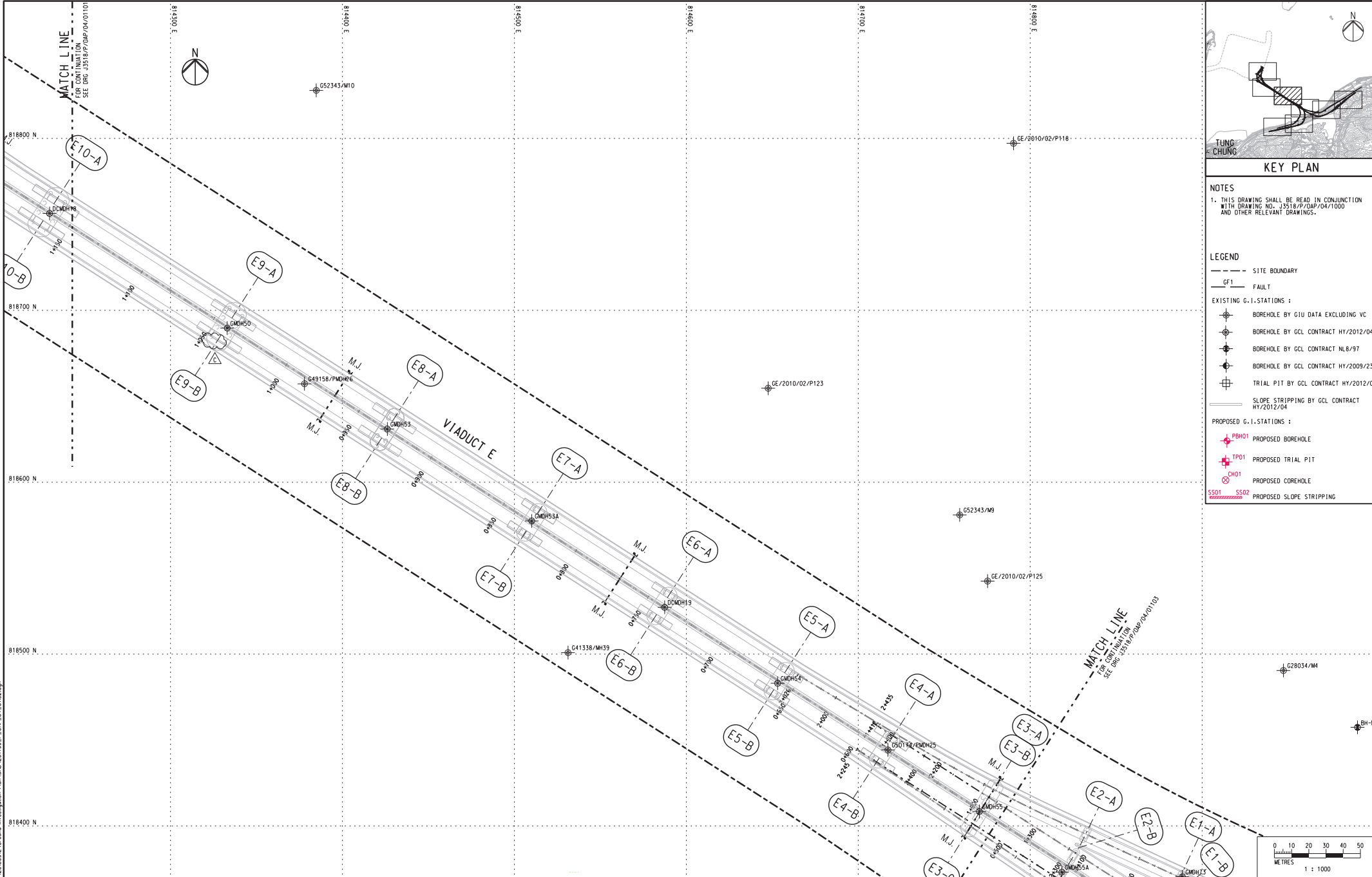
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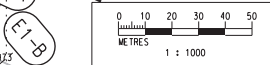
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 港珠澳大桥香港工程管理有限公司  
 Hong Kong Southern Connection Viaduct Project  
 Hong Kong Project Management Office

Supervising Officer: **AECOM**

Project Title: Contract No. HY/2012/07  
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 Southern Connection Viaduct Section

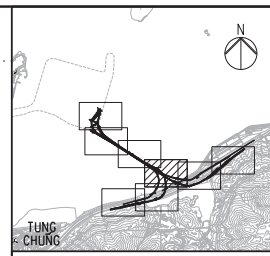
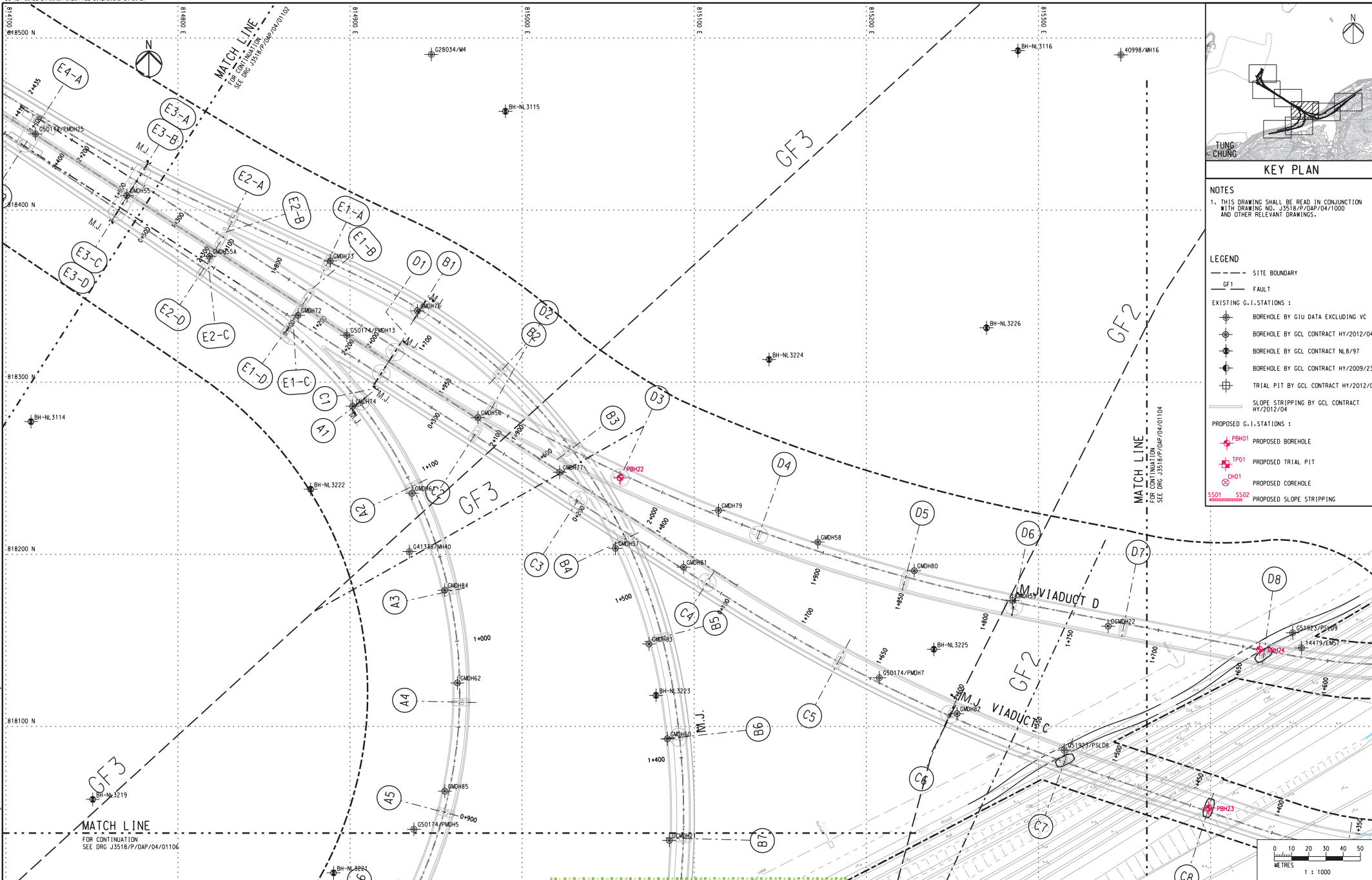
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Originator: **ARUP**

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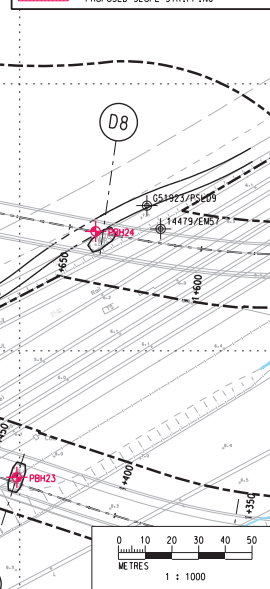
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    - SS01 SS02 PROPOSED SLOPE STRIPPING



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Client

Supervising Officer

Project Title

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

Contractor

Originator

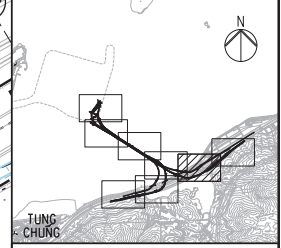
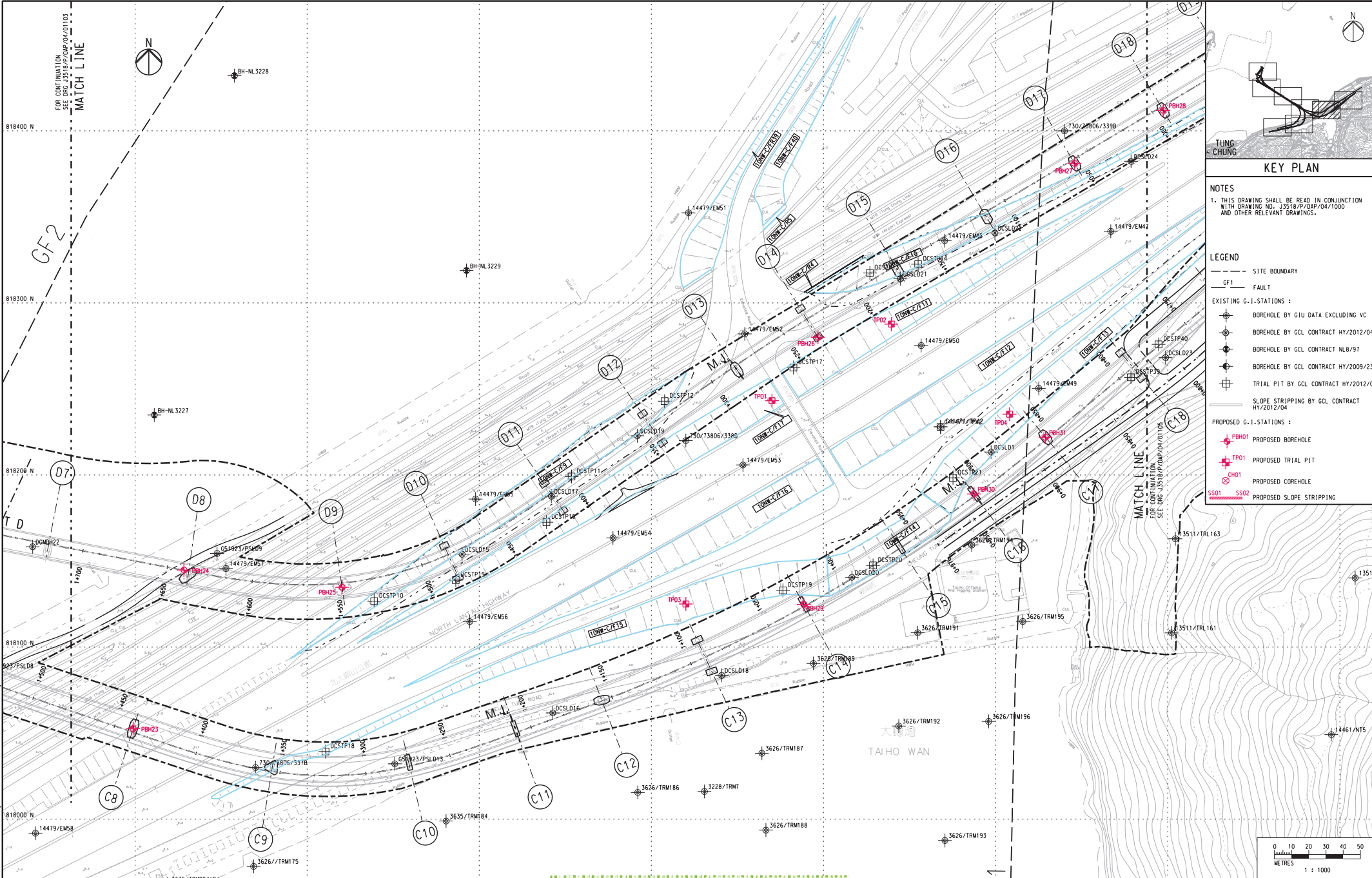
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Drawing no. J3518/P/OAP/04/01103 Rev. C



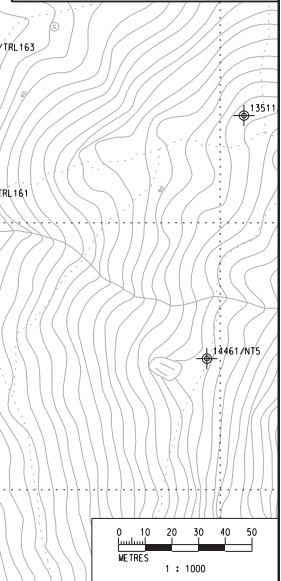
DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



**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 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



Printed by : 12/09/2013  
 File name : J:\3518\99\RECORD\20130927\Ground Investigation Plan\CAD\231498\_P\_OAP\_04\_01100.dwg

Rev	Description	By	Date	Rev	Description	By	Date	Drawn	Date
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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  
 香港港大橋香港工程總處  
 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 Gammon

Contractor

Originator

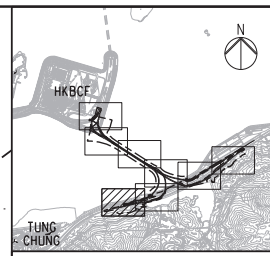
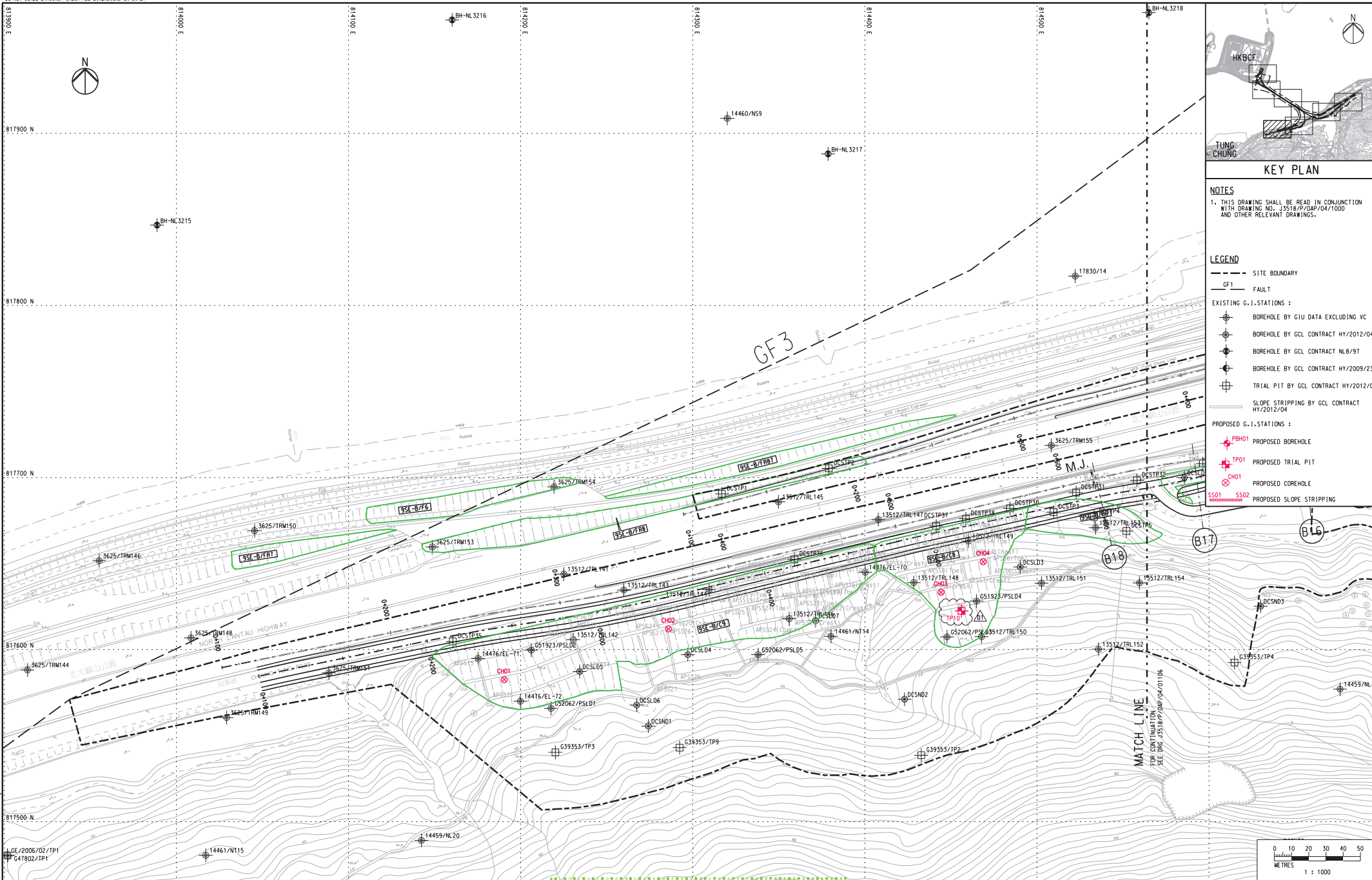
ARUP

Drawing title

**Figure 1.2f**

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

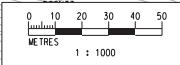
DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



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 NL6/97
    - 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:
    - PBHO1 PROPOSED BOREHOLE
    - TP01 PROPOSED TRIAL PIT
    - CH01 PROPOSED COREHOLE
    - SS01, SS02 PROPOSED SLOPE STRIPPING



Printed by : 07/11/2013  
 File name : J:\23499\ap\p\04\01107.dgn

DATE: 2006/02/19  
 BY: GAT802/TP1

Rev	Description	By	Date	Rev	Description	By	Date	Drawn	Date	Client
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B	SUBMISSION	RC	07/13					Checked	Approved	
C	SUBMISSION	RC	09/13					DS	DOP	
D1	FOR INTERNAL REVIEW	RC	11/13					Scale	1:1000 @ A1 / 1:2000 @ A3	

Client: 路政署 HIGHWAYS DEPARTMENT  
 港珠澳大桥香港工程管理局  
 Hong Kong - Zhuhai - Macao Bridge  
 Hong Kong Project Management Office

Supervising Officer: AECOM  
 Contractor: Gammon

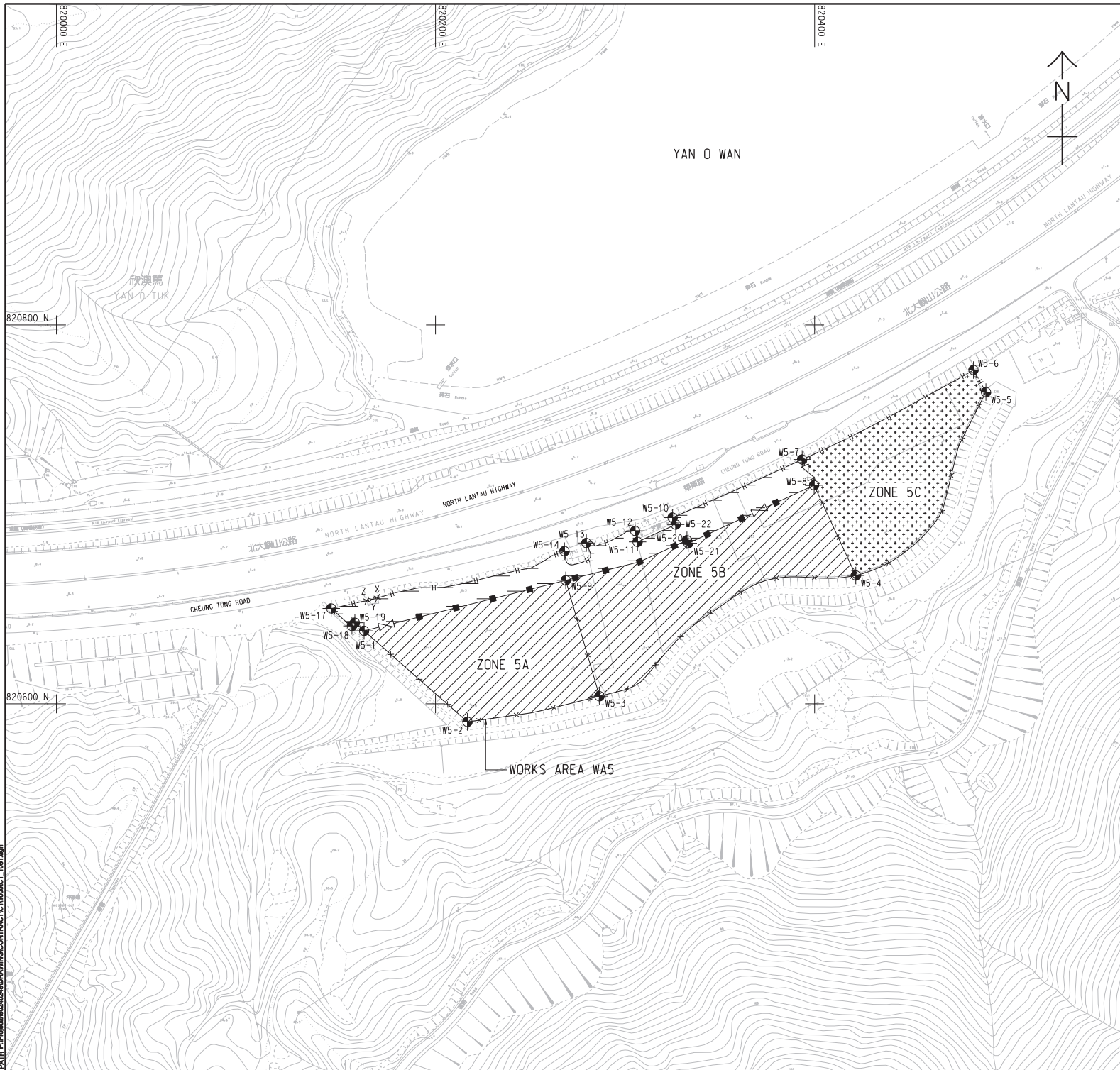
Project Title: Contract No. HY/2012/07  
 Tuen Mun - Chek Lap Kok Link  
 Southern Connection Viaduct Section

Originator: ARUP


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Drawing no. J3518/P/OAP/04/01107 Rev. D1











**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 ERECTED 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 ERECTED 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  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 ERECTED AND MAINTAINED UNDER THIS CONTRACT)
-  CHAIN LINK FENCE AND GATE (TO BE ERECTED AND MAINTAINED BY OTHERS)
-  CHAIN LINK FENCE AND GATE (TO BE ERECTED 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

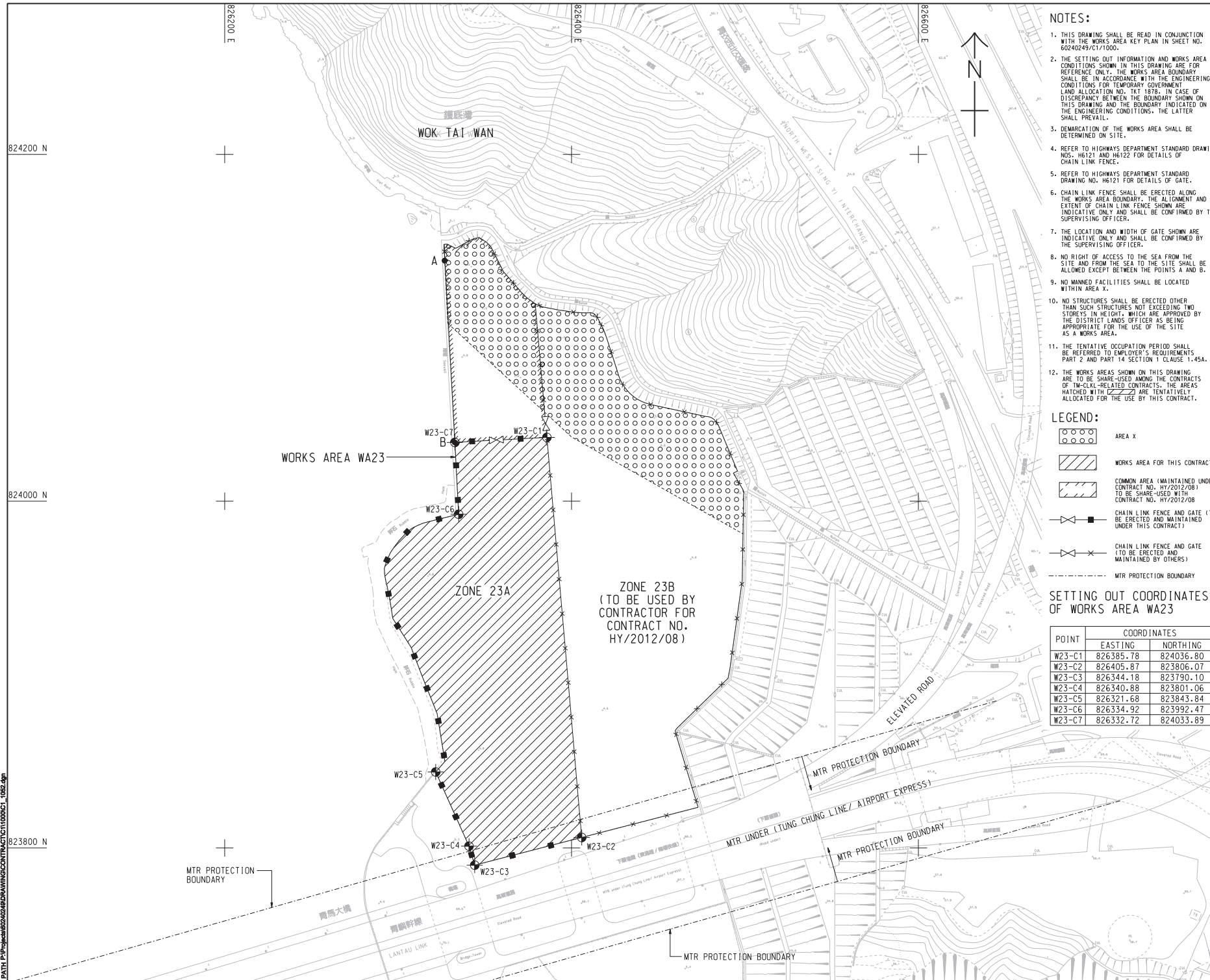
**STATUS**

SCALE	DIMENSION UNIT
A1:1000	METRES

**KEY PLAN**

**Figure 1.2h**

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**NOTES:**

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE WORKS AREA KEY PLAN IN SHEET NO. 60240249/CT1/000.
2. 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. TKT 1879. IN CASE OF DISCREPANCY BETWEEN THE BOUNDARY SHOWN ON THIS DRAWING AND THE BOUNDARY INDICATED ON THE ENGINEERING CONDITIONS, THE LATTER SHALL PREVAIL.
3. DEMARCATION OF THE WORKS AREA SHALL BE DETERMINED ON SITE.
4. REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NOS. H6121 AND H6122 FOR DETAILS OF CHAIN LINK FENCE.
5. REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NO. H6121 FOR DETAILS OF GATE.
6. CHAIN LINK FENCE SHALL BE ERECTED 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.
7. THE LOCATION AND WIDTH OF GATE SHOWN ARE INDICATIVE ONLY AND SHALL BE CONFIRMED BY THE SUPERVISING OFFICER.
8. NO RIGHT OF ACCESS TO THE SEA FROM THE SITE AND FROM THE SEA TO THE SITE SHALL BE ALLOWED EXCEPT BETWEEN THE POINTS A AND B.
9. NO MANNED FACILITIES SHALL BE LOCATED WITHIN AREA X.
10. NO STRUCTURES SHALL BE ERECTED 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.
11. THE TENTATIVE OCCUPATION PERIOD SHALL BE REFERRED TO EMPLOYER'S REQUIREMENTS PART 2 AND PART 14 SECTION 1 CLAUSE 1.45A.
12. THE WORKS AREAS SHOWN ON THIS DRAWING ARE TO BE SHARED AMONG THE CONTRACTS OF TM-CLKL-RELATED CONTRACTS. THE AREAS HATCHED WITH [diagonal lines] ARE TENTATIVELY ALLOCATED FOR THE USE BY THIS CONTRACT.

**LEGEND:**

- [Circle with dot symbol] AREA X
- [Diagonal line hatch symbol] WORKS AREA FOR THIS CONTRACT
- [Cross-hatch symbol] COMMON AREA (MAINTAINED UNDER CONTRACT NO. HY/2012/08) TO BE SHARED WITH CONTRACT NO. HY/2012/08
- [Chain link symbol] CHAIN LINK FENCE AND GATE (TO BE ERECTED AND MAINTAINED UNDER THIS CONTRACT)
- [Chain link with cross symbol] CHAIN LINK FENCE AND GATE (TO BE ERECTED AND MAINTAINED BY OTHERS)
- [Dashed line symbol] MTR PROTECTION BOUNDARY

**SETTING OUT COORDINATES OF WORKS AREA WA23**

POINT	COORDINATES	
	EASTING	NORTHING
W23-C1	826385.78	824036.80
W23-C2	826405.87	823806.07
W23-C3	826344.18	823790.10
W23-C4	826340.88	823801.06
W23-C5	826321.68	823843.84
W23-C6	826334.92	823992.47
W23-C7	826332.72	824033.89

# 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  
 港務大樓香港路政管理處  
 Hong Kong + Zhuhai + Hainan Bridge  
 Hong Kong Project Management Office

**CONSULTANT**  
**AECOM Asia Company Ltd.**  
 www.aecom.com

**SUB-CONSULTANTS**  
 2411111111

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**ISSUE/REVISION**

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

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**STATUS**

SCALE: A1 1:1000 DIMENSION UNIT: METRES

**KEY PLAN**

PROJECT NO.  
60240249

CONTRACT NO.  
HY/2012/07

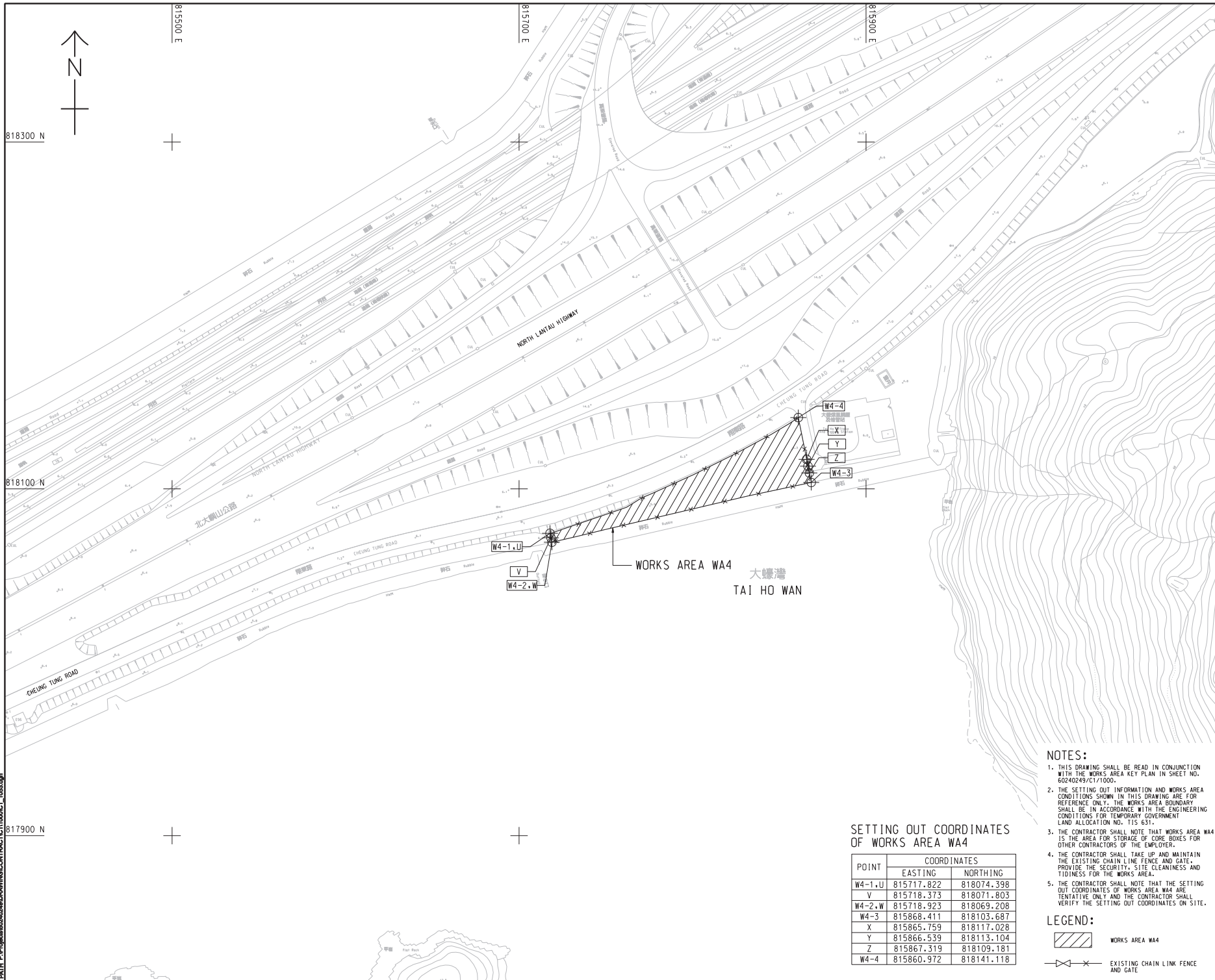
**SHEET TITLE**  
WORKS AREA AND HOARDING PLAN

SHEET 2 OF 2

**SHEET NUMBER**  
60240249/CT1/052

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WORKS AREA WA4  
 大蠔灣  
 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**  
 2/11/2012/16

**Figure 1.2j**

**ISSUE/REVISION**

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

**SCALE**  
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**DIMENSION UNIT**  
 大呎  
 METRES

**KEY PLAN**

**PROJECT NO.**  
 60240249

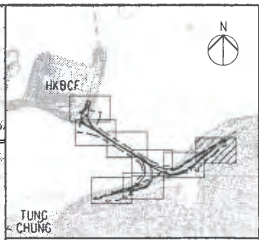
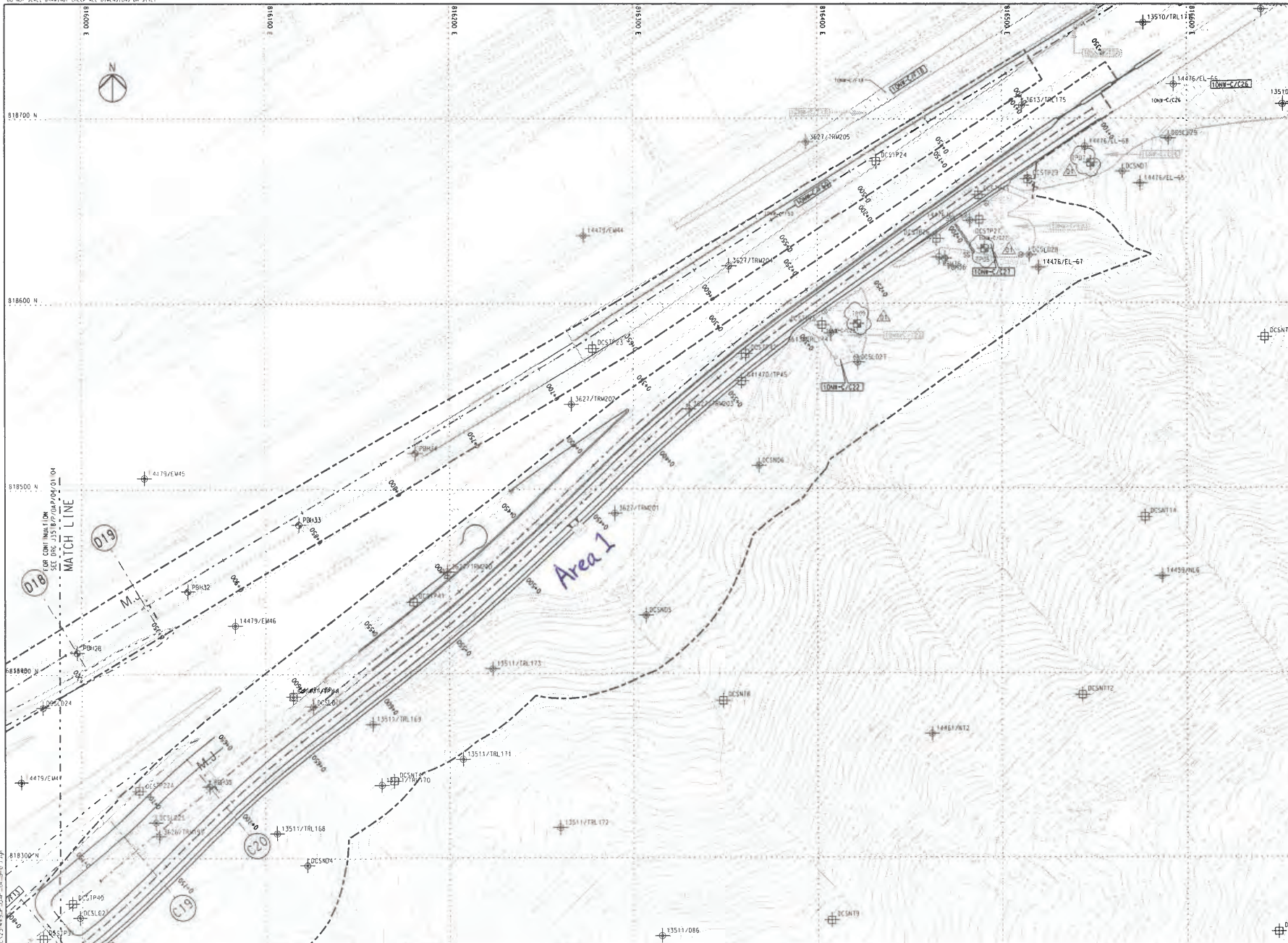
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 HY/2012/07

**SHEET TITLE**  
 WORKS AREA WA4

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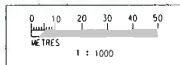
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**NOTES**  
 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NO. J3518/P/OAP/04/1000 AND OTHER RELEVANT DRAWINGS.

- 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
  - ⊕ S502 PROPOSED SLOPE STRIPPING



FOR CONTRACT INFORMATION SEE DOC. J3518/P/OAP/04/1000  
 MATCH LINE  
 D18  
 D19  
 D20  
 D21  
 D22

Rev	Description	By	Date	Rev	Description	By	Date
01	ISSUED FOR PERMIT	RL	31/03				
02	ISSUED FOR PERMIT	RL	07/13				
03	ISSUED FOR PERMIT	RL	29/13				
04	FOR INTERNAL REVIEW	RL	19/12				

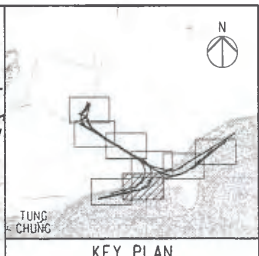
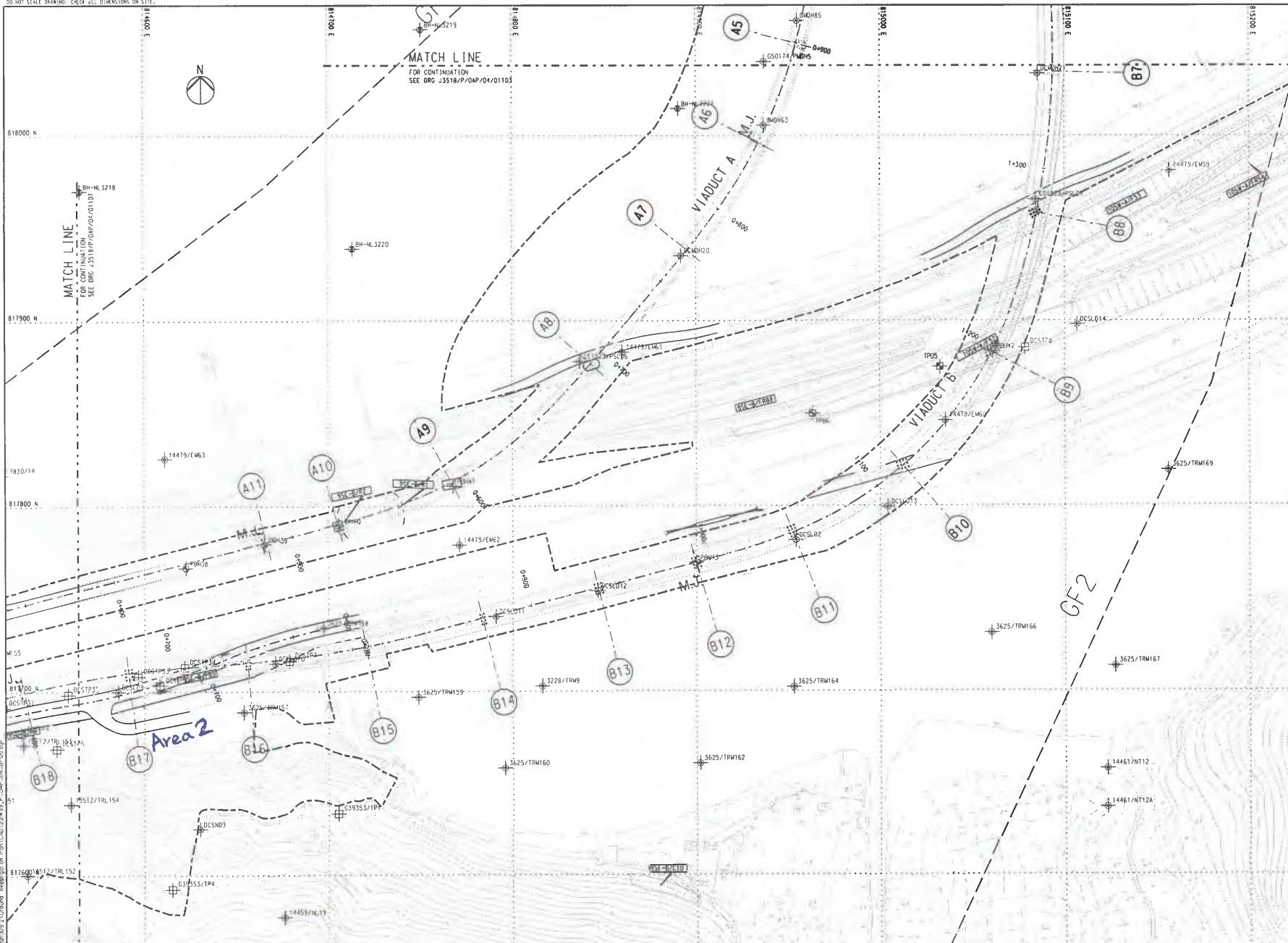
Drawn	Date	Client
RL	07/13	路政署 HIGHWAYS DEPARTMENT 港珠澳大桥香港工程指挥部 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office
Checked	Approved	
DS	DOP	
Scale		

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

	Project Title Contract No. HY/2012/07 Tuen Mun - Chek Lap Kok Link Southern Connection Viaduct Section
	Drawing title <b>Figure 1.2k</b>
Supervising Officer 	Contractor 
Originator 	Drawing no. J3518/P/OAP/04/01105 Rev. D1



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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**

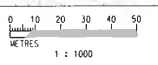
- SITE BOUNDARY
- GF1 FAULT

**EXISTING G.I. STATIONS :**

- ⊕ BOREHOLE BY GIU DATA EXCLUDING VC
- ⊕ BOREHOLE BY GCL CONTRACT HY/2012/04
- ⊕ BOREHOLE BY GCL CONTRACT 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 :**

- ⊕ PROPOSED BOREHOLE
- ⊕ PROPOSED TRIAL PIT
- ⊕ PROPOSED COREHOLE
- PROPOSED SLOPE STRIPPING



P:\Draw By: RYD\Draw: J:\2012\3518\OAP\04\1000\2\Ground\rev01.dwg  
 Plot Date: 07/13

Rev	Description	By	Date	Rev	Description	By	Date
A	SUBMISSION	RL	07/13				
B	SUBMISSION	RL	07/13				
C	SUBMISSION	RL	07/13				

Drawn RL Date 07/13  Checked DS Approved DOP  Scale 1:1000 @ A1 / 1:2000 @ A3	Client  路政署 HIGHWAYS DEPARTMENT 港珠澳大橋香港工程管理有限公司 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	Drawing Title <b>Figure 1.2I</b>
Drawing no. J3518/P/OAP/04/1106			Rev 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
Noise monitoring	6 sessions
Impact Water Quality Monitoring	14 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 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**

No exceedance of Action and Limit Levels was recorded for impact water quality 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 Chinese White Dolphins 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, where 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 Passive Acoustic Monitoring (PAM) was carried out as there was no marine works carried out outside the daylight hours in this reporting month. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was recorded in January 2015 during the exclusion zone monitoring.

## **Environmental Complaints, Non-compliance & Summons**

No environmental complaint, notification of summons and successful prosecution was received in the reporting month.

## **Reporting Change**

There was no reporting change required in the reporting period.

## **Upcoming Works for the Next Reporting Period**

Works to be undertaken in the next monitoring period of February 2015 include the following:

### *Marine Works*

- Construction of Pile caps at Viaducts B, C & E;
- Marine piling platform installation for Viaducts A, B, C, D & E;
- Marine Piling at Viaducts B, C, D & E; and
- Additional marine ground investigation (GI) and laboratory testing.

### *Land-based Works*

- Construction of pile cap superstructure of Viaducts B & C;
- Channel re-construction at Area 1;
- Land Piling at Viaducts B, C & D;
- Pre-drilling works at Viaduct A;
- Construction of pile cap at Viaducts B & D;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

## **Future Key Issues**

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of February 2015 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). 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* and *EP-354/2009/C*, were granted on 28 January 2014 and 10 December 2014, respectively.

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 Fifteenth 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 January 2015.

## 1.3 ORGANIZATION STRUCTURE

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

**Table 1.1** *Contact Information of Key Personnel*

Party	Position	Name	Telephone	Fax
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 (ENVIRON Hong Kong Ltd.)	ENPO Leader	Y.H. Hui	3465 2888	3465 2899
	IEC	Dr. F.C. Tsang	3465 2828	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:

### *Marine Works*

- Construction of Pile caps at Viaducts B, C & E;
- Marine piling platform installation for Viaducts A, B, C, D & E;
- Marine Piling at Viaducts B, C, D & E; and

- Additional marine ground investigation (GI) and laboratory testing.

*Land-based Works*

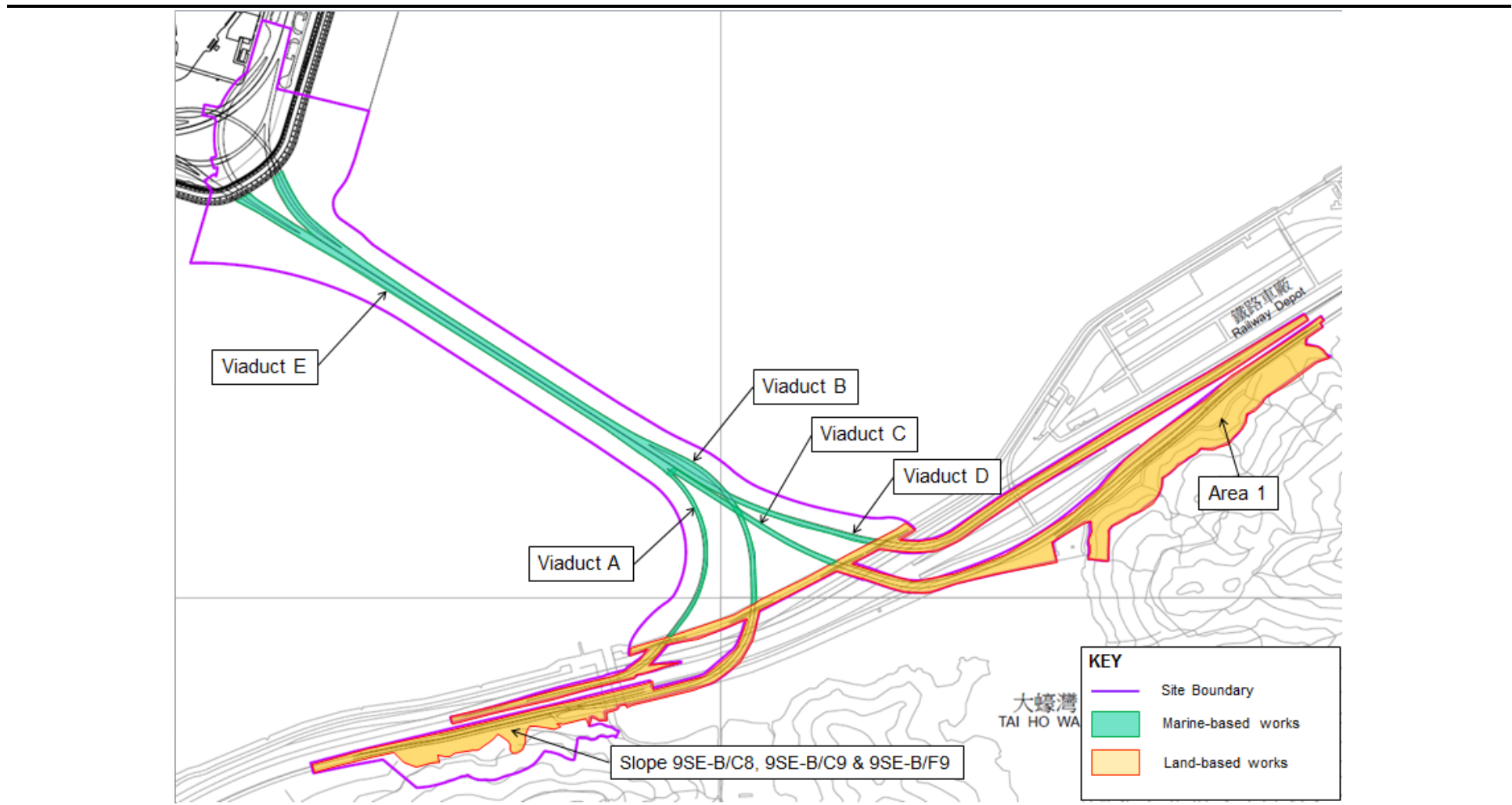
- Construction of pile cap superstructure of Viaducts B & C;
- Channel re-construction at Area 1;
- Land Piling at Viaducts B, C & D;
- Pre-drilling works at Viaduct A;
- Construction of pile cap at Viaducts B & D;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

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 are presented in *Appendix C*.



Figure 1.3 Locations of Construction Activities in the Reporting Month



**Key**

**Air Sensitive Receiver**

- Air Sensitive Receiver
- Noise Sensitive Receiver
- Water Sensitive Receiver
- ▲ Site of Special Scientific Interest (SSSI)
- Known Coral Communities
- Site Boundary

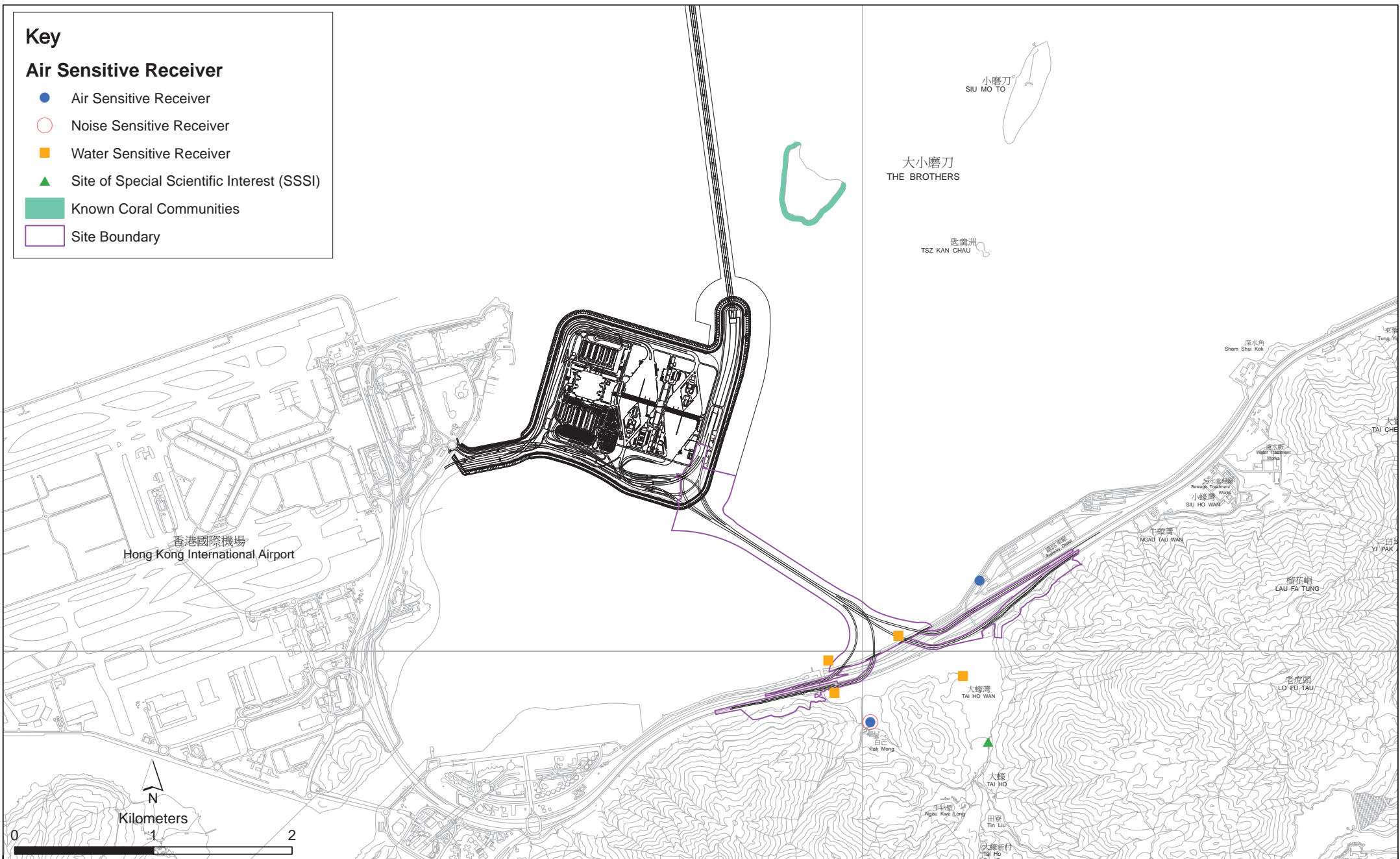


Figure 1.4

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	2, 7, 13, 19, 22 and 28 January 2015
ASR 8A	Area 4	On ground at the works area, Area 4	2, 7, 13, 19, 22 and 28 January 2015

High Volume Samplers (HVSs) were used for carried out 1-hour and 24-hour TSP monitoring on 2, 7, 13, 19, 22 and 28 January 2015 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 anemometer 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*.



**Key**

- Alternative Air Monitoring Station
- Site Boundary

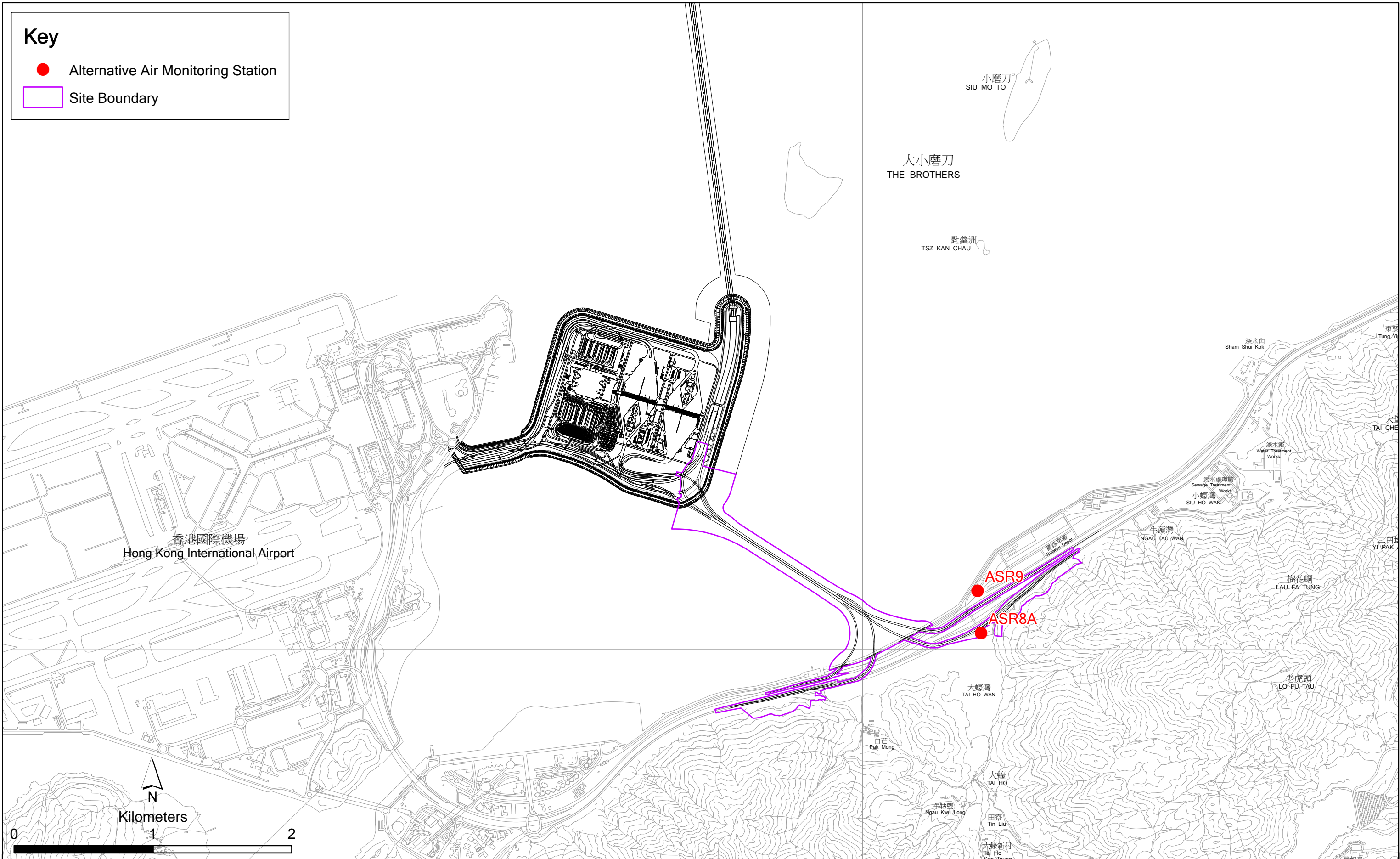


Figure 2.1

Locations of Air Quality Monitoring Stations

**Table 2.2 Air Quality Monitoring Equipment**

<b>Equipment</b>	<b>Brand and Model</b>
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 January 2015 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**

<b>Monitoring Station</b>	<b>Average (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Range (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Action Level (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Limit Level (<math>\mu\text{g}/\text{m}^3</math>)</b>
ASR 8A	109	73 - 176	394	500
ASR 9	148	77 - 217	393	500

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

<b>Monitoring Station</b>	<b>Average (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Range (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Action Level (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Limit Level (<math>\mu\text{g}/\text{m}^3</math>)</b>
ASR 8A	76	57 - 99	178	260
ASR 9	97	64 - 123	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 2, 7, 13, 19, 22 and 28 January 2015 by 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	2, 7, 13, 19, 22 and 28 January 2015

**Table 2.6** *Noise Monitoring Equipment*

Equipment	Brand and Model
Integrated Sound Level Meter	Rion NL-31
Acoustic Calibrator	Rion NC-73



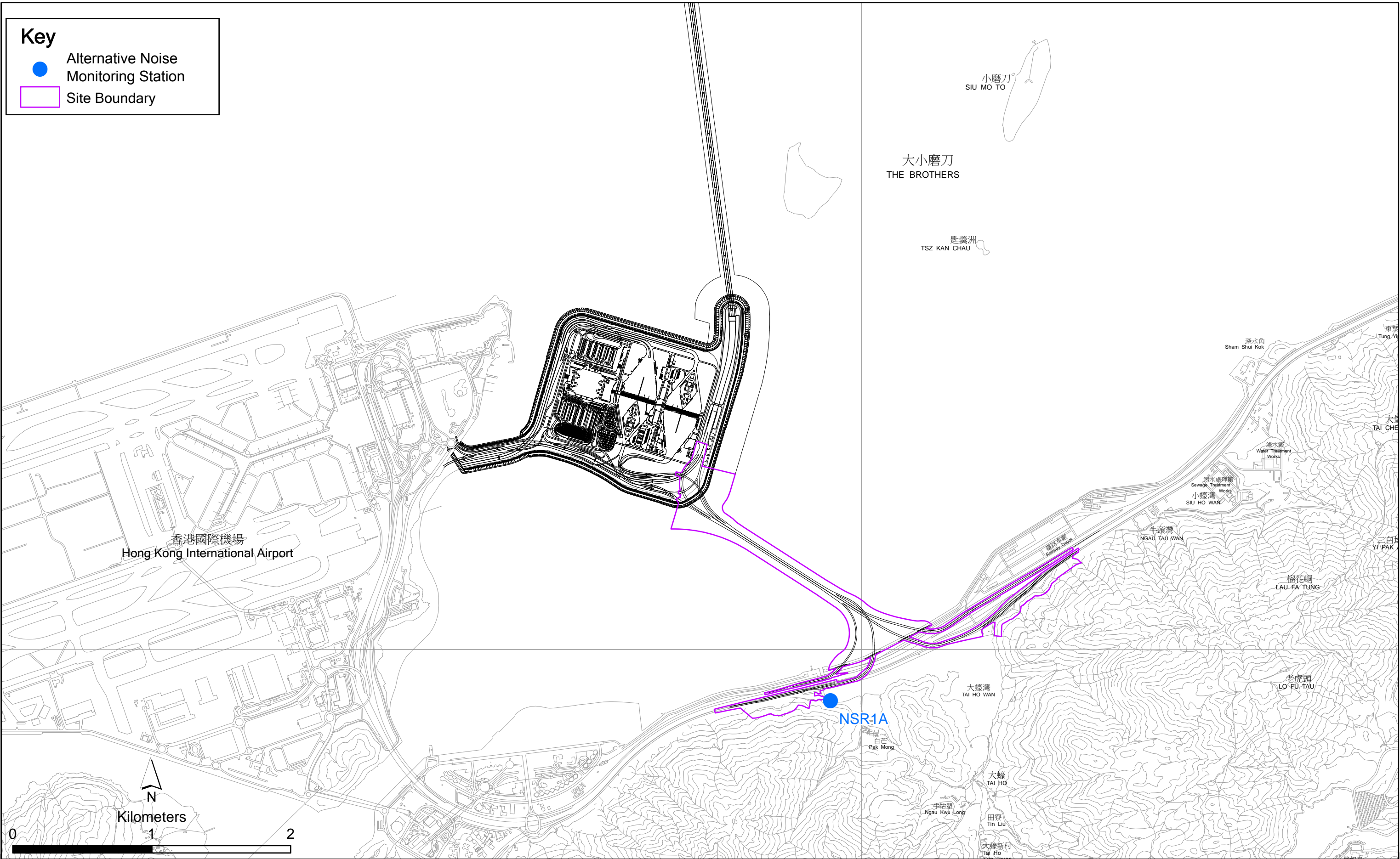


Figure 2.2

Location of Noise Monitoring Station

## 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*.

**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	61	59 - 62	75

No noise Action Level and Limit level exceedance was recorded at all monitoring stations 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 and excavation works, nearby traffic noise and aircraft noise.

## 2.3 *WATER QUALITY MONITORING*

### 2.3.1 *Monitoring Requirements and Equipment*

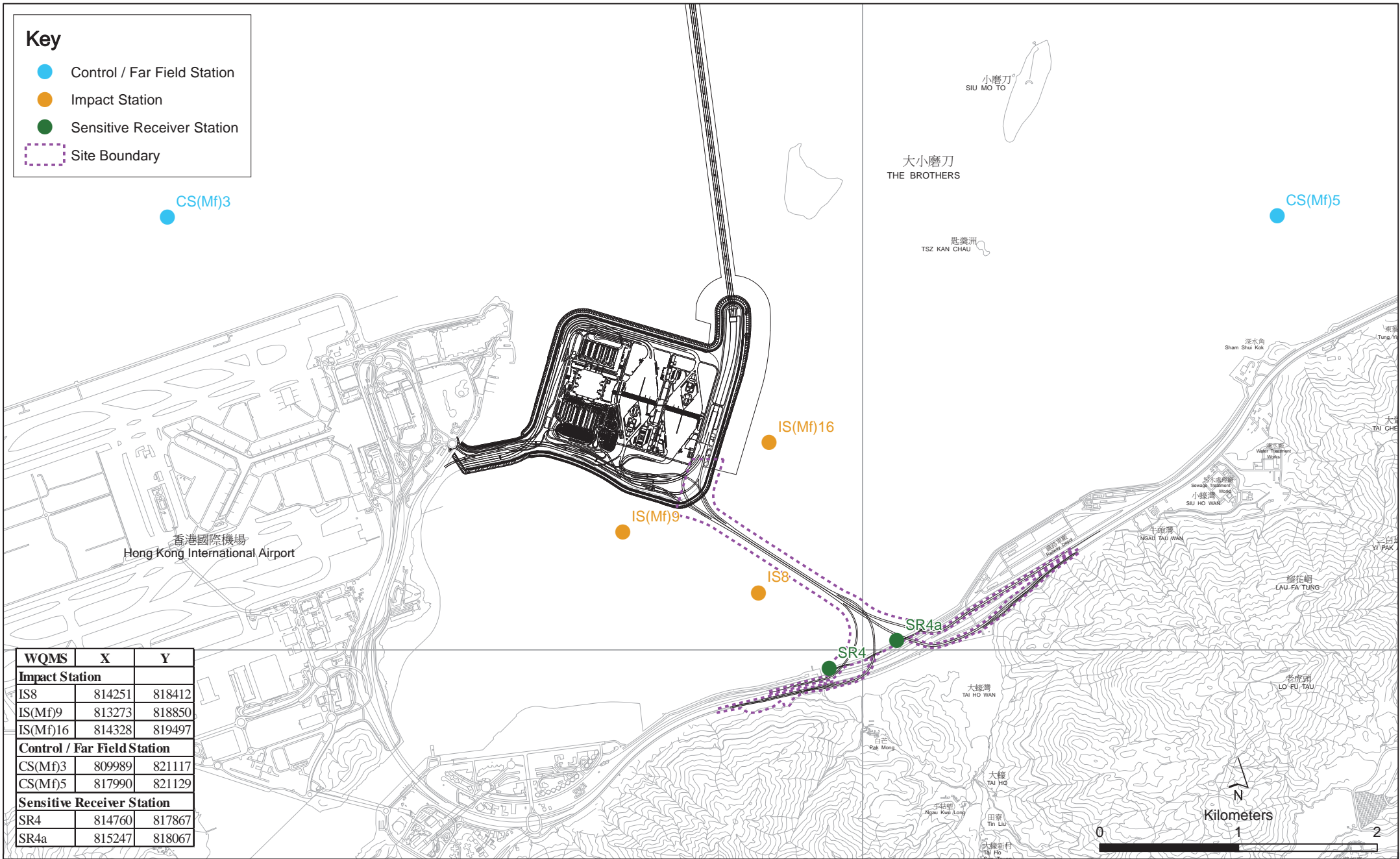
Impact water quality monitoring was carried out to ensure that any deterioration of water quality was detected, and that timely action was taken to rectify the situation. Impact water quality monitoring was undertaken three days per week during the construction period in accordance with the Updated EM&A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



**Key**

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



WQMS	X	Y
<b>Impact Station</b>		
IS8	814251	818412
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
<b>Control / Far Field Station</b>		
CS(Mf)3	809989	821117
CS(Mf)5	817990	821129
<b>Sensitive Receiver Station</b>		
SR4	814760	817867
SR4a	815247	818067

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"> <li>• Temperature(°C)</li> <li>• pH (pH unit)</li> <li>• Turbidity (NTU)</li> <li>• Water depth (m)</li> <li>• Salinity (ppt)</li> <li>• DO (mg/L and % of saturation)</li> <li>• SS (mg/L)</li> </ul>	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			
SR4a	Sensitive receiver	815247	818067			
CS(Mf)3	Control Station	809989	821117			
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.

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
DO and Salinity	YSI Pro2030
Turbidity meter	HACH Model 2100Q
pH meter	HANNA HI8314
Positioning Equipment	Koden913MK2 with KBG-3 DGPS antenna
Water Depth Detector	Speedtech Instrument SM-5
Water Sampler	Kemmerer 1520 (1520-C25) 2.2L with messenger

### 2.3.2 *Monitoring Schedule for the Reporting Month*

The schedule for water quality monitoring in January 2015 is provided in *Appendix F*.

### 2.3.3 *Results and Observations*

In total of 14 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*.

No Action and Limit levels exceedances was recorded at all monitoring stations for impact water quality monitoring in the reporting month. No action is thus required to be undertaken in accordance with the Event Action Plan 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 dolphins. 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* summarises the equipment used for the impact dolphin monitoring.

**Table 2.10** *Dolphin Monitoring Equipment*

<b>Equipment</b>	<b>Model</b>
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 x 50 marine binocular with compass and reticules
Vessel for Monitoring	65 foot single engine motor vessel with viewing platform 4.5m above water level

### 2.4.3 *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.

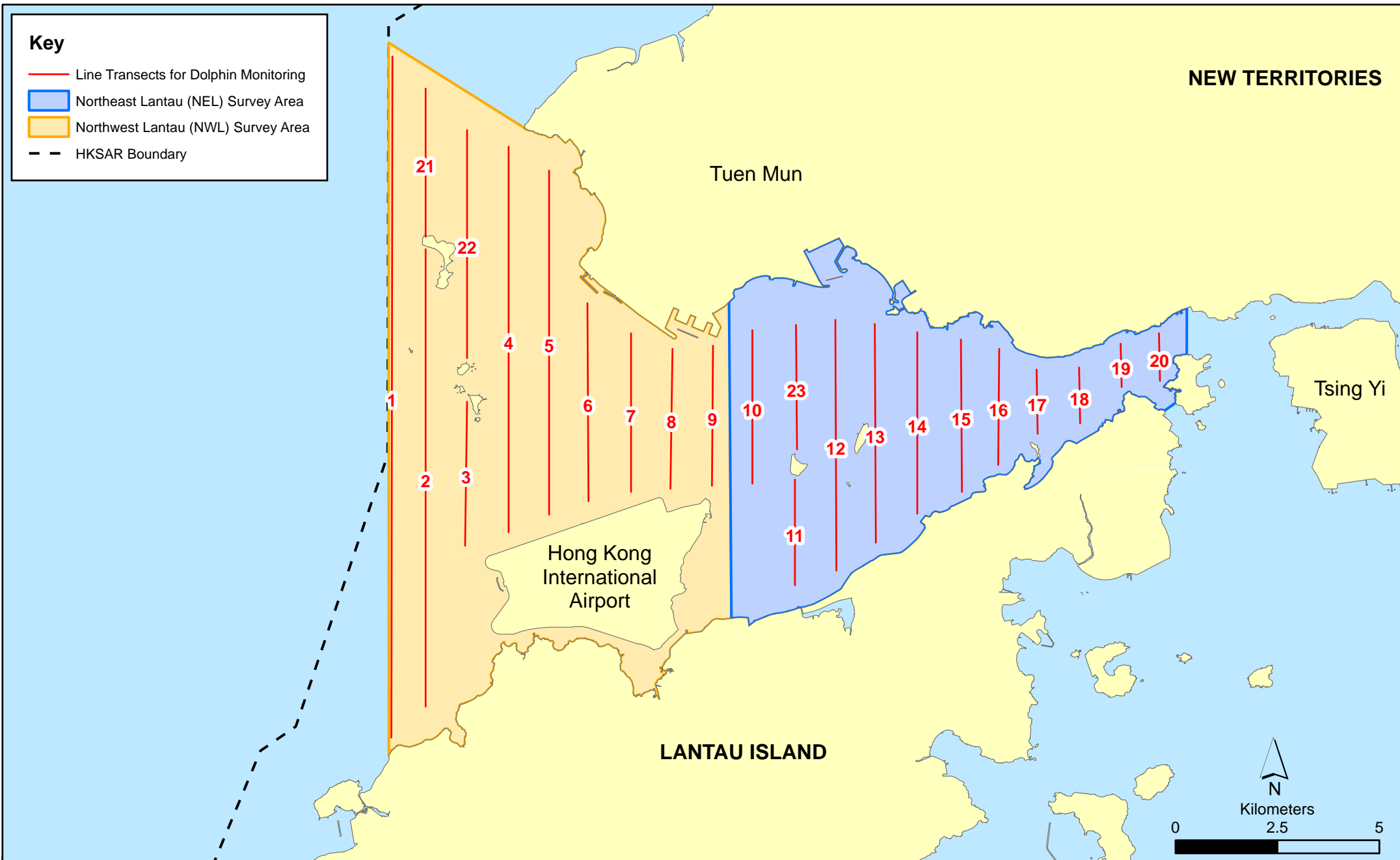


Figure 2.4

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	814577		13	Start Point	816506	819480
1	End Point	804671	831404		13	End Point	816506	824859
2	Start Point	805475	815457		14	Start Point	817537	820220
2	End Point	805477	826654		14	End Point	817537	824613
3	Start Point	806464	819435		15	Start Point	818568	820735
3	End Point	806464	822911		15	End Point	818568	824433
4	Start Point	807518	819771		16	Start Point	819532	821420
4	End Point	807518	829230		16	End Point	819532	824209
5	Start Point	808504	820220		17	Start Point	820451	822125
5	End Point	808504	828602		17	End Point	820451	823671
6	Start Point	809490	820466		18	Start Point	821504	822371
6	End Point	809490	825352		18	End Point	821504	823761
7	Start Point	810499	820690		19	Start Point	822513	823268
7	End Point	810499	824613		19	End Point	822513	824321
8	Start Point	811508	820847		20	Start Point	823477	823402
8	End Point	811508	824254		20	End Point	823477	824613
9	Start Point	812516	820892		21	Start Point	805476	827081
9	End Point	812516	824254		21	End Point	805476	830562
10	Start Point	813525	820872		22	Start Point	806464	824033
10	End Point	813525	824657		22	End Point	806464	829598
11	Start Point	814556	818449		23	Start Point	814559	821739
11	End Point	814556	820992		23	End Point	814559	824768
12	Start Point	815542	818807					
12	End Point	815542	824882					

**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 8, 15, 27 and 29 of January 2015 (*Appendix F*).

## 2.4.7 *Results and Observations*

A total of 294.39 km of survey effort was collected, with 98.7% 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 of January 2015. Among the two areas, 116.20 km and 178.19 km of survey effort were collected from NEL and NWL survey areas respectively. The total survey effort conducted on primary and secondary lines were 214.00 km and 80.39 km respectively. The survey efforts are summarized in *Appendix K*.

A total of eleven (11) groups of forty-six (46) Chinese White Dolphins were sighted during the two sets of monitoring surveys in January 2015. All sightings were made in NWL during the two sets of surveys in January 2015, while no dolphin was sighted at all in NEL in this month. Eight (8) of the eleven (11) sightings were made on primary lines during on-effort search, and none of the dolphin groups was associated with operating fishing vessel. No sighting was made in the proximity of the Project's alignment. The distribution of dolphin sightings 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 January 2015 are shown in *Tables 2.12* and *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: Jan 8 <sup>th</sup> / 15 <sup>th</sup>	0.0	0.0
	Set 2: Jan 27 <sup>th</sup> / 29 <sup>th</sup>	0.0	0.0
NWL	Set 1: Jan 8 <sup>th</sup> / 15 <sup>th</sup>	4.3	21.6
	Set 2: Jan 27 <sup>th</sup> / 29 <sup>th</sup>	7.5	37.6

Note: Dolphin Encounter Rates are deduced from the two sets of surveys (two surveys in each set) in January 2015 in Northeast (NEL) and Northwest Lantau (NWL)

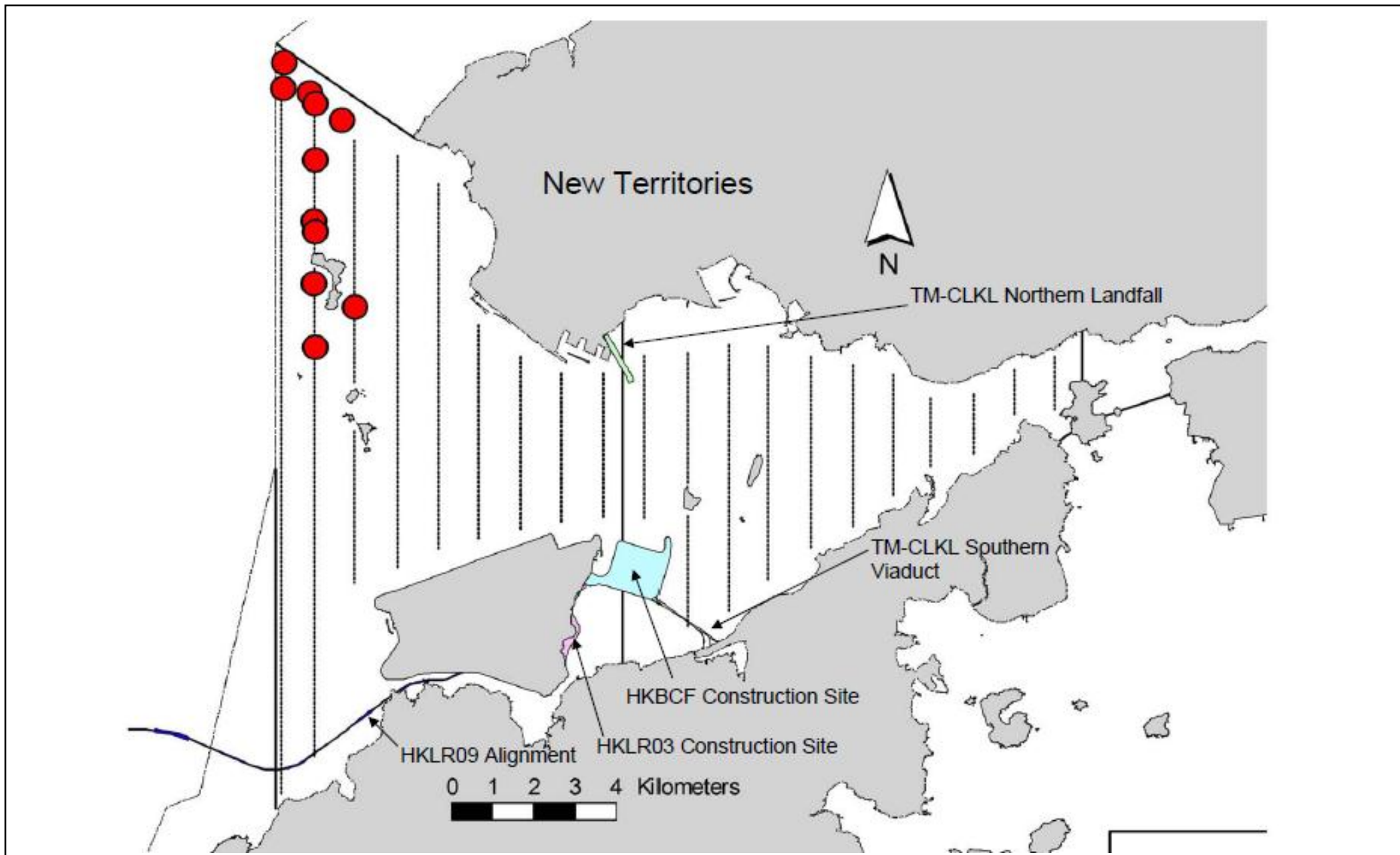


Figure 2.5

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 January 2015)

Date 6/2/2015

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
<b>Northeast Lantau</b>	0.0	0.0	0.0	0.0
<b>Northwest Lantau</b>	5.9	6.3	29.4	26.4

Note: Overall dolphin encounter rates (sightings per 100km of survey effort) from all four surveys are conducted in January 2015 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau

The average group size of Chinese White Dolphins in January 2015 was 4.18 individuals per group, which was slightly higher than the ones in previous months of dolphin monitoring. Five (5) of the eleven (11) dolphin groups were composed of five to eight (5-8) dolphins during the monitoring period. Detailed results of dolphin monitoring in this reporting month are presented in *Appendix K*.

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, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

#### **2.4.8 Marine Mammal Exclusion Zone Monitoring**

Daily 250 m marine mammal exclusion zone monitoring was undertaken during the period of marine works activities being undertaken. No Passive Acoustic Monitoring (PAM) was carried out as there was no marine works carried out outside the daylight hours in this reporting month. No sighting of Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) were recorded in January 2015 during the exclusion zone monitoring.

#### **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 8, 14, 21 and 29 January 2015.

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
8 January 2015	<p>Pier B2</p> <ul style="list-style-type: none"> <li>A generator was not placed on decoupling pad properly</li> </ul> <p>Pier D6.</p> <ul style="list-style-type: none"> <li>The updated dumping permit was not displayed.</li> <li>A power pack was not placed on decoupling pad properly.</li> <li>The door of an operating air compressor was not closed.</li> <li>Some refuse was found on sea nearby platform.</li> </ul> <p>Barge M027 (next to pier E13)</p> <ul style="list-style-type: none"> <li>A chemical container was not placed in drip tray.</li> </ul> <p>Pier E12</p> <ul style="list-style-type: none"> <li>A part of gutter was not installed properly.</li> </ul>	<p>Pier B2 and D6</p> <ul style="list-style-type: none"> <li>Generators or power packs should be placed on decoupling properly.</li> <li>The updated dumping permit should be displayed.</li> <li>Door of operating machine on marine platform should be closed.</li> <li>The contractor should clean up the site and surrounding area regularly to keep tidy and litter free.</li> </ul> <p>Barge M027 (next to pier E13)</p> <ul style="list-style-type: none"> <li>Chemical container should be placed in drip tray.</li> </ul> <p>Pier E12</p> <ul style="list-style-type: none"> <li>Gutter on platform should be installed properly.</li> </ul>
14 January 2015	<p>Pak Mong</p> <ul style="list-style-type: none"> <li>Stagnant water was accumulated in a drip tray.</li> </ul> <p>Slope B/C9</p> <ul style="list-style-type: none"> <li>Refuse was accumulated in the drainage.</li> </ul> <p>Site Access 5D</p> <ul style="list-style-type: none"> <li>Wheel washing facility was incomplete.</li> </ul>	<p>Pak Mong</p> <ul style="list-style-type: none"> <li>Drip tray should have enough capacity to avoid overflowing.</li> </ul> <p>Slope B/C9</p> <ul style="list-style-type: none"> <li>Drainage should be cleaned up regularly to avoid blockage.</li> </ul> <p>Site Access 5D</p> <ul style="list-style-type: none"> <li>The contractor was reminded to ensure waste water from wheel washing will be treated before discharge.</li> </ul>
21 January 2015	<p>Barge Chang Sheung 307 (near platform E4)</p> <ul style="list-style-type: none"> <li>A chemical container was not placed in drip tray.</li> </ul> <p>Pier A1</p> <ul style="list-style-type: none"> <li>A drip tray for generator was not plugged.</li> </ul>	<p>Barge Chang Sheung 307 (near platform E4)</p> <ul style="list-style-type: none"> <li>Chemical container should be placed in drip tray.</li> </ul> <p>Pier A1</p> <ul style="list-style-type: none"> <li>Drip tray should be plugged properly.</li> </ul>
29 January 2015	<p>Pier E13 AB</p> <ul style="list-style-type: none"> <li>A drip tray for generator was not plugged.</li> </ul> <p>Seafront</p> <ul style="list-style-type: none"> <li>Some chemical containers on pontoon were not placed in drip tray.</li> </ul> <p>Pier D14</p> <ul style="list-style-type: none"> <li>The ground was unpaved and dry.</li> </ul>	<p>Pier E13 AB and Seafront</p> <ul style="list-style-type: none"> <li>Chemical containers and generators should be placed in plugged drip tray.</li> </ul> <p>Pier D14</p> <ul style="list-style-type: none"> <li>The contractor was reminded to implement the watering programme for effective dust suppression.</li> </ul>

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), imported fill, recyclable materials and marine

sediment (Categories L & M). 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 <sup>(a)</sup> (m <sup>3</sup> )	Imported Fill (m <sup>3</sup> )	Inert Construction Waste Re-used (m <sup>3</sup> )	Non-inert Construction Waste <sup>(b)</sup> (kg)	Recyclable Materials <sup>(c)</sup> (kg)	Chemical Wastes (kg)	Marine Sediment (m <sup>3</sup> )	
							Category L	Category M (M <sub>p</sub> & M <sub>t</sub> )
January 2015	12,474	115	990	132,170	91	0	178	487

**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/C	10 Dec 2014	N/A	HyD	Tuen Mun- Chek Lap Kok Link
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 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 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 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	Nil	N/A	N/A	GCL	For Piling Works
Construction Noise Permit for night works and works in general holidays	GW-RW0640-14	28 Aug 2014	27 Feb 2015	GCL	General works at WA5
Construction Noise Permit for night works and works in general holidays	GW-RS1032-14	25 Sep 2014	28 Mar 2015	GCL	For Load unload at NLH near Viaduct D
Construction Noise Permit for night works and works in general holidays	GW-RS0078-15	28 Jan 2015	29 Jul 2015	GCL	For Plant mobilization using tractor
Construction Noise Permit for night works and works in general holidays	GW-RS1225-14	31 Oct 2014	2 May 2015	GCL	For Broad Permit
Construction Noise Permit for night works and works in general holidays	GW-RS1383-14	15 Dec 2014	28 Feb 2015	GCL	TTA Case 060-12 Ch.1.0-4.2
Construction Noise Permit for night works and works in general holidays	GW-RS1386-14	15 Dec 2014	15 Mar 2015	GCL	TTA Case 009 Ch.2.3E-4.2E

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Construction Noise Permit for night works and works in general holidays	GW-RS1403-14	15 Dec 2014	28 Feb 2015	GCL	TTA Case 050 Series Airport Rd to NLH Ch.5.3
Marine Dumping Permit	EP/MD/15-186	1 Jan 2015	31 Jan2015	GCL	For dumping Type I (Dedicated Site) and Type II sediment
Marine Dumping Permit	EP/MD/15-203	28 Jan 2015	27 Jul 2015	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.

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

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

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*.

No complaint, notification of summons and prosecution was received in the reporting period.

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



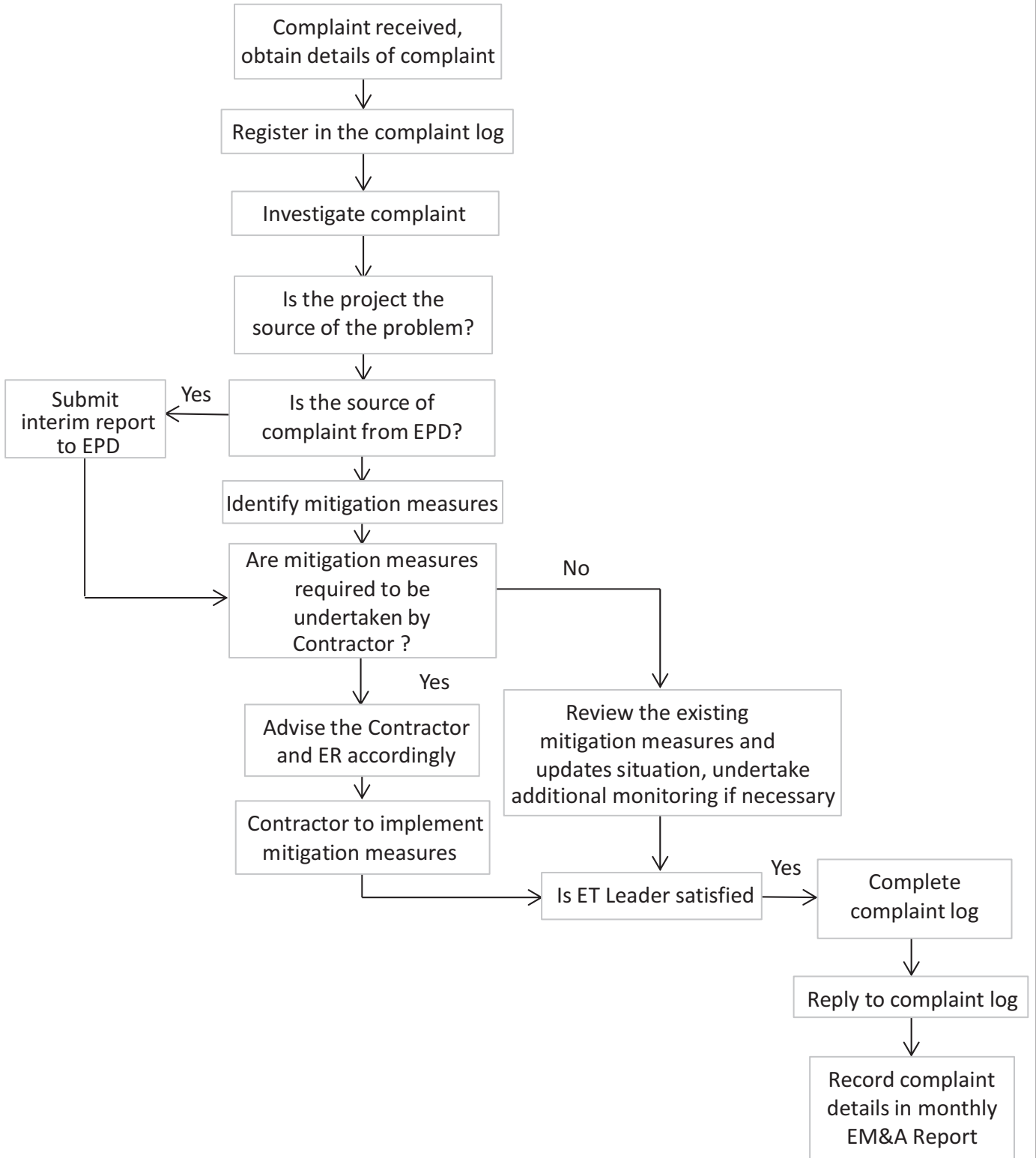


Figure 2.6

Environmental Complaint Handling Procedure

### 3 *FUTURE KEY ISSUES*

#### 3.1 *CONSTRUCTION PROGRAMME FOR THE COMING MONTHS*

As informed by the Contractor, the major works for this Contract in February 2015 will be:

##### *Marine Works*

- Construction of Pile caps at Viaducts B, C & E;
- Marine piling platform installation for Viaducts A, B, C, D & E;
- Marine Piling at Viaducts B, C, D & E; and
- Additional marine ground investigation (GI) and laboratory testing.

##### *Land-based Works*

- Construction of pile cap superstructure of Viaducts B & C;
- Channel re-construction at Area 1;
- Land Piling at Viaducts B, C & D;
- Pre-drilling works at Viaduct A;
- Construction of pile cap at Viaducts B & D;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

#### 3.2 *KEY ISSUES FOR THE COMING MONTH*

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of February 2015 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 February 2015 are provided in *Appendix F*.

#### 4.1 CONCLUSIONS

This Fifteenth Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 31 January 2015, in accordance with the Updated EM&A Manual and the requirements of the *Environmental Permit (EP-354/2009/C)*.

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

A total of eleven (11) groups of forty-six (46) Chinese White Dolphins were sighted during the two sets of monitoring surveys in January 2015. All sightings were made in NWL during the two sets of surveys in January 2015, while no dolphin was sighted at all in NEL in this month. Eight (8) of the eleven (11) sightings were made on primary lines during on-effort search, and none of the dolphin groups was associated with operating fishing vessel. No sighting was made in the proximity of the Project's alignment. During this month of dolphin monitoring, no unacceptable impact from the construction activities of the TM-CLKL Southern Connection Viaduct Section on Chinese White Dolphins was noticeable from general observations.

Environmental site inspection was carried out four (4) times in January 2015. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audits.

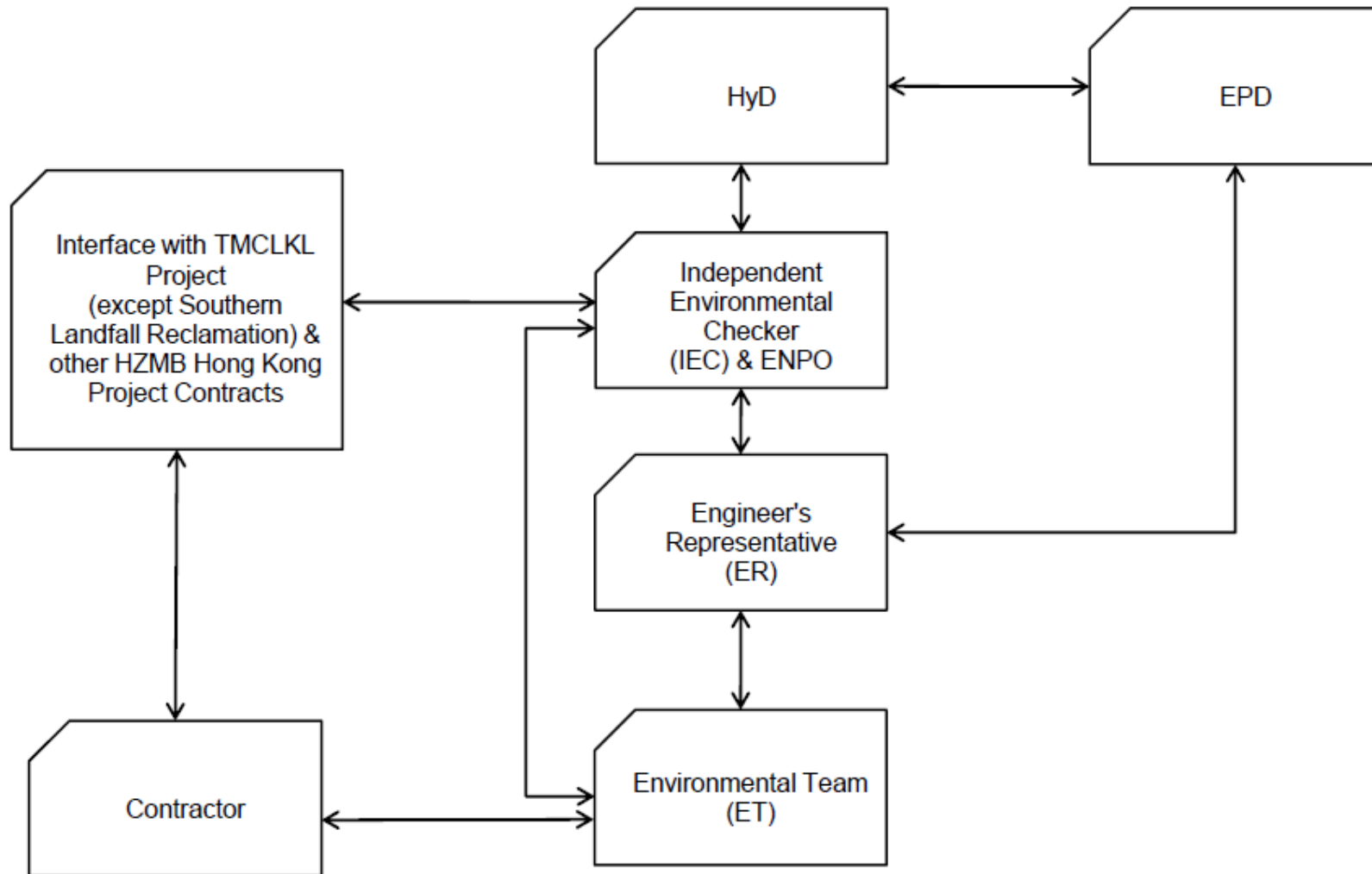
No environmental complaint, notification of summons or prosecution was received in the reporting month.

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	Duration% Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014					2015						
											December					January			February		March	
											24	01	08	15	22	29	05	12	19	26	02	09
<b>HY/2012/07 - TM-CLK Link-SC [DWP rD1] - Status Update 21-12-2014</b>																						
<b>Contract Key Dates</b>																						
<b>Possession Dates / Access Period</b>																						
POS02	Portion A (Commencement of Works+499 days)	0	22-Dec-14*	0%	0		03-Nov-14		-49	0												
POS03	Portion B (Commencement of Works+619 days)	0	03-Mar-15*	0%	0		03-Mar-15		0	412												
<b>General Submissions</b>																						
<b>General Requirements</b>																						
<b>Temporary Works Design</b>																						
PR00130	Unloading Jetty at HKBCF - Working Platform design and approval	90	02-Jun-14 A	10%	81	01-Apr-15	13-May-14	16-Aug-14	-186	1												
<b>Land Works</b>																						
PR00160	Propose/submit/approval of a performance review for piled fnds in accordance w/ ETWB TC	101	26-May-14 A	80.2%	20	16-Jan-15	11-Jan-16	02-Feb-16	310	0												
<b>Land GI Works</b>																						
PR02200	14No possible Boreholes for Pier E14 & Viaduct F - possible early access ahead of possessic	72	30-Sep-13 A	34.72%	47	24-Feb-15	06-Jul-18	29-Aug-18	1040	1040												
PR02204	SQR Sampling & Testing and Approval	195	14-Aug-14 A	45.64%	106	06-May-15	05-Aug-14	09-Dec-14	-116	0												
PR03110	Trial Pits along Cheung Tung Road	20	17-Feb-14 A	85%	3	24-Dec-14	27-Aug-18	29-Aug-18	1087	1087												
<b>Additional Land GI</b>																						
PR03200	Boreholes PBH25, 29, 30, 31 (Piers D9, C14, C16, C17)	33	11-Jan-14 A	75.76%	8	02-Jan-15	21-Aug-18	29-Aug-18	1082	1082												
<b>Design Submissions</b>																						
<b>Detailed Design (v17)</b>																						
<b>Ground Investigation</b>																						
ARDD0009	Consultation with GEO	20	13-Aug-13 A	85%	3	24-Dec-14	29-Mar-17	31-Mar-17	592	57												
ARDD0010	IC/SO Approval of Ground Investigation Interpretative Report - AP03.00	75	13-Aug-13 A	20%	60	13-Mar-15	09-Jan-17	31-Mar-17	535	0												
ARDD0010-1	IC/SO Approval of Ground Investigation Interpretative Report - AP03.00	0		0%	0	13-Mar-15		31-Mar-17	535	0												
ARDD0013-1	Additional GI Fieldwork, Lab Testing and Permitting E5-E8	45	16-Jul-13 A	88.89%	5	26-Dec-14	23-Aug-18	29-Aug-18	958	55												
ARDD0013-2	Additional GI Fieldwork, Lab Testing and Permitting - Other areas	60	16-Jul-13 A	80%	12	06-Jan-15	14-Aug-18	29-Aug-18	951	48												
ARDD0015-1	E5-E8 Interpretation	15	17-Sep-13 A	86.67%	2	23-Dec-14	28-Aug-18	29-Aug-18	961	961												
ARDD0015-2	Additional GI Interpretative Report - AP03.00	15	08-Oct-13 A	73.33%	4	25-Dec-14	13-Jul-18	18-Jul-18	929	0												
ARDD0017-1	Earliest IC certificate for DDA-AP03.00	0		0%	0	05-Feb-15		29-Aug-18	929	26												
ARDD0017-2	IC/SO Approval of Additional GI Interpretative Report - AP03.00	75	29-Jan-14 A	20%	60	13-Mar-15	07-Jun-18	29-Aug-18	903	0												
ARDD0017-4	IC/SO Approval of Additional GI Interpretative Report - AP03.00	0		0%	0	13-Mar-15		29-Aug-18	903	903												
<b>General Submissions</b>																						
ARDD0037-1	Preparation of Seismic Performance Report - AP12.00	20	22-Dec-14	0%	20	16-Jan-15	23-Sep-15	20-Oct-15	197	0												
ARDD0037-2	IC/SO Approval of Seismic Performance Report - AP12.00	75	19-Jan-15	0%	75	01-May-15	21-Oct-15	02-Feb-16	197	0												
ARDD0041-2	IC/SO Approval of O&M Facility Provisions AIP - BP11.00	75	23-Jun-14 A	100%	0	01-Dec-14 A																
ARDD0041-4	IC/SO Approval of O&M Facility Provisions AIP - BP11.00	0		100%	0	01-Dec-14 A																
ARDD0042-1	Preparation of O&M Facility Provisions DDA - BP11.01	40	19-Sep-14 A	80%	8	31-Dec-14	15-May-15	26-May-15	104	0												
ARDD0042-2	IC/SO Approval of O&M Facility Provisions DDA - BP11.01	75	01-Jan-15	0%	75	15-Apr-15	27-May-15	08-Sep-15	104	0												
<b>Viaduct D</b>																						
<b>Viaduct Design</b>																						
ARDD0333-1	Viaduct D - Earliest IC Certificate for Sub & Superstructure DDA - DP14.03	0		0%	0	22-Dec-14		27-Aug-14	-82	0												
ARDD0333-3	Viaduct D - IC/SO Approval of Sub & Superstructure DDA - DP14.03	75	02-Sep-14 A	60%	30	17-Feb-15	15-Sep-14	24-Oct-14	-82	0												
ARDD0333-4	Viaduct D - IC/SO Approval of Sub & Superstructure DDA - DP14.03	0		0%	0	17-Feb-15		24-Oct-14	-82	0												
<b>Information to Contractor</b>																						
ARDD0348	Viaduct D - Final Segment Types and Reinforcement	0		100%	0	04-Dec-14 A																
ARDD0350	Viaduct D - Final Anchorage and PT Requirements	0		100%	0	04-Dec-14 A																
ARDD0352	Viaduct D - Final Bearing Schedule	0		100%	0	04-Dec-14 A																

	Project ID: J3518DWP rD1-M19	<b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b> <b>3-Month Rolling Programme (Page 1 of 36 Pages)</b> <b>(Progress as of 21-Dec-14)</b>	Date	Revision	Checked	Approved	<b>DWG. No.:</b>  <b>J3518/GCL/PGM/3MRP-M19</b>
	Layout: J3518-DWP-3MRP Submission - M19		21-Sep-14				
	Filter: TASK filters: 3-Month Lookahead, No CC Milestones, no Level of Effort, No Level of Effort.		21-Oct-14				
			21-Nov-14		DB		
			21-Dec-14				

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014					2015														
											December					January					February					March				
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16			
ARDD0354	Viaduct D - Final Movement Joint (MJ) Schedule	0		100%	0	04-Dec-14 A																								
<b>Associated Construction Milestones</b>																														
ARDD0362	Viaduct D - DDA approval ready for Commencement of Pilecaps	0	18-Feb-15	0%	0		27-Oct-14		-114	0																				
ARDD0363	Viaduct D - Initial Segment Casting on Approval of DDA	0	18-Feb-15	0%	0		27-Oct-14		-114	62																				
<b>Viaduct C</b>																														
<b>Viaduct Design</b>																														
ARDD0381	Viaduct C - Preparation of Substructure DDA - DP13.03	50	04-Aug-14 A	100%	0	20-Dec-14 A																								
ARDD0382	Viaduct C - Preparation of Superstructure DDA - DP13.03	70	04-Aug-14 A	100%	0	20-Dec-14 A																								
ARDD0383	Viaduct C - Submission of Sub & Superstructure DDA - DP13.03	0		100%	0	20-Dec-14 A																								
ARDD0384-1	Viaduct C - Earliest IC Certificate for Sub & Superstructure DDA - DP13.03	0		0%	0	30-Jan-15		09-Mar-15	26	45																				
ARDD0384-3	Viaduct C - IC/SO Approval of Sub & Superstructure DDA - DP13.03	75	22-Dec-14	0%	75	03-Apr-15	25-Nov-14	09-Mar-15	-19	0																				
<b>Information to Contractor</b>																														
ARDD0394	Viaduct C - Final Pilecap Reinforcement	0		100%	0	20-Dec-14 A																								
ARDD0396	Viaduct C - Final Pier Shapes and Reinforcement	0		100%	0	20-Dec-14 A																								
ARDD0397	Viaduct C - Typical Segment Shapes for Moulds	0		100%	0	20-Dec-14 A																								
ARDD0398	Viaduct C - Typical Segment Reinforcement	0		100%	0	20-Dec-14 A																								
ARDD0399	Viaduct C - Final Segment Types and Reinforcement	0		0%	0	22-Jan-15		07-Jan-15	-11	36																				
ARDD0400	Viaduct C - Typical Anchorage and Tendon Types	0		100%	0	20-Dec-14 A																								
ARDD0401	Viaduct C - Final Anchorage and PT Requirements	0		0%	0	22-Dec-14		07-Jan-15	13	60																				
ARDD0402	Viaduct C - Provisional Bearing Schedule	0		100%	0	20-Dec-14 A																								
ARDD0403	Viaduct C - Final Bearing Schedule	0		0%	0	22-Dec-14		05-Sep-14	-75	0																				
ARDD0404	Viaduct C - Provisional Movement Joint (MJ) Schedule	0		100%	0	20-Dec-14 A																								
ARDD0405	Viaduct C - Final Movement Joint (MJ) Schedule	0		0%	0	22-Dec-14		02-Mar-16	313	180																				
<b>Viaduct A</b>																														
<b>Viaduct Design</b>																														
ARDD0425	Viaduct A - IC/SO Approval of Viaduct AIP - DP11.00	68	19-Jul-14 A	100%	0	08-Dec-14 A																								
ARDD0425-1	Viaduct A - IC/SO Approval of Viaduct AIP - DP11.00	0		100%	0	08-Dec-14 A																								
ARDD0430-1	Viaduct A - Earliest IC Certificate for Foundation DDA DP11.01	0		0%	0	22-Dec-14		04-Mar-15	53	45																				
ARDD0430-2	Viaduct A - IC/SO Approval of Foundation DDA - DP11.01	55	04-Oct-14 A	20%	44	19-Feb-15	02-Jan-15	04-Mar-15	9	0																				
ARDD0430-4	Viaduct A - IC/SO Approval of Foundation DDA - DP11.01	0		0%	0	19-Feb-15		04-Mar-15	9	0																				
ARDD0432	Viaduct A - Preparation of Substructure DDA - DP11.03	50	19-Sep-14 A	34%	33	04-Feb-15	17-Nov-14	31-Dec-14	-25	0																				
ARDD0433	Viaduct A - Preparation of Superstructure DDA - DP11.03	70	19-Sep-14 A	35.71%	45	20-Feb-15	18-Aug-14	17-Oct-14	-90	0																				
ARDD0434-2	Viaduct A - Submission of DDA - DP11.03	0		0%	0	20-Feb-15		17-Oct-14	-90	0																				
ARDD0435-3	Viaduct A - IC/SO Approval of DDA DP11.03	75	23-Feb-15	0%	75	05-Jun-15	05-Mar-15	17-Jun-15	8	0																				
<b>Information to Contractor</b>																														
ARDD0443	Viaduct A - Typical Pilecap Reinforcement - Stainless Steel Rebar	0	22-Dec-14	0%	0		01-Jan-15		8	33																				
ARDD0444	Viaduct A - Typical Pilecap Reinforcement - Regular Rebar	0		0%	0	22-Dec-14		31-Dec-14	8	33																				
ARDD0445	Viaduct A - Final Pilecap Reinforcement	0		0%	0	04-Feb-15		31-Dec-14	-25	0																				
ARDD0447	Viaduct A - Final Pier Shapes and Reinforcement	0		0%	0	04-Feb-15		21-May-15	76	10																				
ARDD0448	Viaduct A - Typical Segment Shapes for Moulds	0		0%	0	22-Dec-14		28-May-15	114	0																				
ARDD0449	Viaduct A - Typical Segment Reinforcement	0		0%	0	22-Dec-14		28-May-15	114	45																				
ARDD0450	Viaduct A - Final Segment Types and Reinforcement	0		0%	0	20-Feb-15		09-Jul-15	99	30																				
ARDD0451	Viaduct A - Typical Anchorage and Tendon Types	0		0%	0	20-Feb-15		28-May-15	69	0																				
ARDD0452	Viaduct A - Final Anchorage and PT Requirements	0		0%	0	20-Feb-15		09-Jul-15	99	30																				
ARDD0453	Viaduct A - Provisional Bearing Schedule	0		0%	0	20-Feb-15		17-Oct-14	-90	0																				
ARDD0454	Viaduct A - Final Bearing Schedule	0		0%	0	20-Feb-15		06-Jul-15	96	48																				
ARDD0455	Viaduct A - Provisional Movement Joint (MJ) Schedule	0		0%	0	20-Feb-15		12-Jun-15	80	0																				

■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

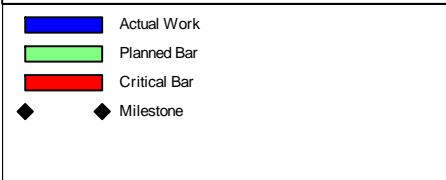
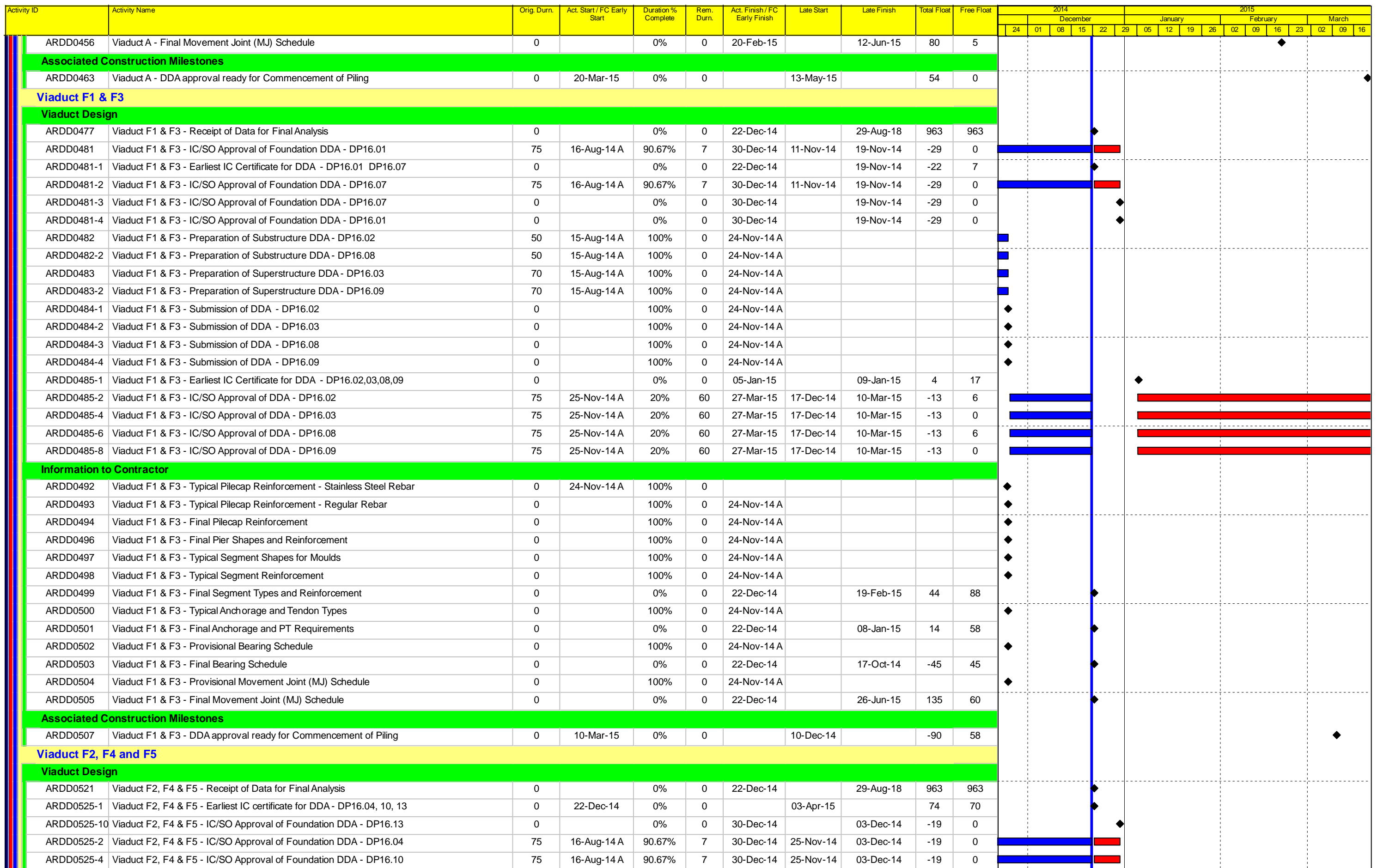
Project ID: J3518DWP-3MRP Submission - M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 2 of 36 Pages)**  
**(Progress as of 21-Dec-14)**

Date	Revision	Checked	Approved
21-Sep-14			
21-Oct-14			
21-Nov-14		DB	
21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**





Project ID: J3518DWP-3MRP-Submission - M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 3 of 36 Pages)**  
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**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014												2015												
											December				January				February				March												
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16	23	30	06	13	20	27	03	10
ARDD0525-6	Viaduct F2, F4 & F5 - IC/SO Approval of Foundation DDA - DP16.13	75	16-Aug-14 A	90.67%	7	30-Dec-14	25-Nov-14	03-Dec-14	-19	0																									
ARDD0525-7	Viaduct F2, F4 & F5 - IC/SO Approval of Foundation DDA - DP16.10	0		0%	0	30-Dec-14		03-Dec-14	-19	0																									
ARDD0525-8	Viaduct F2, F4 & F5 - IC/SO Approval of Foundation DDA - DP16.04	0		0%	0	30-Dec-14		03-Dec-14	-19	0																									
ARDD0526	Viaduct F2, F4 & F5 - Preparation of Substructure DDA - DP16.05	50	15-Aug-14 A	100%	0	24-Nov-14 A																													
ARDD0526-4	Viaduct F2, F4 & F5 - Preparation of Substructure DDA - DP16.11	50	15-Aug-14 A	100%	0	24-Nov-14 A																													
ARDD0526-6	Viaduct F2, F4 & F5 - Preparation of Substructure DDA - DP16.14	50	15-Aug-14 A	100%	0	24-Nov-14 A																													
ARDD0527	Viaduct F2, F4 & F5 - Preparation of Superstructure DDA - DP16.06	70	15-Aug-14 A	100%	0	24-Nov-14 A																													
ARDD0527-4	Viaduct F2, F4 & F5 - Preparation of Superstructure DDA - DP16.12	70	15-Aug-14 A	100%	0	24-Nov-14 A																													
ARDD0527-6	Viaduct F2, F4 & F5 - Preparation of Superstructure DDA - DP16.15	70	15-Aug-14 A	100%	0	24-Nov-14 A																													
ARDD0528-1	Viaduct F2, F4 & F5 - Submission of DDA -DP16.05	0		100%	0	24-Nov-14 A																													
ARDD0528-2	Viaduct F2, F4 & F5 - Submission of DDA -DP16.06	0		100%	0	24-Nov-14 A																													
ARDD0528-3	Viaduct F2, F4 & F5 - Submission of DDA -DP16.11	0		100%	0	24-Nov-14 A																													
ARDD0528-4	Viaduct F2, F4 & F5 - Submission of DDA -DP16.12	0		100%	0	24-Nov-14 A																													
ARDD0528-5	Viaduct F2, F4 & F5 - Submission of DDA -DP16.14	0		100%	0	24-Nov-14 A																													
ARDD0528-6	Viaduct F2, F4 & F5 - Submission of DDA -DP16.15	0		100%	0	24-Nov-14 A																													
ARDD0529-1	Viaduct F2, F4 & F5 - Earliest IC certificate for DDA - DP16.05,06,11,12,14,15	0		0%	0	05-Jan-15		17-Mar-15	51	47																									
ARDD0529-10	Viaduct F2, F4 & F5 - IC/SO Approval of Sub-Structure DDA -DP16.14	75	25-Nov-14 A	20%	60	08-May-15	20-Feb-15	14-May-15	4	0																									
ARDD0529-12	Viaduct F2, F4 & F5 - IC/SO Approval of Superstructure DDA -DP16.15	75	25-Nov-14 A	20%	60	08-May-15	20-Feb-15	14-May-15	4	0																									
ARDD0529-2	Viaduct F2, F4 & F5 - IC/SO Approval of Substructure DDA - DP16.05	75	25-Nov-14 A	20%	60	08-May-15	20-Feb-15	14-May-15	4	0																									
ARDD0529-4	Viaduct F2, F4 & F5 - IC/SO Approval of Superstructure DDA - DP16.06	75	25-Nov-14 A	20%	60	08-May-15	20-Feb-15	14-May-15	4	0																									
ARDD0529-6	Viaduct F2, F4 & F5 - IC/SO Approval of Sub-Structure DDA - DP16.11	75	25-Nov-14 A	20%	60	08-May-15	20-Feb-15	14-May-15	4	0																									
ARDD0529-8	Viaduct F2, F4 & F5 - IC/SO Approval of Superstructure DDA - DP16.12	75	25-Nov-14 A	20%	60	08-May-15	20-Feb-15	14-May-15	4	0																									
<b>Information to Contractor</b>																																			
ARDD0536	Viaduct F2, F4 & F5 - Typical Pilecap Reinforcement - Stainless Steel Rebar	0	24-Nov-14 A	100%	0																														
ARDD0537	Viaduct F2, F4 & F5 - Typical Pilecap Reinforcement - Regular Rebar	0		100%	0	24-Nov-14 A																													
ARDD0538	Viaduct F2, F4 & F5 - Final Pilecap Reinforcement	0		100%	0	24-Nov-14 A																													
ARDD0540	Viaduct F2, F4 & F5 - Final Pier Shapes and Reinforcement	0		100%	0	24-Nov-14 A																													
ARDD0541	Viaduct F2, F4 & F5 - Typical Segment Shapes for Moulds	0		100%	0	24-Nov-14 A																													
ARDD0542	Viaduct F2, F4 & F5 - Typical Segment Reinforcement	0		100%	0	24-Nov-14 A																													
ARDD0543	Viaduct F2, F4 & F5 - Final Segment Types and Reinforcement	0		0%	0	22-Dec-14		19-Feb-15	44	88																									
ARDD0544	Viaduct F2, F4 & F5 - Typical Anchorage and Tendon Types	0		100%	0	24-Nov-14 A																													
ARDD0545	Viaduct F2, F4 & F5 - Final Anchorage and PT Requirements	0		0%	0	22-Dec-14		19-Feb-15	44	88																									
ARDD0546	Viaduct F2, F4 & F5 - Provisional Bearing Schedule	0		100%	0	24-Nov-14 A																													
ARDD0547	Viaduct F2, F4 & F5 - Final Bearing Schedule	0		0%	0	22-Dec-14		17-Oct-14	-45	45																									
ARDD0548	Viaduct F2, F4 & F5 - Provisional Movement Joint (MJ) Schedule	0		100%	0	24-Nov-14 A																													
ARDD0549	Viaduct F2, F4 & F5 - Final Movement Joint (MJ) Schedule	0		0%	0	22-Dec-14		26-Jun-15	135	60																									
<b>Parapet and Utility Trough</b>																																			
ARDD0566	IC/SO Approval of DDA -DP30.01 & DP31.01	75	31-Jul-14 A	50.67%	37	10-Feb-15	02-Oct-14	21-Nov-14	-57	0																									
ARDD0566-1	IC/SO Approval of DDA -DP30.01 & DP31.01	0		0%	0	10-Feb-15		21-Nov-14	-57	0																									
<b>TCSS Provisions</b>																																			
ARDD0573	IC/SO Approval of DDA for TCSS civil provisions - BP10.01	75	29-Sep-14 A	60%	30	30-Jan-15	13-Oct-14	21-Nov-14	-50	0																									
ARDD0573-1	IC/SO Approval of DDA for TCSS civil provisions - BP10.01	0		0%	0	30-Jan-15		21-Nov-14	-50	0																									
<b>Slopeworks for Viaduct C: 10NW -C/C22, C/C26, C/C27, C/F13, C/F14, C/F15</b>																																			
ARDD0587	IC/SO Approval of Slope Combined AIP/DDA -CP13.01	75	20-Nov-13 A	89.33%	8	31-Dec-14	14-Sep-15	23-Sep-15	190	0																									
ARDD0587-1	IC/SO Approval of Slope Combined AIP/DDA -CP13.01	0		0%	0	31-Dec-14		23-Sep-15	190	0																									
<b>Slopeworks for Viaduct A: 9SE-B/FR8, B/R1, B/R2</b>																																			
ARDD0595	IC/SO Approval of Slope Combined AIP/DDA -CP11.01	75	31-Jul-14 A	90.67%	7	30-Dec-14	15-Sep-15	23-Sep-15	191	1																									

<ul style="list-style-type: none"> <li> Actual Work</li> <li> Planned Bar</li> <li> Critical Bar</li> <li> Milestone</li> </ul>	Project ID: J3518DWP-1-M19 Layout: J3518-DWP-3MRP Submission - M19 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, no Level of Effort, No Level of Effort.	<b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b> <b>3-Month Rolling Programme (Page 4 of 36 Pages)</b> <b>(Progress as of 21-Dec-14)</b>	<table border="1" style="font-size: small;"> <tr><th>Date</th><th>Revision</th><th>Checked</th><th>Approved</th></tr> <tr><td>21-Sep-14</td><td></td><td></td><td></td></tr> <tr><td>21-Oct-14</td><td></td><td></td><td></td></tr> <tr><td>21-Nov-14</td><td></td><td>DB</td><td></td></tr> <tr><td>21-Dec-14</td><td></td><td></td><td></td></tr> </table>	Date	Revision	Checked	Approved	21-Sep-14				21-Oct-14				21-Nov-14		DB		21-Dec-14				<b>DWG. No.:</b>  <b>J3518/GCL/PGM/3MRP-M19</b>
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											December					January					February					March													
												24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16											
ARDD0595-1	IC/SO Approval of Slope Combined AIP/DDA -CP11.01	0		0%	0	31-Dec-14		23-Sep-15	190	142																													
<b>Slopeworks for Viaduct D: 10NW -C/R4, C/F9, C/F10, C/F11, C/F17, C/F50</b>																																							
ARDD0602	Preparation of Slope Combined AIP/DDA - CP14.01	20	10-Dec-13 A	100%	0	15-Dec-14 A																																	
ARDD0603	IC/SO Approval of Slope Combined AIP/DDA -CP14.01	75	16-Dec-14 A	0%	75	03-Apr-15	29-Oct-14	10-Feb-15	-38	0																													
<b>Natural Terrian Hazard Assessment</b>																																							
ARDD0613	GEO Approval of NTHM Combined AIP/DDA - CP20.02, CP21.02	75	16-Jul-14 A	90.67%	7	30-Dec-14	12-Mar-15	20-Mar-15	58	0																													
ARDD0613-1	GEO Approval of NTHM Combined AIP/DDA - CP20.02, CP21.02	0		0%	0	30-Dec-14		20-Mar-15	58	0																													
<b>Waterworks, Drainage &amp; Utility Diversions</b>																																							
ARDD0629	IC/SO Approval of Waterworks, Drainage & Utility DDA - BP20.01	75	22-Jul-14 A	90.67%	7	30-Dec-14	16-Oct-14	24-Oct-14	-47	8																													
ARDD0629-1	IC/SO Approval of Waterworks, Drainage & Utility DDA - BP20.01	0		0%	0	09-Jan-15		24-Oct-14	-55	0																													
ARDD0630	Gov't Approval of Submissions for Waterworks, Drainage & Utility Diversions	75	22-Jul-14 A	80%	15	09-Jan-15	06-Oct-14	24-Oct-14	-55	0																													
<b>Viaduct Approach Ramp Retaining Walls</b>																																							
<b>Approach Ramp D</b>																																							
ARDD0652	Approach D - IC/SO Approval of Approach Ramp D DDA - DP20.01	75	25-Sep-14 A	60%	30	30-Jan-15	31-Dec-14	10-Feb-15	7	0																													
ARDD0652-1	Approach D - IC/SO Approval of Approach Ramp D DDA - DP20.01	0		0%	0	30-Jan-15		10-Feb-15	7	12																													
<b>Approach Ramp C</b>																																							
ARDD0658	Approach C - IC/SO Approval of Approach Ramp C DDA -DP20.01	75	03-Oct-14 A	20%	60	13-Mar-15	16-Dec-14	09-Mar-15	-4	0																													
ARDD0658-1	Approach C - IC/SO Approval of Approach Ramp C DDA -DP20.01	0		0%	0	13-Mar-15		09-Mar-15	-4	15																													
<b>Approach Ramp B</b>																																							
ARDD0664	Approach B - IC/SO Approval of Approach Ramp B DDA -DP21.01	75	14-Oct-14 A	80%	15	09-Jan-15	06-Oct-14	24-Oct-14	-55	0																													
ARDD0664-1	Approach B - IC/SO Approval of Approach Ramp B DDA -DP21.01	0		0%	0	09-Jan-15		24-Oct-14	-55	136																													
<b>Approach A</b>																																							
ARDD0670	Approach A - IC/SO Approval of Approach Ramp A DDA - DP20.01	75	03-Oct-14 A	20%	60	13-Mar-15	26-Mar-15	17-Jun-15	68	0																													
ARDD0670-1	Approach A - IC/SO Approval of Approach Ramp A DDA - DP20.01	0		0%	0	13-Mar-15		17-Jun-15	68	45																													
<b>Approach F</b>																																							
ARDD0675	Approach F - Preparation of Approach Ramp F DDA Submission -DP22.01	50	12-Nov-14 A	98%	1	22-Dec-14	09-Oct-14	09-Oct-14	-52	0																													
ARDD0676	Approach F - IC/SO Approval of Approach Ramp F DDA -DP22.01	75	23-Dec-14	0%	75	06-Apr-15	10-Oct-14	22-Jan-15	-52	0																													
<b>Viaduct Pavement</b>																																							
ARDD867	Viaduct Pavement - IC/SO Approval of AIP - BP02.00	68	27-Jun-14 A	89.71%	7	30-Dec-14	21-Aug-18	29-Aug-18	956	0																													
ARDD867-1	Viaduct Pavement - IC/SO Approval of AIP - BP02.00	0		0%	0	30-Dec-14		29-Aug-18	956	956																													
ARDD871	Viaduct Pavement - IC/SO Approval of DDA - BP02.01	75	27-Jun-14 A	90.67%	7	30-Dec-14	25-Nov-14	03-Dec-14	-19	0																													
ARDD871-1	Viaduct Pavement - IC/SO Approval of DDA - BP02.01	0		0%	0	30-Dec-14		03-Dec-14	-19	0																													
<b>Signs, Markings and Street Furniture</b>																																							
ARDD0688	IC/SO Approval of Signs, Markings & Street Furniture DDA - BP03.01	75	16-Oct-14 A	20%	60	13-Mar-15	13-Feb-15	07-May-15	39	0																													
ARDD0688-1	IC/SO Approval of Signs, Markings & Street Furniture DDA - BP03.01	0		0%	0	13-Mar-15		07-May-15	39	0																													
<b>Landscape</b>																																							
ARDD0700	IC/SO Approval of DDA for landscape works - BP22.01	75	15-Oct-14 A	0%	75	03-Apr-15	21-Sep-15	01-Jan-16	195	0																													
<b>Remaining Works</b>																																							
ARDD0704	Preparation of Remaining Works AIP - ZP01.00	30	22-Dec-14	0%	30	30-Jan-15	02-May-16	10-Jun-16	355	0																													
ARDD0705	IC/SO Approval of Remaining Works AIP - ZP01.00	40	02-Feb-15	0%	40	27-Mar-15	13-Jun-16	05-Aug-16	355	0																													
<b>Segment Target Geometry And Erection Engineering</b>																																							
<b>Viaduct A</b>																																							
ARDD0716	Viaduct A - Confirmation of Erection Sequence from Freyssinet	0		0%	0	22-Dec-14		22-Jan-15	24	0																													
ARDD0717	Viaduct A - Erection Sequence Analysis	20	22-Dec-14	0%	20	16-Jan-15	23-Jan-15	19-Feb-15	24	0																													
ARDD0718	Viaduct A - Target Geomtery Analysis	20	19-Jan-15	0%	20	13-Feb-15	20-Feb-15	19-Mar-15	24	0																													
ARDD0719	Viaduct A - Segment Geometry Schedules	10	16-Feb-15	0%	10	27-Feb-15	20-Mar-15	02-Apr-15	24	0																													
ARDD0719-1	Viaduct A - Final Erection Geometry (Bridge A2)	0		0%	0	27-Feb-15		02-Apr-15	24	0																													

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											December						January						February						March					
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16							
<b>Viaduct C</b>																																		
ARDD0722	Viaduct C - Erection Sequence Analysis	20	17-Nov-14 A	75%	5	26-Dec-14	25-Nov-14	01-Dec-14	-19	0																								
ARDD0723	Viaduct C - Target Geomtery Analysis	20	29-Dec-14	0%	20	23-Jan-15	02-Dec-14	29-Dec-14	-19	0																								
ARDD0724	Viaduct C - Segment Geometry Schedules	10	26-Jan-15	0%	10	06-Feb-15	30-Dec-14	12-Jan-15	-19	0																								
ARDD0724-1	Viaduct C - Final Erection Geometry (Bridge C4 & C3)	0		0%	0	06-Feb-15		12-Jan-15	-19	0																								
ARDD0724-2	Viaduct C - Final Erection Geometry (Bridge C2 & C1)	0		0%	0	20-Mar-15		09-Mar-15	-9	10																								
<b>Viaduct D</b>																																		
ARDD0727	Viaduct D - Erection Sequence Analysis	20	18-Aug-14 A	100%	0	04-Dec-14 A																												
ARDD0728	Viaduct D - Target Geomtery Analysis	20	11-Dec-14 A	30%	14	08-Jan-15	10-Aug-18	29-Aug-18	949	949																								
ARDD0729	Viaduct D - Segment Geometry Schedules	10	11-Dec-14 A	30%	7	30-Dec-14	08-Aug-14	18-Aug-14	-96	0																								
ARDD0729-1	Viaduct D - Final Erection Geometry (Bridge D3)	0		0%	0	30-Dec-14		18-Aug-14	-96	0																								
ARDD0729-2	Viaduct D - Final Erection Geometry (Bridge D2 & D1)	0		0%	0	30-Dec-14		22-Sep-14	-71	55																								
<b>Viaduct E5 and E6</b>																																		
ARDD0734	Viaduct E5 & E6 - Segment Geometry Schedules	10	18-Mar-14 A	20%	8	31-Dec-14	29-May-14	09-Jun-14	-147	0																								
ARDD0734-1	Viaduct E5 & E6 - Final Erection Geometry	0		0%	0	31-Dec-14		09-Jun-14	-147	7																								
<b>Viaduct E7 &amp; E8</b>																																		
ARDD0739	Viaduct E7 & E8 - Segment Geometry Schedules	10	18-Mar-14 A	20%	8	31-Dec-14	29-May-14	09-Jun-14	-147	0																								
ARDD0739-1	Viaduct E7 & E8 - Final Erection Geometry	0		0%	0	31-Dec-14		09-Jun-14	-147	7																								
<b>Viaduct E1</b>																																		
ARDD0744	Viaduct E1 - Segment Geometry Schedules	10	22-Sep-14 A	80%	2	23-Dec-14	24-Sep-14	25-Sep-14	-63	0																								
ARDD0744-1	Viaduct E1 - Final Erection Geometry	0		0%	0	23-Dec-14		25-Sep-14	-63	61																								
<b>Viaduct E2</b>																																		
ARDD0749	Viaduct E2 - Segment Geometry Schedules	10	18-Mar-14 A	20%	8	31-Dec-14	06-May-14	15-May-14	-164	0																								
ARDD0749-1	Viaduct E2 - Final Erection Geometry	0		0%	0	31-Dec-14		15-May-14	-164	3																								
<b>Viaduct F</b>																																		
ARDD0751	Viaduct F - Confirmation of Erection Sequence from Freyssinet	0		0%	0	22-Dec-14		20-Oct-14	-44	0																								
ARDD0752	Viaduct F - Erection Sequence Analysis	30	22-Dec-14	0%	30	30-Jan-15	21-Oct-14	01-Dec-14	-44	0																								
ARDD0753	Viaduct F - Target Geometry Analysis	30	02-Feb-15	0%	30	13-Mar-15	02-Dec-14	12-Jan-15	-44	0																								
ARDD0754	Viaduct F - Segment Geometry Schedules	10	16-Mar-15	0%	10	27-Mar-15	13-Jan-15	26-Jan-15	-44	0																								
<b>Reprovisioning Works</b>																																		
<b>CEDD Access Track</b>																																		
ARDD0809	IC/SO Approval of Combined AIP/DDA for CEDD Access Track - BP32.01	75	26-Sep-14 A	20%	60	13-Mar-15	21-Mar-16	10-Jun-16	325	0																								
ARDD0817	IC/SO Approval of Combined AIP/DDA for CEDD Access Track - BP32.01	0		0%	0	13-Mar-15		10-Jun-16	325	429																								
<b>Other Design</b>																																		
<b>Marine Permanent Navigation Aids</b>																																		
BMT0135	Preparation of MPNA DDA - BP36.01	46	11-Jun-14 A	19.57%	37	10-Feb-15	26-Feb-15	17-Apr-15	48	0																								
BMT0140	IC/SO Approval of MPNA DDA BP36.01	75	11-Feb-15	0%	75	26-May-15	20-Apr-15	31-Jul-15	48	0																								
<b>Major Procurement</b>																																		
<b>Marine Permanent Navigaion Aids</b>																																		
PR65011	Design & Approvals for Marine Navigation Aids	150	16-Dec-13 A	54.67%	68	26-May-15	11-May-15	31-Jul-15	55	0																								
<b>Tower Cranes</b>																																		
PR66011	Procure & Deliver Tower Cranes	325	01-Oct-14 A	53.85%	150	29-Jun-15	03-Oct-14	02-Apr-15	-68	940																								
PR66013	Erect & Commission Tower Crane @ E4	24	15-Jan-15	0%	24	11-Feb-15	03-Oct-14	01-Nov-14	-84	22																								
PR66018	Erect & Commission Tower Crane @ E9	24	15-Jan-15	0%	24	11-Feb-15	10-Jun-15	27-Jul-15	102	43																								
PR66019	Erect & Commission Tower Crane @ E10	24	15-Jan-15	0%	24	11-Feb-15	16-Jan-15	12-Feb-15	1	41																								
<b>Equipment Platforms for Tower Cranes</b>																																		
PR66026	Inst.Temp.Eqpt.Platform (piles & deck) @ E4	18	22-Dec-14	0%	18	14-Jan-15	05-Sep-14	30-Sep-14	-84	0																								

■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

Project ID: J3518DWPd1-M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 6 of 36 Pages)**  
**(Progress as of 21-Dec-14)**

Date	Revision	Checked	Approved
21-Sep-14			
21-Oct-14			
21-Nov-14		DB	
21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**









Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014												2015												
											December						January						February						March						
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16								
PPBRE4	Design check by ICE - Viaduct E (E1, E2, E5, E6, E7 & E8)	24	06-Jun-14 A	16.67%	20	16-Jan-15	07-Aug-18	29-Aug-18	1070	1070	[Gantt Bar]																								
PPBRE5	SO review & comment on design submission - Viaduct E (E1, E2, E5, E6, E7 & E8)	36	10-Oct-14 A	5.56%	34	02-Feb-15	07-Jul-18	15-Aug-18	1044	0	[Gantt Bar]																								
PPBRE6	Bearing Design Amendment & re-issue - Viaduct E (E1, E2, E5, E6, E7 & E8)	12	03-Feb-15	0%	12	16-Feb-15	16-Aug-18	29-Aug-18	1044	0	[Gantt Bar]																								
PPBRE7	Manufacture of Bearing - Viaduct E (E1, E2, E5, E6, E7 & E8)	54	02-Jun-14 A	5.56%	51	25-Feb-15	30-Jun-18	29-Aug-18	1039	1039	[Gantt Bar]																								
PPBRE8	Testing Bearing - Viaduct E (E1, E2, E5, E6, E7 & E8)	24	30-Jun-14 A	4.17%	23	16-Feb-15	03-Aug-18	29-Aug-18	1044	1044	[Gantt Bar]																								
PPBRE9	Bearing Delivery - Viaduct E (E1, E2, E5, E6, E7 & E8)	48	18-Oct-14 A	4.17%	46	16-Feb-15	04-Dec-14	29-Jan-15	-15	0	[Gantt Bar]																								
<b>Bridge E1</b>																																			
PP7360	Site preparation Bearings for Viaduct E1	18	17-Feb-15	0%	18	12-Mar-15	30-Jan-15	23-Feb-15	-15	0	[Gantt Bar]																								
<b>Bridge E2</b>																																			
PP7290	Site preparation Bearings for Viaduct E2	18	13-Mar-15	0%	18	08-Apr-15	24-Feb-15	16-Mar-15	-15	0	[Gantt Bar]																								
<b>Viaduct F</b>																																			
PPBRF1	Preliminary Design of Bearings - Viaduct F	70	23-Feb-15	0%	70	20-May-15	20-Oct-14	12-Jan-15	-102	0	[Gantt Bar]																								
<b>Movement Joints</b>																																			
PPMJ01	Design & Submission of MJ	138	08-Feb-14 A	52.9%	65	13-Mar-15	09-Apr-15	26-Jun-15	83	0	[Gantt Bar]																								
PPMJ02-1	MJ Design Approval	96	26-May-14 A	39.58%	58	05-Mar-15	17-Apr-15	26-Jun-15	90	7	[Gantt Bar]																								
PPMJ02-2	Manufacture & delivery of MJ	188	14-Mar-15	0%	188	31-Oct-15	27-Jun-15	12-Feb-16	83	0	[Gantt Bar]																								
<b>Other Sub-Contract Procurement</b>																																			
<b>Pavement</b>																																			
PP7760-2	Procure Pavement Viaduct Sub-Contractor	36	31-Dec-14	0%	36	11-Feb-15	02-Oct-15	13-Nov-15	222	0	[Gantt Bar]																								
PP7760-4	Pavement Viaduct Sub-Contractor - Materials approvals & MS	90	12-Feb-15	0%	90	06-Jun-15	14-Nov-15	04-Mar-16	222	335	[Gantt Bar]																								
<b>Structural Health Monitoring System (SHMS)</b>																																			
PP7774	SHMS - So approval of Preliminary System Proposal	30	29-Jul-14 A	90%	3	24-Dec-14	27-Aug-18	29-Aug-18	1087	1087	[Gantt Bar]																								
PP7776	SHMS - Prepare & Submit Final System Proposal	48	29-Jul-14 A	100%	0	15-Dec-14 A					[Gantt Bar]																								
PP7778	SHMS - So approval of Final System Proposal	30	16-Dec-14 A	0%	30	28-Jan-15	14-Jun-14	19-Jul-14	-159	0	[Gantt Bar]																								
PP7780	SHMS - Prepare Civil Work Provision	90	22-Dec-14	0%	90	16-Apr-15	14-May-14	28-Aug-14	-185	0	[Gantt Bar]																								
PP7782	SHMS - Submit Precast Pile Cap Shell SHMS details for E5-E6-E7-E8	0	22-Jan-15	0%	0		25-Jun-14		-174	0	[Milestone]																								
PP7786	SHMS - Submit Segment SHMS details for E5-E6-E7-E8	0	12-Feb-15	0%	0		18-Jul-14		-173	0	[Milestone]																								
PP7788	SHMS - FAT & Delivery for Bridge E5-E6-E7-E8 equipment	54	29-Jan-15	0%	54	09-Apr-15	21-Jul-14	22-Sep-14	-159	18	[Gantt Bar]																								
<b>Site Preparation / Mobilisations</b>																																			
<b>Temp Traffic Mgt Submission &amp; Approval</b>																																			
TTM00550	Earliest Implementation of TTM after TMLG Meeting No. 15	0	01-Dec-14 A	100%	0						[Milestone]																								
TTM00560	Send TTMs to SO & Govt Depts for TMLG Meeting No. 16	0		100%	0	01-Dec-14 A					[Milestone]																								
TTM00570	TMLG Meeting No. 16	0		100%	0	09-Dec-14 A					[Milestone]																								
TTM00580	Earliest Implementation of TTM after TMLG Meeting No. 16	0	20-Dec-14 A	100%	0						[Milestone]																								
TTM00590	Send TTMs to SO & Govt Depts for TMLG Meeting No. 17	0		0%	0	23-Dec-14		24-Feb-15	45	2	[Gantt Bar]																								
TTM00600	TMLG Meeting No. 17	0		0%	0	08-Jan-15*		10-Mar-15	43	0	[Gantt Bar]																								
TTM00610	Earliest Implementation of TTM after TMLG Meeting No. 17	0	23-Jan-15	0%	0		22-Sep-15		172	20	[Gantt Bar]																								
TTM00620	Send TTMs to SO & Govt Depts for TMLG Meeting No. 18	0		0%	0	22-Jan-15		24-Mar-15	43	0	[Gantt Bar]																								
TTM00630	TMLG Meeting No. 18	0		0%	0	05-Feb-15*		07-Apr-15	43	0	[Gantt Bar]																								
TTM00640	Earliest Implementation of TTM after TMLG Meeting No. 18	0	20-Feb-15	0%	0		22-Sep-15		152	20	[Gantt Bar]																								
TTM00650	Send TTMs to SO & Govt Depts for TMLG Meeting No. 19	0		0%	0	19-Feb-15		21-Apr-15	43	0	[Gantt Bar]																								
TTM00660	TMLG Meeting No. 19	0		0%	0	05-Mar-15*		05-May-15	43	0	[Gantt Bar]																								
TTM00670	Earliest Implementation of TTM after TMLG Meeting No. 19	0	20-Mar-15	0%	0		22-Sep-15		132	20	[Gantt Bar]																								
TTM00680	Send TTMs to SO & Govt Depts for TMLG Meeting No. 20	0		0%	0	19-Mar-15		19-May-15	43	0	[Gantt Bar]																								
<b>Tree Felling / Transplant</b>																																			
<b>Approved Trees in Contract</b>																																			
TR00140	SO Approval of Base Tree Survey Report	30	14-Oct-13 A	90%	3	24-Dec-14	27-Aug-18	29-Aug-18	960	960	[Gantt Bar]																								

<ul style="list-style-type: none"> <li><span style="color: blue;">█</span> Actual Work</li> <li><span style="color: green;">█</span> Planned Bar</li> <li><span style="color: red;">█</span> Critical Bar</li> <li>◆ Milestone</li> </ul>	Project ID: J3518DWPd1-M19 Layout: J3518-DWP-3MRP Submission - M19 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, no Level of Effort, No Level of Effort.	<p style="text-align: center;"><b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b></p> <p style="text-align: center;"><b>3-Month Rolling Programme (Page 10 of 36 Pages)</b></p> <p style="text-align: center;"><b>(Progress as of 21-Dec-14)</b></p>	<table border="1"> <thead> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> </thead> <tbody> <tr> <td>21-Sep-14</td> <td></td> <td></td> <td></td> </tr> <tr> <td>21-Oct-14</td> <td></td> <td></td> <td></td> </tr> <tr> <td>21-Nov-14</td> <td></td> <td>DB</td> <td></td> </tr> <tr> <td>21-Dec-14</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Date	Revision	Checked	Approved	21-Sep-14				21-Oct-14				21-Nov-14		DB		21-Dec-14				<b>DWG. No.:</b>  <b>J3518/GCL/PGM/3MRP-M19</b>
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											December					January				February			March												
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16								
TR00200	Tree transplant for Viaduct B - affecting Piers B11 to B17	90	17-Feb-14 A	97.78%	2	23-Dec-14	15-Feb-16	16-Feb-16	305	976	[Gantt Bar]																								
TR00220	Tree transplant for Viaduct B - affecting Pier B18 & Abutment B	90	17-Feb-14 A	97.78%	2	23-Dec-14	22-Dec-15	23-Dec-15	264	976	[Gantt Bar]																								
TR00240	Tree transplant for Viaduct B - affecting realigned CTR	90	17-Feb-14 A	97.78%	2	23-Dec-14	24-Oct-14	25-Oct-14	-50	143	[Gantt Bar]																								
TR00250	Tree felling for Viaduct B - affecting Slopes 9SE-B/F9, C8 & C9	48	05-May-14 A	91.67%	4	27-Dec-14	25-Aug-18	29-Aug-18	974	974	[Gantt Bar]																								
TR00260	Tree felling for Viaduct C - affecting Piers C9 to Abutment C	24	30-Jan-14 A	83.33%	4	27-Dec-14	31-Jul-18	03-Aug-18	954	54	[Gantt Bar]																								
TR00270	Tree transplant for Viaduct C - affecting Piers C9 to Abutment C	90	17-Feb-14 A	35.56%	58	05-Mar-15	15-May-18	03-Aug-18	900	0	[Gantt Bar]																								
TR00280	Tree felling for Viaduct C - affecting realigned CTR	30	30-Jan-14 A	70%	9	03-Jan-15	18-Dec-14	30-Dec-14	-3	49	[Gantt Bar]																								
TR00290	Tree transplant for Viaduct C - affecting realigned CTR	90	17-Feb-14 A	35.56%	58	05-Mar-15	22-Oct-14	30-Dec-14	-52	0	[Gantt Bar]																								
<b>Additional Trees</b>																																			
TR01010	Additional tree felling for Viaduct B along CTR	48	19-May-14 A	77.08%	11	06-Jan-15	13-Oct-14	25-Oct-14	-59	134	[Gantt Bar]																								
<b>Site Set Up for Works Area 3 and Site Offices along CEDD Access Road</b>																																			
PR30030	Works Area 3-A1/3-A2 - Construct 1.5m steel access bridge	30	22-Dec-14	0%	30	28-Jan-15	24-Jul-18	29-Aug-18	948	948	[Gantt Bar]																								
<b>Temporary Working Platform at North Lantau</b>																																			
PR08080	Inst.Unloading Frame incl. T&C for seg.lift (incl. Load Test)	15	24-Oct-14 A	20%	12	07-Jan-15	11-Dec-14	24-Dec-14	-9	11	[Gantt Bar]																								
<b>CONSTRUCTION</b>																																			
<b>PILING AND SUBSTRUCTURE</b>																																			
<b>Viaduct A</b>																																			
<b>Milestones - Marine Foundation</b>																																			
GFXX138-1	A2 (A2d) - Start date for piling	0	20-Mar-15	0%	0		25-Jun-15		76	0	[Milestone]																								
GFXX146-1	A1 (A2e) - Completion of piling works	0		0%	0	07-Feb-15		22-Aug-15	157	93	[Milestone]																								
<b>Milestones - Land Foundation</b>																																			
ZA00040	A10 (A1b) - Start date for piling	0	20-Mar-15	0%	0		24-Oct-15		176	141	[Milestone]																								
ZA00050	A11 (A1a) - Start date for piling	0	20-Mar-15	0%	0		13-May-15		41	0	[Milestone]																								
<b>General</b>																																			
ZA00010	Viaduct A - Approval of Foundation DDA DP11.01	0		0%	0	19-Feb-15		12-May-15	58	1	[Milestone]																								
<b>Bridge A2</b>																																			
<b>Pier A1 (A2e)</b>																																			
<b>Foundation Works</b>																																			
GFXX144	A1 (A2e) - Bored Piles (1.80m dia. x 3 nos)	88	12-Aug-14 A	75%	22	19-Jan-15	09-Jul-15	03-Aug-15	157	0	[Gantt Bar]																								
GFXX145	A1 (A2e) - Sonic & Interface Coring	12	20-Jan-15	0%	12	02-Feb-15	04-Aug-15	17-Aug-15	157	0	[Gantt Bar]																								
GFXX146	A1 (A2e) - Dismantle removable panels of temp. platform	5	03-Feb-15	0%	5	07-Feb-15	18-Aug-15	22-Aug-15	157	0	[Gantt Bar]																								
<b>Pier A2 (A2d)</b>																																			
<b>Foundation Works</b>																																			
GFXX137	A2 (A2d) - Inst.Temp.Working Platform	12	22-Dec-14	0%	12	07-Jan-15	27-May-15	09-Jun-15	122	0	[Gantt Bar]																								
GFXX138	A2 (A2d) - Pre-drilling (2 nos)	12	08-Jan-15	0%	12	21-Jan-15	10-Jun-15	24-Jun-15	122	0	[Gantt Bar]																								
GFXX138-2	A2 (A2d) - Confirm Rockhead Levels	8	22-Jan-15	0%	8	30-Jan-15	30-Jun-15	09-Jul-15	126	28	[Gantt Bar]																								
GFXX139	A2 (A2d) - Bored Piles (2.20m dia. x 2 nos)	51	23-Feb-15	0%	51	27-Apr-15	25-Jun-15	24-Aug-15	98	0	[Gantt Bar]																								
<b>Pier A5 (A2a)</b>																																			
<b>Foundation Works</b>																																			
GFXX122	A5 (A2a) - Inst.Temp.Working Platform	13	11-Mar-15	0%	13	25-Mar-15	25-Jul-15	08-Aug-15	109	0	[Gantt Bar]																								
<b>Bridge A1</b>																																			
<b>Pier A8 (A1d)</b>																																			
<b>Preliminary Works for Land Piling</b>																																			
GFXX281	A8 (A1d) - Mobilise & Set up grouting equipment	24	17-Feb-15	0%	24	19-Mar-15	17-Mar-15	17-Apr-15	21	0	[Gantt Bar]																								
GFXX281-1	A8 (A1d) - Pre-grouting Works	24	20-Mar-15	0%	24	21-Apr-15	18-Apr-15	16-May-15	21	0	[Gantt Bar]																								
PA080020	A08 (A1d) - Erect MTR protective fence / Remove existing fence	12	22-Dec-14	0%	12	07-Jan-15	19-Jan-15	31-Jan-15	21	0	[Gantt Bar]																								
PA080030	A8 (A1d) - Install Geo. Instru. & Baseline Monitoring	36	22-Dec-14	0%	36	04-Feb-15	19-Jan-15	04-Mar-15	21	0	[Gantt Bar]																								

<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; border: 1px solid black;"></span> Actual Work</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; border: 1px solid black;"></span> Planned Bar</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: red; border: 1px solid black;"></span> Critical Bar</li> <li><span style="display: inline-block; width: 0; height: 0; border-left: 5px solid transparent; border-right: 5px solid transparent; border-bottom: 8px solid black;"></span> Milestone</li> </ul>	Project ID: J3518DWPd1-M19 Layout: J3518-DWP-3MRP Submission - M19 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, no Level of Effort, No Level of Effort.	<b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b> <b>3-Month Rolling Programme (Page 11 of 36 Pages)</b> <b>(Progress as of 21-Dec-14)</b>	<table border="1"> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> <tr> <td>21-Sep-14</td> <td></td> <td></td> <td></td> </tr> <tr> <td>21-Oct-14</td> <td></td> <td></td> <td></td> </tr> <tr> <td>21-Nov-14</td> <td></td> <td>DB</td> <td></td> </tr> <tr> <td>21-Dec-14</td> <td></td> <td></td> <td></td> </tr> </table>	Date	Revision	Checked	Approved	21-Sep-14				21-Oct-14				21-Nov-14		DB		21-Dec-14				<b>DWG. No.:</b>  <b>J3518/GCL/PGM/3MRP-M19</b>
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											December					January					February					March				
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16			
PA080040	A08 (A1d) - Set up piling platform	10	05-Feb-15	0%	10	16-Feb-15	05-Mar-15	16-Mar-15	21	0																				
<b>Pier A9 (A1c)</b>																														
<b>Preliminary Works for Land Piling</b>																														
PA090010	A9 (A1c) - Implement TTMS along north side of NLH E/B	2	22-Dec-14	0%	2	23-Dec-14	14-Mar-15	16-Mar-15	65	0																				
PA090020	A9 (A1c) - Erect boundary fence, site clearance & set up site ingress	4	24-Dec-14	0%	4	30-Dec-14	17-Mar-15	20-Mar-15	65	6																				
PA090030	A9 (A1c) - Erect MTR protective fence	12	08-Jan-15	0%	12	21-Jan-15	21-Mar-15	10-Apr-15	59	0																				
PA090040	A9 (A1c) - Install Geo. Instru. & Baseline Monitoring	36	08-Jan-15	0%	36	18-Feb-15	21-Mar-15	07-May-15	59	0																				
PA090050	A9 (A1c) - Set up piling platform	24	23-Feb-15	0%	24	21-Mar-15	08-May-15	17-Jun-15	52	0																				
<b>Socketted H-Pile installation</b>																														
GFXX292	A9 (A1c) - Predrilling	16	15-Dec-14 A	43.75%	9	03-Jan-15	02-Sep-15	11-Sep-15	204	0																				
GFXX292-1	A9 (A1c) - Confirm Rockhead Levels	8	05-Jan-15	0%	8	13-Jan-15	12-Sep-15	21-Sep-15	204	181																				
<b>Pier A10 (A1b)</b>																														
<b>Preliminary Works for Land Piling</b>																														
PA100010	A10 (A1b) - Implement TTMS along north side of NLH E/B	2	22-Dec-14	0%	2	23-Dec-14	01-Apr-15	08-Apr-15	80	0																				
PA100020	A10 (A1b) - Install Water filled barriers & set up site ingress	4	13-Jan-15	0%	4	16-Jan-15	29-Apr-15	06-May-15	80	0																				
PA100030	A10 (A1b) - Erect MTR protective fence	12	22-Jan-15	0%	12	04-Feb-15	20-May-15	10-Jun-15	85	0																				
PA100040	A10 (A1b) - Install Geo. Instru. & Baseline Monitoring	36	17-Jan-15	0%	36	03-Mar-15	07-May-15	18-Jun-15	86	16																				
<b>Socketted H-Pile installation</b>																														
GFXX286-1	A10 (A1b) - Predrilling	15	05-Dec-14 A	100%	0	11-Dec-14 A																								
GFXX286-3	A10 (A1b) - Confirm Rockhead Levels	8	22-Dec-14	0%	8	02-Jan-15	14-Oct-15	23-Oct-15	238	1																				
GFXX288	A10 (A1b) - Install SH Pile (8 no.)	149	05-Jan-15	0%	149	09-Jul-15	24-Oct-15	26-Apr-16	237	0																				
<b>Pier A11 (A1a) &amp; Abutment A</b>																														
<b>Preliminary Works for Land Piling</b>																														
PA110010	A11 (A1a) to Abutment A - Implement TTMS along north side of NLH E/B	2	22-Dec-14	0%	2	23-Dec-14	01-Apr-15	08-Apr-15	80	0																				
PA110020	A11 (A1a) to Approach Ramp A - Erect boundary fence / water filled barrier & set up site ingr	14	24-Dec-14	0%	14	12-Jan-15	10-Apr-15	28-Apr-15	80	0																				
PA110030	A11 (A1a) - Erect MTR protective fence	12	05-Feb-15	0%	12	18-Feb-15	10-Jun-15	03-Jul-15	85	0																				
PA110040	A11 (A1a) - Install Geo. Instru. & Baseline Monitoring	36	05-Feb-15	0%	36	21-Mar-15	11-Jun-15	24-Jul-15	99	28																				
<b>Socketted H-Pile installation</b>																														
GFXX286-2	A11 (A1a) - Predrilling	15	01-Dec-14 A	100%	0	04-Dec-14 A																								
GFXX286-4	A11 (A1a) - Confirm Rockhead Levels	8	22-Dec-14	0%	8	02-Jan-15	04-May-15	12-May-15	103	40																				
GFXX287	A11 (A1a) - Install SH Pile (6 no.)	149	23-Feb-15	0%	149	24-Aug-15	13-May-15	09-Nov-15	63	0																				
<b>Viaduct B</b>																														
<b>Milestones - Land Foundation</b>																														
ZB00141	B10 (B2c) - Completion of piling works	0		100%	0	08-Dec-14 A																								
<b>Bridge B3</b>																														
<b>Pier B1 (B3f)</b>																														
<b>Pier Works</b>																														
SB3F0310	B1 (B3f) - Type 4B-MJ Pier Head Rebarwork	5	26-Nov-14 A	80%	1	22-Dec-14	29-Aug-18	29-Aug-18	946	946																				
SB3F0320	B1 (B3f) - Type 4B-MJ Pier Head Formwork & Prep for Concreting	7	14-Nov-14 A	100%	0	25-Nov-14 A																								
SB3F0330	B1 (B3f) - Type 4B-MJ Pier Head Concreting	1	22-Dec-14	0%	1	22-Dec-14	22-Oct-14	22-Oct-14	-52	0																				
SB3F0340	B1 (B3f) - Type 4B-MJ Pier Head Curing/Striking of Forms/Remove Scaffolding	6	23-Dec-14	0%	6	31-Dec-14	23-Oct-14	29-Oct-14	-52	0																				
<b>Pier Head Segments</b>																														
SB3F0370	B1 (B3f) - Pier Head Segment - Temporary Platform	6	02-Jan-15	0%	6	08-Jan-15	30-Oct-14	05-Nov-14	-52	0																				
SB3F0371	B1 (B3f) - Pier Head Segment Bearings	4	09-Jan-15	0%	4	13-Jan-15	06-Nov-14	10-Nov-14	-52	0																				
SB3F0372	B1 (B3f) - Pier Head Segment Lift & Temp Support (2 seg)	4	14-Jan-15	0%	4	17-Jan-15	11-Nov-14	14-Nov-14	-52	0																				
<b>Pier B2 (B3e)</b>																														
<b>Pier Works</b>																														

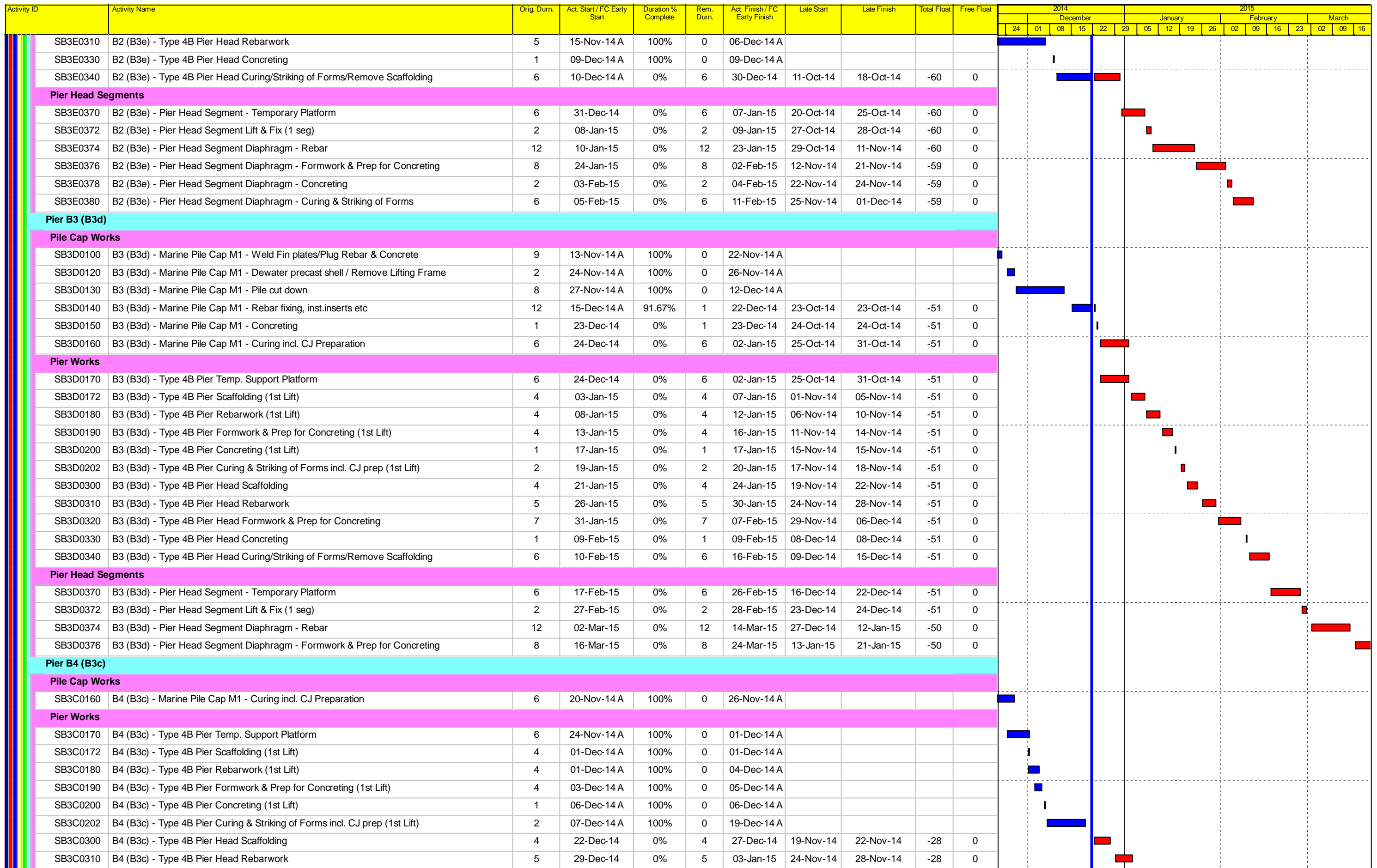
■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

Project ID: J3518DWPd1-M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 12 of 36 Pages)**  
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21-Sep-14			
21-Oct-14			
21-Nov-14		DB	
21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**



	Project ID: J3518DWPd1-M19 Layout: J3518-DWP-3MRP Submission - M19 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, no Level of Effort, No Level of Effort.	<b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b>				Date	Revision	Checked	Approved	<b>DWG. No.:</b>  <b>J3518/GCL/PGM/3MRP-M19</b>
	<b>3-Month Rolling Programme (Page 13 of 36 Pages)</b>					21-Sep-14				
	<b>(Progress as of 21-Dec-14)</b>					21-Oct-14				
						21-Nov-14		DB		

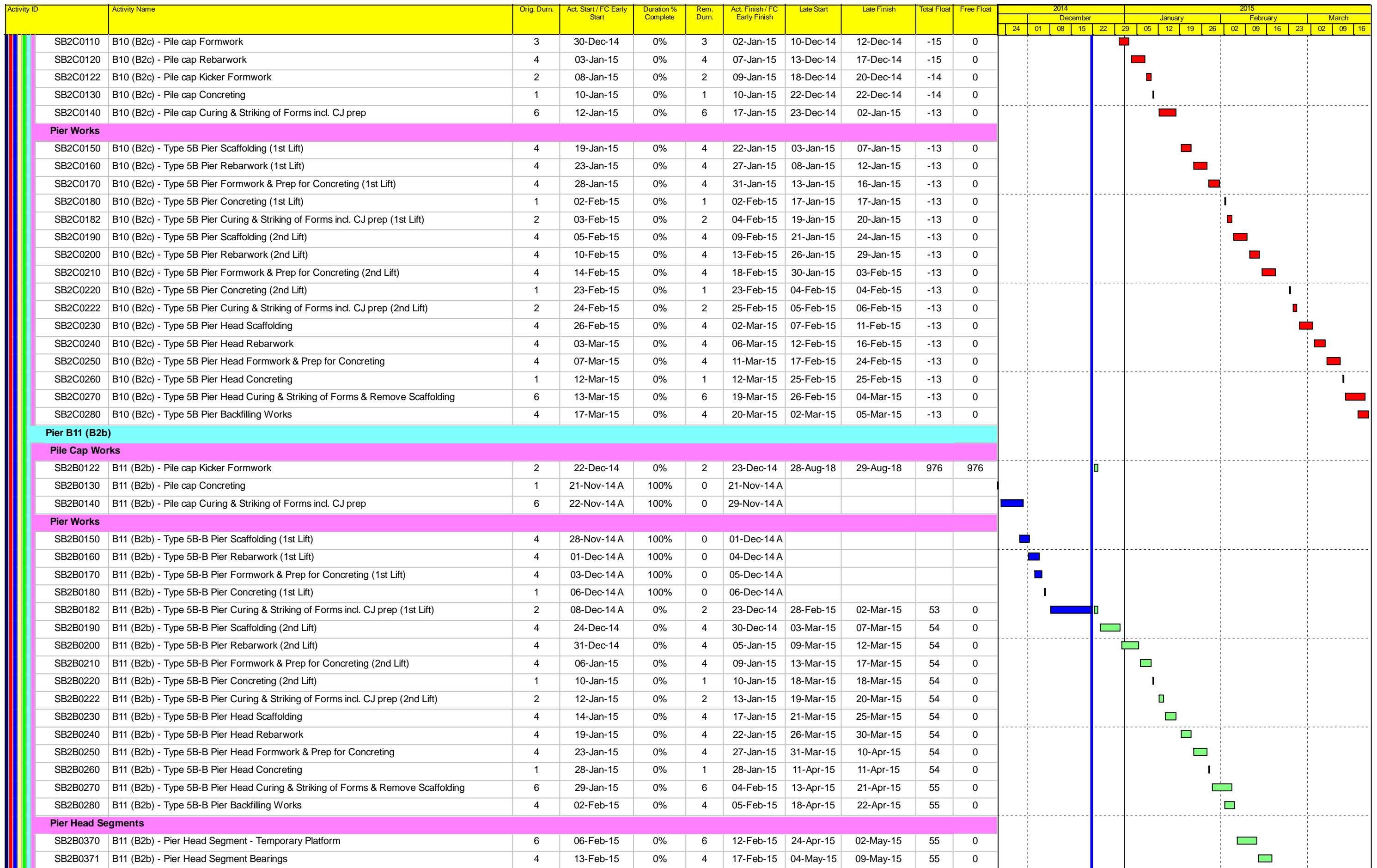












■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

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21-Dec-14			

**DWG. No.:**  
J3518/GCL/PGM/3MRP-M19

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014					2015														
											December					January					February					March				
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16			
SB2B0372	B11 (B2b) - Pier Head Segment Lift & Temp. Support (1 seg)	4	18-Feb-15	0%	4	25-Feb-15	11-May-15	15-May-15	55	0																				
<b>Pier B12 (B2a)</b>																														
<b>Pile Cap Works</b>																														
SB2A0122	B12 (B2a) - Pile cap Kicker Formwork	2	22-Dec-14	0%	2	23-Dec-14	28-Aug-18	29-Aug-18	976	976																				
<b>Pier Works</b>																														
SB2A0150	B12 (B2a) - Type 5B-MJ Pier Scaffolding (1st Lift)	4	24-Nov-14 A	100%	0	25-Nov-14 A																								
SB2A0160	B12 (B2a) - Type 5B-MJ Pier Rebarwork (1st Lift)	4	25-Nov-14 A	100%	0	28-Nov-14 A																								
SB2A0170	B12 (B2a) - Type 5B-MJ Pier Formwork & Prep for Concreting (1st Lift)	4	27-Nov-14 A	100%	0	01-Dec-14 A																								
SB2A0180	B12 (B2a) - Type 5B-MJ Pier Concreting (1st Lift)	1	02-Dec-14 A	100%	0	02-Dec-14 A																								
SB2A0182	B12 (B2a) - Type 5B-MJ Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	03-Dec-14 A	100%	0	05-Dec-14 A																								
SB2A0190	B12 (B2a) - Type 5B-MJ Pier Scaffolding (2nd Lift)	5	05-Dec-14 A	100%	0	10-Dec-14 A																								
SB2A0200	B12 (B2a) - Type 5B-MJ Pier Rebarwork (2nd Lift)	4	10-Dec-14 A	0%	4	27-Dec-14	11-Mar-15	14-Mar-15	62	0																				
SB2A0210	B12 (B2a) - Type 5B-MJ Pier Formwork & Prep for Concreting (2nd Lift)	4	29-Dec-14	0%	4	02-Jan-15	16-Mar-15	19-Mar-15	62	0																				
SB2A0220	B12 (B2a) - Type 5B-MJ Pier Concreting (2nd Lift)	1	03-Jan-15	0%	1	03-Jan-15	20-Mar-15	20-Mar-15	62	0																				
SB2A0222	B12 (B2a) - Type 5B-MJ Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	05-Jan-15	0%	2	06-Jan-15	21-Mar-15	23-Mar-15	62	90																				
<b>Bridge B1</b>																														
<b>Pier B13 (B1g)</b>																														
<b>Pile Cap Works</b>																														
SB1G0090	B13 (B1g) - Utility diversion & Cut slope	36	17-Sep-14 A	100%	0	01-Dec-14 A																								
SB1G0091	B13 (B1g) - Pile cap Excavation / ELS (incl. sheet piling)	24	04-Nov-14 A	100%	0	01-Dec-14 A																								
SB1G0092	B13 (B1g) - Pile Breakdown to cut-off etc.	4	02-Dec-14 A	100%	0	09-Dec-14 A																								
SB1G0100	B13 (B1g) - Pile cap Blinding	1	05-Dec-14 A	100%	0	05-Dec-14 A																								
SB1G0110	B13 (B1g) - Pile cap Formwork	3	15-Dec-14 A	0%	3	24-Dec-14	27-Aug-18	29-Aug-18	975	975																				
SB1G0120	B13 (B1g) - Pile cap Rebarwork	4	10-Dec-14 A	0%	4	27-Dec-14	06-Feb-15	10-Feb-15	37	0																				
SB1G0122	B13 (B1g) - Pile cap Kicker Formwork	2	29-Dec-14	0%	2	30-Dec-14	11-Feb-15	12-Feb-15	37	0																				
SB1G0130	B13 (B1g) - Pile cap Concreting	1	31-Dec-14	0%	1	31-Dec-14	13-Feb-15	13-Feb-15	37	0																				
SB1G0140	B13 (B1g) - Pile cap Curing & Striking of Forms incl. CJ prep	6	02-Jan-15	0%	6	08-Jan-15	14-Feb-15	24-Feb-15	37	0																				
<b>Pier Works</b>																														
SB1G0150	B13 (B1g) - Type 5B-B Pier Scaffolding (1st Lift)	4	09-Jan-15	0%	4	13-Jan-15	25-Feb-15	02-Mar-15	38	0																				
SB1G0160	B13 (B1g) - Type 5B-B Pier Rebarwork (1st Lift)	4	14-Jan-15	0%	4	17-Jan-15	03-Mar-15	06-Mar-15	38	0																				
SB1G0170	B13 (B1g) - Type 5B-B Pier Formwork & Prep for Concreting (1st Lift)	4	19-Jan-15	0%	4	22-Jan-15	07-Mar-15	11-Mar-15	38	0																				
SB1G0180	B13 (B1g) - Type 5B-B Pier Concreting (1st Lift)	1	23-Jan-15	0%	1	23-Jan-15	12-Mar-15	12-Mar-15	38	0																				
SB1G0182	B13 (B1g) - Type 5B-B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	24-Jan-15	0%	2	26-Jan-15	13-Mar-15	14-Mar-15	38	0																				
SB1G0190	B13 (B1g) - Type 5B-B Pier Scaffolding (2nd Lift)	4	27-Jan-15	0%	4	30-Jan-15	16-Mar-15	19-Mar-15	38	0																				
SB1G0200	B13 (B1g) - Type 5B-B Pier Rebarwork (2nd Lift)	4	31-Jan-15	0%	4	04-Feb-15	20-Mar-15	24-Mar-15	38	0																				
SB1G0210	B13 (B1g) - Type 5B-B Pier Formwork & Prep for Concreting (2nd Lift)	4	05-Feb-15	0%	4	09-Feb-15	25-Mar-15	28-Mar-15	38	0																				
SB1G0220	B13 (B1g) - Type 5B-B Pier Concreting (2nd Lift)	1	10-Feb-15	0%	1	10-Feb-15	30-Mar-15	30-Mar-15	38	0																				
SB1G0222	B13 (B1g) - Type 5B-B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	11-Feb-15	0%	2	12-Feb-15	31-Mar-15	01-Apr-15	38	0																				
SB1G0230	B13 (B1g) - Type 5B-B Pier Head Scaffolding	4	13-Feb-15	0%	4	17-Feb-15	08-Apr-15	13-Apr-15	38	0																				
SB1G0240	B13 (B1g) - Type 5B-B Pier Head Rebarwork	4	18-Feb-15	0%	4	25-Feb-15	14-Apr-15	18-Apr-15	38	0																				
SB1G0250	B13 (B1g) - Type 5B-B Pier Head Formwork & Prep for Concreting	4	26-Feb-15	0%	4	02-Mar-15	20-Apr-15	24-Apr-15	38	0																				
SB1G0260	B13 (B1g) - Type 5B-B Pier Head Concreting	1	03-Mar-15	0%	1	03-Mar-15	25-Apr-15	25-Apr-15	38	0																				
SB1G0270	B13 (B1g) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding	6	04-Mar-15	0%	6	10-Mar-15	27-Apr-15	06-May-15	38	0																				
SB1G0280	B13 (B1g) - Type 5B-B Pier Backfilling Works	4	11-Mar-15	0%	4	14-Mar-15	08-May-15	12-May-15	38	54																				
<b>Pier B14 (B1f)</b>																														
<b>Pile Cap Works</b>																														
SB1F0090	B14 (B1f) - Utility diversion & Cut slope	36	22-Nov-14 A	55.56%	16	12-Jan-15	10-Aug-18	29-Aug-18	962	962																				

■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

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 Milestones, no Level of Effort, No Level of Effort.

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21-Oct-14			
21-Nov-14		DB	
21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014												2015												
											December						January						February						March						
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16								
SB1F0091	B14 (B1f) - Pile cap Excavation / ELS (incl. sheet piling)	24	02-Dec-14 A	58.33%	10	05-Jan-15	01-Dec-14	11-Dec-14	-18	0																									
SB1F0092	B14 (B1f) - Pile Breakdown to cut-off etc.	4	06-Jan-15	0%	4	09-Jan-15	12-Dec-14	16-Dec-14	-18	0																									
SB1F0100	B14 (B1f) - Pile cap Blinding	1	10-Jan-15	0%	1	10-Jan-15	17-Dec-14	17-Dec-14	-18	0																									
SB1F0110	B14 (B1f) - Pile cap Formwork	3	12-Jan-15	0%	3	14-Jan-15	18-Dec-14	20-Dec-14	-18	0																									
SB1F0120	B14 (B1f) - Pile cap Rebarwork	4	15-Jan-15	0%	4	19-Jan-15	22-Dec-14	27-Dec-14	-18	0																									
SB1F0122	B14 (B1f) - Pile cap Kicker Formwork	2	20-Jan-15	0%	2	21-Jan-15	29-Dec-14	30-Dec-14	-18	0																									
SB1F0130	B14 (B1f) - Pile cap Concreting	1	22-Jan-15	0%	1	22-Jan-15	31-Dec-14	31-Dec-14	-18	0																									
SB1F0140	B14 (B1f) - Pile cap Curing & Striking of Forms incl. CJ prep	6	23-Jan-15	0%	6	29-Jan-15	02-Jan-15	08-Jan-15	-18	0																									
<b>Pier Works</b>																																			
SB1F0150	B14 (B1f) - Type 5B Pier Scaffolding (1st Lift)	4	30-Jan-15	0%	4	03-Feb-15	09-Jan-15	13-Jan-15	-18	0																									
SB1F0160	B14 (B1f) - Type 5B Pier Rebarwork (1st Lift)	4	04-Feb-15	0%	4	07-Feb-15	14-Jan-15	17-Jan-15	-18	0																									
SB1F0170	B14 (B1f) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	4	09-Feb-15	0%	4	12-Feb-15	19-Jan-15	22-Jan-15	-18	0																									
SB1F0180	B14 (B1f) - Type 5B Pier Concreting (1st Lift)	1	13-Feb-15	0%	1	13-Feb-15	23-Jan-15	23-Jan-15	-18	0																									
SB1F0182	B14 (B1f) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	14-Feb-15	0%	2	16-Feb-15	24-Jan-15	26-Jan-15	-18	0																									
SB1F0190	B14 (B1f) - Type 5B Pier Scaffolding (2nd Lift)	4	17-Feb-15	0%	4	24-Feb-15	27-Jan-15	31-Jan-15	-17	0																									
SB1F0200	B14 (B1f) - Type 5B Pier Rebarwork (2nd Lift)	4	25-Feb-15	0%	4	28-Feb-15	02-Feb-15	05-Feb-15	-17	0																									
SB1F0210	B14 (B1f) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift)	4	02-Mar-15	0%	4	05-Mar-15	06-Feb-15	10-Feb-15	-17	0																									
SB1F0220	B14 (B1f) - Type 5B Pier Concreting (2nd Lift)	1	06-Mar-15	0%	1	06-Mar-15	11-Feb-15	11-Feb-15	-17	0																									
SB1F0222	B14 (B1f) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	07-Mar-15	0%	2	09-Mar-15	12-Feb-15	13-Feb-15	-17	0																									
SB1F0230	B14 (B1f) - Type 5B Pier Head Scaffolding	4	10-Mar-15	0%	4	13-Mar-15	14-Feb-15	18-Feb-15	-17	0																									
SB1F0240	B14 (B1f) - Type 5B Pier Head Rebarwork	4	14-Mar-15	0%	4	18-Mar-15	23-Feb-15	26-Feb-15	-17	0																									
SB1F0250	B14 (B1f) - Type 5B Pier Head Formwork & Prep for Concreting	4	19-Mar-15	0%	4	23-Mar-15	27-Feb-15	03-Mar-15	-17	0																									
<b>Pier B15 (B1e)</b>																																			
<b>Pier Works</b>																																			
SB1E0230	B15 (B1e) - Type 5B Pier Head Scaffolding	4	22-Dec-14	0%	4	27-Dec-14	13-Apr-15	17-Apr-15	84	0																									
SB1E0240	B15 (B1e) - Type 5B Pier Head Rebarwork	4	29-Dec-14	0%	4	02-Jan-15	18-Apr-15	22-Apr-15	84	0																									
SB1E0250	B15 (B1e) - Type 5B Pier Head Formwork & Prep for Concreting	4	03-Jan-15	0%	4	07-Jan-15	24-Apr-15	28-Apr-15	84	0																									
SB1E0260	B15 (B1e) - Type 5B Pier Head Concreting	1	08-Jan-15	0%	1	08-Jan-15	29-Apr-15	29-Apr-15	84	0																									
SB1E0270	B15 (B1e) - Type 5B Pier Head Curing & Striking of Forms & Remove Scaffolding	6	09-Jan-15	0%	6	15-Jan-15	02-May-15	11-May-15	84	0																									
SB1E0280	B15 (B1e) - Type 5B Pier Backfilling Works	4	16-Jan-15	0%	4	20-Jan-15	12-May-15	16-May-15	84	0																									
<b>Pier Head Segments</b>																																			
SB1E0370	B15 (B1e) - Pier Head Segment - Temporary Platform	6	21-Jan-15	0%	6	27-Jan-15	18-May-15	27-May-15	85	0																									
SB1E0372	B15 (B1e) - Pier Head Segment Lift & Fix (1 seg)	2	28-Jan-15	0%	2	29-Jan-15	29-May-15	30-May-15	85	0																									
SB1E0374	B15 (B1e) - Pier Head Segment Diaphragm - Rebar	12	30-Jan-15	0%	12	12-Feb-15	01-Jun-15	25-Jun-15	85	0																									
SB1E0376	B15 (B1e) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	13-Feb-15	0%	8	25-Feb-15	26-Jun-15	07-Jul-15	85	0																									
SB1E0378	B15 (B1e) - Pier Head Segment Diaphragm - Concreting	2	26-Feb-15	0%	2	27-Feb-15	08-Jul-15	10-Jul-15	85	0																									
SB1E0380	B15 (B1e) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	28-Feb-15	0%	6	06-Mar-15	11-Jul-15	20-Jul-15	86	0																									
<b>Pier B16 (B1d)</b>																																			
<b>Pier Works</b>																																			
SB1D0200	B16 (B1d) - Type 5B Pier Head Rebarwork	4	22-Dec-14	0%	4	27-Dec-14	13-May-15	19-May-15	104	0																									
SB1D0210	B16 (B1d) - Type 5B Pier Head Formwork & Prep for Concreting	4	29-Dec-14	0%	4	02-Jan-15	19-May-15	26-May-15	104	0																									
SB1D0220	B16 (B1d) - Type 5B Pier Head Concreting	1	03-Jan-15	0%	1	03-Jan-15	26-May-15	27-May-15	104	0																									
SB1D0270	B16 (B1d) - Type 5B Pier Head Curing & Striking of Forms & Remove Scaffolding	6	05-Jan-15	0%	6	10-Jan-15	27-May-15	10-Jun-15	105	0																									
SB1D0280	B16 (B1d) - Type 5B Pier Backfilling Works	4	12-Jan-15	0%	4	15-Jan-15	10-Jun-15	19-Jun-15	105	0																									
<b>Pier Head Segments</b>																																			
SB1D0370	B16 (B1d) - Pier Head Segment - Temporary Platform	6	16-Jan-15	0%	6	22-Jan-15	19-Jun-15	29-Jun-15	105	0																									
SB1D0372	B16 (B1d) - Pier Head Segment Lift & Fix (1 seg)	2	23-Jan-15	0%	2	24-Jan-15	29-Jun-15	03-Jul-15	105	0																									

Actual Work  
 Planned Bar  
 Critical Bar  
 Milestone

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**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
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**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**



Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014					2015														
											December					January					February					March				
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16			
SB1D0374	B16 (B1d) - Pier Head Segment Diaphragm - Rebar	12	26-Jan-15	0%	12	07-Feb-15	03-Jul-15	21-Jul-15	107	0																				
SB1D0376	B16 (B1d) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	09-Feb-15	0%	8	17-Feb-15	22-Jul-15	01-Aug-15	107	0																				
SB1D0378	B16 (B1d) - Pier Head Segment Diaphragm - Concreting	2	18-Feb-15	0%	2	23-Feb-15	03-Aug-15	04-Aug-15	107	0																				
SB1D0380	B16 (B1d) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	24-Feb-15	0%	6	02-Mar-15	05-Aug-15	12-Aug-15	107	0																				
<b>Pier B18 (B1b) &amp; Abutment B</b>																														
<b>Preliminary Works for Land Piling</b>																														
PB180030	B18 (B1b) - Install Geo. Instru. & Baseline Monitoring	36	13-Jun-14 A	0%	36	04-Feb-15	03-Nov-15	14-Dec-15	254	478																				
<b>Viaduct C</b>																														
<b>Milestones - Marine Foundation</b>																														
GFX194-1	C6 (C3f) - Start date for piling	0	13-Mar-15	0%	0		07-Feb-15		-26	0																				
GFX199-1	C5 (C4a) - Start date for piling	0	05-Dec-14 A	100%	0																									
GFX204-1	C4 (C4b) - Start date for piling	0	22-Dec-14	0%	0		29-Dec-14		4	0																				
GFX209-1	C3 (C4c) - Start date for piling	0	03-Jan-15	0%	0		18-Dec-14		-11	0																				
GFX217-1	C2 (C4d) - Completion of piling works	0		100%	0	19-Dec-14 A																								
GFX222-1	C1(C4e) - Completion of piling works	0		100%	0	27-Nov-14 A																								
<b>Milestones - Land Foundation</b>																														
ZC00031	C19 (C1d) - Completion of piling works	0		0%	0	03-Jan-15		03-Jul-15	144	11																				
ZC00041	C18 (C1e) - Completion of piling works	0		0%	0	14-Feb-15		27-Jun-15	104	37																				
ZC00050	C17 (C2a) - Start date for piling	0	03-Mar-15	0%	0		09-May-15		53	0																				
ZC00060	C16 (C2b) - Start date for piling	0	03-Mar-15	0%	0		29-Jun-15		94	0																				
ZC00070	C15 (C2c) - Start date for piling	0	06-Feb-15	0%	0		29-Sep-15		189	111																				
ZC00080	C14 (C2d) - Start date for piling	0	28-Jan-15	0%	0		11-Sep-15		183	162																				
ZC00090-1	C13 (C2e) - Start date for piling	0	15-Dec-14 A	100%	0																									
ZC00090-2	C13 (C2e) - Completion of piling works	0		0%	0	27-Jan-15		26-Jun-15	119	0																				
ZC00091	C12 (C2f) - Start date for piling	0	22-Dec-14	0%	0		21-Apr-15		93	0																				
ZC00092	C11 (C3a) - Start date for piling	0	03-Jan-15	0%	0		13-Feb-15		35	0																				
ZC00093	C10 (C3b) - Start date for piling	0	03-Jan-15	0%	0		19-Jan-15		13	0																				
ZC00095	C8 (C3d) - Start date for piling	0	29-Nov-14 A	100%	0																									
ZC00095-1	C8 (C3d) - Completion of piling works	0		0%	0	17-Mar-15		26-Jun-15	80	22																				
<b>Bridge C4</b>																														
<b>Pier C1 (C4e)</b>																														
<b>Foundation Works</b>																														
GFX220	C1 (C4e) - Bored Piles (1.80m dia. x 3 nos)	84	18-Aug-14 A	100%	0	27-Nov-14 A																								
GFX221	C1 (C4e) - Sonic & Interface Coring	12	22-Dec-14	0%	12	07-Jan-15	22-Jan-15	04-Feb-15	24	9																				
GFX221-1	C1 (C4e) - Selection of bored pile for Full Depth Coring	21	22-Dec-14	0%	21	17-Jan-15	12-Jan-15	04-Feb-15	15	0																				
GFX221-2	C1 (C4e) - Bored Pile Full Depth Coring & Testing	20	19-Jan-15	0%	20	10-Feb-15	05-Feb-15	03-Mar-15	15	0																				
GFX222	C1 (C4e) - Dismantle removable panels of temp. platform	5	11-Feb-15	0%	5	16-Feb-15	04-Mar-15	09-Mar-15	15	36																				
<b>Pier C2 (C4d)</b>																														
<b>Foundation Works</b>																														
GFX215	C2 (C4d) - Bored Piles (2.20m dia. x 2 nos)	70	21-Oct-14 A	100%	0	19-Dec-14 A																								
GFX216	C2 (C4d) - Sonic & Interface Coring	12	23-Dec-14	0%	12	08-Jan-15	27-Feb-15	12-Mar-15	51	0																				
GFX217	C2 (C4d) - Dismantle removable panels of temp. platform	5	09-Jan-15	0%	5	14-Jan-15	13-Mar-15	18-Mar-15	51	141																				
<b>Pier C3 (C4c)</b>																														
<b>Foundation Works</b>																														
GFX208	C3 (C4c) - Inst.Temp.Working Platform	12	24-Nov-14 A	100%	0	04-Dec-14 A																								
GFX209	C3 (C4c) - Predrilling (3 nos)	12	09-Dec-14 A	33.33%	8	02-Jan-15	09-Dec-14	17-Dec-14	-11	0																				
GFX209-2	C3 (C4c) - Confirm Rockhead Levels	8	03-Jan-15	0%	8	12-Jan-15	19-Dec-14	30-Dec-14	-10	1																				

■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

Project ID: J3518DWPd1-M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 20 of 36 Pages)**  
**(Progress as of 21-Dec-14)**

Date	Revision	Checked	Approved
21-Sep-14			
21-Oct-14			
21-Nov-14		DB	
21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**



Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014							2015																			
											December							January				February				March											
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16										
GFXX210	C3 (C4c) - Bored Piles (2.00m dia. x 3 nos)	68	03-Jan-15	0%	68	26-Mar-15	18-Dec-14	13-Mar-15	-11	0																											
<b>Pier C4 (C4b)</b>																																					
<b>Foundation Works</b>																																					
GFXX203	C4 (C4b) - Inst.Temp.Working Platform	12	08-Sep-14 A	100%	0	22-Nov-14 A																															
GFXX204	C4 (C4b) - Predrilling (3 nos)	12	24-Nov-14 A	100%	0	08-Dec-14 A																															
GFXX204-2	C4 (C4b) - Confirm Rockhead Levels	8	22-Dec-14	0%	8	02-Jan-15	03-Jan-15	12-Jan-15	8	4																											
GFXX205	C4 (C4b) - Bored Piles (2.00m dia. x 3 nos)	76	22-Dec-14	0%	76	26-Mar-15	29-Dec-14	31-Mar-15	4	0																											
<b>Pier C5 (C4a)</b>																																					
<b>Foundation Works</b>																																					
GFXX199	C5 (C4a) - Predrilling (2 nos)	12	20-Nov-14 A	100%	0	29-Nov-14 A																															
GFXX199-2	C5 (C4a) - Confirm Rockhead Levels	8	01-Dec-14 A	100%	0	04-Dec-14 A																															
GFXX200	C5 (C4a) - Bored Piles (2.35m dia. x 2 nos)	77	05-Dec-14 A	19.48%	62	10-Mar-15	07-Jan-15	23-Mar-15	11	0																											
GFXX201	C5 (C4a) - Sonic & Interface Coring	12	12-Mar-15	0%	12	25-Mar-15	24-Mar-15	10-Apr-15	10	0																											
<b>Pier C6 (C3f)</b>																																					
<b>Foundation Works</b>																																					
GFXX193	C6 (C3f) - Inst.Temp.Working Platform	12	10-Feb-15	0%	12	26-Feb-15	10-Jan-15	23-Jan-15	-26	0																											
GFXX194	C6 (C3f) - Predrilling (3 nos)	12	27-Feb-15	0%	12	12-Mar-15	24-Jan-15	06-Feb-15	-26	0																											
GFXX194-2	C6 (C3f) - Confirm Rockhead Levels	8	13-Mar-15	0%	8	21-Mar-15	07-Feb-15	16-Feb-15	-26	0																											
GFXX195	C6 (C3f) - Bored Piles (2.00m dia. x 3 nos)	58	13-Mar-15	0%	58	26-May-15	07-Feb-15	23-Apr-15	-26	0																											
<b>Bridge C3</b>																																					
<b>Pier C7 (C3e)</b>																																					
<b>Preliminary Works for Land Piling</b>																																					
GFXX361-1	C7 (C3e) - Pre-grouting Works	30	28-Oct-14 A	80%	6	30-Dec-14	23-Aug-18	29-Aug-18	1084	1084																											
<b>Socketted H-Pile Installation</b>																																					
GFXX397-1	C7 (C3e) - Confirm Rockhead Levels	8	19-Sep-14 A	0%	8	02-Jan-15	22-Apr-15	30-Apr-15	94	71																											
<b>Pile Cap Works</b>																																					
SC3E0088	C7 (C3e) - Pile cap - pipe Pile Wall for ELS	20	05-Dec-14 A	100%	0	19-Dec-14 A																															
SC3E0090	C7 (C3e) - Pile cap Excavation / ELS	20	22-Dec-14	0%	20	16-Jan-15	15-Jun-15	15-Jul-15	122	0																											
SC3E0092	C7 (C3e) - Pile cap Pile breakdown to cut-off etc.	4	17-Jan-15	0%	4	21-Jan-15	17-Jul-15	22-Jul-15	123	57																											
<b>Pier C8 (C3d)</b>																																					
<b>Preliminary Works for Land Piling</b>																																					
PC080050	C8 (C3d) - Install Geo. Instru. & Baseline Monitoring	36	06-Oct-14 A	100%	0	21-Nov-14 A																															
PC080060	C8 (C3d) - Set up piling platform	36	10-Oct-14 A	100%	0	21-Nov-14 A																															
PC080070	C8 (C3d) - Complete Civil Preparation Works for piling to commence	0		100%	0	21-Nov-14 A																															
<b>Socketted H-Pile Installation</b>																																					
GFXX392-1	C8 (C3d) - Confirm Rockhead Levels	8	20-Aug-14 A	100%	0	28-Nov-14 A																															
GFXX393	C8 (C3d) - Install SH Pile (16 no.)	108	29-Nov-14 A	37.04%	68	17-Mar-15	01-Apr-15	26-Jun-15	80	0																											
GFXX932-2	C8 (C3d) - Predrilling (PD-C8-S2, PD-C8-S3)	17	22-Dec-14	0%	17	13-Jan-15	10-Aug-18	29-Aug-18	1073	1073																											
<b>Pier C9 (C3c)</b>																																					
<b>Foundation Works</b>																																					
GFXX420	C9 (C3c) - Bored Pile (2.00m dia. x 3 nos)	110	18-Nov-14 A	50%	55	02-Mar-15	23-Feb-15	02-May-15	48	0																											
<b>Pier C10 (C3b)</b>																																					
<b>Foundation Works</b>																																					
GFXX414-5	C10 (C3b) - Confirm Rockhead Levels	8	24-Sep-14 A	0%	8	02-Jan-15	09-Jan-15	17-Jan-15	13	0																											
GFXX418	C10 (C3b) - Bored Pile (2.20m dia. x 2 nos)	110	03-Jan-15	0%	110	20-May-15	19-Jan-15	05-Jun-15	13	0																											
<b>Pier C11 (C3a)</b>																																					
<b>Foundation Works</b>																																					

- Actual Work
- Planned Bar
- Critical Bar
- ◆ Milestones

Project ID: J3518DWP-3MRP Submission - M19  
 Layout: J3518-DWP-3MRP Submission - M19  
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 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 21 of 36 Pages)**  
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21-Sep-14			
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**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014												2015														
											December						January						February						March								
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16										
GFXX414-6	C11 (C3a) - Confirm Rockhead Levels	8	04-Sep-14 A	0%	8	02-Jan-15	04-Feb-15	12-Feb-15	35	0	[Gantt Bar]																										
GFXX416	C11 (C3a) - Bored Pile (2.00m dia. x 2 nos)	110	03-Jan-15	0%	110	20-May-15	13-Feb-15	03-Jul-15	35	0	[Gantt Bar]																										
<b>Bridge C2</b>																																					
<b>Pier C12 (C2f)</b>																																					
<b>Foundation Works</b>																																					
GFXX411	C12 (C2f) - Confirm Rockhead Levels	8	29-Aug-14 A	0%	8	02-Jan-15	17-Apr-15	25-Apr-15	90	0	[Gantt Bar]																										
GFXX412	C12 (C2f) - Bored Pile (2.00m dia. x 2 nos)	48	22-Dec-14	0%	48	18-Feb-15	17-Apr-15	13-Jun-15	90	0	[Gantt Bar]																										
GFXX413	C12 (C2f) - Sonic & Interface Coring Tests	12	23-Feb-15	0%	12	07-Mar-15	18-Jun-15	03-Jul-15	93	12	[Gantt Bar]																										
GFXX422-4	C12 (C2f) - Selection of bored pile for Full Depth Coring	24	23-Feb-15	0%	24	21-Mar-15	15-Jun-15	14-Jul-15	90	0	[Gantt Bar]																										
<b>Pier C13 (C2e) Portal</b>																																					
<b>Socketted H-Pile Installation</b>																																					
GFXX388	C13 (C2e) - Install SH Pile (10 nr.)	35	15-Dec-14 A	17.14%	29	27-Jan-15	22-May-15	26-Jun-15	119	0	[Gantt Bar]																										
GFXX399-4	C13 (C2e) - Selction of pile for Loading Test	24	28-Jan-15	0%	24	27-Feb-15	27-Jun-15	25-Jul-15	119	0	[Gantt Bar]																										
GFXX399-6	C13 (C2e) - Loading Test for pre-bored H-pile	36	28-Feb-15	0%	36	15-Apr-15	27-Jul-15	05-Sep-15	119	111	[Gantt Bar]																										
<b>Pier C14 (C2d)</b>																																					
<b>Preliminary Works for Land Piling</b>																																					
PC140020	C14 (C2d) - Erect fencing & site clearance	5	06-Mar-15	0%	5	11-Mar-15	04-Aug-18	10-Aug-18	900	0	[Gantt Bar]																										
PC140030	C14 (C2d) - Set up piling platform	15	12-Mar-15	0%	15	28-Mar-15	11-Aug-18	29-Aug-18	900	0	[Gantt Bar]																										
<b>Socketted H-Pile Installation</b>																																					
GFXX380-5	C14 (C2d) - Confirm Rockhead Levels	8	24-Sep-14 A	0%	8	02-Jan-15	02-Sep-15	10-Sep-15	204	21	[Gantt Bar]																										
GFXX381-2	C14 (C2d) - Install SH Pile (12 nr)	49	28-Jan-15	0%	49	28-Mar-15	11-Sep-15	10-Nov-15	183	0	[Gantt Bar]																										
<b>Pier C15 (C2c)</b>																																					
<b>Preliminary Works for Land Piling</b>																																					
PC150030	C15 (C2c) - Set up piling platform	15	17-Nov-14 A	0%	15	10-Jan-15	12-Aug-15	01-Sep-15	161	0	[Gantt Bar]																										
PC150040	C15 (C2c) - Complete Civil Preparation Works for piling to commence	0		0%	0	10-Jan-15		01-Sep-15	161	0	[Milestone]																										
<b>Socketted H-Pile Installation</b>																																					
GFXX380-3	C15 (C2c) - Predrilling	14	12-Jan-15	0%	14	27-Jan-15	02-Sep-15	17-Sep-15	189	0	[Gantt Bar]																										
GFXX380-6	C15 (C2c) - Confirm Rockhead Levels	8	28-Jan-15	0%	8	05-Feb-15	18-Sep-15	26-Sep-15	189	0	[Gantt Bar]																										
GFXX381-3	C15 (C2c) - Install SH Pile (13 nr)	49	06-Feb-15	0%	49	11-Apr-15	29-Sep-15	26-Nov-15	189	0	[Gantt Bar]																										
<b>Pier C16 (C2b)</b>																																					
<b>Preliminary Works for Land Piling</b>																																					
PC160020	C16 (C2b) - Erect fencing & site clearance	5	06-Mar-15	0%	5	11-Mar-15	04-Aug-18	10-Aug-18	900	0	[Gantt Bar]																										
PC160030	C16(C2b) - Set up piling platform	15	12-Mar-15	0%	15	28-Mar-15	11-Aug-18	29-Aug-18	900	0	[Gantt Bar]																										
<b>Foundation Works</b>																																					
GFXX404-3	C16 (C2b) - Confirm Rockhead Levels	8	17-Oct-14 A	0%	8	02-Jan-15	04-Jun-15	12-Jun-15	129	47	[Gantt Bar]																										
GFXX408	C16 (C2b) - Bored Pile (2.00m dia. x 2 nos)	72	03-Mar-15	0%	72	01-Jun-15	13-Jun-15	07-Sep-15	82	0	[Gantt Bar]																										
<b>Bridge C1</b>																																					
<b>Pier C17 (C2a)</b>																																					
<b>Preliminary Works for Land Piling</b>																																					
PC170010	C17 (C2a) - Install Geo. Instru. & Baseline Monitoring	36	08-Oct-14 A	0%	36	04-Feb-15	22-Jun-18	03-Aug-18	1032	22	[Gantt Bar]																										
PC170020	C17 (C2a) - Erect fencing & site clearance	5	06-Mar-15	0%	5	11-Mar-15	04-Aug-18	10-Aug-18	900	0	[Gantt Bar]																										
PC170030	C17(C2a) - Set up piling platform	15	12-Mar-15	0%	15	28-Mar-15	11-Aug-18	29-Aug-18	900	0	[Gantt Bar]																										
<b>Foundation Works</b>																																					
GFXX404-4	C17 (C2a) - Confirm Rockhead Levels	8	22-Dec-14	0%	8	02-Jan-15	29-Apr-15	08-May-15	100	47	[Gantt Bar]																										
GFXX406	C17 (C2a) - Bored Pile (2.00m dia. x 2 nos)	72	03-Mar-15	0%	72	01-Jun-15	09-May-15	04-Aug-15	53	0	[Gantt Bar]																										
<b>Pier C18 (C3d) Portal</b>																																					
<b>Socketted H-Pile Installation</b>																																					

■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

Project ID: J3518DWPd1-M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 22 of 36 Pages)**  
**(Progress as of 21-Dec-14)**

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21-Oct-14			
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21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014												2015														
											December						January						February						March								
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16										
GFX374	C18 (C1e) - Install SH Pile (10 nr)	56	17-Nov-14 A	19.64%	45	14-Feb-15	05-May-15	27-Jun-15	104	0																											
<b>Pier C19 (C1d)</b>																																					
<b>Socketted H-Pile Installation</b>																																					
GFX369-2	C19 (C1d) - Install SH Pile (9 nr)	56	10-Nov-14 A	83.93%	9	03-Jan-15	23-Jun-15	03-Jul-15	144	0																											
GFX399-7	C19 (C1d) - Selection of Pile for Loading Test	24	17-Jan-15	0%	24	13-Feb-15	04-Jul-15	31-Jul-15	133	0																											
GFX399-8	C19 (C1d) - Loading Test for pre-bored H-pile	36	14-Feb-15	0%	36	31-Mar-15	01-Aug-15	11-Sep-15	133	2																											
<b>Pier C20 (C1c) &amp; Abutment C</b>																																					
<b>Pile Cap Works</b>																																					
SC1C0090	C20 (C1c) - Pile cap Excavation / ELS	18	22-Dec-14 A	0%	18	14-Jan-15	20-May-15	24-Jun-15	109	0																											
SC1C0092	C20 (C1c) - Pile Breakdown to cut-off etc.	7	15-Jan-15	0%	7	22-Jan-15	25-Jun-15	04-Jul-15	109	0																											
SC1C0100	C20 (C1c) - Pile cap Blinding	1	23-Jan-15	0%	1	23-Jan-15	06-Jul-15	06-Jul-15	109	0																											
SC1C0110	C20 (C1c) - Pile cap Formwork	3	24-Jan-15	0%	3	27-Jan-15	07-Jul-15	10-Jul-15	109	0																											
SC1C0120	C20 (C1c) - Pile cap Rebarwork	7	28-Jan-15	0%	7	04-Feb-15	11-Jul-15	20-Jul-15	109	0																											
SC1C0122	C20 (C1c) - Pile cap Kicker Formwork	3	05-Feb-15	0%	3	07-Feb-15	21-Jul-15	24-Jul-15	109	0																											
SC1C0130	C20 (C1c) - Pile cap Concreting	1	09-Feb-15	0%	1	09-Feb-15	25-Jul-15	25-Jul-15	109	0																											
SC1C0140	C20 (C1c) - Pile cap Curing & Striking of Forms incl. CJ prep	6	10-Feb-15	0%	6	16-Feb-15	27-Jul-15	03-Aug-15	109	0																											
<b>Pier Works</b>																																					
SC1C0150	C20 (C1c) - Pier/Pier Head Scaffolding	4	17-Feb-15	0%	4	24-Feb-15	13-Oct-15	17-Oct-15	160	0																											
SC1C0160	C20 (C1c) - Pier/Pier Head Rebarwork	6	25-Feb-15	0%	6	03-Mar-15	19-Oct-15	26-Oct-15	160	0																											
SC1C0170	C20 (C1c) - Pier/Pier Head Formwork	8	04-Mar-15	0%	8	12-Mar-15	27-Oct-15	04-Nov-15	160	0																											
SC1C0180	C20 (C1c) - Pier/Pier Head Concreting	1	13-Mar-15	0%	1	13-Mar-15	05-Nov-15	05-Nov-15	160	0																											
SC1C0190	C20 (C1c) - Pier/Pier Head Curing & Striking of Forms incl. CJ prep	6	14-Mar-15	0%	6	20-Mar-15	06-Nov-15	12-Nov-15	160	0																											
<b>Abutment &amp; Approach Ramp C</b>																																					
SC1C0200	Abutment C - Walls & Staircase	48	17-Feb-15	0%	48	25-Apr-15	04-Aug-15	07-Oct-15	109	104																											
<b>Viaduct D</b>																																					
<b>Milestones - Marine Foundation</b>																																					
GFX228	Viaduct D - ARUP issues Pile Spacing & Diameter for Temporary Platform Design	0		0%	0	22-Dec-14		29-Aug-18	1090	1090																											
GFX230-1	Pier D7 (D3e) - Start date for piling	0	22-Dec-14 A	100%	0																																
GFX235-1	Pier D6 (D4a) - Start date for piling	0	03-Dec-14 A	100%	0																																
GFX240-1	Pier D5 (D4b) - Start date for piling	0	12-Dec-14 A	100%	0																																
GFX248-1	Pier D4 (D4c) - Completion of Piling Works	0		0%	0	19-Mar-15		08-Dec-14	-81	0																											
GFX253-1	Pier D3 (D4d) - Completion of Piling Works	0		0%	0	09-Feb-15		25-Oct-14	-88	7																											
GFX258-2	Pier D2 (D4e) - Completion of Piling Works	0		0%	0	07-Feb-15		24-Aug-15	158	8																											
<b>Milestones - Land Foundation</b>																																					
GFX446A2	D14 (D2c) - Completion of piling works	0		0%	0	05-Feb-15		08-Dec-14	-48	10																											
GFX446B	D15 (D2b) - Start date for piling	0	03-Jan-15	0%	0		07-Aug-14		-122	1																											
GFX454A	D13 (D2d) - Start date for piling	0	03-Jan-15	0%	0		23-Mar-15		64	0																											
GFX461B	D11 (D3a) - Start date for piling	0	28-Nov-14 A	100%	0																																
GFX461C	D12 (D2e) - Start date for piling	0	14-Jan-15	0%	0		22-Nov-14		-42	0																											
GFX471-2	D8 (D3d) - Completion of piling works	0		0%	0	12-Feb-15		15-Jan-15	-24	22																											
<b>Bridge D3</b>																																					
<b>Pier D1 (D4f)</b>																																					
<b>Foundation Works</b>																																					
GFX262	D1 (D4f) - Sonic & Interface Coring	12	22-Dec-14	0%	12	07-Jan-15	03-Jan-15	16-Jan-15	8	0																											
GFX263	D1 (D4f) - Dismantle removable panels of temp. platform	5	08-Jan-15	0%	5	13-Jan-15	17-Jan-15	22-Jan-15	8	30																											
<b>Pile Cap Works</b>																																					
SD4F0070	D1 (D4f) - Marine Pile Cap M2 - Inst.Floating Seal & Casing Head Steelwork	7	18-Feb-15	0%	7	28-Feb-15	23-Jan-15	30-Jan-15	-22	0																											

Actual Work  
 Planned Bar  
 Critical Bar  
 Milestone

Project ID: J3518DWPd1-M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 23 of 36 Pages)**  
**(Progress as of 21-Dec-14)**

Date	Revision	Checked	Approved
21-Sep-14			
21-Oct-14			
21-Nov-14		DB	
21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014					2015															
											December					January			February		March										
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16				
SD4F0080	D1 (D4f) - Marine Pile Cap M2 - Install precast shell in position	1	02-Mar-15	0%	1	02-Mar-15	31-Jan-15	31-Jan-15	-22	0																					
SD4F0090	D1 (D4f) - Marine Pile Cap M2 - Inst.Access & make Watertight	3	03-Mar-15	0%	3	05-Mar-15	02-Feb-15	05-Feb-15	-21	0																					
SD4F0100	D1 (D4f) - Marine Pile Cap M2 - Weld Fin plates/Plug Rebar & Concrete	9	06-Mar-15	0%	9	16-Mar-15	06-Feb-15	16-Feb-15	-21	0																					
SD4F0110	D1 (D4f) - Marine Pile Cap M2 - Dewater precast shell / Remove Lifting Frame	2	17-Mar-15	0%	2	18-Mar-15	17-Feb-15	18-Feb-15	-21	0																					
SD4F0120	D1 (D4f) - Marine Pile Cap M2 - Pile cut down	12	19-Mar-15	0%	12	01-Apr-15	23-Feb-15	07-Mar-15	-21	0																					
<b>Pier D2 (D4e)</b>																															
<b>Foundation Works</b>																															
GFXX256	D2 (D4e) - Bored Piles (2.35m dia. x 2 nos)	63	19-Sep-14 A	65.08%	22	19-Jan-15	10-Jul-15	04-Aug-15	158	0																					
GFXX257	D2 (D4e) - Sonic & Interface Coring	12	20-Jan-15	0%	12	02-Feb-15	05-Aug-15	18-Aug-15	158	0																					
GFXX258	D2 (D4e) - Dismantle removable panels of temp. platform	5	03-Feb-15	0%	5	07-Feb-15	19-Aug-15	24-Aug-15	158	0																					
<b>Pile Cap Works</b>																															
SD4E0070	D2 (D4e) - Marine Pile Cap M1 - Inst.Floating Seal & Casing Head Steelwork	7	18-Feb-15	0%	7	28-Feb-15	25-Aug-15	02-Sep-15	114	0																					
SD4E0080	D2 (D4e) - Marine Pile Cap M1 - Install precast shell in position	1	02-Mar-15	0%	1	02-Mar-15	04-Sep-15	04-Sep-15	114	0																					
SD4E0090	D2 (D4e) - Marine Pile Cap M1 - Inst.Access & make Watertight	3	03-Mar-15	0%	3	05-Mar-15	05-Sep-15	08-Sep-15	114	0																					
SD4E0100	D2 (D4e) - Marine Pile Cap M1 - Weld Fin plates/Plug Rebar & Concrete	9	06-Mar-15	0%	9	16-Mar-15	09-Sep-15	21-Sep-15	114	0																					
SD4E0120	D2 (D4e) - Marine Pile Cap M1 - Dewater precast shell / Remove Lifting Frame	2	17-Mar-15	0%	2	18-Mar-15	22-Sep-15	23-Sep-15	114	0																					
SD4E0130	D2 (D4e) - Marine Pile Cap M1 - Pile cut down	8	19-Mar-15	0%	8	27-Mar-15	25-Sep-15	06-Oct-15	114	0																					
<b>Pier D3 (D4d)</b>																															
<b>Foundation Works</b>																															
GFXX251	D3 (D4d) - Bored Piles (2.00m dia. x 3 nos)	65	03-Nov-14 A	69.23%	20	16-Jan-15	11-Sep-14	06-Oct-14	-85	3																					
GFXX252	D3 (D4d) - Sonic & Interface Coring	12	21-Jan-15	0%	12	03-Feb-15	07-Oct-14	20-Oct-14	-88	0																					
GFXX253	D3 (D4d) - Dismantle removable panels of temp. platform	5	04-Feb-15	0%	5	09-Feb-15	21-Oct-14	25-Oct-14	-88	0																					
<b>Pile Cap Works</b>																															
SD4D0070	D3 (D4d) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	18-Feb-15	0%	7	28-Feb-15	27-Oct-14	03-Nov-14	-95	0																					
SD4D0080	D3 (D4d) - Marine Pile Cap M2b - Install precast shell in position	1	02-Mar-15	0%	1	02-Mar-15	04-Nov-14	04-Nov-14	-95	0																					
SD4D0090	D3 (D4d) - Marine Pile Cap M2b - Inst.Access & make Watertight	3	03-Mar-15	0%	3	05-Mar-15	05-Nov-14	07-Nov-14	-95	0																					
SD4D0100	D3 (D4d) - Marine Pile Cap M2b - Weld Fin plates/Plug Rebar & Concrete	9	06-Mar-15	0%	9	16-Mar-15	08-Nov-14	18-Nov-14	-95	0																					
SD4D0120	D3 (D4d) - Marine Pile Cap M2b - Dewater precast shell / Remove Lifting Frame	2	17-Mar-15	0%	2	18-Mar-15	19-Nov-14	20-Nov-14	-95	0																					
SD4D0130	D3 (D4d) - Marine Pile Cap M2b - Pile cut down	12	19-Mar-15	0%	12	01-Apr-15	21-Nov-14	04-Dec-14	-95	0																					
<b>Pier D4 (D4c)</b>																															
<b>Foundation Works</b>																															
GFXX246	D4 (D4c) - Bored Piles (2.00m dia. x 3 nos)	70	06-Nov-14 A	24.29%	53	27-Feb-15	16-Sep-14	18-Nov-14	-81	0																					
GFXX247	D4 (D4c) - Sonic & Interface Coring	12	28-Feb-15	0%	12	13-Mar-15	19-Nov-14	02-Dec-14	-81	0																					
GFXX248	D4 (D4c) - Dismantle removable panels of temp. platform	5	14-Mar-15	0%	5	19-Mar-15	03-Dec-14	08-Dec-14	-81	0																					
<b>Pile Cap Works</b>																															
SD4C0070	D4 (D4c) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	20-Mar-15	0%	7	27-Mar-15	09-Dec-14	16-Dec-14	-81	0																					
<b>Pier D5 (D4b)</b>																															
<b>Foundation Works</b>																															
GFXX240-2	D5 (D4b) - Confirm Rockhead Levels	8	20-Nov-14 A	100%	0	11-Dec-14 A																									
GFXX241	D5 (D4b) - Bored Piles (2.35m dia. x 2 nos)	78	12-Dec-14 A	8.97%	71	20-Mar-15	22-Sep-14	15-Dec-14	-76	0																					
<b>Pier D6 (D4a)</b>																															
<b>Foundation Works</b>																															
GFXX235-2	D6 (D4a) - Confirm Rockhead Levels	8	21-Nov-14 A	100%	0	02-Dec-14 A																									
GFXX236	D6 (D4a) - Bored Piles (2.00m dia. x 3 nos)	62	03-Dec-14 A	8.06%	57	04-Mar-15	27-Sep-14	04-Dec-14	-71	0																					
GFXX237	D6 (D4a) - Sonic & Interface Coring	12	05-Mar-15	0%	12	18-Mar-15	19-Dec-14	05-Jan-15	-59	12																					
GFXX237-1	D6 (D4a) - Selection of bored pile for Full Depth Coring	24	05-Mar-15	0%	24	01-Apr-15	05-Dec-14	05-Jan-15	-71	0																					
<b>Bridge D2</b>																															

Actual Work Planned Bar Critical Bar Milestone	Project ID: J3518DWPrD1-M19 Layout: J3518-DWP-3MRP Submission - M19 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, no Level of Effort, No Level of Effort.
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<b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b> <b>3-Month Rolling Programme (Page 24 of 36 Pages)</b> <b>(Progress as of 21-Dec-14)</b>	<table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> <tr> <td>21-Sep-14</td> <td></td> <td></td> <td></td> </tr> <tr> <td>21-Oct-14</td> <td></td> <td></td> <td></td> </tr> <tr> <td>21-Nov-14</td> <td></td> <td>DB</td> <td></td> </tr> <tr> <td>21-Dec-14</td> <td></td> <td></td> <td></td> </tr> </table>	Date	Revision	Checked	Approved	21-Sep-14				21-Oct-14				21-Nov-14		DB		21-Dec-14			
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<b>DWG. No.:</b>  <b>J3518/GCL/PGM/3MRP-M19</b>
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Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration% Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014					2015																						
											December					January			February		March																	
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16											
<b>Pier D7 (D3e)</b>																																						
<b>Foundation Works</b>																																						
GFXX230-2	D7 (D3e) - Confirm Rockhead Levels	8	08-Nov-14 A	100%	0	21-Nov-14 A																																
GFXX231	D7 (D3e) - Bored Piles (2.35m dia. x 2 nos)	67	22-Nov-14 A	40.3%	40	09-Feb-15	12-Nov-14	30-Dec-14	-34	0																												
GFXX232	D7 (D3e) - Sonic & Interface Coring	10	17-Mar-15	0%	10	27-Mar-15	31-Dec-14	12-Jan-15	-61	0																												
<b>Pier D8 (D3d)</b>																																						
<b>Socketted H-Pile Installation</b>																																						
GFXX471	D8 (D3d) - Installation of SH Pile (16 nr)	122	16-Oct-14 A	64.75%	43	12-Feb-15	24-Nov-14	15-Jan-15	-24	0																												
<b>Pile Cap Works</b>																																						
SD3D0088	D8 (D3d) - Pile cap - Pipe Pile Wall for ELS	24	14-Mar-15	0%	24	18-Apr-15	16-Jan-15	12-Feb-15	-46	0																												
<b>Pier D9 (D3c)</b>																																						
<b>Socketted H-Pile Installation</b>																																						
GFXX466	D9 (D3c) - Installation of SH Pile (22 nr)	108	20-Nov-14 A	26.85%	79	30-Mar-15	21-Jan-15	30-Apr-15	23	0																												
<b>Pile Cap Works</b>																																						
SD3C0090	D9 (D3c) - Pile cap Excavation / ELS (incl. sheet piling)	45	27-Sep-14 A	30%	32	30-Jan-15	10-Apr-15	27-May-15	83	48																												
<b>Pier D10 (D3b)</b>																																						
<b>Socketted H-Pile Installation</b>																																						
GFXX461-1	D10 (D3b) - Installation of SH Pile (16 nr)	153	10-Nov-14 A	24.84%	115	16-May-15	15-Sep-14	31-Jan-15	-82	0																												
<b>Pier D11 (D3a)</b>																																						
<b>Preliminary Works for Land Piling</b>																																						
PD110020	D11 (D3a) - Set up piling platform	10	23-Jul-14 A	100%	0	21-Nov-14 A																																
PD110030	D11(D3a) - Complete Civil Preparation Works for piling to commence	0		100%	0	21-Nov-14 A																																
<b>Socketted H-Pile Installation</b>																																						
GFXX460-2	D11 (D3a) - Predrilling	17	25-Oct-14 A	100%	0	01-Dec-14 A																																
GFXX460-5	D11 (D3a) - Confirm Rockhead Levels	8	03-Nov-14 A	75%	2	23-Dec-14	28-Aug-18	29-Aug-18	1088	1088																												
GFXX461-2	D11 (D3a) - Installation of SH Pile (16 nr)	153	28-Nov-14 A	15.03%	130	04-Jun-15	26-Sep-14	05-Mar-15	-72	0																												
<b>Pier D12 (D2e)</b>																																						
<b>Preliminary Works for Land Piling</b>																																						
PD120012	D12 (D2e) - Install Geo. Instru. & Baseline Monitoring	36	22-Dec-14	0%	36	04-Feb-15	19-Jul-18	29-Aug-18	1054	1054																												
PD120020	D12 (D2e) - Set up piling platform	10	03-Nov-14 A	50%	5	29-Dec-14	24-Aug-18	29-Aug-18	973	0																												
PD120030	D12 (D2e) - Complete Civil Preparation Works for piling to commence	0		0%	0	29-Dec-14		29-Aug-18	973	973																												
<b>Socketted H-Pile Installation</b>																																						
GFXX460-6	D12 (D2e) - Confirm Rockhead Levels	8	22-Sep-14 A	50%	4	27-Dec-14	18-Nov-14	21-Nov-14	-29	13																												
GFXX460-9	D12A (D2e) - Predrilling (PD-D12A-S1)	17	20-Dec-14 A	0%	17	13-Jan-15	03-Nov-14	21-Nov-14	-42	0																												
GFXX461-3	D12 (D2e) - Installation of SH Pile (16 nr)	153	14-Jan-15	0%	153	23-Jul-15	22-Nov-14	02-Jun-15	-42	0																												
<b>Pile Cap Works</b>																																						
SD2EL090	D12A (D2e-L) - Pile cap Excavation / ELS	45	03-Nov-14 A	0%	45	14-Feb-15	23-Mar-15	01-Jun-15	72	102																												
<b>Pier D13 (D2d)</b>																																						
<b>Socketted H-Pile Installation</b>																																						
GFXX452-8	D13 (D2d) - Confirm Rockhead Levels	8	31-May-14 A	0%	8	02-Jan-15	13-Mar-15	21-Mar-15	64	0																												
GFXX454	D13 (D2d) - Installation of SH Pile (16 nos)	71	03-Jan-15	0%	71	30-Mar-15	23-Mar-15	19-Jun-15	64	0																												
<b>Bridge D1</b>																																						
<b>Pier D14 (D2c)</b>																																						
<b>Socketted H-Pile Installation</b>																																						
GFXX446-	D14 (D2c) - Installation of SH Pile (10 nr)	121	06-Oct-14 A	69.42%	37	05-Feb-15	27-Oct-14	08-Dec-14	-48	0																												
<b>Pile Cap Works</b>																																						
SD2CL090	D14A (D2c-L) - Pile cap Excavation / ELS	35	18-Feb-15	0%	35	08-Apr-15	09-Dec-14	21-Jan-15	-58	0																												

■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

Project ID: J3518DWPd1-M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
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**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 25 of 36 Pages)**  
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**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**



Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014					2015														
											December					January					February					March				
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16	23	02	09
<b>Pier D15 (D2b)</b>																														
<b>Preliminary Works for Land Piling</b>																														
PD150020	D15 (D2b) - Set up piling platform	20	22-Dec-14	0%	20	16-Jan-15	04-Aug-18	29-Aug-18	958	0																				
PD150030	D15 (D2b) - Complete Civil Preparation Works for piling to commence	0		0%	0	16-Jan-15		29-Aug-18	958	958																				
<b>Socketted H-Pile Installation</b>																														
GFXX445-2	D15 (D2b) - Predrilling	18	24-Nov-14 A	100%	0	27-Nov-14 A																								
GFXX445-4	D15 (D2b) - Confirm Rockhead Levels	8	22-Dec-14	0%	8	02-Jan-15	29-Jul-14	06-Aug-14	-122	0																				
GFXX446-2	D15 (D2b) - Installation of SH Pile (13 nr)	121	03-Jan-15	0%	121	03-Jun-15	07-Aug-14	31-Dec-14	-122	0																				
<b>Pier D16 (D2a)</b>																														
<b>Pile Cap Works</b>																														
SD2A0090	D16 (D2a) - Pile cap Excavation / ELS (incl. sheet piling)	22	18-Feb-15	0%	22	18-Mar-15	06-Dec-14	03-Jan-15	-60	0																				
SD2A0092	D16 (D2a) - Pile cap Pile breakdown to cut-off etc.	4	19-Mar-15	0%	4	23-Mar-15	05-Jan-15	08-Jan-15	-60	0																				
<b>Pier D17 (D1d)</b>																														
<b>Pile Cap Works</b>																														
SD1D0090	D17 (D1d) - Pile cap Excavation / ELS (incl. sheet piling)	45	18-Feb-15	0%	45	22-Apr-15	03-Mar-15	06-May-15	8	0																				
<b>Pier D18 (D1c)</b>																														
<b>Socketted H-Pile Installation</b>																														
GFXX439-5	D18 (D1c) - Selction of pile for Loading test	24	22-Dec-14	0%	24	21-Jan-15	31-Jan-15	03-Mar-15	32	0																				
GFXX439-7	D18 (D1c) - Loading test of pre-bored H-pile	36	22-Jan-15	0%	36	07-Mar-15	04-Mar-15	18-Apr-15	32	0																				
<b>Pile Cap Works</b>																														
SD1C0090	D18 (D1c) - Pile cap Excavation / ELS (incl. sheet piling)	30	09-Mar-15	0%	30	20-Apr-15	20-Apr-15	05-Jun-15	29	0																				
<b>Pier D19 (D1b) &amp; Abutment D</b>																														
<b>Pile Cap Works</b>																														
SD1B0090	D19 (D1b) - Pile cap Excavation / ELS	45	18-Feb-15	0%	45	22-Apr-15	11-Feb-15	14-Apr-15	-6	0																				
<b>Abutment &amp; Approach Ramp D</b>																														
SD1B0200	Abutment D - Walls & Staircase	48	18-Feb-15	0%	48	27-Apr-15	11-Feb-15	18-Apr-15	-6	34																				
<b>Viaduct E</b>																														
<b>Viaduct E1</b>																														
<b>Bridge E1 - Piling &amp; Substructure</b>																														
<b>Milestones</b>																														
GFXX031-5	E2C/E2D (E1b2/E1b1) - Piling Works Completion	0		100%	0	02-Dec-14 A																								
GFXX031-6	E2B (E1b3) - Piling Works Completion	0		100%	0	02-Dec-14 A																								
GFXX031-7	E2A (E1b4) - Piling Works Completion	0		100%	0	02-Dec-14 A																								
<b>E1A, E1B, E1C &amp; E1D (E1a1-2-3-4)</b>																														
<b>Pile Cap Works - E1A, E1B, E1C &amp; E1D</b>																														
<b>Pile Cap Works - E1A (E1a4)</b>																														
SE1A4070	E1A (E1a4) - Marine Pile Cap - Inst.prefab.collar frame to perm.casing of Bored pile	4	28-Nov-14 A	0%	4	27-Dec-14	25-Aug-18	29-Aug-18	943	943																				
SE1A4080	E1A (E1a4) - Marine Pile Cap M1 - Install precast shell in position	2	17-Dec-14 A	100%	0	17-Dec-14 A																								
SE1A4090	E1A (E1a4) - Marine Pile Cap - Temp fixings to casings	6	18-Dec-14 A	0%	6	30-Dec-14	08-Dec-14	15-Dec-14	-12	0																				
SE1A4100	E1A (E1a4) - Marine Pile Cap - Tremie concrete at pedestal	1	31-Dec-14	0%	1	31-Dec-14	15-Dec-14	16-Dec-14	-12	0																				
SE1A4120	E1A (E1a4) - Marine Pile Cap - Dewatering inside precast shell	1	02-Jan-15	0%	1	02-Jan-15	16-Dec-14	17-Dec-14	-12	0																				
SE1A4130	E1A (E1a4) - Marine Pile Cap - Trimming of pile & casing	10	03-Jan-15	0%	10	14-Jan-15	17-Dec-14	31-Dec-14	-12	0																				
SE1A4140	E1A (E1a4) - Marine Pile Cap - Rebar fixing, installation of cast inserts etc	10	15-Jan-15	0%	10	26-Jan-15	31-Dec-14	13-Jan-15	-12	0																				
SE1A4150	E1A (E1a4) - Marine Pile Cap - Concreting	1	27-Jan-15	0%	1	27-Jan-15	13-Jan-15	14-Jan-15	-12	0																				
SE1A4160	E1A (E1a4) - Marine Pile Cap - Curing incl. CJ Preparation	6	28-Jan-15	0%	6	03-Feb-15	14-Jan-15	21-Jan-15	-12	0																				
<b>Pile Cap Works - E1B (E1a3)</b>																														
SE1A3070	E1B (E1a3) - Marine Pile Cap - Inst.prefab.collar frame to perm.casing of Bored pile	4	28-Nov-14 A	100%	0	04-Dec-14 A																								

■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

Project ID: J3518DWPd1-M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 26 of 36 Pages)**  
**(Progress as of 21-Dec-14)**

Date	Revision	Checked	Approved
21-Sep-14			
21-Oct-14			
21-Nov-14		DB	
21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**









Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration% Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014												2015											
											December						January						February						March					
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16							
GFX062	E8 (E2f) - Bored Piles (2.20m dia. x 4 nr)	100	20-Jan-15	0%	100	26-May-15	20-Nov-14	23-Mar-15	-49	0																								
<b>E9A &amp; E9B (E2g - 1/2)</b>																																		
<b>Foundation Works - E9A &amp; E9B</b>																																		
<b>Foundation Works</b>																																		
GFX067	E9 (E2g) - Bored Piles (2.00m dia. x 6 nr)	105	17-May-14 A	100%	0	03-Dec-14 A																												
GFX068	E9 (E2g) - Sonic & Interface Coring	12	22-Dec-14	0%	12	07-Jan-15	05-Mar-15	18-Mar-15	57	0																								
GFX069	E9 (E2g) - Dismantle temp. removable piling platform	7	08-Jan-15	0%	7	15-Jan-15	19-Mar-15	26-Mar-15	57	0																								
<b>Pile Cap Works - E9A &amp; E9B</b>																																		
<b>Pile Cap Works</b>																																		
SE2G00	E9 (E2g1/2) - Marine Pile Cap - Inst.Floating Seal & Casing Head Steelwork	8	16-Jan-15	0%	8	24-Jan-15	27-Mar-15	11-Apr-15	57	0																								
SE2G00	E9 (E2g1/2) - Marine Pile Cap - Install precast shell in position (3 units)	6	26-Jan-15	0%	6	31-Jan-15	13-Apr-15	20-Apr-15	57	0																								
SE2G00	E9 (E2g1/2) - Marine Pile Cap - Inst.Access & make Watertight	8	02-Feb-15	0%	8	10-Feb-15	21-Apr-15	06-May-15	59	0																								
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Weld Fin Plates / Plug Rebar & Concrete	2	11-Feb-15	0%	2	12-Feb-15	08-May-15	09-May-15	59	0																								
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Dewater precast shell / Remove Lifting Frame	2	13-Feb-15	0%	2	14-Feb-15	11-May-15	12-May-15	59	0																								
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Pile cut down 6nr	12	16-Feb-15	0%	12	04-Mar-15	13-May-15	30-May-15	59	0																								
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Rebar fixing (1st pour)	8	05-Mar-15	0%	8	13-Mar-15	01-Jun-15	19-Jun-15	59	0																								
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Concreting (First pour)	1	14-Mar-15	0%	1	14-Mar-15	22-Jun-15	22-Jun-15	59	0																								
SE2G01	E9 (E2g1/2) - Marine Pile Cap - CJ preparation	4	16-Mar-15	0%	4	19-Mar-15	24-Jun-15	03-Jul-15	59	0																								
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Rebar fixing (Final pour)	8	20-Mar-15	0%	8	28-Mar-15	04-Jul-15	17-Jul-15	59	0																								
<b>E10A &amp; E10B (E2h - 1/2)</b>																																		
<b>Foundation Works - E10A &amp; E10B</b>																																		
<b>Foundation Works</b>																																		
GFX072	E10 (E2h) - Bored Piles (2.20m dia. x 6 nr)	132	15-May-14 A	100%	0	12-Dec-14 A																												
GFX073	E10 (E2h) - Sonic & Interface Coring	12	22-Dec-14	0%	12	07-Jan-15	05-Nov-14	18-Nov-14	-40	0																								
GFX074	E10 (E2h) - Dismantle temp. removable piling platform	7	08-Jan-15	0%	7	15-Jan-15	19-Nov-14	26-Nov-14	-40	0																								
<b>Pile Cap Works - E10A &amp; E10B</b>																																		
<b>Pile Cap Works</b>																																		
SE2H00	E10 (E2h1/2) - Marine Pile Cap - Inst.Floating Seal & Casing Head Steelwork	8	16-Jan-15	0%	8	24-Jan-15	27-Nov-14	05-Dec-14	-40	0																								
SE2H00	E10 (E2h1/2) - Marine Pile Cap - Install precast shell in position (3 units)	6	26-Jan-15	0%	6	31-Jan-15	06-Dec-14	12-Dec-14	-40	0																								
SE2H00	E10 (E2h1/2) - Marine Pile Cap - Inst.Access & make Watertight	8	02-Feb-15	0%	8	10-Feb-15	13-Dec-14	22-Dec-14	-40	0																								
SE2H01	E10 (E2h1/2) - Marine Pile Cap - Weld Fin Plates / Plug Rebar & Concrete	2	11-Feb-15	0%	2	12-Feb-15	23-Dec-14	24-Dec-14	-40	0																								
SE2H01	E10 (E2h1/2) - Marine Pile Cap - Dewater precast shell / Remove Lifting Frame	2	13-Feb-15	0%	2	14-Feb-15	27-Dec-14	29-Dec-14	-40	0																								
SE2H01	E10 (E2h1/2) - Marine Pile Cap - Pile cut down 6nr	10	16-Feb-15	0%	10	02-Mar-15	30-Dec-14	10-Jan-15	-40	0																								
SE2H01	E10 (E2h1/2) - Marine Pile Cap - Rebar fixing (1st pour)	8	03-Mar-15	0%	8	11-Mar-15	12-Jan-15	20-Jan-15	-40	0																								
SE2H01	E10 (E2h1/2) - Marine Pile Cap - Concreting (First pour)	1	12-Mar-15	0%	1	12-Mar-15	21-Jan-15	21-Jan-15	-40	0																								
SE2H01	E10 (E2h1/2) - Marine Pile Cap - CJ preparation	4	13-Mar-15	0%	4	17-Mar-15	22-Jan-15	26-Jan-15	-40	0																								
SE2H01	E10 (E2h1/2) - Marine Pile Cap - Rebar fixing (Final pour)	8	18-Mar-15	0%	8	26-Mar-15	27-Jan-15	04-Feb-15	-40	0																								
<b>Viaduct E5, E6, E7 &amp; E8</b>																																		
<b>Milestones - Land Foundation</b>																																		
GFX012	Land Access to BCF (Available in Month 17)	0	22-Dec-14	0%	0		05-Nov-14		-47	0																								
GFX548-1	E14B (E7d) - Start date for piling	0	30-Jan-15	0%	0		13-Jun-15		106	0																								
GFX549-1	E14A (E8d) - Start date for piling	0	30-Jan-15	0%	0		24-Dec-14		-29	0																								
<b>E11A &amp; E11B (E5E6a/E7E8a)</b>																																		
<b>Foundation Works - E11A &amp; E11B</b>																																		
<b>Foundation Works</b>																																		
GFX083	E11 (E5E6a/E7E8a) - Confirm Rockhead levels	8	12-Jun-14 A	75%	2	23-Dec-14	28-Aug-18	29-Aug-18	1088	1088																								
GFX084	E11 (E5E6a/E7E8a) - Bored Piles (2.35m dia. x 7 nr)	130	10-Jul-14 A	50%	65	13-Mar-15	13-Jun-14	28-Aug-14	-160	0																								

<ul style="list-style-type: none"> <li><span style="color: blue;">■</span> Actual Work</li> <li><span style="color: green;">■</span> Planned Bar</li> <li><span style="color: red;">■</span> Critical Bar</li> <li><span style="color: blue;">◆</span> Milestone</li> </ul>	Project ID: J3518DWPd1-M19 Layout: J3518-DWP-3MRP Submission - M19 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, no Level of Effort, No Level of Effort.	<b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b> <b>3-Month Rolling Programme (Page 30 of 36 Pages)</b> <b>(Progress as of 21-Dec-14)</b>	<table border="1"> <thead> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> </thead> <tbody> <tr> <td>21-Sep-14</td> <td></td> <td></td> <td></td> </tr> <tr> <td>21-Oct-14</td> <td></td> <td></td> <td></td> </tr> <tr> <td>21-Nov-14</td> <td></td> <td>DB</td> <td></td> </tr> <tr> <td>21-Dec-14</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Date	Revision	Checked	Approved	21-Sep-14				21-Oct-14				21-Nov-14		DB		21-Dec-14				<b>DWG. No.:</b>  <b>J3518/GCL/PGM/3MRP-M19</b>
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Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014												2015												
											December						January						February						March						
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16	23							
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.35m dia. x 2 nr (Total 7 Nr))	130	10-Jul-14 A	50%	65	13-Mar-15	13-Jun-14	28-Aug-14	-160	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.35m dia. x 2 nr (Total 7 Nr))	130	10-Jul-14 A	50%	65	13-Mar-15	13-Jun-14	28-Aug-14	-160	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.35m dia. x 2 nr (Total 7 Nr))	130	10-Jul-14 A	50%	65	13-Mar-15	13-Jun-14	28-Aug-14	-160	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.35m dia. x 1 nr (Total 7 Nr))	130	10-Jul-14 A	50%	65	13-Mar-15	13-Jun-14	28-Aug-14	-160	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX085	E11 (E5E6a/E7E8a) - Sonic & Interface Coring	18	14-Mar-15	0%	18	08-Apr-15	29-Aug-14	19-Sep-14	-160	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>E12A, E12B, E12C &amp; E12D (E8b/E7b/E6b/E5b)</b>																																			
<b>Foundation Works - E12</b>																																			
<b>Foundation Works</b>																																			
GFXX088	E12 (E5b/E6b, E7b/E8b + Dolphins) - Confirm Rockhead levels	8	21-Jun-14 A	100%	0	22-Dec-14	29-Aug-18	29-Aug-18	1090	1090	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX089	E12 (E5b/E6b/E7b/E8b + Dolphins) - Bored Piles (2.35m dia. x 14 nr ; 2.00m dia x 6 nr)	216	11-Jul-14 A	51.85%	104	04-May-15	04-Aug-14	05-Dec-14	-117	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX089	E12D (E5b+ Dolphins) - Bored Piles (2.35m dia. x 4 nr (total 14) ; 2.00m dia x 3 nr (total 6))	216	11-Jul-14 A	51.85%	104	04-May-15	04-Aug-14	05-Dec-14	-117	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX089	E12C (E6b) - Bored Piles (2.35m dia. x 3 nr)	216	11-Jul-14 A	51.85%	104	04-May-15	04-Aug-14	05-Dec-14	-117	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX089	E12B (E7b) - Bored Piles (2.35m dia. x 3 nr)	216	11-Jul-14 A	51.85%	104	04-May-15	04-Aug-14	05-Dec-14	-117	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX089	E12A (E8b + Dolphins) - Bored Piles (2.35m dia. x 4 nr (total 14) ; 2.00m dia x 3 nr (total 6))	216	11-Jul-14 A	51.85%	104	04-May-15	04-Aug-14	05-Dec-14	-117	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>E13A, E13B, E13C &amp; E13D (E8c/E7c/E6c/E5c)</b>																																			
<b>Foundation Works - E13</b>																																			
<b>Foundation Works - E13A (E8c) &amp; E13B (E7c)</b>																																			
GFXX100	E13A/B (E8c/E7c & Dolphin) - Predrilling	26	29-Oct-14 A	100%	0	15-Dec-14 A					[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX100	E13A/B (E8c/E7c & Dolphin) - Confirm Rockhead levels	8	22-Dec-14	0%	8	02-Jan-15	11-Oct-14	20-Oct-14	-61	109	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>Foundation Works - E13C (E6c) &amp; E13D (E5c)</b>																																			
GFXX094	E13C/D (E6c/E5c + Dolphin) - Confirm Rockhead levels	8	21-Jul-14 A	75%	2	23-Dec-14	28-Aug-18	29-Aug-18	1088	1088	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX095	E13C/D (E6c/E5c + Dolphin) - Bored Piles (2.20m dia. x 8 nr; 2.00m dia x 3nr)	128	14-Aug-14 A	35.16%	83	08-Apr-15	09-Jun-14	15-Sep-14	-164	10	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX095	E13D (E5c + Dolphin) - Bored Piles (2.20m dia. x 4 nr; 2.00m dia x 3nr)	128	14-Aug-14 A	35.16%	83	08-Apr-15	09-Jun-14	15-Sep-14	-164	10	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX615	E13C (E6c) - Bored Piles (2.20m dia. x 4 nr)	128	14-Aug-14 A	27.34%	93	20-Apr-15	27-May-14	15-Sep-14	-174	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>E14A, E14B, E14C &amp; E14D (E8d/E7d/E6d/E5d)</b>																																			
<b>Foundation Works - E14</b>																																			
GFXX545	Mobilization & Assembling Bored Pile Plant & Equipment for Viaducts in HKBCF	5	22-Dec-14	0%	5	29-Dec-14	05-Nov-14	10-Nov-14	-40	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>Foundation Works - E14A (E8d)</b>																																			
GFXX544	E14A (E8d) - Pre-drilling for Piles (4 nos)	24	02-Jan-15	0%	24	29-Jan-15	26-Nov-14	23-Dec-14	-29	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX544	E14A (E8d) - Confirm Rockhead levels	8	30-Jan-15	0%	8	07-Feb-15	24-Dec-14	05-Jan-15	-29	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX549	E14A (E8d) - Bored Piles (2.20m dia. x 4 nos)	102	30-Jan-15	0%	102	08-Jun-15	24-Dec-14	04-May-15	-29	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>Foundation Works - E14B (E7d)</b>																																			
GFXX544	E14B (E7d) - Pre-drilling for Piles (3 nos)	24	02-Jan-15	0%	24	29-Jan-15	05-Nov-14	02-Dec-14	-47	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX544	E14B (E7d) - Confirm Rockhead levels	8	30-Jan-15	0%	8	07-Feb-15	03-Dec-14	11-Dec-14	-47	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX548	E14B (E7d) - Bored Piles(2.20m dia. x 3 nos)	90	30-Jan-15	0%	90	23-May-15	03-Dec-14	24-Mar-15	-47	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>Foundation Works - E14C (E6d)</b>																																			
GFXX544	E14C (E6d) - Pre-drilling for Piles (3 nos)	25	30-Jan-15	0%	25	03-Mar-15	02-Jan-15	30-Jan-15	-24	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
GFXX544	E14C (E6d) - Confirm Rockhead levels	8	04-Mar-15	0%	8	12-Mar-15	15-Jun-15	24-Jun-15	82	77	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>Foundation Works - E14D (E5d)</b>																																			
GFXX544	E14D (E5d) - Pre-drilling for Piles (4 nos)	25	04-Mar-15	0%	25	01-Apr-15	31-Jan-15	04-Mar-15	-24	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>Viaduct F</b>																																			
<b>Viaduct F1</b>																																			
<b>General F1</b>																																			
<b>Milestones</b>																																			
F10010	Viaduct F1 - Approval of Foundation DDA	0		0%	0	30-Dec-14		19-Nov-14	-29	0	[Gantt bars for Dec 2014, Jan 2015, Feb 2015, Mar 2015]																								
<b>F1 (F1b)</b>																																			
<b>Foundation Works</b>																																			

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											December						January						February						March					
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16							
GFXX553-1	F1 (F1b) - Pre-drilling for Piles (2 nos)	19	30-Dec-14	0%	19	21-Jan-15	18-Nov-14	09-Dec-14	-34	0																								
GFXX553-4	F1 (F1b) - Confirm Rockhead Levels	8	22-Jan-15	0%	8	30-Jan-15	10-Dec-14	18-Dec-14	-34	82																								
<b>F2 (F1c)</b>																																		
<b>Foundation Works</b>																																		
GFXX553-2	F2 (F1c) - Pre-drilling for Piles (2 nos)	19	31-Dec-14	0%	19	22-Jan-15	20-Nov-14	11-Dec-14	-33	0																								
GFXX553-5	F2 (F1c) - Confirm Rockhead Levels	8	23-Jan-15	0%	8	31-Jan-15	12-Dec-14	20-Dec-14	-33	81																								
<b>F3 (F1d)</b>																																		
<b>Foundation Works</b>																																		
GFXX553-3	F3 (F1d) - Pre-drilling for Piles (2 nos)	19	31-Dec-14	0%	19	22-Jan-15	20-Nov-14	12-Dec-14	-33	0																								
GFXX553-6	F3 (F1d) - Confirm Rockhead Levels	8	23-Jan-15	0%	8	31-Jan-15	12-Dec-14	22-Dec-14	-33	81																								
<b>Viaduct F2</b>																																		
<b>General F2</b>																																		
<b>Milestones</b>																																		
F20010	Viaduct F2 - Approval of Foundation DDA	0		0%	0	30-Dec-14		03-Dec-14	-19	0																								
<b>F4 (F2b)</b>																																		
<b>Foundation Works</b>																																		
GFXX561-1	F4 (F2b) - Pre-drilling for piles (2 nos)	19	04-Mar-15	0%	19	25-Mar-15	30-Apr-15	22-May-15	45	0																								
<b>F5 (F2c)</b>																																		
<b>Foundation Works</b>																																		
GFXX561-2	F5 (F2c) - Pre-drilling for Piles (2 nos)	19	31-Dec-14	0%	19	22-Jan-15	17-Mar-15	11-Apr-15	61	0																								
GFXX561-8	F5 (F2c) - Confirm Rockhead Levels	8	23-Jan-15	0%	8	31-Jan-15	13-Apr-15	21-Apr-15	61	141																								
<b>F6 (F2d)</b>																																		
<b>Foundation Works</b>																																		
GFXX561-	F6 (F2d) - Confirm Rockhead Levels	8	23-Jan-15	0%	8	31-Jan-15	29-Dec-14	07-Jan-15	-21	81																								
GFXX561-3	F6 (F2d) - Pre-drilling for Piles (2 nos)	19	31-Dec-14	0%	19	22-Jan-15	04-Dec-14	27-Dec-14	-21	0																								
<b>F7 (F2e)</b>																																		
<b>Foundation Works</b>																																		
GFXX561-	F7 (F2e) - Confirm Rockhead Levels	8	14-Feb-15	0%	8	26-Feb-15	14-Apr-15	22-Apr-15	43	122																								
GFXX561-4	F7 (F2e) - Pre-drilling for Piles (2 nos)	19	23-Jan-15	0%	19	13-Feb-15	19-Jan-15	09-Feb-15	-4	0																								
<b>F8 (F2f) &amp; Abutment</b>																																		
<b>Foundation Works</b>																																		
GFXX561-	F8 (F2f) - Confirm Rockhead Levels	8	03-Mar-15	0%	8	11-Mar-15	04-Dec-15	12-Dec-15	226	158																								
GFXX561-5	F8 (F2f) - Pre-drilling for Piles (2 nos)	18	06-Feb-15	0%	18	02-Mar-15	02-Feb-15	25-Feb-15	-4	0																								
<b>Viaduct F3</b>																																		
<b>General F3</b>																																		
<b>Milestones</b>																																		
F30010	Viaduct F3 - Approval of Foundation DDA	0		0%	0	30-Dec-14		30-Jan-15	23	17																								
<b>F9 (F3d-1/F3d-2)</b>																																		
<b>Foundation Works - F9 (F3d-1/F3d-2)</b>																																		
<b>Foundation Works</b>																																		
GFXX571	F9 (F3d) - Pre-drilling for Piles (4 nos)	19	23-Jan-15	0%	19	13-Feb-15	17-Jun-15	10-Jul-15	115	0																								
GFXX571	F9 (F3d) - Confirm Rockhead Levels	8	14-Feb-15	0%	8	26-Feb-15	11-Jul-15	20-Jul-15	115	194																								
<b>F10 (F3c-1/F3c-2)</b>																																		
<b>Foundation Works - Pier F10</b>																																		
<b>Foundation Works</b>																																		
GFXX571	F10 (F3c) - Pre-drilling for Piles (4 nos)	18	06-Feb-15	0%	18	02-Mar-15	02-Feb-15	25-Feb-15	-4	0																								
GFXX571	F10 (F3c) - Confirm Rockhead Levels	8	03-Mar-15	0%	8	11-Mar-15	27-Feb-15	09-Mar-15	-3	111																								

	Project ID: J3518DWPd1-M19	<b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b> <b>3-Month Rolling Programme (Page 32 of 36 Pages)</b> <b>(Progress as of 21-Dec-14)</b>	Date	Revision	Checked	Approved	<b>DWG. No.:</b> <b>J3518/GCL/PGM/3MRP-M19</b>
	Layout: J3518-DWP-3MRP Submission - M19		21-Sep-14				
	Filter: TASK filters: 3-Month Lookahead, No CC Milestones, no Level of Effort, No Level of Effort.		21-Oct-14				
			21-Nov-14	DB			
			21-Dec-14				

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014					2015																		
											December					January					February					March								
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16							
<b>F11 (F3b-1/F3b-2)</b>																																		
<b>Foundation Works - Pier F11 (F3b-1/F3b-2)</b>																																		
<b>Foundation Works</b>																																		
GFXX571	F11 (F3b) - Pre-drilling for Piles (4 nos)	18	25-Feb-15	0%	18	17-Mar-15	17-Feb-15	12-Mar-15	-4	0																								
GFXX571	F11 (F3b) - Confirm Rockhead Levels	8	18-Mar-15	0%	8	26-Mar-15	13-Mar-15	21-Mar-15	-4	98																								
<b>F12 (F3a) &amp; Abutment</b>																																		
<b>Foundation Works</b>																																		
GFXX571-4	F12 (F3a) - Pre-drilling for Piles (2 nos)	20	11-Mar-15	0%	20	02-Apr-15	05-May-15	29-May-15	42	0																								
<b>Viaduct F5</b>																																		
<b>General F5</b>																																		
<b>Milestones</b>																																		
F50010	Viaduct F5 - Approval of foundation DDA	0		0%	0	30-Dec-14		06-Jul-15	134	55																								
<b>F13 (F5d)</b>																																		
<b>Foundation Works</b>																																		
GFXX586-1	F13 (F5d) - Pre-drilling for Piles (3 nos)	12	18-Mar-15	0%	12	31-Mar-15	07-Jul-15	20-Jul-15	87	0																								
<b>Viaduct F4</b>																																		
<b>General F4</b>																																		
F40010	Viaduct F4 - Approval of foundation DDA	0		0%	0	30-Dec-14		26-Jun-15	128	13																								
<b>F17 (F4b)</b>																																		
<b>Foundation Works</b>																																		
GFXX579-2	F17 (F4b) - Pre-drilling for Piles (2 nos)	12	22-Dec-14	0%	12	07-Jan-15	04-Jun-15	17-Jun-15	129	0																								
GFXX579-6	F17 (F4b) - Confirm Rockhead Levels	8	08-Jan-15	0%	8	16-Jan-15	18-Jun-15	27-Jun-15	129	0																								
GFXX581	F17 (F4b) - Bored Piles (2.20m dia. x 2 nos)	70	17-Jan-15	0%	70	16-Apr-15	29-Jun-15	18-Sep-15	129	53																								
<b>F18 (F4c) &amp; Abutment</b>																																		
<b>Foundation Works</b>																																		
GFXX579-3	F18 (F4c) - Pre-drilling for Piles (2 nos)	12	08-Jan-15	0%	12	21-Jan-15	10-Sep-15	23-Sep-15	199	0																								
GFXX579-7	F18 (F4c) - Confirm Rockhead Levels	8	22-Jan-15	0%	8	30-Jan-15	24-Sep-15	05-Oct-15	199	123																								
<b>Approach Ramp F</b>																																		
<b>Approach Ramp Land Foundation - HKBCF</b>																																		
<b>Approach Ramp F Piling</b>																																		
GFXX593	AR-F - Pre-drilling for Piles (28 nos)	24	22-Dec-14	0%	24	21-Jan-15	13-Dec-14	13-Jan-15	-7	0																								
GFXX594	AR-F - Confirm Rockhead Levels	8	22-Jan-15	0%	8	30-Jan-15	14-Jan-15	22-Jan-15	-7	50																								
<b>SUPERSTRUCTURE</b>																																		
<b>Assembling, relocation and dismantle of lifting equipment</b>																																		
<b>Lauching Gantry 1</b>																																		
PR20130	Assembly of Lauching Gantry LG1 on Temp.Loading Platform	36	15-Sep-14 A	55.56%	16	17-Jan-15	28-Oct-14	14-Nov-14	-52	7																								
PR20130-1	Assembly of Lauching Gantry LG1 onto Pier B1/B2 (incl.Load Test)	24	27-Jan-15	0%	24	26-Feb-15	15-Nov-14	12-Dec-14	-59	0																								
PR20140	Viaduct B3 - Learning Curve Gantry LG1	25	27-Feb-15	0%	25	27-Mar-15	13-Dec-14	14-Jan-15	-59	0																								
<b>Viaduct B Superstructure</b>																																		
<b>Bridge B3 Superstructure</b>																																		
<b>Milestones</b>																																		
<b>Milestones Ready for PH Segment Erection</b>																																		
B300020-1	Pier B5 (B3b) ready for Viaduct B3 PH segment erection	0		0%	0	02-Feb-15		16-Dec-14	-38	0																								
B300030-1	Pier B4 (B3c) ready for Viaduct B3 PH segment erection	0		0%	0	20-Jan-15		15-Dec-14	-28	0																								
B300040-1	Pier B3 (B3d) ready for Viaduct B3 PH segment erection	0		0%	0	16-Feb-15		15-Dec-14	-51	0																								
B300050-1	Pier B2 (B3e) ready for Viaduct B3 PH segment erection	0		0%	0	30-Dec-14		18-Oct-14	-60	0																								
B300060-1	Pier B1 (B3f) ready for Viaduct B3 PH segment erection	0		0%	0	31-Dec-14		29-Oct-14	-52	0																								

<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; border: 1px solid black;"></span> Actual Work</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; border: 1px solid black;"></span> Planned Bar</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: red; border: 1px solid black;"></span> Critical Bar</li> <li><span style="display: inline-block; width: 0; height: 0; border-left: 5px solid transparent; border-right: 5px solid transparent; border-bottom: 8px solid black;"></span> Milestone</li> </ul>	Project ID: J3518DWPd1-M19 Layout: J3518-DWP-3MRP Submission - M19 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, no Level of Effort, No Level of Effort.	<b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b> <b>3-Month Rolling Programme (Page 33 of 36 Pages)</b> <b>(Progress as of 21-Dec-14)</b>				Date	Revision	Checked	Approved	<b>DWG. No.:</b>  <b>J3518/GCL/PGM/3MRP-M19</b>
		21-Sep-14								
		21-Oct-14								
		21-Nov-14		DB						
		21-Dec-14								

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014												2015											
											December						January						February						March					
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16							
<b>Milestones Ready for Deck Segment Erection</b>																																		
B300020	Pier B5 (B3b) ready for Viaduct B3 deck segment erection	0		0%	0	19-Mar-15		30-Jan-15	-38	25																								
B300030	Pier B4 (B3c) ready for Viaduct B3 deck segment erection	0		0%	0	06-Mar-15		30-Jan-15	-27	30																								
B300050	Pier B2 (B3e) ready for Viaduct B3 deck segment erection	0		0%	0	11-Feb-15		14-Jan-15	-24	35																								
B300060	Pier B1 (B3f) ready for Viaduct B3 deck segment erection	0		0%	0	17-Jan-15		14-Nov-14	-52	0																								
<b>Bridge B2 Superstructure</b>																																		
<b>Milestones</b>																																		
<b>Milestones Ready for PH Segment Erection</b>																																		
B200020-1	Pier B11 (B2b) ready for Viaduct B2 PH segment erection	0		0%	0	05-Feb-15		23-Apr-15	59	0																								
B200030-1	Pier B10 (B2c) ready for Viaduct B2 PH segment erection	0		0%	0	19-Mar-15		05-Mar-15	-12	1																								
B200040-1	Pier B9 (B2d) ready for Viaduct B2 PH segment erection	0		0%	0	02-Mar-15		10-Feb-15	-14	1																								
B200050-1	Pier B8 (B2e) ready for Viaduct B2 PH segment erection	0		0%	0	14-Feb-15		17-Jan-15	-24	1																								
B200060-1	Pier B7 (B2f) ready for Viaduct B2 PH segment erection	0		0%	0	06-Mar-15		05-Jan-15	-49	0																								
<b>Milestones Ready for Deck Segment Erection</b>																																		
B200020	Pier B11 (B2b) ready for Viaduct B2 deck segment erection	0		0%	0	25-Feb-15		15-May-15	63	148																								
<b>Bridge B1 Superstructure</b>																																		
<b>Milestones</b>																																		
<b>Milestones Ready for PH Segment Erection</b>																																		
B100030-1	Pier B16 (B1d) ready for Viaduct B1 PH segment erection	0		0%	0	10-Jan-15		10-Jun-15	119	0																								
B100040-1	Pier B15 (B1e) ready for Viaduct B1 PH segment erection	0		0%	0	15-Jan-15		11-May-15	91	0																								
B100060-1	Pier B13 (B1g) ready for Viaduct B1 PH segment erection	0		0%	0	10-Mar-15		07-May-15	45	0																								
<b>Milestones Ready for Deck Segment Erection</b>																																		
B100030	Pier B16 (B1d) ready for Viaduct B1 deck segment erection	0		0%	0	02-Mar-15		12-Aug-15	132	217																								
B100040	Pier B15 (B1e) ready for Viaduct B1 deck segment erection	0		0%	0	06-Mar-15		20-Jul-15	108	193																								
<b>Viaduct C Superstructure</b>																																		
<b>Bridge C1 Superstructure</b>																																		
<b>Milestones</b>																																		
<b>Milestones Ready for PH Segment Erection</b>																																		
C100010-1	Pier C20 (C1c) ready for Viaduct C1 PH segment erection	0		0%	0	20-Mar-15		12-Nov-15	192	0																								
<b>Viaduct E</b>																																		
<b>Bridge E1 Superstructure</b>																																		
<b>Milestones</b>																																		
<b>Milestones Ready for PH Segment Erection</b>																																		
E100040-1	Pier B1 (B3f) ready for Viaduct E1 PH segment erection	0		0%	0	31-Dec-14		29-Oct-14	-52	0																								
<b>Milestones Ready for Deck Segment Erection</b>																																		
E100040	Pier B1 (B3f) ready for Viaduct E1 deck segment erection	0		0%	0	17-Jan-15		23-Jan-15	5	64																								
<b>At-Grade Roadworks &amp; Other Works along NLH</b>																																		
<b>Viaduct D Slope Works</b>																																		
<b>Slope 10NW-C/F10</b>																																		
M201215	10NW-C/F10 - Install Geo. Instru. & Baseline Monitoring	30	26-Jul-14 A	0%	30	28-Jan-15	28-Jul-16	08-Sep-16	415	323																								
<b>Slope 10NW-C/F11</b>																																		
M201220	10NW-C/F11 - Install Geo. Instru. & Baseline Monitoring	30	16-Aug-14 A	0%	30	28-Jan-15	28-Sep-16	05-Nov-16	459	531																								
<b>At-Grade Roadworks and Other Works along Cheung Tung Road</b>																																		
<b>Re-alignment of Cheung Tung Road adjacent to Viaduct B</b>																																		
RP00020	Construct new ESS adjacent to Viaduct B	60	15-Sep-14 A	28.33%	43	12-Feb-15	20-Mar-14	26-May-14	-193	0																								
RP00030	Inst. new equip. & testing / commissioning of new ESS	60	13-Feb-15	0%	60	11-May-15	27-May-14	29-Aug-14	-193	0																								
<b>Box Culvert Extension</b>																																		

<p>Actual Work</p> <p>Planned Bar</p> <p>Critical Bar</p> <p>Milestone</p>	<p>Project ID: J3518DWPrD1-M19</p> <p>Layout: J3518-DWP-3MRP Submission - M19</p> <p>Filter: TASK filters: 3-Month Lookahead, No CC</p> <p>Milestones, no Level of Effort, No Level of Effort.</p>	<p><b>Tuen Mun - Chek Lap Kok Link - Southern Connection</b></p> <p><b>3-Month Rolling Programme (Page 34 of 36 Pages)</b></p> <p><b>(Progress as of 21-Dec-14)</b></p>				Date	Revision	Checked	Approved	DWG. No.:
					21-Sep-14				<p><b>J3518/GCL/PGM/3MRP-M19</b></p>	
				21-Oct-14						
				21-Nov-14		DB				
				21-Dec-14						



Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014					2015														
											December					January					February					March				
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09	16			
BCE0030	Demolish existing culvert / step channel / existing staircase	12	14-Oct-14 A	100%	0	21-Nov-14 A																								
BCE0040	Prepare slab base & blind	6	25-Nov-14 A	100%	0	10-Dec-14 A																								
BCE0050	Culvert RC base	12	01-Dec-14 A	100%	0	10-Dec-14 A																								
BCE0060	Culvert RC walls & connect new 450 dia. stormwater pipe	20	12-Dec-14 A	0%	20	16-Jan-15	24-Jan-15	16-Feb-15	26	0																				
BCE0070	Culvert RC roof	20	17-Jan-15	0%	20	09-Feb-15	17-Feb-15	14-Mar-15	26	0																				
BCE0080	Catch pit rear wall to +3.189	6	10-Feb-15	0%	6	16-Feb-15	16-Mar-15	21-Mar-15	26	0																				
BCE0090	Catch pit rear wall to +7.600	6	17-Feb-15	0%	6	26-Feb-15	23-Mar-15	28-Mar-15	26	0																				
BCE0100	Catch pit rear wall to +12.250 w/ backfill	6	27-Feb-15	0%	6	05-Mar-15	30-Mar-15	11-Apr-15	26	0																				
BCE0110	Construct staircases & backfill to required elevation	12	06-Mar-15	0%	12	19-Mar-15	13-Apr-15	28-Apr-15	26	0																				
BCE0120	Construct step irons at 300/c staggerd & new railings	6	06-Mar-15	0%	6	12-Mar-15	21-Apr-15	28-Apr-15	32	6																				
BCE0130	Construct all proposed connecting U-Channels	12	06-Mar-15	0%	12	19-Mar-15	13-Apr-15	28-Apr-15	26	219																				

**Viaduct B Slope Works**

**Slope 9SE-B/C9**

**Zone A**

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float
SWVB1140	9SE-B/C9 Zone A - Soil nail 37 nr. @ +18.5 (Row F)	12	01-Aug-14 A	100%	0	21-Nov-14 A				
SWVB1170	9SE-B/C9 Zone A - Inst. 300UC @ +15.0	10	22-Dec-14	0%	10	05-Jan-15	17-Aug-18	29-Aug-18	968	968
SWVB1180	9SE-B/C9 Zone A - Excav. to +14.5	5	18-Nov-14 A	100%	0	06-Dec-14 A				
SWVB1190	9SE-B/C9 Zone A - Raking Drain 14 nr @ +16.0	5	22-Dec-14	0%	5	29-Dec-14	24-Aug-18	29-Aug-18	973	973
SWVB1200	9SE-B/C9 Zone A - Excav. to +11.5	5	01-Dec-14 A	100%	0	13-Dec-14 A				
SWVB1210	9SE-B/C9 Zone A - Soil nail 42 nr @ +13.0 (Row C)	12	16-Dec-14 A	8.33%	11	06-Jan-15	16-Aug-18	29-Aug-18	967	967
SWVB1220	9SE-B/C9 Zone A - Excav. to +9.0	5	01-Dec-14 A	100%	0	06-Dec-14 A				
SWVB1230	9SE-B/C9 Zone A - Soil nail 55 nr @ +11.0 (Row B)	14	08-Dec-14 A	35.71%	9	03-Jan-15	07-Aug-18	17-Aug-18	960	0
SWVB1240	9SE-B/C9 Zone A - Raking Drain 27 nr @ +10.5	9	05-Jan-15	0%	9	14-Jan-15	18-Aug-18	29-Aug-18	960	960
SWVB1250	9SE-B/C9 Zone A - Excav. to +7.0	5	24-Nov-14 A	100%	0	22-Dec-14	29-Aug-18	29-Aug-18	978	978
SWVB1260	9SE-B/C9 Zone A - Soil nail 67 nr @ +9.0 (Row A)	15	18-Dec-14 A	0%	15	10-Jan-15	16-Jan-15	02-Feb-15	19	0
SWVB1270	9SE-B/C9 Zone A - Raking Drain 33 nr @ +8.5	11	12-Jan-15	0%	11	23-Jan-15	03-Feb-15	14-Feb-15	19	0
SWVB1280	9SE-B/C9 Zone A - Excav. to +5.50	5	24-Jan-15	0%	5	29-Jan-15	16-Feb-15	24-Feb-15	19	0
SWVB1290	9SE-B/C9 Zone A - Form 375UC @ +5.5	12	30-Jan-15	0%	12	12-Feb-15	25-Feb-15	10-Mar-15	19	0
SWVB1300	9SE-B/C9 Zone A - Hydroseeding	6	13-Feb-15	0%	6	23-Feb-15	11-Mar-15	17-Mar-15	19	43

**Zone B & C**

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float
SWVB1440	9SE-B/C9 Zone B & C - Soil nail 87 nr. @+20.5 (Row G)	17	22-Sep-14 A	100%	0	11-Dec-14 A				
SWVB1460	9SE-B/C9 Zone B & C - Soil nail 92 nr. @ +18.5 (Row F)	17	27-Oct-14 A	100%	0	15-Dec-14 A				
SWVB1470	9SE-B/C9 Zone B & C - Raking Drain 13 nr @ +18.6	5	22-Dec-14	0%	5	29-Dec-14	24-Aug-18	29-Aug-18	973	973
SWVB1480	9SE-B/C9 Zone B & C - Excav. to approx +15	8	17-Oct-14 A	100%	0	12-Dec-14 A				
SWVB1490	9SE-B/C9 Zone B & C - Soil nail 35 nr. @+16.5 (Row E)	12	18-Oct-14 A	100%	0	20-Dec-14 A				
SWVB1500	9SE-B/C9 Zone B & C - Raking Drain 14 nr @ +17.0	5	22-Dec-14	0%	5	29-Dec-14	25-Nov-14	29-Nov-14	-23	0
SWVB1510	9SE-B/C9 Zone B & C - Form 375UC @ approx +16.0	18	30-Dec-14	0%	18	20-Jan-15	01-Dec-14	20-Dec-14	-23	1
SWVB1520	9SE-B/C9 Zone B & C - Rock excav. to +6.5	42	24-Nov-14 A	42.86%	24	21-Jan-15	24-Nov-14	20-Dec-14	-24	0
SWVB1530	9SE-B/C9 Zone B & C - Raking Drain 8 nr @ +8.0 in rock	8	22-Jan-15	0%	8	30-Jan-15	22-Dec-14	02-Jan-15	-24	0
SWVB1540	9SE-B/C9 Zone B & C - Rock excav. to +5.5	42	31-Jan-15	0%	42	24-Mar-15	03-Jan-15	24-Feb-15	-24	0
SWVB1560	9SE-B/C9 Zone B & C - Install Geo. Instru. & Baseline Monitoring	30	09-Jun-14 A	0%	30	28-Jan-15	17-Jan-15	24-Feb-15	20	44

**Slope 9SE-B/C8**

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float
SWVB2080	9SE-B/C8 -Raking Drain 9 nr	12	22-Dec-14	0%	12	07-Jan-15	15-Aug-18	29-Aug-18	966	966
SWVB2100	9SE-B/C8 -Inst. 225UC & railings @ approx +15.0	14	22-Dec-14	0%	14	09-Jan-15	30-Aug-14	18-Sep-14	-90	1
SWVB2110	9SE-B/C8 -Rock excav. to +7.00	30	10-Oct-14 A	50%	15	10-Jan-15	29-Aug-14	18-Sep-14	-91	0
SWVB2120	9SE-B/C8 -Raking Drain 9 nr	10	12-Jan-15	0%	10	22-Jan-15	19-Sep-14	30-Sep-14	-91	0
SWVB2130	9SE-B/C8 -Inst. 225UC	12	23-Jan-15	0%	12	05-Feb-15	03-Oct-14	18-Oct-14	-91	0

■ Actual Work  
■ Planned Bar  
■ Critical Bar  
◆ Milestone

Project ID: J3518DWPrD1-M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 35 of 36 Pages)**  
**(Progress as of 21-Dec-14)**

Date	Revision	Checked	Approved
21-Sep-14			
21-Oct-14			
21-Nov-14		DB	
21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	2014												2015												
											December				January				February				March												
											24	01	08	15	22	29	05	12	19	26	02	09	16	23	02	09									
SWVB2140	9SE-B/C8 - Install Geo. Instru. & Baseline Monitoring	30	09-Jun-14 A	0%	30	28-Jan-15	08-Sep-14	18-Oct-14	-84	7	[Gantt bar: 28-Jan-15 to 08-Sep-14]																								
SWVB2150	9SE-B/C8 -Hydroseeding	6	06-Feb-15	0%	6	12-Feb-15	20-Oct-14	25-Oct-14	-91	0	[Gantt bar: 12-Feb-15 to 25-Oct-14]																								
<b>Slope 9SE-B/F9</b>																																			
SWVB3040	9SE-B/F9 - Soil nail 59 nr. (Row A & B)	8	13-Oct-14 A	100%	0	27-Nov-14 A					[Gantt bar: 13-Oct-14 to 27-Nov-14]																								
SWVB3060	9SE-B/F9 - Soil nail 33 nr. (Row C)	8	08-Nov-14 A	100%	0	27-Nov-14 A					[Gantt bar: 08-Nov-14 to 27-Nov-14]																								
SWVB3070	9SE-B/F9 - Raking Drain 4 nr	5	22-Dec-14	0%	5	29-Dec-14	24-Aug-18	29-Aug-18	973	973	[Gantt bar: 22-Dec-14 to 29-Dec-14]																								
SWVB3080	9SE-B/F9 - Excav. to +7.5	8	28-Nov-14 A	100%	0	16-Dec-14 A					[Gantt bar: 28-Nov-14 to 16-Dec-14]																								
SWVB3090	9SE-B/F9 - Inst. 600 width conc. maintenance staircase w/ railings & 450UC	18	22-Dec-14	0%	18	14-Jan-15	24-Sep-14	18-Oct-14	-72	12	[Gantt bar: 22-Dec-14 to 18-Oct-14]																								
SWVB3100	9SE-B/F9 - Inst. 225UC	12	22-Dec-14	0%	12	07-Jan-15	03-Oct-14	18-Oct-14	-66	18	[Gantt bar: 22-Dec-14 to 18-Oct-14]																								
SWVB3110	9SE-B/F9 - Install Geo. Instru. & Baseline Monitoring	30	22-Dec-14	0%	30	28-Jan-15	08-Sep-14	18-Oct-14	-84	0	[Gantt bar: 22-Dec-14 to 18-Oct-14]																								
SWVB3120	9SE-B/F9 - Hydroseeding	6	29-Jan-15	0%	6	04-Feb-15	20-Oct-14	25-Oct-14	-84	0	[Gantt bar: 29-Jan-15 to 25-Oct-14]																								
<b>Slope 9SE-B/F85</b>																																			
SWVB4020	9SE-B/F85 - Filling & forming slope	18	13-Feb-15	0%	18	09-Mar-15	18-Mar-15	14-Apr-15	25	0	[Gantt bar: 13-Feb-15 to 14-Apr-15]																								
SWVB4030	9SE-B/F85 - Form UC	12	10-Mar-15	0%	12	23-Mar-15	02-Oct-15	17-Oct-15	137	0	[Gantt bar: 10-Mar-15 to 17-Oct-15]																								
<b>Re-alignment of Cheung Tung Road adjacent to Viaduct C</b>																																			
<b>West Portion</b>																																			
RW61000	Realign CTR (West of Abut. C) - Site Clearance	42	03-Sep-14 A	76.19%	10	05-Jan-15	07-Nov-14	18-Nov-14	-38	38	[Gantt bar: 03-Sep-14 to 18-Nov-14]																								
RW61010	Realign CTR (West of Abut. C) - Road drainage works	60	08-Jan-15	0%	60	21-Mar-15	07-Nov-14	19-Jan-15	-50	0	[Gantt bar: 08-Jan-15 to 19-Jan-15]																								
RW61020	Realign CTR (West of Abut. C) - Utility diversion	90	09-Mar-15	0%	90	27-Jul-15	06-Jan-15	06-May-15	-50	0	[Gantt bar: 09-Mar-15 to 06-May-15]																								
RW61082	Realign CTR (West of Abut. C) - Road formation	48	20-Nov-14 A	31.25%	33	18-Feb-15	07-Nov-14	15-Dec-14	-53	0	[Gantt bar: 20-Nov-14 to 15-Dec-14]																								
RW61084	Realign CTR (West of Abut. C) - Retaining Wall C1	48	13-Oct-14 A	75%	12	07-Jan-15	21-Oct-14	03-Nov-14	-53	0	[Gantt bar: 13-Oct-14 to 03-Nov-14]																								
<b>East Portion</b>																																			
RW60000	Realign CTR (East of Abut. C) - Site Clearance	54	01-Dec-14 A	18.52%	44	13-Feb-15	27-Jan-15	21-Mar-15	28	80	[Gantt bar: 01-Dec-14 to 21-Mar-15]																								
RW60005	Realign CTR (East of Abut. C) - Road formation	66	06-Mar-15	0%	66	17-Jun-15	31-Dec-14	21-Mar-15	-52	0	[Gantt bar: 06-Mar-15 to 21-Mar-15]																								
RW61086	Realign CTR (East of Abut. C) - Retaining Wall C2	54	22-Nov-14 A	100%	0	22-Nov-14 A					[Gantt bar: 22-Nov-14 to 22-Nov-14]																								
<b>Emergency Gates G6 &amp; G7</b>																																			
RP10070	Construct Expressway Fence /Beam Barriers betw new Gates G6 & G7	24	30-Oct-14 A	25%	18	14-Jan-15	11-Aug-15	04-Sep-15	160	0	[Gantt bar: 30-Oct-14 to 04-Sep-15]																								
RP10080	Construct footings, pavement, kerbing for new gates G6 & G7	30	15-Jan-15	0%	30	18-Feb-15	05-Sep-15	14-Oct-15	160	0	[Gantt bar: 15-Jan-15 to 14-Oct-15]																								
RP10090	Install new gates G6 & G7	24	23-Feb-15	0%	24	21-Mar-15	16-Oct-15	13-Nov-15	160	210	[Gantt bar: 23-Feb-15 to 13-Nov-15]																								
<b>ESS Sub-Station</b>																																			
RP10020	Construct new ESS-C Sub.Stn. adjacent to Viaduct C	48	13-Aug-14 A	75%	12	07-Jan-15	27-Oct-14	08-Nov-14	-48	0	[Gantt bar: 13-Aug-14 to 08-Nov-14]																								
RP10030	Inst.Eqpt. & Testing / commissioning of new ESS	60	08-Jan-15	0%	60	21-Mar-15	10-Nov-14	21-Jan-15	-48	0	[Gantt bar: 08-Jan-15 to 21-Jan-15]																								
<b>Viaduct C Slope Works</b>																																			
<b>Slope 10NW-C/C22</b>																																			
SWVC1000	10NW-C/C22 - Slope works	18	19-Dec-14 A	100%	0	19-Dec-14 A					[Gantt bar: 19-Dec-14 to 19-Dec-14]																								
<b>Slope 10NW-C/C26</b>																																			
SWVC2000	10NW-C/C26 - Slope works	60	19-Dec-14 A	100%	0	19-Dec-14 A					[Gantt bar: 19-Dec-14 to 19-Dec-14]																								
<b>Slope 10NW-C/C27</b>																																			
SWVC3000	10NW-C/C27 - Slope works	24	19-Dec-14 A	100%	0	19-Dec-14 A					[Gantt bar: 19-Dec-14 to 19-Dec-14]																								
<b>Natural Terrain Hazard Mitigation Works</b>																																			
<b>NTHM Works - West Portion</b>																																			
NTW0010	DDA Approval for Natural Terrain Hazard Mitigation Measures	0		0%	0	30-Dec-14		20-Mar-15	58	0	[Milestone: 30-Dec-14]																								
<b>Check Dam no. 1 (CD1)</b>																																			
GFXX497	Predrilling Works for Check Dams	25	31-Dec-14	0%	25	29-Jan-15	23-Mar-15	29-Apr-15	66	0	[Gantt bar: 31-Dec-14 to 29-Apr-15]																								
GFXX499	CD1 - Mobilization of rig for MiniPile	6	23-Jan-15	0%	6	29-Jan-15	22-Apr-15	29-Apr-15	66	0	[Gantt bar: 23-Jan-15 to 29-Apr-15]																								
GFXX500	CD1 - Installation of MiniPile (13nos.)	52	30-Jan-15	0%	52	10-Apr-15	02-May-15	25-Jul-15	66	0	[Gantt bar: 30-Jan-15 to 25-Jul-15]																								

█ Actual Work  
█ Planned Bar  
█ Critical Bar  
◆ Milestone

Project ID: J3518DWPd1-M19  
 Layout: J3518-DWP-3MRP Submission - M19  
 Filter: TASK filters: 3-Month Lookahead, No CC  
 Milestones, no Level of Effort, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection**  
**3-Month Rolling Programme (Page 36 of 36 Pages)**  
**(Progress as of 21-Dec-14)**

Date	Revision	Checked	Approved
21-Sep-14			
21-Oct-14			
21-Nov-14		DB	
21-Dec-14			

**DWG. No.:**  
**J3518/GCL/PGM/3MRP-M19**

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	
<b>AIR QUALITY</b>									
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		✓
<b>NOISE</b>									
5.11	Section 4	Noise monitoring	All existing representative sensitive receivers / during North Lantau Viaduct construction	Contractor	EM&A Manual		Y		✓
<b>WATER QUALITY</b>									
<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	✓
<b>ECOLOGY</b>									
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			✓
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 <sup>2</sup> 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		✓
7.13	6.5	Undertaken gabion wall works in Stream NL1 in the dry season	North Lantau slope works/dry	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	
			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		✓
<b>LANDSCAPE AND VISUAL</b>									
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		<>
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		n/a
10.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Recycle/Reuse all felled trees and vegetation, e.g.	All areas/detailed	Design	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	
		mulching (CM9)	design/ during construction	Consultant/ Contractor					
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 (OM4)	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	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and	All areas/detailed design/ during	Design Consultant/	TMEIA	Y	Y	Y	n/a. To be

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		finishes	construction / during operation	Contractor					implemented by HyD
<b>WASTE</b>									
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 where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting.	All areas / throughout construction period	Contractor	TMEIA		Y		✓



EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
12.6	8.1	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			↔
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 materials should avoid over-ordering and wastage.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The Contractor should recycle as many C&D	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	
		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.	construction period						
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"> <li>- suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed;</li> <li>- Having a capacity of &lt;450L unless the specifications have been approved by the EPD; and</li> <li>- 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;</li> <li>- Enclosed with at least 3 sides;</li> <li>- 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;</li> <li>- Adequate ventilation;</li> <li>- Sufficiently covered to prevent rainfall entering</li> </ul>	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	
		(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 hardstanding;	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including waste reduction, reuse and recycling.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local	Site Offices/ 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	
		collection scheme by the Contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site.							
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		<>
<b>CULTURAL HERITAGE</b>									
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 <sup>(a)</sup>	<u>Surface and Middle</u> <b>5.0 mg/L</b>	<u>Surface and Middle</u> <b>4.2 mg/L</b>
	<u>Bottom</u> <b>4.7 mg/L</b>	<u>Bottom</u> <b>3.6 mg/L</b>
Turbidity in NTU (Depth-averaged <sup>(b), (c)</sup> )	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., <b>27.5 NTU</b>	130% of upstream control station at the same tide of the same day and 99%-ile of baseline data, i.e., <b>47.0 NTU</b>
SS in mg/L (Depth-averaged <sup>(b), (c)</sup> )	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., <b>23.5 mg/L</b>	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., <b>34.4 mg/L</b>

**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 : 26/11/2014

Sampler

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

Calibration Office and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 24 Mar 2014  
 Slope (m) : 2.07593  
 Intercept (b) : -0.00102  
 Correlation Coefficient(r) : 0.99996

Standard Condition

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

Calibration Condition

Pa (hpa) : 1013  
 Ta(K) : 296

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1   18 holes	11.8	3.447	1.661	55	55.19
2   13 holes	9.9	3.157	1.521	50	50.17
3   10 holes	7.2	2.692	1.297	44	44.15
4   7 holes	4.8	2.198	1.059	36	36.12
5   5 holes	2.9	1.709	0.824	29	29.10

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): 30.964 Intercept(b): 3.542 Correlation Coefficient(r): 0.9994

Checked by: Magnum Fan

Date: 02/12/2014

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR9  
 Calibrated by : P.F.Yeung  
 Date : 26/11/2014

Sampler

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

Calibration Office and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 24 Mar 2014  
 Slope (m) : 2.07593  
 Intercept (b) : -0.00102  
 Correlation Coefficient(r) : 0.99996

Standard Condition

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

Calibration Condition

Pa (hpa) : 1013  
 Ta(K) : 296

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1   18 holes	11.6	3.417	1.647	55	55.19
2   13 holes	9.7	3.125	1.506	50	50.17
3   10 holes	6.8	2.616	1.261	42	42.14
4   7 holes	4.6	2.152	1.037	35	35.12
5   5 holes	2.8	1.679	0.809	28	28.09

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

Sampler Calibration Relationship (Linear Regression)

Slope(m): 32.249 Intercept(b): 1.767 Correlation Coefficient(r): 0.9997

Checked by: Magnum Fan

Date: 02/12/2014



High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR8(A)  
 Calibrated by : P.F. Yeung  
 Date : 28/01/2015

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 24 Mar 2014  
 Slope (m) : 2.07593  
 Intercept (b) : -0.00102  
 Correlation Coefficient(r) : 0.99996

Standard Condition

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

Calibration Condition

Pa (hpa) : 1018  
 Ta(K) : 293

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.6	3.443	1.659	56	56.62
2	13 holes	9.6	3.132	1.509	51	51.56
3	10 holes	7.1	2.694	1.298	45	45.49
4	7 holes	4.6	2.168	1.045	37	37.41
5	5 holes	2.8	1.692	0.815	29	29.32

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): 31.968 Intercept(b): 3.625 Correlation Coefficient(r): 0.9994

Checked by: Magnum Fan

Date: 31/01/2015

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR9  
 Calibrated by : P.F. Yeung  
 Date : 28/01/2015

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 24 Mar 2014  
 Slope (m) : 2.07593  
 Intercept (b) : -0.00102  
 Correlation Coefficient(r) : 0.99996

Standard Condition

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

Calibration Condition

Pa (hpa) : 1018  
 Ta(K) : 293

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.5	3.428	1.652	55	55.60
2	13 holes	9.7	3.149	1.517	50	50.55
3	10 holes	6.8	2.636	1.270	42	42.46
4	7 holes	4.6	2.168	1.045	35	35.38
5	5 holes	2.8	1.692	0.815	28	28.31

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

Sampler Calibration Relationship (Linear Regression)

Slope(m): 32.439 Intercept(b): 1.587 Correlation Coefficient(r): 0.9995

Checked by: Magnum Fan

Date: 31/01/2015



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

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 24, 2014 Rootmeter S/N 0438320 Ta (K) - 293  
 Operator Tisch Orifice I.D. - 2454 Pa (mm) - 758.19

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.4740	3.2	2.00
2	NA	NA	1.00	1.0340	6.4	4.00
3	NA	NA	1.00	0.9240	7.9	5.00
4	NA	NA	1.00	0.8820	8.8	5.50
5	NA	NA	1.00	0.7270	12.7	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
1.0103	0.6854	1.4245	0.9958	0.6755	0.8791
1.0061	0.9730	2.0146	0.9916	0.9590	1.2433
1.0040	1.0866	2.2524	0.9895	1.0709	1.3900
1.0028	1.1370	2.3623	0.9884	1.1206	1.4579
0.9976	1.3722	2.8491	0.9832	1.3524	1.7583
Qstd slope (m) =		2.07593	Qa slope (m) =		1.29991
intercept (b) =		-0.00102	intercept (b) =		-0.00063
coefficient (r) =		0.99996	coefficient (r) =		0.99996
y axis = SQRT[H2O(Pa/760)(298/Ta)]			y axis = SQRT[H2O(Ta/Pa)]		

CALCULATIONS

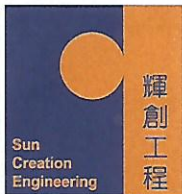
Vstd = Diff. Vol [(Pa-Diff. Hg)/760] (298/Ta)  
 Qstd = Vstd/Time

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}





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. : C143980

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC14-1497)

Date of Receipt / 收件日期 : 23 June 2014

Description / 儀器名稱 : Sound Level Calibrator

Manufacturer / 製造商 : Rion

Model No. / 型號 : NC-73

Serial No. / 編號 : 10997142

Supplied By / 委託者 : Envirotech Services Co.

Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,  
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 check

DATE OF TEST / 測試日期 : 28 June 2014

TEST RESULTS / 測試結果

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

All results are within manufacturer's specification.

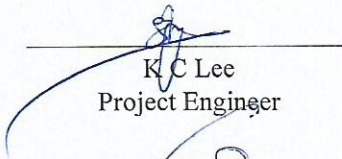
The results are detailed in the subsequent page(s).

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

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

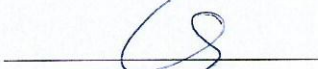
Tested By :

測試

  
K C Lee  
Project Engineer

Certified By :

核證

  
K M Wu  
Engineer

Date of Issue :

簽發日期

2 July 2014

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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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. : C143980  
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	C143868
CL281	Multifunction Acoustic Calibrator	DC130171
TST150A	Measuring Amplifier	C141558

- 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	93.7	± 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 :

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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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. : C144558

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC14-1853)

Date of Receipt / 收件日期 : 22 July 2014

Description / 儀器名稱 : Sound Level Meter

Manufacturer / 製造商 : Rion

Model No. / 型號 : NL-31

Serial No. / 編號 : 00603867

Supplied By / 委託者 : Envirotech Services Co.

Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,  
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 : 29 July 2014

### TEST RESULTS / 測試結果

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

All results are within manufacturer's specification.

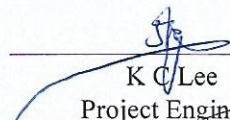
The results are detailed in the subsequent page(s).

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

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

Tested By :

測試

  
K C Lee  
Project Engineer

Certified By :

核證

  
K M Wu  
Engineer

Date of Issue :

簽發日期

30 July 2014

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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Page 1 of 4



# Certificate of Calibration

## 校正證書

Certificate No. : C144558

證書編號

1. 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.
2. Self-calibration was performed before the test.
3. The results presented are the mean of 3 measurements at each calibration point.
4. Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL280	40 MHz Arbitrary Waveform Generator	C140016
CL281	Multifunction Acoustic Calibrator	DC130171

5. Test procedure : MA101N.

6. Results :

- 6.1 Sound Pressure Level

- 6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L <sub>A</sub>	A	Fast	94.00	1	93.6	± 1.1

- 6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 120	L <sub>A</sub>	A	Fast	94.00	1	93.6 (Ref.)
				104.00		103.6
				114.00		113.6

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

- 6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L <sub>A</sub>	A	Fast	94.00	1	93.6	Ref.
			Slow			93.5	± 0.3

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# Certificate of Calibration

## 校正證書

Certificate No. : C144558

證書編號

### 6.3 Frequency Weighting

#### 6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L <sub>A</sub>	A	Fast	94.00	63 Hz	67.3	-26.2 ± 1.5
					125 Hz	77.3	-16.1 ± 1.5
					250 Hz	84.9	-8.6 ± 1.4
					500 Hz	90.3	-3.2 ± 1.4
					1 kHz	93.6	Ref.
					2 kHz	94.9	+1.2 ± 1.6
					4 kHz	94.7	+1.0 ± 1.6
					8 kHz	92.5	-1.1 (+2.1 ; -3.1)
					12.5 kHz	89.7	-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)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L <sub>C</sub>	C	Fast	94.00	63 Hz	92.7	-0.8 ± 1.5
					125 Hz	93.4	-0.2 ± 1.5
					250 Hz	93.6	0.0 ± 1.4
					500 Hz	93.6	0.0 ± 1.4
					1 kHz	93.6	Ref.
					2 kHz	93.5	-0.2 ± 1.6
					4 kHz	92.9	-0.8 ± 1.6
					8 kHz	90.6	-3.0 (+2.1 ; -3.1)
					12.5 kHz	87.8	-6.2 (+3.0 ; -6.0)

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# Certificate of Calibration

## 校正證書

Certificate No. : C144558  
證書編號

Remarks : - UUT Microphone Model No. : UC-53A & S/N : 316987

- Mfr's Spec. : IEC 61672 Class 1

- Uncertainties of Applied Value : 94 dB : 63 Hz - 125 Hz :  $\pm 0.35$  dB  
250 Hz - 500 Hz :  $\pm 0.30$  dB  
1 kHz :  $\pm 0.20$  dB  
2 kHz - 4 kHz :  $\pm 0.35$  dB  
8 kHz :  $\pm 0.45$  dB  
12.5 kHz :  $\pm 0.70$  dB  
104 dB : 1 kHz :  $\pm 0.10$  dB (Ref. 94 dB)  
114 dB : 1 kHz :  $\pm 0.10$  dB (Ref. 94 dB)

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

Note :

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.

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Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com



## Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/010 Manufacturer : HACH

Model No. : 2100Q Serial No. : 11110 C 014260

Date of Calibration : 06/10/2014 Due Date : 05/01/2015

Ref. No. of Turbidity Standard used (4000NTU)

005/6.1/001/7

Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	20.6	3.00
100	102	2.00
800	790	-1.25

(\*) Difference = (Measured Value – Theoretical Value) / Theoretical Value x 100

Acceptance Criteria

Difference : -5 % to 5 %

The turbidity meter complies \* / ~~does not comply~~ \* with the specified requirements and is deemed acceptable \* / ~~unacceptable~~ \* for use. Measurements are traceable to national standards.

Prepared by : hw

Checked by : 1266





## Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/011                      Manufacturer : HACH  
Model No. : 2100Q                                      Serial No. : 12060 C 018534  
Date of Calibration : 05/01/2015                      Due Date : 04/04/2015

Ref. No. of Turbidity Standard used (4000NTU)

005/6.1/001/7

Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	19.8	-1.00
100	104	4.00
800	788	-1.50

(\* ) Difference = (Measured Value – Theoretical Value) / Theoretical Value x 100

Acceptance Criteria

Difference : -5 % to 5 %

The turbidity meter complies \* / ~~does not comply~~ \* with the specified requirements and is deemed acceptable \* / ~~unacceptable~~ \* for use. Measurements are traceable to national standards.

Prepared by : hy

Checked by : [Signature]



### Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/005      Manufacturer : HANNA  
 Model No. : HI 8314      Serial No. : 8246095  
 Date of Calibration : 07/12/2014      Calibration Due Date : 06/01/2015

#### Liquid Junction Error

Primary Standard Solution Used : Phosphate      Ref No. of Primary Solution: 003/5.2/001/20  
 Temperature of Solution : 20.0       $\Delta\text{pH}_{1/2} = \underline{+0.08}$   
 pH value of diluted buffer : 6.76      pH (S) = 6.881  
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.121}$  (Observed Deviation)  
 Liquid Junction Error ( $\Delta\text{pH}_j$ ) =  $\Delta\text{pH} - \Delta\text{pH}_{1/2} = \underline{0.041}$

#### Shift on Stirring

pH of buffer solution (with stirring),  $\text{pH}_s = \underline{6.94}$   
 Shift on stirring,  $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j = \underline{0.018}$

#### Noise

Noise,  $\Delta\text{pH}_n = \text{difference between max and min reading} : \underline{0.00}$

#### Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008  
 Temperature record from the reference thermometer ( $T_R$ ): 19.9 °C  
 Temperature record from the ATC ( $T_{ATC}$ ): 19.8 °C  
 Temperature Difference,  $|T_R - T_{ATC}|$  : 0.1 °C

#### Acceptance Criteria

Performance Characteristic	Acceptable Range
Liquid Junction Error $\Delta\text{pH}_j$	$\leq 0.05$
Shift on Stirring $\Delta\text{pH}_s$	$\leq 0.02$
Noise $\Delta\text{pH}_n$	$\leq 0.02$
Verification of ATC      Temperature Difference	$\leq 0.5^\circ\text{C}$

The pH meter complies \* / does not comply \* with the specified requirements and is deemed acceptable \* / unacceptable \* for use. Measurements are traceable to national standards.

\* Delete as appropriate

Calibrated by :       Checked by : 



### Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/005      Manufacturer : HANNA  
 Model No. : HI 8314      Serial No. : 8246095  
 Date of Calibration : 07/01/2015      Calibration Due Date : 06/02/2015

#### Liquid Junction Error

Primary Standard Solution Used : Phosphate      Ref No. of Primary Solution: 003/5.2/001/20  
 Temperature of Solution : 20.0       $\Delta\text{pH}_{1/2} = \underline{+0.08}$   
 pH value of diluted buffer : 6.79      pH (S) = 6.881  
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.091}$       (Observed Deviation)  
 Liquid Junction Error ( $\Delta\text{pH}_j$ ) =  $\Delta\text{pH} - \Delta\text{pH}_{1/2} = \underline{0.011}$

#### Shift on Stirring

pH of buffer solution (with stirring),  $\text{pH}_s = \underline{6.91}$   
 Shift on stirring,  $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j = \underline{0.018}$

#### Noise

Noise,  $\Delta\text{pH}_n =$  difference between max and min reading : 0.00

#### Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008 °C  
 Temperature record from the reference thermometer ( $T_R$ ): 19.9 °C  
 Temperature record from the ATC ( $T_{ATC}$ ): 19.9 °C  
 Temperature Difference,  $|T_R - T_{ATC}|$  : 0.0 °C

#### Acceptance Criteria

Performance Characteristic	Acceptable Range
Liquid Junction Error $\Delta\text{pH}_j$	$\leq 0.05$
Shift on Stirring $\Delta\text{pH}_s$	$\leq 0.02$
Noise $\Delta\text{pH}_n$	$\leq 0.02$
Verification of ATC      Temperature Difference	$\leq 0.5^\circ\text{C}$

The pH meter complies \* / does not comply \* with the specified requirements and is deemed acceptable \* / unacceptable \* for use. Measurements are traceable to national standards.

\* Delete as appropriate

Calibrated by : my

Checked by : Heleen



### Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No. : <u>ET/EW/008/006</u>	Manufacturer : <u>YSI</u>
Model No. : <u>Pro 2030</u>	Serial No. : <u>12A 100554</u>
Date of Calibration : <u>17/12/2014</u>	Calibration Due Date : <u>16/03/2015</u>

**Temperature Verification**

Ref. No. of Reference Thermometer : ET/0521/008

Ref. No. of Water Bath : ---

		Temperature (°C)		
Reference Thermometer reading	Measured	20.0	Corrected	19.4
DO Meter reading	Measured	19.4	Difference	0.0

**Standardization of sodium thiosulphate (Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>) solution**

Reagent No. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> titrant	CPE/012/4.5/001/9	Reagent No. of 0.025N K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	CPE/012/4.4/001/32
		Trial 1	Trial 2
Initial Vol. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (ml)		0.00	10.15
Final Vol. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (ml)		10.15	20.35
Vol. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> used (ml)		10.15	10.20
Normality of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> solution (N)		0.02463	0.02451
Average Normality (N) of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> solution (N)		0.02457	
Acceptance criteria, Deviation		Less than ± 0.001N	

Calculation: Normality of Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, N = 0.25 / ml Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> used

**Lineality Checking**

**Determination of dissolved oxygen content by Winkler Titration \***

Purging Time (min)	2		5		10	
	1	2	1	2	1	2
Trial						
Initial Vol. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (ml)	0.00	11.40	22.80	0.00	6.60	10.30
Final Vol. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (ml)	11.40	22.80	29.30	6.60	10.30	14.00
Vol. (V) of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> used (ml)	11.40	11.40	6.50	6.60	3.70	3.70
Dissolved Oxygen (DO), mg/L	7.52	7.52	4.29	4.35	2.44	2.44
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: DO (mg/L) = V x N x 8000/298

Purging time, min	DO meter reading, mg/L			Winkler Titration result *, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	7.61	7.20	7.41	7.52	7.52	7.52	1.47
5	4.28	4.75	4.52	4.29	4.35	4.32	4.52
10	2.50	2.49	2.50	2.44	2.44	2.44	2.43
Linear regression coefficient				0.9978			





## Internal Calibration Report of Dissolved Oxygen Meter

### Zero Point Checking

DO meter reading, mg/L	0.00
------------------------	------

### Salinity Checking

Reagent No. of NaCl (10ppt)	CPE/012/4.7/002/29	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/29
-----------------------------	--------------------	-----------------------------	--------------------

### Determination of dissolved oxygen content by Winkler Titration \*\*

Salinity (ppt)	10		30	
	1	2	1	2
Initial Vol. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (ml)	0.00	11.90	23.80	34.40
Final Vol. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (ml)	11.90	23.80	34.40	44.90
Vol. (V) of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> used (ml)	11.90	11.90	10.60	10.50
Dissolved Oxygen (DO), mg/L	7.85	7.85	6.99	6.93
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: DO (mg/L) = V x N x 8000/298

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result**, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	7.68	7.78	7.73	7.85	7.85	7.85	1.54
30	6.88	6.89	6.89	6.99	6.93	6.96	1.01

### Acceptance Criteria

- (1) Difference between temperature readings from temperature sensor of DO probe and reference thermometer : < 0.5 °C
- (2) Linear regression coefficient : >0.99
- (3) Zero checking: 0.0mg/L
- (4) Difference (%) of DO content from the meter reading and by winkler titration : within ± 5%

The equipment complies # / does not comply # with the specified requirements and is deemed acceptable # / unacceptable # for use.

# Delete as appropriate

Calibrated by : \_\_\_\_\_

Approved by : \_\_\_\_\_



## Performance Check of Salinity Meter

Equipment Ref. No. : ET/EW/008/006                      Manufacturer : YSI  
 Model No. : Pro 2030    Serial No. : 12A 100554  
 Date of Calibration : 17/12/2014                      Due Date : 16/03/2015

Ref. No. of Salinity Standard used (30ppt)	S/001/5
--	---------


Salinity Standard (ppt)	Measured Salinity (ppt)	Difference %
30.0	30.5	1.7

(\*  $\text{Difference } (\%) = (\text{Measured Salinity} - \text{Salinity Standard value}) / \text{Salinity Standard value} \times 100$ )

### Acceptance Criteria

Difference : -10 % to 10 %

The salinity meter complies \* / ~~does not comply~~ \* with the specified requirements and is deemed acceptable \* / ~~unacceptable~~ \* for use. Measurements are traceable to national standards.

Checked by :                       Approved by : 

**ENVIROTECH SERVICES CO.**

**Calibration Report of Wind Meter**

Date of Calibration : 20 November 2014

Brand of Test Meter: Global Water

Model: Speed Sensor: WE550 (S/N:EC0000 )

Direction Sensor: WE570 (S/N:ED0000)

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

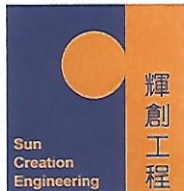
Global Wate (m/s)	Anemomete (m/s)
0.35	0.4
1.49	1.6
3.01	3.1

Wind Direction Test

Global Wate (o)	Marine Compass (o)
270.21	270
0.01	0
90.12	90
179.05	180

Calibrated by: Fai  
Yeung Ping Fai  
(Technical Officer)

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



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. : C146966

證書編號

ITEM TESTED / 送檢項目 ( Job No. / 序引編號 : IC14-2877 )      Date of Receipt / 收件日期 : 12 November 2014

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.  
Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,  
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 check

DATE OF TEST / 測試日期 : 14 November 2014

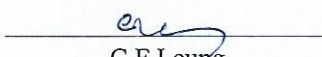
### TEST RESULTS / 測試結果

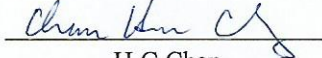
The results apply to the particular unit-under-test only.

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 : C F Leung  
Project Engineer

Certified By :   
核證 : H C Chan  
Engineer

Date of Issue : 18 November 2014  
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所書面批准。

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

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Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

Page 1 of 2



# Certificate of Calibration

## 校正證書

Certificate No. : C146966

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	S12109

4. Test procedure : MA130N.

5. Results :

### Air Velocity

Applied Value (m/s)	UUT Reading (m/s)	Measured Correction		
		Value (m/s)	Measurement Uncertainty	
			Expanded Uncertainty (m/s)	Coverage Factor
2.0	1.7	+0.3	0.2	2.0
4.1	3.8	+0.3	0.3	2.0
6.1	5.8	+0.3	0.3	2.0
8.0	7.8	+0.2	0.3	2.0
10.0	9.9	+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 :

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所書面批准。

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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



Appendix F

## EM&A Monitoring Schedules

**HY/2012/07 - Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section  
Impact Marine Water Quality Monitoring (WQM) Schedule (January 15)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				01-Jan	02-Jan	03-Jan
				WQM Mid-Ebb 10:12 (08:27 - 11:57) Mid-Flood 15:56 (14:11 - 17:41)		WQM Mid-Ebb 12:02 (10:17 - 13:47) Mid-Flood 17:15 (15:30 - 19:00)
04-Jan	05-Jan	06-Jan	07-Jan	08-Jan	09-Jan	10-Jan
		WQM Mid-Flood 8:35 (06:50 - 10:20) Mid-Ebb 13:49 (12:04 - 15:34)		WQM Mid-Flood 9:35 (07:50 - 11:20) Mid-Ebb 14:52 (13:07 - 16:37)		WQM Mid-Flood 10:31 (08:46 - 12:16) Mid-Ebb 16:01 (14:16 - 17:46)
11-Jan	12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan
		WQM Mid-Flood 12:26 (10:41 - 14:11) Mid-Ebb 18:52 (17:07 - 20:37)		WQM Mid-Ebb 7:45 (06:00 - 09:30) Mid-Flood 14:04 (12:19 - 15:49)		WQM Mid-Ebb 10:37 (08:52 - 12:22) Mid-Flood 15:50 (14:05 - 17:35)
18-Jan	19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan
		WQM Mid-Ebb 13:06 (11:21 - 14:51) Mid-Flood 18:19 (16:34 - 20:04)		WQM Mid-Flood 9:00 (07:15 - 10:45) Mid-Ebb 14:35 (12:50 - 16:20)		WQM Mid-Flood 10:19 (08:34 - 12:04) Mid-Ebb 16:08 (14:23 - 17:53)
25-Jan	26-Jan	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan
		WQM Mid-Flood 12:33 (10:48 - 14:18) Mid-Ebb 19:18 (17:33 - 21:03)		WQM Mid-Ebb 8:27 (06:42 - 10:12) Mid-Flood 14:22 (12:37 - 16:07)		WQM Mid-Ebb 11:11 (09:30 - 12:50) Mid-Flood 16:18 (14:33 - 18:03)

**HY/2012/07 - Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section  
Impact Marine Water Quality Monitoring (WQM) Schedule (February 15)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Feb	02-Feb	03-Feb	04-Feb	05-Feb	06-Feb	07-Feb
		<b>WQM</b> Mid-Ebb 12:58 (11:13 - 14:43) Mid-Flood 18:20 (16:35 - 20:05)		<b>WQM</b> Mid-Flood 8:29 (06:44 - 10:14) Mid-Ebb 13:53 (12:08 - 15:38)		<b>WQM</b> Mid-Flood 9:14 (07:29 - 10:59) Mid-Ebb 14:35 (12:50 - 16:20)
08-Feb	09-Feb	10-Feb	11-Feb	12-Feb	13-Feb	14-Feb
		<b>WQM</b> Mid-Flood 10:39 (08:54 - 12:24) Mid-Ebb 16:52 (15:08 - 18:38)		<b>WQM</b> Mid-Flood 12:00 (10:15 - 13:45) Mid-Ebb 19:00 (17:15 - 20:45)		<b>WQM</b> Mid-Ebb 9:11 (07:40 - 10:40) Mid-Flood 14:09 (12:24 - 15:54)
15-Feb	16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	21-Feb
		<b>WQM</b> Mid-Ebb 12:05 (10:20 - 13:50) Mid-Flood 17:21 (15:36 - 19:06)		<b>WQM</b> Mid-Ebb 13:31 (11:46 - 15:16) Mid-Flood 19:04 (17:19 - 20:49)		<b>WQM</b> Mid-Flood 8:58 (07:13 - 10:43) Mid-Ebb 14:53 (13:08 - 16:38)
22-Feb	23-Feb	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb
		<b>WQM</b> Mid-Flood 10:39 (08:54 - 12:24) Mid-Ebb 17:18 (15:33 - 19:03)		<b>WQM</b> Mid-Flood 12:19 (10:34 - 14:04) Mid-Ebb 19:46 (18:01 - 21:31)		<b>WQM</b> Mid-Ebb 10:02 (09:00 - 11:00) Mid-Flood 14:52 (13:07 - 16:37)

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section  
Tentative Impact Noise Monitoring Schedule (1 to 31 January 2015)**

Alternative Noise Monitoring at Pak Mong Village Entrance

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

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section  
Tentative Impact Air Quality Monitoring Schedule (1 to 31 January 2015)**

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Holiday 01-Jan	02-Jan	03-Jan
					1-hr TSP Monitoring 24-hr TSP Monitoring	
04-Jan	05-Jan	06-Jan	07-Jan	08-Jan	09-Jan	10-Jan
			1-hr TSP Monitoring 24-hr TSP Monitoring			
11-Jan	12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan
		1-hr TSP Monitoring 24-hr TSP Monitoring				
18-Jan	19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan
	1-hr TSP Monitoring 24-hr TSP Monitoring			1-hr TSP Monitoring 24-hr TSP Monitoring		
25-Jan	26-Jan	27-Jan	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  
Tentative Impact Noise Monitoring Schedule (1 to 28 February 2015)**

Alternative Noise Monitoring at Pak Mong Village Entrance

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

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section  
Tentative Impact Air Quality Monitoring Schedule (1 to 28 February 2015)**

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Feb	02-Feb	03-Feb	04-Feb	05-Feb	06-Feb	07-Feb
		1-hr TSP Monitoring 24-hr TSP Monitoring				
08-Feb	09-Feb	10-Feb	11-Feb	12-Feb	13-Feb	14-Feb
	1-hr TSP Monitoring 24-hr TSP Monitoring			1-hr TSP Monitoring 24-hr TSP Monitoring		
15-Feb	16-Feb	17-Feb	18-Feb	Holiday 19-Feb	Holiday 20-Feb	Holiday 21-Feb
		1-hr TSP Monitoring 24-hr TSP Monitoring				
22-Feb	23-Feb	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb
	1-hr TSP Monitoring 24-hr TSP Monitoring			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 Dolphin Monitoring Survey Schedule (1 to 31 January 2015)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Holiday 01-Jan	02-Jan	03-Jan
04-Jan	05-Jan	06-Jan	07-Jan	08-Jan	09-Jan	10-Jan
				Impact Dolphin Monitoring		
11-Jan	12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan
				Impact Dolphin Monitoring		
18-Jan	19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan
25-Jan	26-Jan	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan
		Impact Dolphin Monitoring		Impact Dolphin 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 Dolphin Monitoring Survey Schedule (1 to 28 February 2015)**

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

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	2015-01-02	ASR8A	9:00	1-hr TSP	140	394	500		
TMCLKL	HY/2012/07	2015-01-02	ASR8A	10:02	1-hr TSP	130				
TMCLKL	HY/2012/07	2015-01-02	ASR8A	11:04	1-hr TSP	113				
TMCLKL	HY/2012/07	2015-01-07	ASR8A	8:22	1-hr TSP	106				
TMCLKL	HY/2012/07	2015-01-07	ASR8A	9:24	1-hr TSP	85				
TMCLKL	HY/2012/07	2015-01-07	ASR8A	10:26	1-hr TSP	129				
TMCLKL	HY/2012/07	2015-01-13	ASR8A	8:20	1-hr TSP	98				
TMCLKL	HY/2012/07	2015-01-13	ASR8A	9:22	1-hr TSP	83				
TMCLKL	HY/2012/07	2015-01-13	ASR8A	10:24	1-hr TSP	73				
TMCLKL	HY/2012/07	2015-01-19	ASR8A	8:00	1-hr TSP	130				
TMCLKL	HY/2012/07	2015-01-19	ASR8A	9:02	1-hr TSP	94				
TMCLKL	HY/2012/07	2015-01-19	ASR8A	10:04	1-hr TSP	138				
TMCLKL	HY/2012/07	2015-01-22	ASR8A	8:30	1-hr TSP	176				
TMCLKL	HY/2012/07	2015-01-22	ASR8A	9:32	1-hr TSP	99				
TMCLKL	HY/2012/07	2015-01-22	ASR8A	10:34	1-hr TSP	110				
TMCLKL	HY/2012/07	2015-01-28	ASR8A	8:11	1-hr TSP	74				
TMCLKL	HY/2012/07	2015-01-28	ASR8A	9:13	1-hr TSP	92				
TMCLKL	HY/2012/07	2015-01-28	ASR8A	10:15	1-hr TSP	83				
						Average			109	
						Min.			73	
						Max.	176			

## 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	2015-01-02	ASR9	9:11	1-hr TSP	144	393	500		
TMCLKL	HY/2012/07	2015-01-02	ASR9	10:13	1-hr TSP	187				
TMCLKL	HY/2012/07	2015-01-02	ASR9	11:15	1-hr TSP	147				
TMCLKL	HY/2012/07	2015-01-07	ASR9	8:33	1-hr TSP	217				
TMCLKL	HY/2012/07	2015-01-07	ASR9	9:35	1-hr TSP	161				
TMCLKL	HY/2012/07	2015-01-07	ASR9	10:37	1-hr TSP	165				
TMCLKL	HY/2012/07	2015-01-13	ASR9	8:30	1-hr TSP	129				
TMCLKL	HY/2012/07	2015-01-13	ASR9	9:32	1-hr TSP	109				
TMCLKL	HY/2012/07	2015-01-13	ASR9	10:34	1-hr TSP	141				
TMCLKL	HY/2012/07	2015-01-19	ASR9	8:11	1-hr TSP	201				
TMCLKL	HY/2012/07	2015-01-19	ASR9	9:13	1-hr TSP	144				
TMCLKL	HY/2012/07	2015-01-19	ASR9	10:15	1-hr TSP	173				
TMCLKL	HY/2012/07	2015-01-22	ASR9	8:40	1-hr TSP	213				
TMCLKL	HY/2012/07	2015-01-22	ASR9	9:42	1-hr TSP	161				
TMCLKL	HY/2012/07	2015-01-22	ASR9	10:44	1-hr TSP	109				
TMCLKL	HY/2012/07	2015-01-28	ASR9	8:22	1-hr TSP	93				
TMCLKL	HY/2012/07	2015-01-28	ASR9	9:24	1-hr TSP	99				
TMCLKL	HY/2012/07	2015-01-28	ASR9	10:26	1-hr TSP	77				
						Average			148	
						Min.			77	
						Max.	217			

\* TSP monitoring at ASR8 on 2 December was cancelled due to the rejection of access to the monitoring station.



**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	2015-01-02	ASR8A	12:08	24-hr TSP	91	178	260
TMCLKL	HY/2012/07	2015-01-07	ASR8A	11:28	24-hr TSP	81		
TMCLKL	HY/2012/07	2015-01-13	ASR8A	11:26	24-hr TSP	67		
TMCLKL	HY/2012/07	2015-01-19	ASR8A	11:06	24-hr TSP	99		
TMCLKL	HY/2012/07	2015-01-22	ASR8A	11:36	24-hr TSP	60		
TMCLKL	HY/2012/07	2015-01-28	ASR8A	11:17	24-hr TSP	57		
						Average	76	
						Min.	57	
						Max.	99	

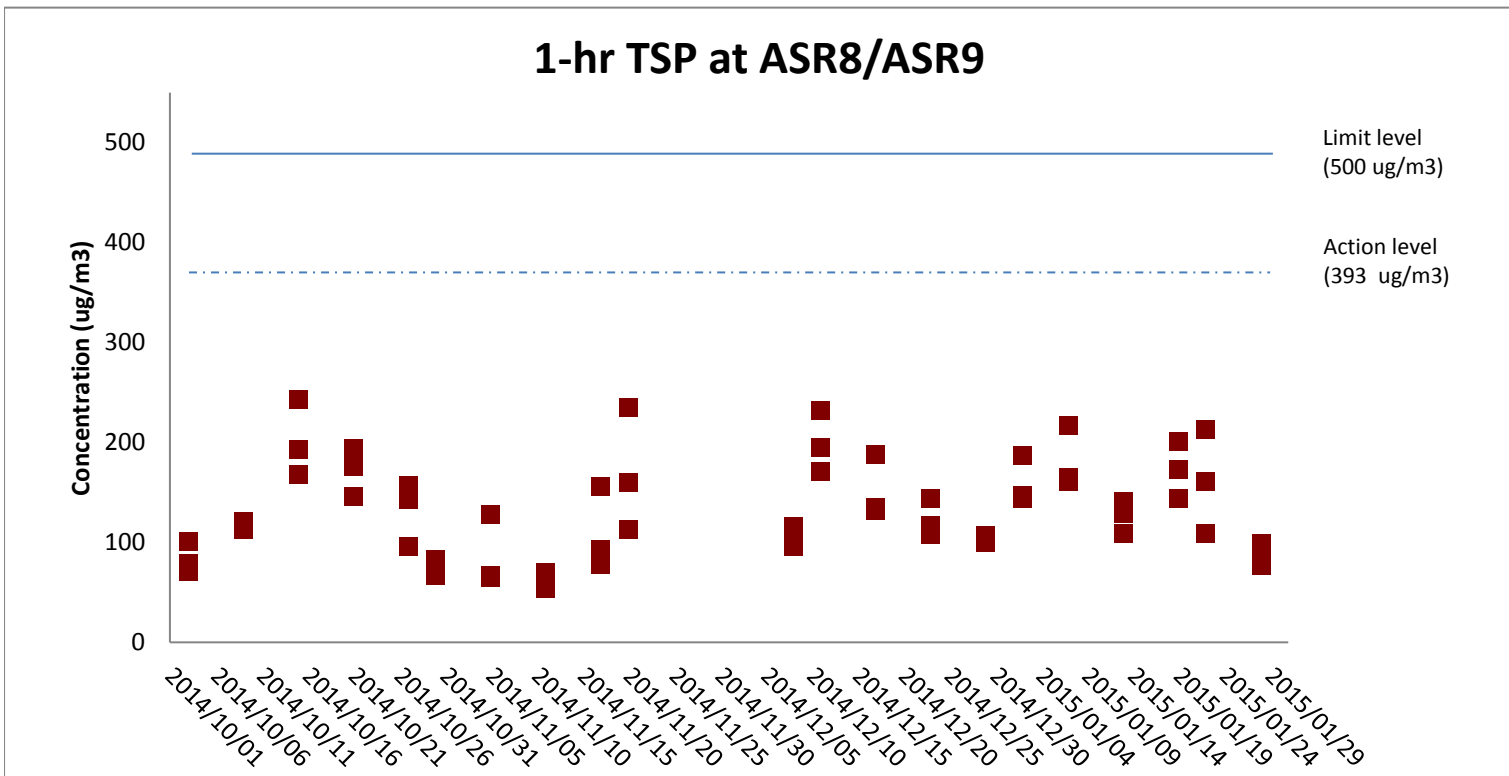
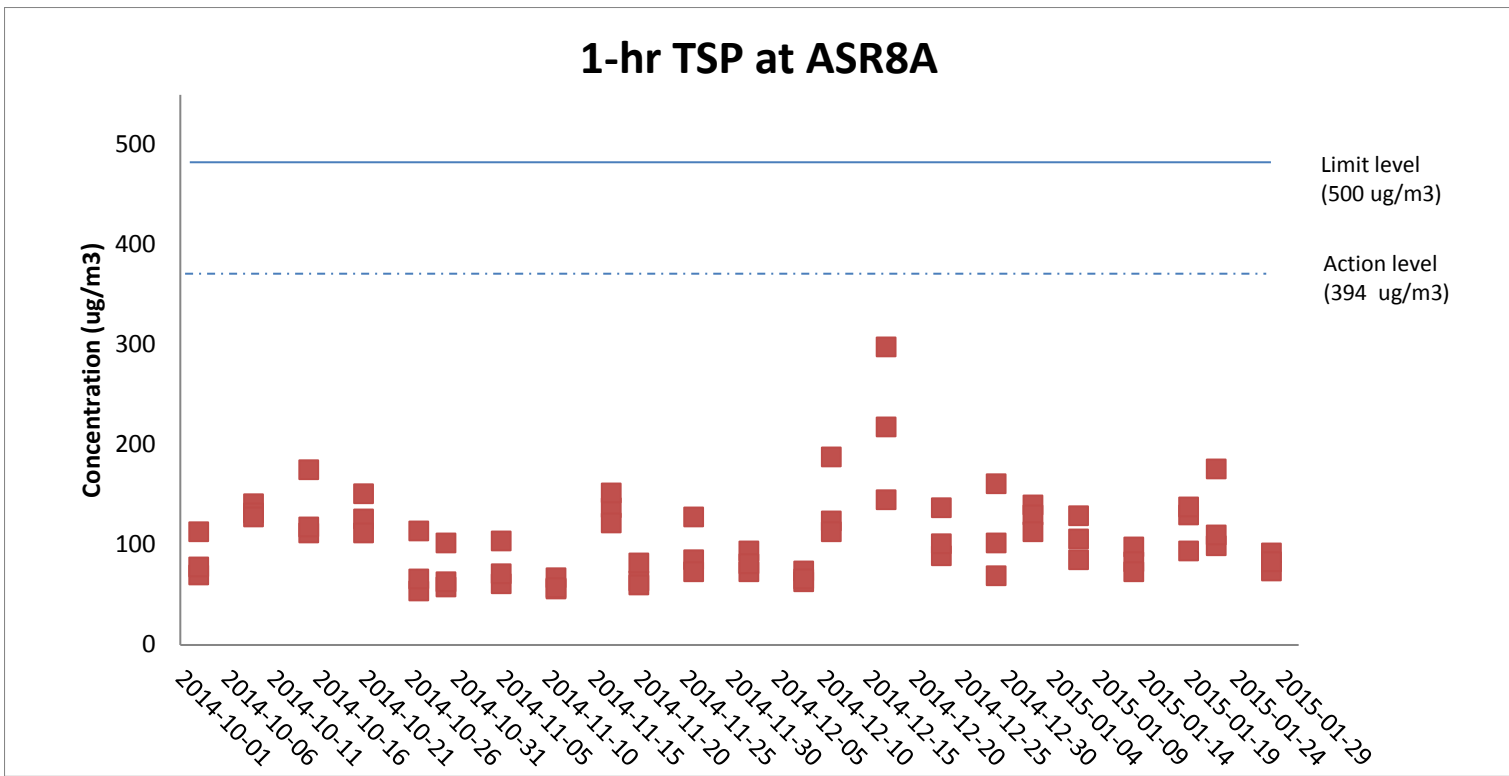
**24-hour TSP Monitoring Results at Air Quality Monitoring Station ASR9**

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	2015-01-02	ASR9	12:17	24-hr TSP	106	178	260
TMCLKL	HY/2012/07	2015-01-07	ASR9	11:39	24-hr TSP	104		
TMCLKL	HY/2012/07	2015-01-13	ASR9	11:36	24-hr TSP	92		
TMCLKL	HY/2012/07	2015-01-19	ASR9	11:17	24-hr TSP	123		
TMCLKL	HY/2012/07	2015-01-22	ASR9	11:46	24-hr TSP	94		
TMCLKL	HY/2012/07	2015-01-28	ASR9	11:28	24-hr TSP	64		
						Average	97	
						Min.	64	
						Max.	123	

Action Level Exceedance

Limit Level Exceedance

\* TSP monitoring at ASR8 on 2 December was cancelled due to the rejection of access to the monitoring station.

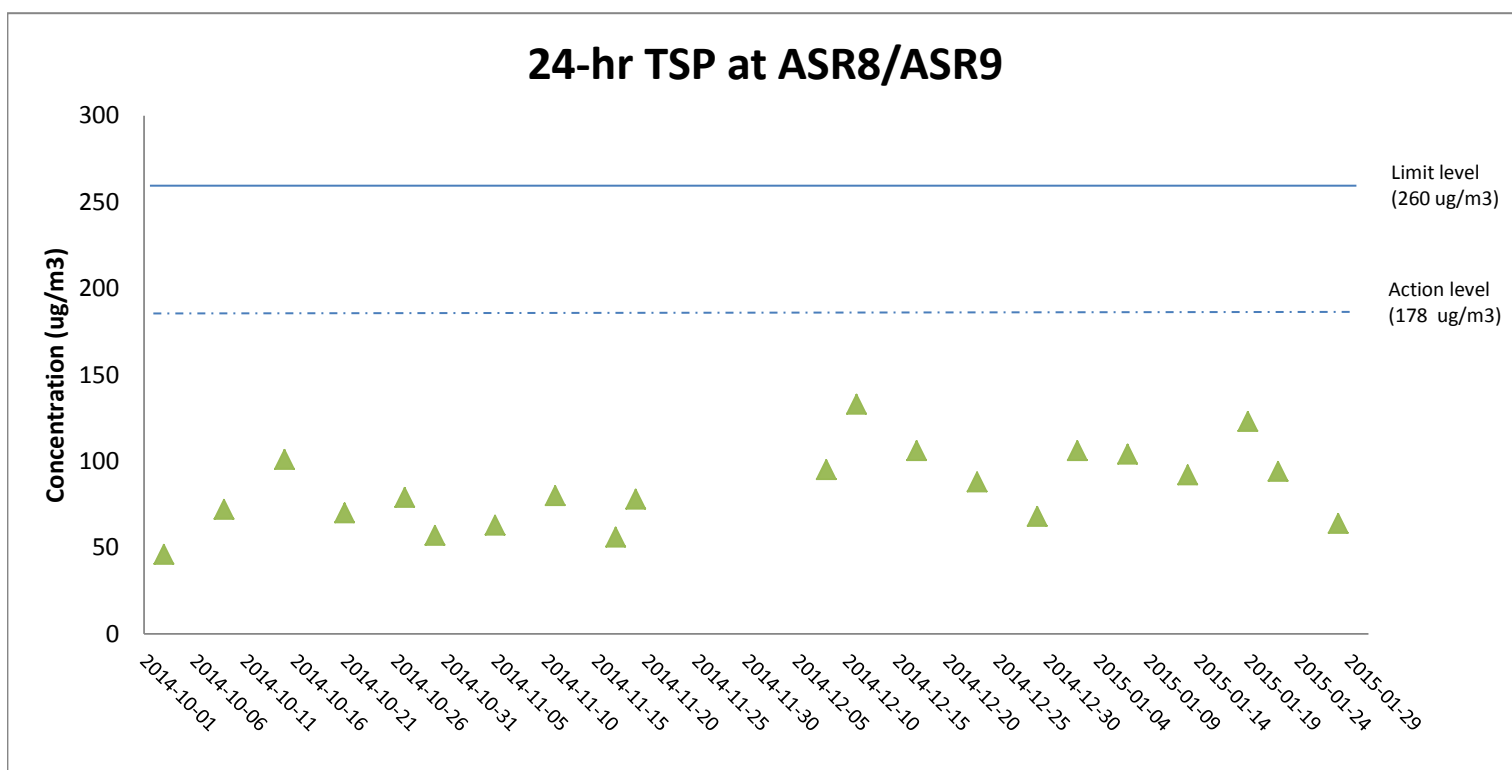
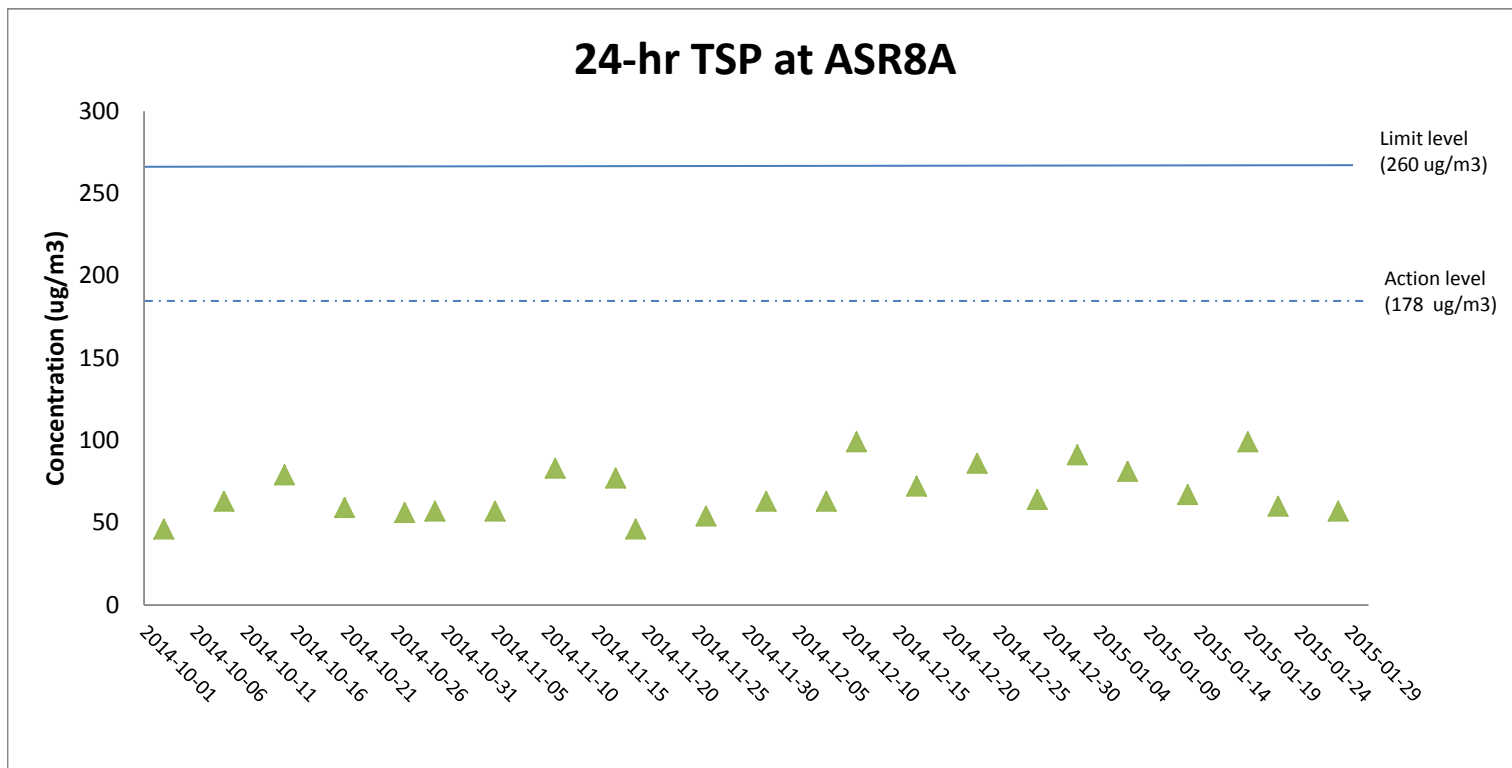


Weather condition within the reporting period varied between sunny to rainy.

Major construction works undertaken within the reporting period include Construction of pile cap superstructure of Viaducts B & C; Channel reconstruction at Area 1; Land Piling at Viaducts B, C & D; Pre-drilling works at Viaduct A; Construction of pile cap at Viaducts B & D; Additional land GI, trial pits & lab testing; Utility surveys; and Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

Marine works within the reporting period include Construction of Pile caps at Viaducts B, C & E; Marine piling platform installation for Viaducts A, B, C, D & E; Marine Piling at Viaducts B, C, D & E; and Additional marine ground investigation (GI) and laboratory testing.

TSP monitoring at ASR8 on 26 November and 2 December were cancelled due to rejection of access to monitoring station.



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

Major construction works undertaken within the reporting period include Construction of pile cap superstructure of Viaducts B & C; Channel reconstruction at Area 1; Land Piling at Viaducts B, C & D; Pre-drilling works at Viaduct A; Construction of pile cap at Viaducts B & D; Additional land GI, trial pits & lab testing; Utility surveys; and Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

Marine works within the reporting period include Construction of Pile caps at Viaducts B, C & E; Marine piling platform installation for Viaducts A, B, C, D & E; Marine Piling at Viaducts B, C, D & E; and Additional marine ground investigation (GI) and laboratory testing.

TSP monitoring at ASR8 on 26 November and 2 December were cancelled due to rejection of access to monitoring station.

Appendix H

## Meteorological Data for the Reporting Month

Date	Time	Wind speed	Wind direction
02-01-2015	7:00	0.19	188
02-01-2015	8:00	0.10	121
02-01-2015	9:00	0.39	150
02-01-2015	10:00	0.75	150
02-01-2015	11:00	0.70	128
02-01-2015	12:00	0.45	194
02-01-2015	13:00	2.36	185
02-01-2015	14:00	2.47	191
02-01-2015	15:00	2.05	187
02-01-2015	16:00	2.13	159
02-01-2015	17:00	2.94	165
02-01-2015	18:00	1.96	161
02-01-2015	19:00	0.58	152
02-01-2015	20:00	0.66	181
02-01-2015	21:00	0.05	109
02-01-2015	22:00	0.10	184
02-01-2015	23:00	1.62	167
03-01-2015	0:00	1.44	150
03-01-2015	1:00	0.17	135
03-01-2015	2:00	0.70	177
03-01-2015	3:00	0.02	192
03-01-2015	4:00	0.10	238
03-01-2015	5:00	1.47	155
03-01-2015	6:00	0.06	253
03-01-2015	7:00	0.04	134
03-01-2015	8:00	0.07	121
03-01-2015	9:00	1.19	188
03-01-2015	10:00	1.31	170
03-01-2015	11:00	0.77	167
03-01-2015	12:00	1.44	156
07-01-2015	7:00	0.08	168
07-01-2015	8:00	0.17	225
07-01-2015	9:00	0.34	194
07-01-2015	10:00	0.04	249
07-01-2015	11:00	0.10	248
07-01-2015	12:00	0.30	298
07-01-2015	13:00	0.28	254
07-01-2015	14:00	0.06	277
07-01-2015	15:00	0.33	256
07-01-2015	16:00	0.10	187
07-01-2015	17:00	0.22	303
07-01-2015	18:00	0.26	303
07-01-2015	19:00	0.11	306
07-01-2015	20:00	0.17	157
07-01-2015	21:00	0.10	103
07-01-2015	22:00	0.09	72
07-01-2015	23:00	0.52	309
08-01-2015	0:00	0.42	183
08-01-2015	1:00	0.11	209
08-01-2015	2:00	0.23	201



Date	Time	Wind speed	Wind direction
08-01-2015	3:00	0.15	224
08-01-2015	4:00	0.21	102
08-01-2015	5:00	0.03	162
08-01-2015	6:00	0.30	45
08-01-2015	7:00	0.16	80
08-01-2015	8:00	0.04	148
08-01-2015	9:00	0.17	178
08-01-2015	10:00	0.05	256
08-01-2015	11:00	0.03	233
08-01-2015	12:00	0.08	254
13-01-2015	7:00	0.18	122
13-01-2015	8:00	0.31	289
13-01-2015	9:00	0.21	145
13-01-2015	10:00	0.16	192
13-01-2015	11:00	0.25	193
13-01-2015	12:00	0.17	175
13-01-2015	13:00	0.43	204
13-01-2015	14:00	0.57	229
13-01-2015	15:00	0.54	231
13-01-2015	16:00	0.95	287
13-01-2015	17:00	0.45	194
13-01-2015	18:00	1.06	123
13-01-2015	19:00	0.81	227
13-01-2015	20:00	0.69	334
13-01-2015	21:00	0.22	224
13-01-2015	22:00	0.20	201
13-01-2015	23:00	0.06	204
14-01-2015	0:00	0.05	158
14-01-2015	1:00	0.23	281
14-01-2015	2:00	0.31	252
14-01-2015	3:00	0.41	336
14-01-2015	4:00	0.73	283
14-01-2015	5:00	0.35	223
14-01-2015	6:00	0.39	336
14-01-2015	7:00	0.37	304
14-01-2015	8:00	0.68	283
14-01-2015	9:00	0.51	246
14-01-2015	10:00	0.22	270
14-01-2015	11:00	0.26	245
14-01-2015	12:00	0.04	245
19-01-2015	7:00	0.07	183
19-01-2015	8:00	0.04	91
19-01-2015	9:00	0.07	295
19-01-2015	10:00	0.17	250
19-01-2015	11:00	0.25	237
19-01-2015	12:00	0.22	272
19-01-2015	13:00	0.11	261
19-01-2015	14:00	0.17	254
19-01-2015	15:00	0.07	247
19-01-2015	16:00	1.08	218

Date	Time	Wind speed	Wind direction
19-01-2015	17:00	0.51	172
19-01-2015	18:00	1.00	163
19-01-2015	19:00	1.00	130
19-01-2015	20:00	2.17	165
19-01-2015	21:00	1.65	168
19-01-2015	22:00	0.73	104
19-01-2015	23:00	0.66	139
20-01-2015	0:00	0.88	181
20-01-2015	1:00	0.87	151
20-01-2015	2:00	0.90	177
20-01-2015	3:00	1.35	235
20-01-2015	4:00	0.88	165
20-01-2015	5:00	1.27	192
20-01-2015	6:00	0.68	190
20-01-2015	7:00	1.14	185
20-01-2015	8:00	0.21	184
20-01-2015	9:00	0.78	189
20-01-2015	10:00	0.74	160
20-01-2015	11:00	0.14	175
20-01-2015	12:00	0.28	250
22-01-2015	7:00	0.20	190
22-01-2015	8:00	0.06	184
22-01-2015	9:00	0.04	113
22-01-2015	10:00	0.32	154
22-01-2015	11:00	1.37	163
22-01-2015	12:00	2.42	155
22-01-2015	13:00	2.66	153
22-01-2015	14:00	2.81	152
22-01-2015	15:00	0.88	177
22-01-2015	16:00	1.19	213
22-01-2015	17:00	3.63	169
22-01-2015	18:00	3.53	172
22-01-2015	19:00	1.57	175
22-01-2015	20:00	0.36	228
22-01-2015	21:00	1.23	112
22-01-2015	22:00	0.40	116
22-01-2015	23:00	0.17	128
23-01-2015	0:00	0.83	113
23-01-2015	1:00	0.57	125
23-01-2015	2:00	0.58	137
23-01-2015	3:00	0.06	244
23-01-2015	4:00	0.06	270
23-01-2015	5:00	0.02	199
23-01-2015	6:00	0.20	134
23-01-2015	7:00	0.29	143
23-01-2015	8:00	0.02	97
23-01-2015	9:00	1.38	167
23-01-2015	10:00	3.46	174
23-01-2015	11:00	3.43	174
23-01-2015	12:00	1.34	145

Date	Time	Wind speed	Wind direction
28-01-2015	7:00	4.75	159
28-01-2015	8:00	3.70	164
28-01-2015	9:00	2.89	181
28-01-2015	10:00	1.44	133
28-01-2015	11:00	2.03	144
28-01-2015	12:00	4.07	161
28-01-2015	13:00	3.87	161
28-01-2015	14:00	3.81	164
28-01-2015	15:00	3.29	155
28-01-2015	16:00	3.28	161
28-01-2015	17:00	1.90	163
28-01-2015	18:00	0.67	128
28-01-2015	19:00	0.66	107
28-01-2015	20:00	0.84	49
28-01-2015	21:00	0.41	85
28-01-2015	22:00	0.65	70
28-01-2015	23:00	1.61	122
29-01-2015	0:00	1.12	111
29-01-2015	1:00	1.46	58
29-01-2015	2:00	2.49	115
29-01-2015	3:00	3.30	164
29-01-2015	4:00	0.09	217
29-01-2015	5:00	0.73	161
29-01-2015	6:00	1.23	178
29-01-2015	7:00	3.07	194
29-01-2015	8:00	2.08	175
29-01-2015	9:00	3.14	176
29-01-2015	10:00	2.72	175
29-01-2015	11:00	3.01	181
29-01-2015	12:00	3.27	187

Appendix I

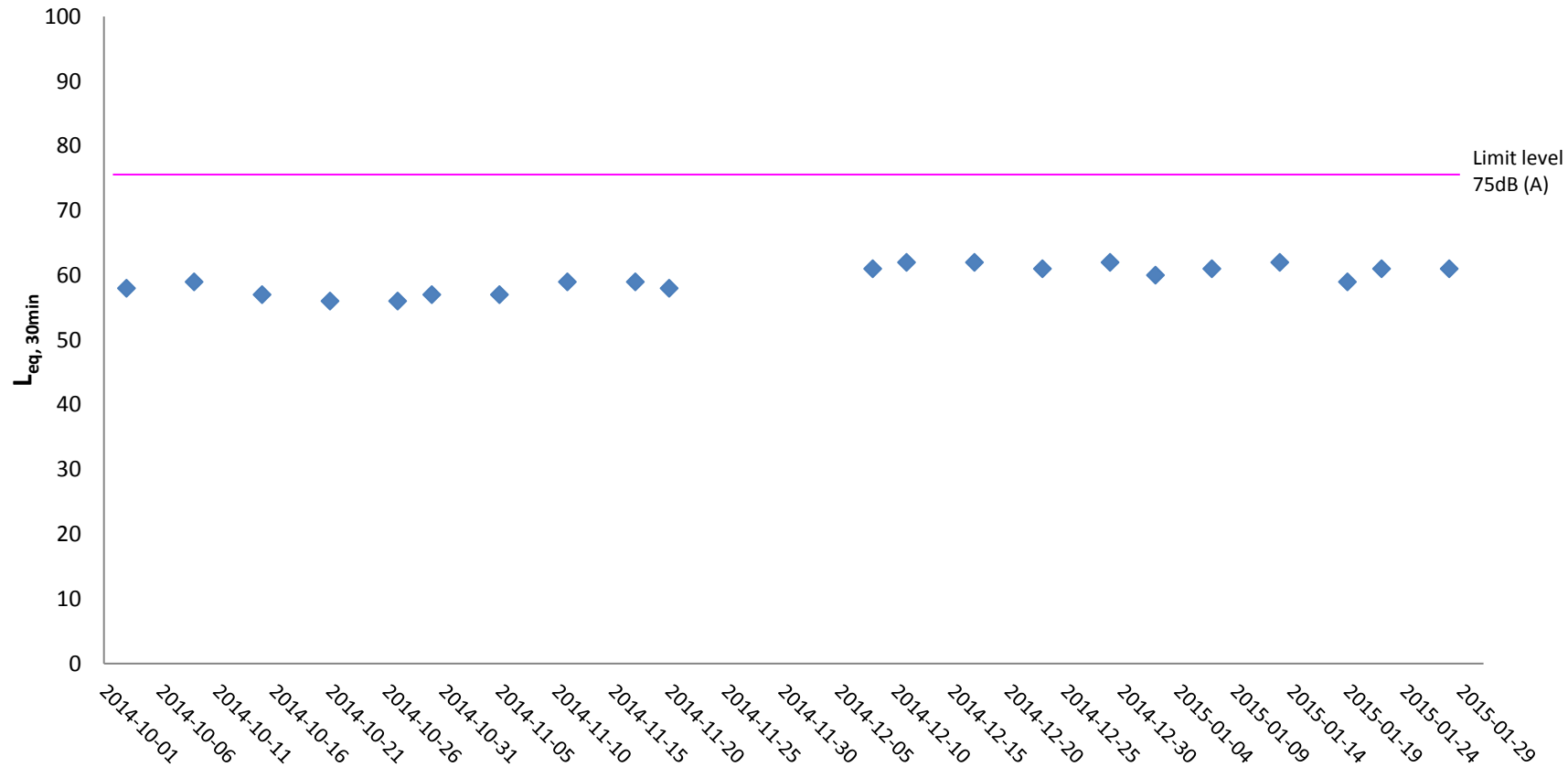
# Impact Noise Monitoring Results and Graphical Presentation

Appendix II Noise Monitoring Results

Works	Date (yyyy-mm-dd)	Station	Weather Condition	Time (hh:mm, 24hour)	Noise Level for 30-min, dB(A)			Limit Level dB(A)	Temp (° C)	Wind Speed (m/s)	Noise Meter Model/ID	Calibrator Model/ID
					Leq	L10	L90					
HY/2012/07	2015-01-02	NSR1A	Sunny	10:25	60	63	54	75	14	0.3	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
HY/2012/07	2015-01-07	NSR1A	Cloudy	9:48	61	64	55	75	17	0.3	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
HY/2012/07	2015-01-13	NSR1A	Cloudy	9:43	62	64	57	75	13	0.4	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
HY/2012/07	2015-01-19	NSR1A	Sunny	9:24	59	63	53	75	13	0.3	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
HY/2012/07	2015-01-22	NSR1A	Sunny	9:53	61	64	55	75	14	0.2	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
HY/2012/07	2015-01-28	NSR1A	Sunny	9:35	61	64	55	75	17	1.2	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
					Min.	59						
					Max.	62						
					Average	61						



### Noise Monitoring Results at NSR 1/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 Construction of pile cap superstructure of Viaduct B & C; Channel re-construction at Area 1; Land Piling at Viaducts B, C & D; Pre-drilling works at Viaduct A; Construction of pile cap at Viaducts B & D; Additional land GI, trial pits & lab testing; Utility surveys; and Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.*

*Marine works within the reporting period include Construction of Pile caps at Viaducts B, C & E; Marine piling platform installation for Viaducts A, B, C, D and E; Marine Piling at Viaducts B, C, D & E; and Additional marine ground investigation (GI) and laboratory testing.*

*Noise impact monitoring on 26 November and 2 December were cancelled due to rejection of access to monitoring station.*

Appendix J

## Impact Water Quality Monitoring Results and Graphical Presentation

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	14:11	18.5	8.13	29.4	7.31	6.27	9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	14:11	18.6	8.14	29.4	7.28	6.34	9.2	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)5	Middle	5.8	2	1	14:11	18.6	8.15	29.5	7.16	6.78	9.6	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)5	Middle	5.8	2	2	14:11	18.6	8.15	29.5	7.13	6.7	9.3	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)5	Bottom	10.6	3	1	14:11	18.6	8.16	29.6	7.03	6.93	9.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)5	Bottom	10.6	3	2	14:11	18.7	8.17	29.6	7	7.01	10.1	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4a	Surface	1	1	1	14:42	18.6	8.16	29.3	7.26	6.48	9.2	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4a	Surface	1	1	2	14:42	18.6	8.17	29.4	7.23	6.54	9.3	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4a	Middle		2	1	14:42							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4a	Middle		2	2	14:42							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4a	Bottom	4.4	3	1	14:42	18.6	8.18	29.4	7.09	7.13	10.1	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4a	Bottom	4.4	3	2	14:42	18.6	8.18	29.4	7.11	7.21	10.4	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4	Surface	1	1	1	15:05	18.6	8.16	29.3	7.21	6.34	9.2	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4	Surface	1	1	2	15:05	18.6	8.17	29.4	7.18	6.29	8.9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4	Middle		2	1	15:05							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4	Middle		2	2	15:05							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4	Bottom	4	3	1	15:05	18.6	8.18	29.5	7.03	6.93	10	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	SR4	Bottom	4	3	2	15:05	18.6	8.18	29.5	6.97	6.86	9.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS8	Surface	1	1	1	15:58	18.6	8.09	29.4	7.26	6.58	9.4	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS8	Surface	1	1	2	15:58	18.7	8.1	29.4	7.23	6.63	9.5	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS8	Middle		2	1	15:58							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS8	Middle		2	2	15:58							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS8	Bottom	4.4	3	1	15:58	18.7	8.13	29.4	7.07	6.81	9.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS8	Bottom	4.4	3	2	15:58	18.6	8.14	29.5	7.04	6.89	10	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	15:52	18.6	8.12	29.3	7.19	6.24	8.7	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	15:52	18.6	8.11	29.4	7.21	6.31	8.9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)16	Middle	4.4	2	1	15:52	18.6	8.15	29.5	7.12	6.68	9.3	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)16	Middle	4.4	2	2	15:52	18.7	8.15	29.6	7.08	6.74	9.5	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)16	Bottom	7.8	3	1	15:52	18.7	8.12	29.6	6.99	6.9	9.9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)16	Bottom	7.8	3	2	15:52	18.7	8.13	29.6	6.95	6.97	9.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	16:18	18.6	8.12	29.3	7.23	6.18	8.9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	16:18	18.5	8.13	29.4	7.26	6.24	9.1	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	16:18							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	16:18							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)9	Bottom	4.8	3	1	16:18	18.6	8.14	29.5	7.07	6.7	9.7	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	IS(Mf)9	Bottom	4.8	3	2	16:18	18.6	8.15	29.4	7.04	6.77	9.9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	16:42	18.5	8.16	29.4	7.3	6.53	9.4	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	16:42	18.6	8.15	29.4	7.33	6.44	9.1	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)3	Middle	5.8	2	1	16:42	18.6	8.14	29.4	7.23	6.95	10	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)3	Middle	5.8	2	2	16:42	18.6	8.15	29.5	7.19	7.02	10.2	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)3	Bottom	10.6	3	1	16:42	18.6	8.16	29.5	7.05	7.04	10.3	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Flood	Fine	CS(Mf)3	Bottom	10.6	3	2	16:42	18.7	8.17	29.6	7.01	7.1	10.4	2015-01-06

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	08:57	18.3	8.13	29.3	7.37	6.67	9.4	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	08:57	18.2	8.12	29.2	7.34	6.65	9.5	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)3	Middle	5.7	2	1	08:57	18.3	8.14	29.4	7.17	7.21	10.3	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)3	Middle	5.7	2	2	08:57	18.4	8.13	29.4	7.2	7.17	10	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.4	3	1	08:57	18.4	8.14	29.5	6.99	7.19	10.1	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.4	3	2	08:57	18.4	8.15	29.4	6.95	7.15	10.4	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4a	Surface	1	1	1	11:11	18.3	8.15	29.3	7.19	6.65	9.4	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4a	Surface	1	1	2	11:11	18.3	8.16	29.3	7.15	6.61	9.3	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4a	Middle		2	1	11:11							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4a	Middle		2	2	11:11							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	1	11:11	18.6	8.15	29.5	6.88	7.43	10.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	2	11:11	18.6	8.16	29.4	6.84	7.4	10.4	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4	Surface	1	1	1	10:46	18.3	8.14	29.3	7.15	6.54	9.4	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4	Surface	1	1	2	10:46	18.4	8.15	29.2	7.18	6.5	9.2	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4	Middle		2	1	10:46							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4	Middle		2	2	10:46							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4	Bottom	3.8	3	1	10:46	18.4	8.16	29.5	6.89	7.27	10.5	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	SR4	Bottom	3.8	3	2	10:46	18.5	8.16	29.5	6.85	7.31	10.4	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS8	Surface	1	1	1	10:18	18.3	8.15	29.3	7.2	6.87	9.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS8	Surface	1	1	2	10:18	18.2	8.16	29.3	7.17	6.81	9.6	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS8	Middle		2	1	10:18							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS8	Middle		2	2	10:18							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS8	Bottom	4.2	3	1	10:18	18.5	8.16	29.4	7.03	6.92	9.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS8	Bottom	4.2	3	2	10:18	18.4	8.16	29.4	7.06	6.87	9.9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	09:50	18.3	8.15	29.3	7.17	6.34	8.9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	09:50	18.3	8.15	29.2	7.15	6.3	8.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)16	Middle	4.3	2	1	09:50	18.4	8.16	29.5	6.94	6.78	9.6	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)16	Middle	4.3	2	2	09:50	18.3	8.16	29.5	6.9	6.72	9.9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.6	3	1	09:50	18.5	8.16	29.5	6.9	7.07	10.1	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.6	3	2	09:50	18.4	8.17	29.5	6.87	7.01	10	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	09:25	18.3	8.14	29.2	7.2	6.34	9.2	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	09:25	18.3	8.13	29.2	7.24	6.3	9	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	09:25							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	09:25							2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	1	09:25	18.3	8.14	29.4	7.05	6.95	9.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	2	09:25	18.3	8.14	29.3	7.01	6.9	10	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	11:40	18.4	8.15	29.4	7.22	6.49	9.3	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	11:40	18.4	8.15	29.3	7.17	6.45	9.1	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)5	Middle	5.6	2	1	11:40	18.5	8.16	29.4	7.05	7.07	9.8	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)5	Middle	5.6	2	2	11:40	18.5	8.17	29.5	7.01	7.12	10	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.2	3	1	11:40	18.5	8.17	29.5	6.9	7.21	10.3	2015-01-06
TMCLKL	HY/2012/07	2015-01-01	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.2	3	2	11:40	18.6	8.17	29.5	6.87	7.17	10.1	2015-01-06

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	15:30	18.3	8.08	29.3	7.21	6.73	8.8	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	15:30	18.4	8.09	29.4	7.18	6.67	8.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)5	Middle	5.8	2	1	15:30	18.4	8.1	29.4	7.09	6.94	9.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)5	Middle	5.8	2	2	15:30	18.5	8.11	29.5	7.11	7	9.8	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)5	Bottom	10.6	3	1	15:30	18.5	8.12	29.6	6.97	7.08	10.6	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)5	Bottom	10.6	3	2	15:30	18.5	8.13	29.6	7	7.11	10	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4a	Surface	1	1	1	15:55	18.4	8.1	29.3	7.34	6.75	10.1	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4a	Surface	1	1	2	15:55	18.4	8.11	29.3	7.29	6.8	10.9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4a	Middle		2	1	15:55							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4a	Middle		2	2	15:55							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4a	Bottom	4.4	3	1	15:55	18.4	8.12	29.4	7.17	7.08	9.2	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4a	Bottom	4.4	3	2	15:55	18.4	8.14	29.4	7.15	7.15	10.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4	Surface	1	1	1	16:15	18.4	8.09	29.3	7.44	6.83	10.3	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4	Surface	1	1	2	16:15	18.3	8.1	29.3	7.41	6.9	9.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4	Middle		2	1	16:15							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4	Middle		2	2	16:15							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4	Bottom	4.2	3	1	16:15	18.4	8.12	29.4	7.19	7.18	10.8	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	SR4	Bottom	4.2	3	2	16:15	18.5	8.11	29.5	7.15	7.24	8.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS8	Surface	1	1	1	16:34	18.4	8.12	29.3	7.36	6.67	9.3	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS8	Surface	1	1	2	16:34	18.4	8.13	29.4	7.32	6.74	8.1	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS8	Middle		2	1	16:34							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS8	Middle		2	2	16:34							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS8	Bottom	4.6	3	1	16:34	18.4	8.12	29.4	7.24	7.29	10.2	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS8	Bottom	4.6	3	2	16:34	18.4	8.13	29.5	7.21	7.35	11.8	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	16:57	18.4	8.09	29.4	7.39	6.81	9.5	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	16:57	18.4	8.09	29.4	7.43	6.88	10.3	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)16	Middle	4.4	2	1	16:57	18.3	8.12	29.4	7.32	6.97	9.1	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)16	Middle	4.4	2	2	16:57	18.4	8.11	29.5	7.3	7.05	10.6	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)16	Bottom	7.8	3	1	16:57	18.4	8.13	29.5	7.2	7.16	10.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)16	Bottom	7.8	3	2	16:57	18.5	8.13	29.6	7.17	7.2	8.6	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	17:22	18.4	8.15	29.4	7.59	6.29	8.2	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	17:22	18.3	8.14	29.3	7.55	6.36	8.9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	17:22							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	17:22							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)9	Bottom	4.2	3	1	17:22	18.4	8.16	29.5	7.38	6.74	8.1	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	IS(Mf)9	Bottom	4.2	3	2	17:22	18.4	8.15	29.5	7.34	6.66	10.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	17:46	18.4	8.07	29.2	7.48	6.75	10.8	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	17:46	18.4	8.08	29.3	7.53	6.7	10.1	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)3	Middle	5.9	2	1	17:46	18.4	8.1	29.5	7.39	6.86	9.6	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)3	Middle	5.9	2	2	17:46	18.5	8.11	29.4	7.41	6.94	10.4	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)3	Bottom	10.8	3	1	17:46	18.5	8.12	29.5	7.26	7.08	9.9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Flood	Fine	CS(Mf)3	Bottom	10.8	3	2	17:46	18.6	8.11	29.6	7.22	7.13	10.7	2015-01-03



Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	10:47	18.1	8.11	29.1	7.34	6.8	8.2	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	10:47	18.1	8.1	29.2	7.3	6.86	9.6	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)3	Middle	5.6	2	1	10:47	18.3	8.14	29.4	7.15	7.02	8.4	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)3	Middle	5.6	2	2	10:47	18.2	8.13	29.4	7.11	7.04	10.6	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.2	3	1	10:47	18.3	8.14	29.5	7.1	7.14	8.6	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.2	3	2	10:47	18.3	8.14	29.4	7.07	7.1	10.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4a	Surface	1	1	1	13:10	18.3	8.13	29.2	7.27	6.94	10.4	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4a	Surface	1	1	2	13:10	18.3	8.14	29.1	7.23	6.9	10.4	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4a	Middle		2	1	13:10							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4a	Middle		2	2	13:10							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4a	Bottom	3.8	3	1	13:10	18.5	8.16	29.3	6.95	7.25	10.9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4a	Bottom	3.8	3	2	13:10	18.5	8.15	29.3	6.91	7.29	10.9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4	Surface	1	1	1	12:37	18.2	8.12	29.2	7.3	7.12	10.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4	Surface	1	1	2	12:37	18.2	8.13	29.2	7.33	7.07	9.2	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4	Middle		2	1	12:37							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4	Middle		2	2	12:37							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4	Bottom	3.6	3	1	12:37	18.4	8.14	29.4	7.09	7.34	10.3	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	SR4	Bottom	3.6	3	2	12:37	18.4	8.13	29.4	7.05	7.3	11.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS8	Surface	1	1	1	12:11	18.3	8.12	29.2	7.25	6.89	9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS8	Surface	1	1	2	12:11	18.3	8.12	29.2	7.29	6.85	8.9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS8	Middle		2	1	12:11							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS8	Middle		2	2	12:11							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS8	Bottom	4.2	3	1	12:11	18.4	8.14	29.4	7.17	7.44	11.9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS8	Bottom	4.2	3	2	12:11	18.4	8.14	29.4	7.14	7.48	12	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	11:42	18.2	8.13	29.2	7.38	6.97	10.5	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	11:42	18.2	8.13	29.2	7.34	6.93	10.4	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)16	Middle	4.2	2	1	11:42	18.3	8.13	29.5	7.21	7.2	11.5	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)16	Middle	4.2	2	2	11:42	18.3	8.13	29.4	7.18	7.25	8.7	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.4	3	1	11:42	18.4	8.14	29.5	7.03	7.17	11.5	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.4	3	2	11:42	18.4	8.13	29.5	7.07	7.1	8.5	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	11:17	18.2	8.12	29.2	7.47	6.43	10.3	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	11:17	18.2	8.13	29.3	7.44	6.4	9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	11:17							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	11:17							2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)9	Bottom	3.8	3	1	11:17	18.3	8.13	29.4	7.2	6.97	9.8	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	IS(Mf)9	Bottom	3.8	3	2	11:17	18.3	8.13	29.5	7.17	6.93	8.3	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	13:30	18.3	8.13	29.3	7.08	6.87	8.9	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	13:30	18.2	8.13	29.2	7.04	6.9	10.4	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)5	Middle	5.7	2	1	13:30	18.4	8.15	29.4	6.97	7.12	9.3	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)5	Middle	5.7	2	2	13:30	18.4	8.14	29.4	6.99	7.07	9.2	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.4	3	1	13:30	18.5	8.15	29.5	6.9	7.19	10.8	2015-01-03
TMCLKL	HY/2012/07	2015-01-03	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.4	3	2	13:30	18.4	8.16	29.4	6.94	7.12	11.4	2015-01-03

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	07:50	17.7	8.09	29.1	7.13	6.59	7.9	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	07:50	17.8	8.1	29.1	7.1	6.64	9.3	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.8	2	1	07:50	17.8	8.12	29.2	7.07	6.89	10.4	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.8	2	2	07:50	17.8	8.13	29.2	7.05	6.95	11.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.6	3	1	07:50	17.8	8.17	29.4	6.93	7.07	9.2	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.6	3	2	07:50	17.9	8.18	29.5	6.89	7.14	10	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	08:17	17.8	8.1	29.1	7.27	6.83	9.6	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	08:17	17.8	8.11	29.2	7.24	6.9	11	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4a	Middle		2	1	08:17							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4a	Middle		2	2	08:17							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4a	Bottom	4	3	1	08:17	17.8	8.12	29.2	7.09	7.04	9.9	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4a	Bottom	4	3	2	08:17	17.9	8.12	29.2	7.04	7	9.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4	Surface	1	1	1	08:35	17.8	8.11	29.1	7.33	6.96	11.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4	Surface	1	1	2	08:35	17.7	8.12	29.1	7.29	6.88	10.3	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4	Middle		2	1	08:35							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4	Middle		2	2	08:35							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4	Bottom	3.8	3	1	08:35	17.8	8.08	29.2	7.15	7.17	8.6	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	SR4	Bottom	3.8	3	2	08:35	17.8	8.09	29.2	7.11	7.24	10.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS8	Surface	1	1	1	08:55	17.8	8.07	29	7.27	6.77	9.5	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS8	Surface	1	1	2	08:55	17.8	8.08	29.1	7.24	6.69	10	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS8	Middle		2	1	08:55							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS8	Middle		2	2	08:55							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS8	Bottom	4	3	1	08:55	17.8	8.12	29.1	7.13	7.33	11.7	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS8	Bottom	4	3	2	08:55	17.9	8.11	29.2	7.1	7.26	11.6	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	09:15	17.8	8.12	29.1	7.4	6.87	10.3	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	09:15	17.9	8.11	29.2	7.37	6.8	10.2	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.2	2	1	09:15	17.9	8.14	29.2	7.3	7.09	10.6	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.2	2	2	09:15	17.9	8.14	29.3	7.26	7.01	10.5	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.4	3	1	09:15	18	8.15	29.4	7.21	7.28	10.9	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.4	3	2	09:15	18	8.16	29.4	7.19	7.2	10.8	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	09:40	17.8	8.13	29.2	7.47	6.29	9.4	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	09:40	17.9	8.14	29.2	7.44	6.35	8.9	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	1	09:40							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	09:40							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.8	3	1	09:40	17.8	8.11	29.2	7.39	6.87	11	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.8	3	2	09:40	17.8	8.12	29.3	7.35	6.95	11.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	10:00	17.8	8.15	29.1	7.45	6.6	9.2	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	10:00	17.8	8.14	29.2	7.43	6.52	9.8	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.6	2	1	10:00	17.8	8.12	29.2	7.22	6.74	9.4	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.6	2	2	10:00	17.9	8.13	29.3	7.25	6.83	8.2	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.2	3	1	10:00	17.9	8.16	29.4	7.18	6.96	8.4	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.2	3	2	10:00	18	8.17	29.4	7.15	7.03	11.2	2015-01-08

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	12:04	18	8.17	29.2	7.25	6.86	11	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	12:04	17.9	8.16	29.3	7.21	6.92	11.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.4	2	1	12:04	18.1	8.2	29.4	7.09	7.08	11.3	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.4	2	2	12:04	18.2	8.19	29.3	7.05	7.1	9.2	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	9.8	3	1	12:04	18.2	8.2	29.5	7.04	7.2	10.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	9.8	3	2	12:04	18.3	8.21	29.6	6.99	7.16	10.7	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	14:14	18.2	8.19	29.2	7.18	7	11.2	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	14:14	18.1	8.2	29.3	7.14	6.96	9	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4a	Middle		2	1	14:14							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4a	Middle		2	2	14:14							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4a	Bottom	3.6	3	1	14:14	18.4	8.22	29.4	6.86	7.31	9.5	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4a	Bottom	3.6	3	2	14:14	18.3	8.23	29.3	6.82	7.35	9.6	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	13:48	18	8.18	29.3	7.21	7.18	9.3	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	13:48	18.1	8.17	29.2	7.24	7.13	11.4	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4	Middle		2	1	13:48							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4	Middle		2	2	13:48							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4	Bottom	3.4	3	1	13:48	18.3	8.21	29.4	7	7.4	11.8	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	SR4	Bottom	3.4	3	2	13:48	18.2	8.21	29.5	6.96	7.36	9.6	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	13:22	18.2	8.18	29.2	7.16	6.95	9.7	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	13:22	18.1	8.19	29.3	7.2	6.91	9.7	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS8	Middle		2	1	13:22							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS8	Middle		2	2	13:22							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS8	Bottom	3.8	3	1	13:22	18.2	8.2	29.4	7.08	7.5	12	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS8	Bottom	3.8	3	2	13:22	18.3	8.21	29.5	7.05	7.54	10.6	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	12:56	18	8.18	29.3	7.29	7.03	9.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	12:56	18.1	8.19	29.4	7.25	6.99	9.8	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.1	2	1	12:56	18.1	8.2	29.4	7.12	7.26	10.9	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.1	2	2	12:56	18.2	8.2	29.5	7.09	7.31	9.5	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.2	3	1	12:56	18.3	8.2	29.5	6.94	7.23	9.4	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.2	3	2	12:56	18.2	8.21	29.6	6.98	7.16	9.3	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	12:30	18.1	8.18	29.3	7.38	6.49	9.7	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	12:30	18	8.19	29.4	7.35	6.46	9	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	12:30							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	12:30							2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.6	3	1	12:30	18.1	8.2	29.6	7.11	7.03	9.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.6	3	2	12:30	18.2	8.21	29.5	7.08	6.99	11.2	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	14:44	18.2	8.19	29.3	6.99	6.93	11.1	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	14:44	18.2	8.2	29.4	6.95	6.96	10.4	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.6	2	1	14:44	18.3	8.21	29.4	6.88	7.18	9.3	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.6	2	2	14:44	18.2	8.2	29.5	6.9	7.13	10	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.2	3	1	14:44	18.4	8.21	29.6	6.81	7.25	10.2	2015-01-08
TMCLKL	HY/2012/07	2015-01-06	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.2	3	2	14:44	18.5	8.22	29.5	6.85	7.18	9.3	2015-01-08

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	08:20	18.1	8.1	29.4	7.05	6.84	10.3	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	08:20	18	8.11	29.5	7.01	6.87	11	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.8	2	1	08:20	18.2	8.12	29.6	6.94	7.09	9.9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.8	2	2	08:20	18.1	8.13	29.5	6.96	7.04	10.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.6	3	1	08:20	18.3	8.14	29.7	6.87	7.16	10	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.6	3	2	08:20	18.4	8.13	29.6	6.91	7.09	9.9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	08:46	18.1	8.1	29.3	7.24	6.91	9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	08:46	18.1	8.11	29.4	7.2	6.87	9.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4a	Middle		2	1	08:46							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4a	Middle		2	2	08:46							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4a	Bottom	3.8	3	1	08:46	18.2	8.13	29.4	6.92	7.22	9.4	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4a	Bottom	3.8	3	2	08:46	18.3	8.14	29.5	6.88	7.26	11.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4	Surface	1	1	1	09:12	17.9	8.09	29.3	7.27	7.09	9.25	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4	Surface	1	1	2	09:12	18	8.08	29.4	7.3	7.04	8.4	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4	Middle		2	1	09:12							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4	Middle		2	2	09:12							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4	Bottom	3.6	3	1	09:12	18.2	8.12	29.5	7.06	7.31	10.2	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	SR4	Bottom	3.6	3	2	09:12	18.2	8.13	29.6	7.02	7.27	10.9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS8	Surface	1	1	1	09:38	18.1	8.09	29.3	7.22	6.86	8.9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS8	Surface	1	1	2	09:38	18.1	8.1	29.4	7.26	6.82	9.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS8	Middle		2	1	09:38							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS8	Middle		2	2	09:38							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS8	Bottom	4.2	3	1	09:38	18.2	8.11	29.5	7.14	7.41	9.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS8	Bottom	4.2	3	2	09:38	18.1	8.12	29.4	7.11	7.45	8.9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	10:04	18	8.09	29.4	7.35	6.94	9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	10:04	17.9	8.1	29.5	7.31	6.9	9.7	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.4	2	1	10:04	18	8.11	29.5	7.18	7.17	8.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.4	2	2	10:04	18.1	8.12	29.6	7.15	7.22	10.8	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.8	3	1	10:04	18.2	8.12	29.6	7	7.14	10	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.8	3	2	10:04	18.1	8.13	29.7	7.04	7.07	9.9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	10:30	18	8.09	29.4	7.44	6.4	9.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	10:30	17.9	8.1	29.5	7.41	6.37	9.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	1	10:30							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	10:30							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.8	3	1	10:30	18.1	8.11	29.7	7.17	6.94	10.4	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.8	3	2	10:30	18	8.12	29.6	7.14	6.9	9.7	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	11:00	17.9	8.08	29.3	7.31	6.77	10.8	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	11:00	17.8	8.07	29.4	7.27	6.83	10.9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.7	2	1	11:00	18	8.11	29.4	7.15	6.99	9.8	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.7	2	2	11:00	18.1	8.1	29.5	7.11	7.01	10.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.4	3	1	11:00	18.2	8.11	29.7	7.1	7.11	11.4	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.4	3	2	11:00	18.3	8.12	29.6	7.05	7.07	10.6	2015-01-09

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	13:07	18.2	7.87	29.4	7.47	7.83	11.7	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	13:07	18.3	7.88	29.5	7.44	7.91	11.9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)3	Middle	5.9	2	1	13:07	18.3	7.9	29.5	7.29	7.74	11.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)3	Middle	5.9	2	2	13:07	18.3	7.91	29.5	7.32	7.67	10.7	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.8	3	1	13:07	18.3	8.02	29.6	7.16	8.06	11.3	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.8	3	2	13:07	18.4	8.01	29.6	7.13	8.11	11.4	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4a	Surface	1	1	1	14:50	18.2	7.28	29.4	7.34	8.19	11.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4a	Surface	1	1	2	14:50	18.1	7.31	29.4	7.32	8.29	13	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4a	Middle		2	1	14:50							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4a	Middle		2	2	14:50							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4a	Bottom	4	3	1	14:50	18.2	7.63	29.4	7.16	9.05	11.8	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4a	Bottom	4	3	2	14:50	18.2	7.7	29.5	7.13	9.09	14.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4	Surface	1	1	1	14:33	18.1	8.03	29.4	7.39	7.9	9.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4	Surface	1	1	2	14:33	18.2	8.1	29.4	7.35	7.64	10.7	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4	Middle		2	1	14:33							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4	Middle		2	2	14:33							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4	Bottom	4	3	1	14:33	18.2	8.06	29.4	7.18	7.37	9.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	SR4	Bottom	4	3	2	14:33	18.2	8.07	29.5	7.2	7.44	10.4	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS8	Surface	1	1	1	14:15	18.2	8.13	29.4	7.31	6.68	10	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS8	Surface	1	1	2	14:15	18.2	8.11	29.5	7.29	6.74	10.1	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS8	Middle		2	1	14:15							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS8	Middle		2	2	14:15							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS8	Bottom	4.4	3	1	14:15	18.2	8.1	29.4	7.22	7.28	9.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS8	Bottom	4.4	3	2	14:15	18.2	8.11	29.5	7.24	7.22	10.1	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	13:53	18.2	8.02	29.5	7.44	6.83	10.2	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	13:53	18.3	8.03	29.5	7.41	6.78	8.1	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)16	Middle	4.6	2	1	13:53	18.2	8.09	29.5	7.29	6.95	9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)16	Middle	4.6	2	2	13:53	18.3	8.1	29.6	7.32	7.01	9.8	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.2	3	1	13:53	18.3	8.02	29.6	7.18	7.06	8.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.2	3	2	13:53	18.3	8.01	29.6	7.17	7	10.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	13:33	18.3	7.94	29.4	7.52	7.68	10	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	13:33	18.3	7.93	29.5	7.48	7.74	10.1	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	13:33							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	13:33							2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.2	3	1	13:33	18.3	7.9	29.5	7.31	7.4	9.6	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.2	3	2	13:33	18.4	7.89	29.5	7.27	7.33	11.7	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	15:17	18.2	8.04	29.5	7.21	6.54	9.8	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	15:17	18.2	8.05	29.5	7.19	6.61	9.9	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)5	Middle	5.6	2	1	15:17	18.2	8.02	29.6	7.1	6.79	9.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)5	Middle	5.6	2	2	15:17	18.3	8.03	29.6	7.07	6.84	10.3	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.2	3	1	15:17	18.4	8.09	29.7	6.98	7.1	8.5	2015-01-09
TMCLKL	HY/2012/07	2015-01-08	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.2	3	2	15:17	18.4	8.1	29.7	6.95	7.04	10.6	2015-01-09



Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	09:16	17.8	8.16	29.5	7.23	7.27	10.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	09:16	17.7	8.15	29.4	7.19	7.24	10	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.9	2	1	09:16	18	8.18	29.6	7.07	7.68	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.9	2	2	09:16	18.1	8.17	29.5	7.04	7.6	10.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.8	3	1	09:16	18.1	8.17	29.6	6.84	7.94	11.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.8	3	2	09:16	18.2	8.17	29.7	6.88	7.9	11.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	09:46	17.8	8.17	29.5	7.12	7.44	10.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	09:46	17.7	8.17	29.5	7.07	7.4	9.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4a	Middle		2	1	09:46							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4a	Middle		2	2	09:46							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4a	Bottom	3.8	3	1	09:46	18.1	8.17	29.7	6.9	7.8	10.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4a	Bottom	3.8	3	2	09:46	18	8.18	29.6	6.93	7.77	10.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4	Surface	1	1	1	10:11	17.8	8.18	29.5	7.2	7.44	10.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4	Surface	1	1	2	10:11	17.9	8.17	29.5	7.17	7.4	10.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4	Middle		2	1	10:11							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4	Middle		2	2	10:11							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4	Bottom	3.8	3	1	10:11	18	8.18	29.7	6.88	8.04	11.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	SR4	Bottom	3.8	3	2	10:11	18.1	8.18	29.6	6.84	8.08	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS8	Surface	1	1	1	10:36	17.9	8.18	29.4	7.15	7.15	9.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS8	Surface	1	1	2	10:36	17.8	8.17	29.4	7.18	7.2	10	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS8	Middle		2	1	10:36							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS8	Middle		2	2	10:36							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS8	Bottom	4.2	3	1	10:36	18.1	8.19	29.5	7.02	7.97	11	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS8	Bottom	4.2	3	2	10:36	18.1	8.18	29.6	6.99	7.92	11.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	11:01	17.9	8.18	29.5	7.14	7.3	10.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	11:01	17.9	8.18	29.5	7.17	7.34	10.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.4	2	1	11:01	18.1	8.19	29.6	7.01	8.08	11.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.4	2	2	11:01	18	8.19	29.6	7.05	8.02	10.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.8	3	1	11:01	18.1	8.19	29.7	6.94	8.15	11.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.8	3	2	11:01	18.2	8.19	29.7	6.97	8.18	11.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	11:40	17.9	8.19	29.5	7.08	7.55	9.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	11:40	18	8.18	29.5	7.04	7.5	10.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	1	11:40							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	11:40							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.8	3	1	11:40	18.1	8.19	29.6	6.85	7.7	10.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.8	3	2	11:40	18.2	8.2	29.7	6.88	7.74	10.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	12:00	18	8.19	29.5	7.34	7.06	9.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	12:00	18	8.19	29.6	7.37	7.09	9.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.8	2	1	12:00	18	8.19	29.7	7.12	7.97	11.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.8	2	2	12:00	18.1	8.18	29.8	7.15	7.9	11.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.6	3	1	12:00	18.1	8.19	29.8	6.91	8.03	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.6	3	2	12:00	18.2	8.2	29.8	6.95	8.06	11.5	2015-01-15

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	14:16	17.7	8.14	29.4	7.37	7.68	10.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	14:16	17.8	8.15	29.5	7.33	7.74	10.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.6	2	1	14:16	18	8.17	29.5	7.21	7.9	11.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.6	2	2	14:16	17.9	8.18	29.6	7.17	7.92	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	10.2	3	1	14:16	18.1	8.19	29.7	7.16	8.02	11.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	10.2	3	2	14:16	18.2	8.18	29.8	7.11	7.98	11.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	16:26	18	8.16	29.4	7.3	7.82	11	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	16:26	18	8.15	29.5	7.26	7.78	11.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4a	Middle		2	1	16:26							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4a	Middle		2	2	16:26							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4a	Bottom	3.2	3	1	16:26	18.1	8.19	29.5	6.98	8.13	11.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4a	Bottom	3.2	3	2	16:26	18.2	8.2	29.6	6.94	8.17	11.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	16:00	17.9	8.15	29.4	7.33	7.01	10.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	16:00	17.8	8.16	29.5	7.36	6.95	9.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4	Middle		2	1	16:00							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4	Middle		2	2	16:00							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4	Bottom	3.4	3	1	16:00	18	8.19	29.6	7.12	7.22	10.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	SR4	Bottom	3.4	3	2	16:00	18.1	8.18	29.7	7.08	7.18	10.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	15:34	18	8.15	29.4	7.28	7.77	10.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	15:34	17.9	8.16	29.3	7.32	7.73	10.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS8	Middle		2	1	15:34							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS8	Middle		2	2	15:34							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS8	Bottom	3.6	3	1	15:34	18.1	8.17	29.6	7.2	8.32	11.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS8	Bottom	3.6	3	2	15:34	18	8.18	29.5	7.17	8.36	12.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	15:08	18	8.15	29.5	7.41	7.85	11.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	15:08	18.1	8.14	29.6	7.37	7.81	10.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.1	2	1	15:08	18.1	8.17	29.6	7.24	8.08	11.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.1	2	2	15:08	18	8.18	29.7	7.21	8.13	11.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.2	3	1	15:08	18.2	8.19	29.8	7.06	8.05	11.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.2	3	2	15:08	18.1	8.2	29.7	7.1	7.98	11.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	14:42	17.9	8.16	29.5	7.5	7.31	10.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	14:42	17.8	8.17	29.6	7.47	7.28	10	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	14:42							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	14:42							2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.6	3	1	14:42	18.1	8.18	29.7	7.23	7.85	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.6	3	2	14:42	18	8.19	29.8	7.2	7.81	11.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	16:56	18	8.16	29.6	7.11	7.75	10.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	16:56	17.9	8.17	29.5	7.07	7.78	10.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.6	2	1	16:56	18.1	8.18	29.6	7	7.99	11.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.6	2	2	16:56	18	8.19	29.7	7.02	7.95	11.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.2	3	1	16:56	18.2	8.2	29.7	6.93	8.07	11.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-10	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.2	3	2	16:56	18.3	8.21	29.8	6.97	8.01	11.2	2015-01-15

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	11:11	17.8	8.11	29.6	7.17	6.81	10.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	11:11	17.9	8.12	29.7	7.13	6.84	10.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.8	2	1	11:11	17.9	8.13	29.8	7.06	7.05	9.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.8	2	2	11:11	18	8.14	29.7	7.08	7.01	8.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.6	3	1	11:11	18.2	8.15	29.8	7	7.13	10.7	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.6	3	2	11:11	18.1	8.16	29.9	7.03	7.07	9.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	11:37	17.9	8.11	29.5	7.21	6.88	9.6	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	11:37	17.8	8.1	29.6	7.17	6.84	10.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4a	Middle		2	1	11:37							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4a	Middle		2	2	11:37							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4a	Bottom	3.4	3	1	11:37	18	8.14	29.6	7.04	7.19	10.1	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4a	Bottom	3.4	3	2	11:37	18.1	8.15	29.7	7.01	7.23	9.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4	Surface	1	1	1	12:03	17.7	8.1	29.5	7.24	7.07	8.5	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4	Surface	1	1	2	12:03	17.8	8.11	29.6	7.27	7.01	9.8	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4	Middle		2	1	12:03							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4	Middle		2	2	12:03							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4	Bottom	3.6	3	1	12:03	17.9	8.14	29.8	7.03	7.28	10.2	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	SR4	Bottom	3.6	3	2	12:03	18	8.15	29.7	6.99	7.24	9.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS8	Surface	1	1	1	12:29	17.9	8.11	29.5	7.19	6.83	8.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS8	Surface	1	1	2	12:29	17.9	8.1	29.4	7.23	6.79	9.5	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS8	Middle		2	1	12:29							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS8	Middle		2	2	12:29							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS8	Bottom	3.8	3	1	12:29	18	8.12	29.6	7.11	7.38	8.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS8	Bottom	3.8	3	2	12:29	18.1	8.13	29.7	7.08	7.42	10.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	12:55	17.9	8.11	29.6	7.32	6.91	10.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	12:55	18	8.12	29.7	7.28	6.87	11	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.4	2	1	12:55	18.2	8.12	29.8	7.15	7.14	9.3	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.4	2	2	12:55	18.1	8.13	29.7	7.12	7.19	10.8	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.8	3	1	12:55	18.2	8.15	29.8	6.97	7.11	8.5	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.8	3	2	12:55	18.2	8.14	29.9	7.01	7.04	10.6	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	13:21	17.8	8.11	29.6	7.41	6.37	8.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	13:21	17.7	8.12	29.7	7.38	6.34	9.5	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	1	13:21							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	13:21							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.8	3	1	13:21	18	8.13	29.8	7.14	6.91	10.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.8	3	2	13:21	17.9	8.14	29.9	7.11	6.87	9.6	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	13:51	17.8	8.09	29.5	7.28	6.74	9.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	13:51	17.8	8.1	29.6	7.24	6.8	10.2	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.9	2	1	13:51	18	8.12	29.8	7.12	6.96	9.1	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.9	2	2	13:51	18.1	8.13	29.7	7.08	6.98	8.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.8	3	1	13:51	18.1	8.14	29.8	7.07	7.08	11.3	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.8	3	2	13:51	18	8.15	29.7	7.02	7.04	9.9	2015-01-13

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	17:07	17.6	8.08	29.3	7.21	6.82	9.6	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	17:07	17.7	8.07	29.4	7.17	6.87	10.3	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.8	2	1	17:07	17.8	8.11	29.6	7.08	6.99	9.1	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.8	2	2	17:07	17.7	8.12	29.5	7.02	7.04	11.3	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	10.5	3	1	17:07	18	8.13	29.6	7.01	7.14	10	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	10.5	3	2	17:07	17.9	8.12	29.7	6.94	7.17	10	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	18:54	17.7	8.1	29.5	7.17	6.96	10.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	18:54	17.8	8.09	29.4	7.11	6.92	9.7	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4a	Middle		2	1	18:54							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4a	Middle		2	2	18:54							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4a	Bottom	3.1	3	1	18:54	17.8	8.11	29.6	6.92	7.21	9.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4a	Bottom	3.1	3	2	18:54	17.9	8.12	29.5	6.95	7.27	10.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	18:32	17.6	8.1	29.5	7.18	7.13	9.3	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	18:32	17.7	8.09	29.6	7.21	7.17	10	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4	Middle		2	1	18:32							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4	Middle		2	2	18:32							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4	Bottom	3.4	3	1	18:32	17.9	8.12	29.7	6.97	7.33	11.7	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	SR4	Bottom	3.4	3	2	18:32	17.8	8.13	29.8	6.92	7.37	11.8	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	18:13	17.7	8.1	29.4	7.12	6.89	9.7	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	18:13	17.8	8.11	29.3	7.18	6.84	9.6	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS8	Middle		2	1	18:13							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS8	Middle		2	2	18:13							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS8	Bottom	3.4	3	1	18:13	17.8	8.11	29.5	7.07	7.44	11.2	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS8	Bottom	3.4	3	2	18:13	17.9	8.12	29.4	7.01	7.48	11.2	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	17:50	17.9	8.1	29.4	7.27	6.95	8.3	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	17:50	17.9	8.11	29.5	7.22	6.98	9.1	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.3	2	1	17:50	18	8.13	29.7	7.1	7.19	10.8	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.3	2	2	17:50	18.1	8.12	29.6	7.07	7.24	9.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.6	3	1	17:50	18.2	8.14	29.9	6.91	7.18	10.1	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.6	3	2	17:50	18.1	8.15	29.8	6.96	7.09	9.9	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	17:35	17.6	8.1	29.5	7.32	6.42	9.6	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	17:35	17.7	8.11	29.6	7.36	6.48	10.4	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	17:35							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	17:35							2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.6	3	1	17:35	17.7	8.12	29.7	7.08	6.99	9.8	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.6	3	2	17:35	17.8	8.13	29.6	7.04	6.92	9.7	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	19:22	17.7	8.1	29.4	7.14	6.86	9.6	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	19:22	17.7	8.09	29.5	7.1	6.89	10.3	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.7	2	1	19:22	17.8	8.1	29.7	7.02	7.14	9.1	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.7	2	2	19:22	17.7	8.12	29.8	6.98	7.08	11.3	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.6	3	1	19:22	17.9	8.12	29.9	6.92	7.19	10	2015-01-13
TMCLKL	HY/2012/07	2015-01-13	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.6	3	2	19:22	18	8.13	29.8	6.98	7.12	10	2015-01-13

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	12:19	17.5	8.02	27.9	7.48	7.52	10.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	12:19	17.4	8.01	27.8	7.43	7.63	9.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)5	Middle	6.0	2	1	12:19	17.5	8.03	27.9	7.49	7.4	9.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)5	Middle	6.0	2	2	12:19	17.6	8.04	28	7.51	7.37	11.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)5	Bottom	10.9	3	1	12:19	17.6	8.07	28.1	7.32	8.17	10.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)5	Bottom	10.9	3	2	12:19	17.6	8.08	28.2	7.36	8.22	10.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4a	Surface	1	1	1	12:48	17.6	8.01	27.6	7.42	7.77	11.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4a	Surface	1	1	2	12:48	17.7	8	27.7	7.46	7.72	10.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4a	Middle		2	1	12:48							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4a	Middle		2	2	12:48							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4a	Bottom	4.6	3	1	12:48	17.5	8.01	27.8	7.38	8.09	12.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4a	Bottom	4.6	3	2	12:48	17.6	7.99	27.7	7.36	8.03	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4	Surface	1	1	1	13:09	17.5	8.19	27.8	7.31	7.82	10.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4	Surface	1	1	2	13:09	17.4	8.15	27.7	7.27	7.87	11	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4	Middle		2	1	13:09							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4	Middle		2	2	13:09							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4	Bottom	4.8	3	1	13:09	17.6	8.13	27.6	7.18	8.02	10.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	SR4	Bottom	4.8	3	2	13:09	17.5	8.1	27.7	7.14	8.06	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS8	Surface	1	1	1	13:32	17.5	7.99	27.7	7.42	7.57	9.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS8	Surface	1	1	2	13:32	17.6	8	27.8	7.46	7.52	9.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS8	Middle		2	1	13:32							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS8	Middle		2	2	13:32							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS8	Bottom	4.5	3	1	13:32	17.5	8.03	27.7	7.38	7.88	10.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS8	Bottom	4.5	3	2	13:32	17.5	8.02	27.8	7.31	7.92	11.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	13:57	17.4	8.06	27.3	7.32	7.67	11.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	13:57	17.5	8.07	27.4	7.35	7.73	11.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)16	Middle	4.5	2	1	13:57	17.5	8.06	27.6	7.29	7.48	9.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)16	Middle	4.5	2	2	13:57	17.6	8.05	27.5	7.26	7.52	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)16	Bottom	8	3	1	13:57	17.7	8.09	27.8	7.16	8.22	10.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)16	Bottom	8	3	2	13:57	17.6	8.08	27.9	7.19	8.17	11.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	14:23	17.3	8.04	27.6	7.11	7.42	8.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	14:23	17.4	8.03	27.5	7.13	7.51	9.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	14:23							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	14:23							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)9	Bottom	4.6	3	1	14:23	17.5	8.05	27.6	7.28	8.08	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	IS(Mf)9	Bottom	4.6	3	2	14:23	17.4	8.06	27.7	7.29	8.01	10.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	14:53	17.4	7.98	27.7	7.3	7.73	10	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	14:53	17.5	7.99	27.6	7.34	7.81	11.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)3	Middle	5.8	2	1	14:53	17.5	7.96	27.6	7.19	8.18	11.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)3	Middle	5.8	2	2	14:53	17.6	7.97	27.8	7.21	8.14	13.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)3	Bottom	10.6	3	1	14:53	17.5	7.99	27.7	7.33	8.39	10.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Flood	Fine	CS(Mf)3	Bottom	10.6	3	2	14:53	17.4	8	27.8	7.38	8.32	10.8	2015-01-15



Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	07:38	17.3	7.97	27.6	7.24	7.84	11	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	07:38	17.4	7.98	27.5	7.21	7.91	12.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)3	Middle	5.7	2	1	07:38	17.4	7.95	27.7	7.17	8.21	11.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)3	Middle	5.7	2	2	07:38	17.4	7.95	27.7	7.14	8.29	10.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.4	3	1	07:38	17.5	7.99	27.9	7.29	8.42	11	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.4	3	2	07:38	17.6	8.01	27.8	7.31	8.36	13.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4a	Surface	1	1	1	08:57	17.4	7.93	27.6	7.37	7.86	12.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4a	Surface	1	1	2	08:57	17.5	7.94	27.6	7.4	7.8	9.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4a	Middle		2	1	08:57							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4a	Middle		2	2	08:57							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	1	08:57	17.4	7.98	27.6	7.33	8.14	12.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	2	08:57	17.5	7.99	27.7	7.29	8.08	10.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4	Surface	1	1	1	08:43	17.4	8.03	27.6	7.25	7.79	9.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4	Surface	1	1	2	08:43	17.5	8.04	27.7	7.21	7.71	10	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4	Middle		2	1	08:43							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4	Middle		2	2	08:43							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4	Bottom	4.4	3	1	08:43	17.4	8.07	27.7	7.13	7.96	12.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	SR4	Bottom	4.4	3	2	08:43	17.4	8.07	27.7	7.09	8.03	12	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS8	Surface	1	1	1	08:28	17.4	7.99	27.5	7.38	7.61	9.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS8	Surface	1	1	2	08:28	17.4	8.01	27.6	7.34	7.68	10	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS8	Middle		2	1	08:28							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS8	Middle		2	2	08:28							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS8	Bottom	4.4	3	1	08:28	17.4	8.01	27.6	7.36	7.93	11.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS8	Bottom	4.4	3	2	08:28	17.4	8.02	27.7	7.29	7.99	11.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	08:11	17.4	8.05	27.4	7.27	7.73	10.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	08:11	17.3	8.06	27.5	7.3	7.79	10.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)16	Middle	4.4	2	1	08:11	17.4	8.04	27.5	7.23	7.54	9.8	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)16	Middle	4.4	2	2	08:11	17.4	8.04	27.5	7.21	7.58	10.6	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.8	3	1	08:11	17.5	8.08	27.7	7.14	8.27	9.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.8	3	2	08:11	17.6	8.07	27.8	7.11	8.18	12.4	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	07:57	17.3	8.02	27.4	7.15	7.56	11.3	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	07:57	17.4	8.03	27.5	7.18	7.63	9.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	07:57							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	07:57							2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	1	07:57	17.4	8.06	27.5	7.2	8.11	13	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	2	07:57	17.4	8.07	27.5	7.22	8.06	12	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	09:16	17.4	8.03	27.7	7.43	7.67	10.7	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	09:16	17.4	8.01	27.8	7.39	7.75	10.1	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)5	Middle	5.8	2	1	09:16	17.4	8.04	27.8	7.45	7.43	11.9	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)5	Middle	5.8	2	2	09:16	17.5	8.05	27.9	7.47	7.49	11.2	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.6	3	1	09:16	17.5	8.07	28	7.28	8.21	11.5	2015-01-15
TMCLKL	HY/2012/07	2015-01-15	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.6	3	2	09:16	17.6	8.07	27.9	7.24	8.28	13.2	2015-01-15

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	14:05	17.7	8.08	27.9	7.63	7.43	11.9	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	14:05	17.8	8.09	27.8	7.6	7.37	11.1	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)5	Middle	6	2	1	14:05	17.8	8.1	27.9	7.57	7.19	8.6	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)5	Middle	6	2	2	14:05	17.8	8.09	28	7.55	7.24	11.6	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)5	Bottom	11	3	1	14:05	17.8	8.04	28.1	7.38	7.88	11	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)5	Bottom	11	3	2	14:05	17.9	8.05	28	7.41	7.95	11.1	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4a	Surface	1	1	1	14:33	17.7	7.95	27.7	7.57	7.56	12.1	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4a	Surface	1	1	2	14:33	17.7	7.96	27.8	7.54	7.61	9.9	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4a	Middle		2	1	14:33							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4a	Middle		2	2	14:33							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4a	Bottom	4.6	3	1	14:33	17.7	8	27.8	7.49	7.73	10	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4a	Bottom	4.6	3	2	14:33	17.8	7.99	27.8	7.46	7.79	10.9	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4	Surface	1	1	1	14:52	17.7	7.94	27.6	7.51	7.43	10.4	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4	Surface	1	1	2	14:52	17.6	7.95	27.7	7.48	7.5	9.8	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4	Middle		2	1	14:52							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4	Middle		2	2	14:52							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4	Bottom	4.8	3	1	14:52	17.7	7.98	27.7	7.4	7.66	10.7	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	SR4	Bottom	4.8	3	2	14:52	17.8	7.99	27.8	7.37	7.71	10.8	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS8	Surface	1	1	1	15:15	17.7	7.98	27.7	7.64	7.41	10.4	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS8	Surface	1	1	2	15:15	17.7	7.98	27.7	7.6	7.36	11	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS8	Middle		2	1	15:15							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS8	Middle		2	2	15:15							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS8	Bottom	4.6	3	1	15:15	17.7	7.98	27.7	7.59	7.55	11.3	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS8	Bottom	4.6	3	2	15:15	17.7	7.99	27.8	7.56	7.6	10.6	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	15:35	17.7	8.01	27.8	7.68	7.56	11.3	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	15:35	17.8	8.03	27.8	7.7	7.5	9.8	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)16	Middle	4.6	2	1	15:35	17.8	8.04	27.8	7.64	7.39	11.8	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)16	Middle	4.6	2	2	15:35	17.8	8.05	27.9	7.62	7.43	10.4	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)16	Bottom	8.2	3	1	15:35	17.8	8.07	27.9	7.48	7.88	11	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)16	Bottom	8.2	3	2	15:35	17.9	8.08	28	7.44	7.94	11.9	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	15:59	17.8	8.05	27.6	7.39	7.24	11.6	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	15:59	17.8	8.06	27.7	7.34	7.3	10.2	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	15:59							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	15:59							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)9	Bottom	4.8	3	1	15:59	17.8	8.05	27.7	7.42	7.72	9.3	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	IS(Mf)9	Bottom	4.8	3	2	15:59	17.8	8.06	27.8	7.45	7.65	10.7	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	16:19	17.7	8.01	27.7	7.41	7.66	9.2	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	16:19	17.7	8.02	27.8	7.38	7.6	9.9	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)3	Middle	5.9	2	1	16:19	17.8	8.04	27.8	7.34	7.93	11.9	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)3	Middle	5.9	2	2	16:19	17.7	8.03	27.9	7.3	7.86	11.8	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)3	Bottom	10.8	3	1	16:19	17.8	8.06	27.9	7.19	8.12	11.4	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Flood	Fine	CS(Mf)3	Bottom	10.8	3	2	16:19	17.9	8.07	28	7.22	8.05	12.1	2015-01-20

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	09:22	17.5	7.95	27.6	7.32	7.71	11.6	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	09:22	17.6	7.96	27.7	7.29	7.66	11.5	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)3	Middle	5.7	2	1	09:22	17.7	7.98	27.8	7.25	7.99	10.4	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)3	Middle	5.7	2	2	09:22	17.8	7.97	27.7	7.21	7.92	11.1	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.4	3	1	09:22	17.8	8	27.8	7.1	8.18	11.5	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.4	3	2	09:22	17.8	8.01	27.9	7.13	8.11	12.2	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4a	Surface	1	1	1	11:32	17.5	7.89	27.6	7.48	7.62	11.4	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4a	Surface	1	1	2	11:32	17.6	7.9	27.7	7.45	7.67	10.7	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4a	Middle		2	1	11:32							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4a	Middle		2	2	11:32							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	1	11:32	17.7	7.94	27.7	7.4	7.8	9.4	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	2	11:32	17.6	7.93	27.8	7.37	7.85	11.8	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4	Surface	1	1	1	11:06	17.6	7.88	27.6	7.42	7.49	12	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4	Surface	1	1	2	11:06	17.5	7.89	27.5	7.39	7.56	11.3	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4	Middle		2	1	11:06							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4	Middle		2	2	11:06							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4	Bottom	4.6	3	1	11:06	17.6	7.92	27.6	7.31	7.72	11.6	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	SR4	Bottom	4.6	3	2	11:06	17.7	7.93	27.7	7.28	7.77	11.7	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS8	Surface	1	1	1	10:40	17.5	7.92	27.5	7.55	7.47	11.2	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS8	Surface	1	1	2	10:40	17.6	7.93	27.6	7.51	7.42	9.6	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS8	Middle		2	1	10:40							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS8	Middle		2	2	10:40							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS8	Bottom	4.4	3	1	10:40	17.6	7.92	27.7	7.5	7.61	9.9	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS8	Bottom	4.4	3	2	10:40	17.7	7.93	27.6	7.47	7.66	10.7	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	10:14	17.6	7.95	27.6	7.59	7.62	12.2	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	10:14	17.7	7.97	27.7	7.61	7.56	11.3	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)16	Middle	4.4	2	1	10:14	17.8	7.98	27.7	7.55	7.45	9.7	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)16	Middle	4.4	2	2	10:14	17.7	7.99	27.8	7.53	7.49	9	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.8	3	1	10:14	17.8	8.01	27.8	7.39	7.94	11.1	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.8	3	2	10:14	17.7	8.02	27.9	7.35	7.8	12	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	09:48	17.6	7.99	27.6	7.3	7.31	9.5	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	09:48	17.5	8	27.5	7.25	7.36	11	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	09:48							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	09:48							2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.6	3	1	09:48	17.7	8.01	27.7	7.33	7.78	10.1	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.6	3	2	09:48	17.7	8.02	27.6	7.36	7.71	11.6	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	12:02	17.7	8.02	27.7	7.54	7.49	11.2	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	12:02	17.6	8.03	27.8	7.51	7.43	8.9	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)5	Middle	5.8	2	1	12:02	17.8	8.04	27.8	7.48	7.25	9.4	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)5	Middle	5.8	2	2	12:02	17.7	8.03	27.9	7.46	7.3	11	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.6	3	1	12:02	17.8	7.98	28	7.29	7.94	9.5	2015-01-20
TMCLKL	HY/2012/07	2015-01-17	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.6	3	2	12:02	17.8	7.99	27.9	7.32	8.01	9.6	2015-01-20

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	16:35	17.6	7.9	27.9	7.48	7.52	10.6	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	16:35	17.6	7.91	27.9	7.44	7.59	10.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.8	2	1	16:35	17.6	7.98	28	7.53	7.34	10.4	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.8	2	2	16:35	17.6	7.97	28	7.5	7.4	10.3	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.6	3	1	16:35	17.7	8.01	28.2	7.36	7.97	11.3	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.6	3	2	16:35	17.8	8.02	28.2	7.31	8.06	11.6	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	17:05	17.6	7.94	27.7	7.34	7.74	10.9	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	17:05	17.7	7.95	27.7	7.31	7.7	11	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4a	Middle		2	1	17:05							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4a	Middle		2	2	17:05							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4a	Bottom	4	3	1	17:05	17.6	7.97	27.7	7.37	7.95	11.5	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4a	Bottom	4	3	2	17:05	17.6	7.95	27.8	7.4	7.86	11.3	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4	Surface	1	1	1	17:23	17.6	7.91	27.8	7.34	7.62	10.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4	Surface	1	1	2	17:23	17.6	7.92	27.8	7.3	7.68	10.9	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4	Middle		2	1	17:23							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4	Middle		2	2	17:23							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4	Bottom	4.4	3	1	17:23	17.6	7.95	27.8	7.19	7.8	11.4	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	SR4	Bottom	4.4	3	2	17:23	17.7	7.96	27.8	7.16	7.88	11.1	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS8	Surface	1	1	1	17:45	17.5	7.95	27.7	7.41	7.54	10.9	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS8	Surface	1	1	2	17:45	17.6	7.96	27.8	7.37	7.46	10.5	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS8	Middle		2	1	17:45							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS8	Middle		2	2	17:45							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS8	Bottom	4.2	3	1	17:45	17.6	7.99	27.8	7.3	7.72	11.3	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS8	Bottom	4.2	3	2	17:45	17.6	8	27.8	7.27	7.79	11.4	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	18:07	17.6	8.04	27.6	7.28	7.43	10.5	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	18:07	17.6	8.03	27.7	7.31	7.49	10.7	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.3	2	1	18:07	17.6	7.94	27.7	7.22	7.56	10.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.3	2	2	18:07	17.6	7.95	27.8	7.2	7.47	10.7	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.6	3	1	18:07	17.7	7.99	27.8	7.14	7.89	11.4	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.6	3	2	18:07	17.8	7.97	27.9	7.1	7.96	11.6	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	18:32	17.6	7.98	27.7	7.26	7.44	10.5	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	18:32	17.7	7.99	27.7	7.23	7.52	10.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	1	18:32							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	18:32							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.4	3	1	18:32	17.6	8.01	27.7	7.18	7.89	11.6	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.4	3	2	18:32	17.6	8.02	27.8	7.15	7.96	11.4	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	18:58	17.6	7.91	27.7	7.33	7.74	11.3	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	18:58	17.6	7.94	27.8	7.29	7.81	11.4	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.8	2	1	18:58	17.6	7.95	27.8	7.17	7.96	11.6	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.8	2	2	18:58	17.6	7.95	27.8	7.14	8.07	11.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.6	3	1	18:58	17.7	7.98	27.9	7.22	8.24	12.1	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.6	3	2	18:58	17.7	7.99	28	7.25	8.18	11.9	2015-01-24

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	11:51	17.4	7.88	27.6	7.15	7.9	11.4	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	11:51	17.5	7.89	27.7	7.12	7.97	11.6	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.6	2	1	11:51	17.5	7.86	27.8	7.08	8.27	12.1	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.6	2	2	11:51	17.6	7.87	27.7	7.05	8.35	12	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	10.2	3	1	11:51	17.7	7.9	27.8	7.2	8.48	12.3	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	10.2	3	2	11:51	17.6	7.92	27.9	7.22	8.42	12.3	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	14:01	17.5	7.84	27.6	7.28	7.92	11.4	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	14:01	17.6	7.85	27.7	7.31	7.86	11.3	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4a	Middle		2	1	14:01							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4a	Middle		2	2	14:01							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4a	Bottom	3.8	3	1	14:01	17.7	7.89	27.8	7.24	8.2	11.9	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4a	Bottom	3.8	3	2	14:01	17.6	7.9	27.7	7.2	8.14	11.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	13:35	17.6	7.94	27.7	7.16	7.85	11.5	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	13:35	17.5	7.95	27.8	7.12	7.77	11.3	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4	Middle		2	1	13:35							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4	Middle		2	2	13:35							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4	Bottom	4.2	3	1	13:35	17.6	7.98	27.8	7.04	8.02	11.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	SR4	Bottom	4.2	3	2	13:35	17.6	7.99	27.9	7	8.09	11.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	13:09	17.4	7.9	27.7	7.29	7.67	11.1	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	13:09	17.5	7.92	27.6	7.25	7.74	10.9	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS8	Middle		2	1	13:09							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS8	Middle		2	2	13:09							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS8	Bottom	4	3	1	13:09	17.6	7.92	27.7	7.27	7.99	11.7	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS8	Bottom	4	3	2	13:09	17.5	7.93	27.8	7.2	8.05	11.6	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	12:43	17.4	7.96	27.6	7.18	7.79	11.2	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	12:43	17.3	7.97	27.5	7.21	7.85	11.4	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.1	2	1	12:43	17.4	7.95	27.6	7.14	7.6	11	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.1	2	2	12:43	17.5	7.96	27.7	7.12	7.64	11.1	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.2	3	1	12:43	17.7	7.99	27.9	7.05	8.33	12	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.2	3	2	12:43	17.7	7.98	27.8	7.02	8.24	11.6	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	12:17	17.4	7.93	27.5	7.06	7.62	11	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	12:17	17.5	7.94	27.6	7.09	7.69	11	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	12:17							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	12:17							2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4	3	1	12:17	17.5	7.97	27.6	7.11	8.17	11.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4	3	2	12:17	17.6	7.98	27.7	7.13	8.12	11.9	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	14:31	17.4	7.94	27.8	7.34	7.73	10.9	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	14:31	17.5	7.92	27.9	7.3	7.81	11.1	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.6	2	1	14:31	17.6	7.95	28	7.36	7.49	10.7	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.6	2	2	14:31	17.5	7.96	27.9	7.38	7.55	10.8	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.2	3	1	14:31	17.7	7.98	28.1	7.19	8.27	11.7	2015-01-24
TMCLKL	HY/2012/07	2015-01-20	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.2	3	2	14:31	17.8	7.99	28.2	7.15	8.34	11.9	2015-01-24



Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	08:30	17.5	8.07	28	7.55	7.25	9.4	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	08:30	17.6	8.09	27.9	7.57	7.27	9.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)5	Middle	5.5	2	1	08:30	17.7	8.11	28.1	7.48	7.34	9.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)5	Middle	5.5	2	2	08:30	17.7	8.1	28.2	7.46	7.36	9.6	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)5	Bottom	9.9	3	1	08:30	17.9	7.84	28.3	7.39	8.13	10.6	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)5	Bottom	9.9	3	2	08:30	18	7.86	28.4	7.41	8.11	12.2	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4a	Surface	1	1	1	08:50	17.6	8.11	28.1	7.45	7.73	11.6	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4a	Surface	1	1	2	08:50	17.5	8.13	28.2	7.47	7.71	10.8	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4a	Middle		2	1	08:50							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4a	Middle		2	2	08:50							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4a	Bottom	3.4	3	1	08:50	17.8	7.97	28.3	7.34	7.84	12.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4a	Bottom	3.4	3	2	08:50	17.9	7.99	28.4	7.36	7.86	11	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4	Surface	1	1	1	09:09	17.5	8.06	27.9	7.38	7.77	11.7	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4	Surface	1	1	2	09:09	17.4	8.04	27.8	7.41	7.79	11.7	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4	Middle		2	1	09:09							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4	Middle		2	2	09:09							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4	Bottom	4.3	3	1	09:09	17.6	8.12	28	7.26	7.94	11.9	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	SR4	Bottom	4.3	3	2	09:09	17.7	8.11	28.1	7.28	7.96	9.6	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS8	Surface	1	1	1	09:29	17.6	7.94	27.9	7.52	7.66	10	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS8	Surface	1	1	2	09:29	17.5	7.96	27.9	7.54	7.64	10.7	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS8	Middle		2	1	09:29							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS8	Middle		2	2	09:29							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS8	Bottom	3.9	3	1	09:29	17.7	8.06	28.1	7.41	7.93	11.1	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS8	Bottom	3.9	3	2	09:29	17.8	8.08	28.2	7.39	7.95	11.1	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	09:49	17.7	8	28	7.61	7.61	11.4	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	09:49	17.6	8.02	28	7.59	7.63	11.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)16	Middle	4.2	2	1	09:49	17.8	8.11	28.1	7.48	7.74	10.8	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)16	Middle	4.2	2	2	09:49	17.9	8.13	28.2	7.5	7.76	10.1	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)16	Bottom	7.4	3	1	09:49	18	7.94	28.3	7.36	7.88	10.2	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)16	Bottom	7.4	3	2	09:49	18.1	7.96	28.4	7.34	7.9	11.9	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	10:12	17.5	7.92	27.9	7.31	7.44	9.7	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	10:12	17.6	7.94	28	7.29	7.42	9.7	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	10:12							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	10:12							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)9	Bottom	4.1	3	1	10:12	17.7	8.03	28.1	7.06	8.06	12.1	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	IS(Mf)9	Bottom	4.1	3	2	10:12	17.8	8.05	28.2	7.08	8.07	11.3	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	10:35	17.6	7.97	28.1	7.42	7.8	10.1	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	10:35	17.6	8.01	28	7.4	7.83	10.2	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)3	Middle	5.5	2	1	10:35	17.7	8.13	28.2	7.25	7.94	10.3	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)3	Middle	5.5	2	2	10:35	17.8	8.11	28.3	7.27	7.96	11.9	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)3	Bottom	10	3	1	10:35	17.9	8.05	28.4	7.19	8	12.8	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Flood	Fine	CS(Mf)3	Bottom	10	3	2	10:35	18	8.07	28.4	7.17	8.02	11.2	2015-01-22

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	12:50	17.6	7.97	27.7	7.21	7.96	10.4	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	12:50	17.6	7.98	27.8	7.18	8.03	10.4	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.4	2	1	12:50	17.7	7.95	27.9	7.14	8.33	12.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.4	2	2	12:50	17.6	7.96	27.8	7.11	8.41	10.9	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	9.8	3	1	12:50	17.8	7.99	27.9	7.26	8.54	13.7	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	9.8	3	2	12:50	17.9	8.01	28	7.28	8.48	11.9	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	14:40	17.6	7.9	27.7	7.34	7.98	11.2	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	14:40	17.7	7.91	27.8	7.37	7.92	9.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4a	Middle		2	1	14:40							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4a	Middle		2	2	14:40							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4a	Bottom	3.2	3	1	14:40	17.8	7.95	27.8	7.3	8.26	12.9	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4a	Bottom	3.2	3	2	14:40	17.8	7.96	27.9	7.26	8.2	12.3	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	14:18	17.6	8	27.8	7.22	7.91	10.3	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	14:18	17.7	8.01	27.9	7.18	7.83	12.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4	Middle		2	1	14:18							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4	Middle		2	2	14:18							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4	Bottom	4	3	1	14:18	17.8	8.04	27.9	7.1	8.08	10.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	SR4	Bottom	4	3	2	14:18	17.7	8.05	28	7.06	8.15	13	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	13:56	17.5	7.99	27.7	7.35	7.73	10.8	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	13:56	17.6	8.01	27.8	7.31	7.8	11.7	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS8	Middle		2	1	13:56							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS8	Middle		2	2	13:56							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS8	Bottom	3.6	3	1	13:56	17.7	8.01	27.9	7.33	8.05	11.3	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS8	Bottom	3.6	3	2	13:56	17.7	8.02	27.8	7.26	8.11	11.4	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	13:34	17.4	8.02	27.6	7.24	7.86	11	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	13:34	17.5	8.03	27.7	7.27	7.91	11.9	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4	2	1	13:34	17.7	8.01	27.7	7.2	7.66	11.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4	2	2	13:34	17.6	8.02	27.8	7.18	7.7	10.8	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7	3	1	13:34	17.7	8.05	28	7.11	8.39	12.6	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7	3	2	13:34	17.8	8.04	27.9	7.08	8.3	11.6	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	13:12	17.5	8.02	27.7	7.12	7.68	10.8	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	13:12	17.6	8	27.6	7.15	7.75	11.6	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	13:12							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	13:12							2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.8	3	1	13:12	17.7	8.03	27.7	7.17	8.23	11.5	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.8	3	2	13:12	17.8	8.04	27.8	7.19	8.18	12.3	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	15:02	17.6	8	27.9	7.4	7.79	10.1	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	15:02	17.6	7.98	28	7.36	7.87	11.8	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.3	2	1	15:02	17.8	8.01	28.1	7.42	7.55	9.8	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.3	2	2	15:02	17.7	8.02	28	7.44	7.61	10.7	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	9.6	3	1	15:02	17.9	8.04	28.1	7.25	8.33	13.3	2015-01-22
TMCLKL	HY/2012/07	2015-01-22	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	9.6	3	2	15:02	17.8	8.05	28.2	7.21	8.4	11.8	2015-01-22

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	09:04	17.6	8	28	7.46	7.64	9.2	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	09:04	17.7	7.98	28.1	7.42	7.72	9	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.7	2	1	09:04	17.8	8.01	28.1	7.48	7.4	11.1	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.7	2	2	09:04	17.9	8.02	28.2	7.5	7.46	11.2	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.4	3	1	09:04	18	8.04	28.4	7.31	8.18	11.5	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.4	3	2	09:04	17.9	8.05	28.3	7.27	8.25	12.3	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	09:30	17.7	7.9	27.8	7.4	7.83	11.2	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	09:30	17.8	7.91	27.9	7.43	7.77	12.6	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4a	Middle		2	1	09:30							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4a	Middle		2	2	09:30							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4a	Bottom	4	3	1	09:30	17.9	7.95	28	7.36	8.11	11.5	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4a	Bottom	4	3	2	09:30	17.9	7.96	27.9	7.32	8.05	12.1	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4	Surface	1	1	1	09:56	17.8	8	27.9	7.28	7.76	11.6	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4	Surface	1	1	2	09:56	17.7	8.01	28	7.24	7.68	11.6	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4	Middle		2	1	09:56							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4	Middle		2	2	09:56							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4	Bottom	4.4	3	1	09:56	17.9	8.04	28	7.16	7.93	11.1	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	SR4	Bottom	4.4	3	2	09:56	17.8	8.05	28.1	7.12	8	10.4	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS8	Surface	1	1	1	10:22	17.6	7.96	27.8	7.41	7.58	9.9	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS8	Surface	1	1	2	10:22	17.7	7.98	27.9	7.37	7.65	9.9	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS8	Middle		2	1	10:22							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS8	Middle		2	2	10:22							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS8	Bottom	4.2	3	1	10:22	17.8	7.98	28	7.39	7.9	10.3	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS8	Bottom	4.2	3	2	10:22	17.8	7.99	27.9	7.32	7.96	11.9	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	10:48	17.5	8.02	27.7	7.3	7.7	10	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	10:48	17.6	8.03	27.8	7.33	7.76	11.6	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.3	2	1	10:48	17.6	8.01	27.9	7.26	7.51	10.5	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.3	2	2	10:48	17.7	8.02	27.8	7.24	7.55	9.1	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.6	3	1	10:48	17.9	8.05	28	7.17	8.24	11.7	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.6	3	2	10:48	17.8	8.04	28.1	7.14	8.15	12.3	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	11:14	17.6	7.99	27.7	7.18	7.53	9.2	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	11:14	17.7	8	27.8	7.21	7.6	11.4	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	1	11:14							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	11:14							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.4	3	1	11:14	17.7	8.03	27.9	7.23	8.08	11.7	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.4	3	2	11:14	17.8	8.04	27.8	7.25	8.03	12	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	11:44	17.6	7.94	27.8	7.27	7.81	11.7	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	11:44	17.7	7.95	27.9	7.24	7.88	9.5	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.8	2	1	11:44	17.7	7.92	28	7.2	8.18	11.5	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.8	2	2	11:44	17.8	7.93	27.9	7.17	8.26	11.5	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.6	3	1	11:44	17.9	7.81	28	7.32	8.39	12.9	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.6	3	2	11:44	17.8	7.83	28.1	7.34	8.33	13.3	2015-01-26

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	14:23	17.8	7.96	27.9	7.15	7.93	11.5	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	14:23	17.7	7.98	28	7.12	7.98	12	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.9	2	1	14:23	17.8	7.95	28.2	7.14	7.96	11.1	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.9	2	2	14:23	17.9	7.94	28.1	7.1	8.25	12	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	10.8	3	1	14:23	18	7.83	28.2	7.12	8.34	11.7	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	10.8	3	2	14:23	17.9	7.82	28.1	7.25	8.39	12.6	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	16:33	17.9	8	27.9	7.26	7.92	11.1	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	16:33	17.8	8.02	28	7.31	7.87	10.2	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4a	Middle		2	1	16:33							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4a	Middle		2	2	16:33							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4a	Bottom	4.2	3	1	16:33	17.9	7.97	28.1	7.26	8.23	13.2	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4a	Bottom	4.2	3	2	16:33	18	7.97	28	7.22	8.19	12.5	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	16:07	17.9	8.01	28	7.18	7.89	11	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	16:07	17.8	8.02	28.1	7.12	7.85	11	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4	Middle		2	1	16:07							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4	Middle		2	2	16:07							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4	Bottom	4.6	3	1	16:07	18	8.06	28.2	7.05	8.06	11.3	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	SR4	Bottom	4.6	3	2	16:07	17.9	8.05	28.1	7.1	8.08	11.3	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	15:41	17.7	7.98	27.9	7.28	7.7	10	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	15:41	17.8	7.99	28	7.25	7.77	9.3	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS8	Middle		2	1	15:41							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS8	Middle		2	2	15:41							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS8	Bottom	4.4	3	1	15:41	17.9	8	28.2	7.26	8.03	9.6	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS8	Bottom	4.4	3	2	15:41	18	7.99	28.1	7.2	8.06	10.5	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	15:15	17.6	8.04	27.9	7.17	7.84	10.2	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	15:15	17.7	8.03	27.8	7.2	7.89	11.8	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.4	2	1	15:15	17.7	8.02	28	7.15	7.64	10.7	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.4	2	2	15:15	17.9	8.02	27.9	7.12	7.69	9.2	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.8	3	1	15:15	18	8.06	28.1	7.29	8.38	11.7	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.8	3	2	15:15	17.8	8.04	28.2	7.28	8.27	12.4	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	14:49	17.8	8.1	27.8	7.08	7.71	11.6	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	14:49	17.7	8	27.9	7.1	7.74	12.4	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	14:49							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	14:49							2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4.6	3	1	14:49	17.8	8.02	28	7.18	8.21	13.1	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4.6	3	2	14:49	17.9	8.03	27.9	7.17	8.16	13.1	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	17:03	17.8	8.1	28.2	7.34	7.77	10.1	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	17:03	17.8	7.99	28.1	7.3	7.83	11.7	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.8	2	1	17:03	18	8.02	28.2	7.37	7.52	12	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.8	2	2	17:03	18.1	8.02	28.3	7.4	7.58	12.6	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.6	3	1	17:03	18.2	8.05	28.6	7.2	8.29	12.4	2015-01-26
TMCLKL	HY/2012/07	2015-01-24	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.6	3	2	17:03	18	8.06	28.5	7.15	8.37	13.4	2015-01-26

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	11:18	17.8	8.08	27.7	7.35	6.75	8.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	11:18	17.7	8.08	27.8	7.32	6.69	10.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)5	Middle	5.7	2	1	11:18	17.7	8.09	27.9	7.33	7.01	10.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)5	Middle	5.7	2	2	11:18	17.6	8.09	28	7.27	7.04	8.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)5	Bottom	10.4	3	1	11:18	17.6	8.09	28.1	7.23	7.2	8.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)5	Bottom	10.4	3	2	11:18	17.5	8.08	28	7.21	7.18	10.1	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4a	Surface	1	1	1	14:46	17.8	8.1	28	7.43	6.95	9.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4a	Surface	1	1	2	14:46	17.8	8.09	28	7.47	6.98	11.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4a	Middle		2	1	14:46							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4a	Middle		2	2	14:46							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4a	Bottom	4.4	3	1	14:46	17.4	8.09	27.9	7.32	7.43	11.1	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4a	Bottom	4.4	3	2	14:46	17.5	8.08	28	7.3	7.38	8.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4	Surface	1	1	1	12:11	17.7	8.07	27.8	7.48	7.05	9.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4	Surface	1	1	2	12:11	17.7	8.07	27.9	7.47	6.98	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4	Middle		2	1	12:11							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4	Middle		2	2	12:11							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4	Bottom	4.6	3	1	12:11	17.6	8.1	27.9	7.39	7.27	8.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	SR4	Bottom	4.6	3	2	12:11	17.4	8.08	27.9	7.38	7.25	9.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS8	Surface	1	1	1	12:37	17.6	8.07	27.7	7.6	6.91	9	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS8	Surface	1	1	2	12:37	17.8	8.08	27.8	7.54	6.87	8.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS8	Middle		2	1	12:37							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS8	Middle		2	2	12:37							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS8	Bottom	4	3	1	12:37	17.6	8.08	27.9	7.35	7.44	11.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS8	Bottom	4	3	2	12:37	17.6	8.1	28	7.39	7.4	10.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	13:05	17.7	8.05	28	7.55	6.9	10.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	13:05	17.6	8.03	27.9	7.47	6.82	8.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)16	Middle	4.4	2	1	13:05	17.6	8.07	28	7.25	7.09	8.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)16	Middle	4.4	2	2	13:05	17.6	8.05	27.9	7.22	7.15	9.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)16	Bottom	7.8	3	1	13:05	17.5	8.09	28	7.22	7.3	11.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)16	Bottom	7.8	3	2	13:05	17.4	8.07	28	7.19	7.26	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	13:35	17.8	8.04	28	7.31	6.73	8.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	13:35	17.8	8.05	27.9	7.28	6.7	10.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	13:35							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	13:35							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)9	Bottom	4.4	3	1	13:35	17.8	8.06	28.2	7.26	7.31	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	IS(Mf)9	Bottom	4.4	3	2	13:35	17.6	8.05	28.1	7.29	7.3	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	14:00	17.7	8.02	27.7	7.45	6.57	7.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	14:00	17.5	8.01	27.8	7.42	6.5	7.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)3	Middle	5.7	2	1	14:00	17.6	8.02	27.9	7.31	6.84	8.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)3	Middle	5.7	2	2	14:00	17.6	8.03	27.8	7.27	6.78	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)3	Bottom	10.4	3	1	14:00	17.5	8.03	27.9	7.17	6.98	10.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Flood	Fine	CS(Mf)3	Bottom	10.4	3	2	14:00	17.6	8.03	27.8	7.13	6.91	9.7	2015-01-30



Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	17:33	17.6	8.03	27.8	7.33	6.67	10.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	17:33	17.5	8.03	27.8	7.27	6.64	10.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)3	Middle	5.6	2	1	17:33	17.6	8.04	27.9	7.19	6.94	8.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)3	Middle	5.6	2	2	17:33	17.6	8.03	27.9	7.15	6.9	9.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.2	3	1	17:33	17.5	8.05	28	7.06	7.09	9.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.2	3	2	17:33	17.5	8.05	28	7.02	7.01	9.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4a	Surface	1	1	1	19:35	17.6	8.09	27.9	7.3	7.07	9.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4a	Surface	1	1	2	19:35	17.6	8.09	27.9	7.33	7.04	9.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4a	Middle		2	1	19:35							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4a	Middle		2	2	19:35							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	1	19:35	17.5	8.09	28	7.22	7.57	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	2	19:35	17.4	8.09	28	7.18	7.5	11.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4	Surface	1	1	1	19:15	17.6	8.08	27.9	7.36	7.15	9.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4	Surface	1	1	2	19:15	17.5	8.07	27.9	7.33	7.1	9.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4	Middle		2	1	19:15							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4	Middle		2	2	19:15							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4	Bottom	4.4	3	1	19:15	17.5	8.09	28	7.25	7.38	10.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	SR4	Bottom	4.4	3	2	19:15	17.5	8.08	28	7.28	7.32	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS8	Surface	1	1	1	18:50	17.5	8.08	27.9	7.44	7.04	11.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS8	Surface	1	1	2	18:50	17.6	8.08	27.8	7.4	7.1	11.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS8	Middle		2	1	18:50							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS8	Middle		2	2	18:50							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS8	Bottom	3.8	3	1	18:50	17.5	8.09	28	7.25	7.54	9	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS8	Bottom	3.8	3	2	18:50	17.5	8.09	28	7.28	7.5	10.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	18:25	17.5	8.04	27.9	7.4	6.98	10.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	18:25	17.5	8.05	27.9	7.37	6.92	9.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)16	Middle		2	1	18:25	17.5	8.06	27.9	7.15	7.2	9.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)16	Middle		2	2	18:25	17.5	8.06	27.9	7.11	7.26	9.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.8	3	1	18:25	17.4	8.08	28.1	7.1	7.41	9.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.8	3	2	18:25	17.3	8.08	28.1	7.07	7.36	9.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	18:01	17.7	8.05	27.9	7.2	6.87	11	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	18:01	17.6	8.05	27.9	7.17	6.82	8.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	18:01							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	18:01							2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.2	3	1	18:01	17.6	8.06	28	7.15	7.43	10.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.2	3	2	18:01	17.6	8.06	28	7.18	7.4	9.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	20:00	17.6	8.09	27.8	7.24	6.87	8.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	20:00	17.6	8.08	27.9	7.2	6.82	9.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)5	Middle	5.6	2	1	20:00	17.5	8.09	28	7.19	7.12	11.1	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)5	Middle	5.6	2	2	20:00	17.5	8.09	28	7.15	7.16	9.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.2	3	1	20:00	17.5	8.08	28	7.11	7.34	10.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-27	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.2	3	2	20:00	17.5	8.08	28	7.08	7.29	9.1	2015-01-30

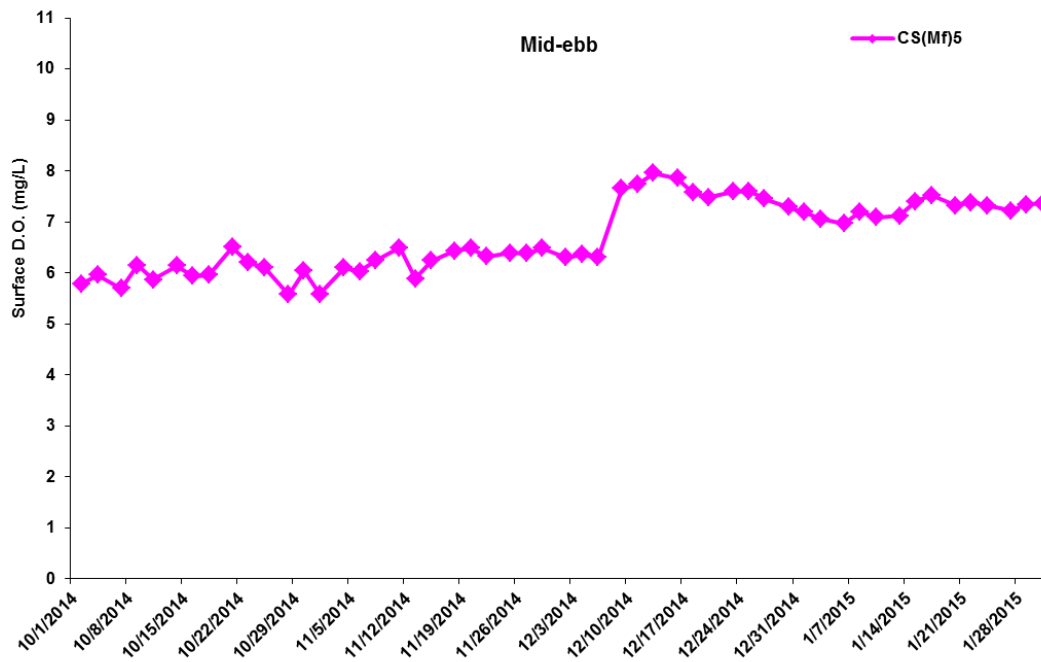
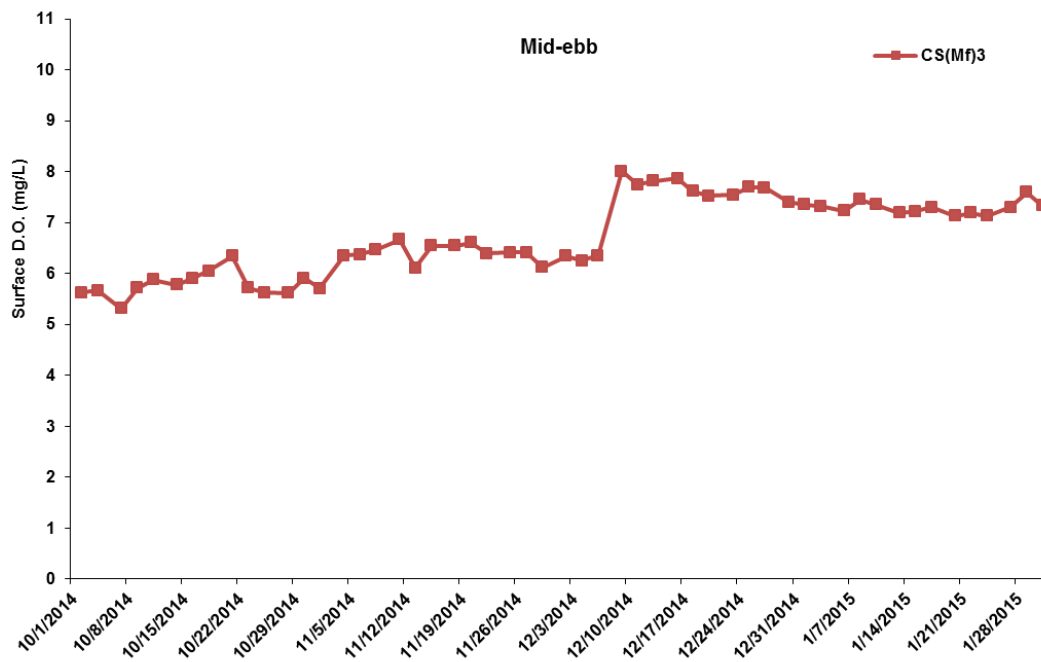
Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	12:37	17	8.14	28	7.43	6.49	9.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	12:37	17.1	8.16	28.1	7.45	6.51	9.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)5	Middle	5.8	2	1	12:37	17.2	8.03	28.1	7.26	6.52	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)5	Middle	5.8	2	2	12:37	17.3	8.05	28.2	7.28	6.5	10.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)5	Bottom	10.5	3	1	12:37	17.4	7.92	28.3	7.15	6.93	10.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)5	Bottom	10.5	3	2	12:37	17.5	7.94	28.3	7.17	6.95	10.1	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4a	Surface	1	1	1	12:59	17.1	7.99	28.1	7.43	6.31	9.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4a	Surface	1	1	2	12:59	17.2	8.01	28	7.45	6.29	9.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4a	Middle		2	1	12:59							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4a	Middle		2	2	12:59							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4a	Bottom	4.4	3	1	12:59	17.3	8.15	28.2	7.29	6.4	9.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4a	Bottom	4.4	3	2	12:59	17.3	8.17	28.3	7.31	6.38	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4	Surface	1	1	1	13:18	17.1	8	28.1	7.47	6.92	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4	Surface	1	1	2	13:18	17.2	8.02	28.1	7.45	6.94	10.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4	Middle		2	1	13:18							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4	Middle		2	2	13:18							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4	Bottom	4.6	3	1	13:18	17.3	8.27	28.2	7.33	7.01	10.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	SR4	Bottom	4.6	3	2	13:18	17.4	8.25	28.3	7.31	7.03	10.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS8	Surface	1	1	1	13:39	17	8.06	28	7.54	6.84	9.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS8	Surface	1	1	2	13:39	17	8.08	28.1	7.56	6.82	9.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS8	Middle		2	1	13:39							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS8	Middle		2	2	13:39							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS8	Bottom	4	3	1	13:39	17.1	8.11	28.2	7.24	6.92	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS8	Bottom	4	3	2	13:39	17.2	8.13	28.3	7.26	6.94	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	14:03	17.1	8.11	28.1	7.61	6.63	9.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	14:03	17.2	8.13	28.1	7.63	6.65	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)16	Middle	4.4	2	1	14:03	17.3	8.24	28.2	7.36	6.71	9.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)16	Middle	4.4	2	2	14:03	17.3	8.22	28.3	7.34	6.73	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)16	Bottom	7.8	3	1	14:03	17.4	7.93	28.4	7.21	6.77	10.1	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)16	Bottom	7.8	3	2	14:03	17.5	7.95	28.4	7.19	6.79	9.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	14:35	17.1	8	28	7.36	6.71	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	14:35	17.1	8.02	28.1	7.34	6.69	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	14:35							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	14:35							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)9	Bottom	4.5	3	1	14:35	17.3	8.03	28.2	7.13	6.82	9.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	IS(Mf)9	Bottom	4.5	3	2	14:35	17.4	8.05	28.3	7.15	6.84	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	15:10	17	8.02	28.1	7.41	6.61	9.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	15:10	17.1	8.04	28.2	7.43	6.63	9.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)3	Middle	5.7	2	1	15:10	17.2	8.11	28.3	7.33	6.7	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)3	Middle	5.7	2	2	15:10	17.3	8.13	28.3	7.35	6.73	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)3	Bottom	10.4	3	1	15:10	17.4	8.24	28.4	7.22	6.88	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Flood	Fine	CS(Mf)3	Bottom	10.4	3	2	15:10	17.4	8.22	28.4	7.24	6.86	10.3	2015-01-30

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	08:12	16.9	4.96	25	7.58	6.57	9.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	08:12	17	4.95	24.9	7.61	6.55	9.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)3	Middle	5.6	2	1	08:12	17	5.01	25	7.28	6.81	10.1	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)3	Middle	5.6	2	2	08:12	17.1	5.02	25.1	7.25	6.85	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.1	3	1	08:12	17.1	5.11	25.3	7.31	6.62	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.1	3	2	08:12	17.1	5.1	25.2	7.33	6.65	10.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4a	Surface	1	1	1	09:31	16.9	7.97	24.8	7.38	6.41	9.1	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4a	Surface	1	1	2	09:31	17	7.96	24.9	7.36	6.45	9	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4a	Middle		2	1	09:31							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4a	Middle		2	2	09:31							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4a	Bottom	4.1	3	1	09:31	17	8	25	7.14	6.49	9.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4a	Bottom	4.1	3	2	09:31	17.1	8.01	25.1	7.15	6.52	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4	Surface	1	1	1	09:17	16.8	7.97	24.9	7.31	6.99	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4	Surface	1	1	2	09:17	16.9	7.99	25	7.33	7.03	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4	Middle		2	1	09:17							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4	Middle		2	2	09:17							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4	Bottom	4.4	3	1	09:17	17	8.12	25.1	7.28	7.11	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	SR4	Bottom	4.4	3	2	09:17	17.1	8.13	25.2	7.25	7.16	10.5	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS8	Surface	1	1	1	09:05	17	7.99	24.8	7.42	6.65	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS8	Surface	1	1	2	09:05	17	8.01	24.9	7.43	6.69	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS8	Middle		2	1	09:05							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS8	Middle		2	2	09:05							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS8	Bottom	3.8	3	1	09:05	17.1	8.05	25	7.19	6.98	10.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS8	Bottom	3.8	3	2	09:05	17	8.06	25.1	7.17	7.01	10.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	08:48	17	8.1	24.8	7.58	6.8	9.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	08:48	17.1	8.09	24.6	7.55	6.78	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)16	Middle	4.2	2	1	08:48	17.2	8.2	24.9	7.28	6.81	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)16	Middle	4.2	2	2	08:48	17.1	8.19	24.8	7.26	6.83	9.9	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.3	3	1	08:48	17.3	7.9	25.3	7.16	6.85	10.2	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.3	3	2	08:48	17.2	7.91	25.2	7.14	6.83	10.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	08:34	17	4.97	24.7	7.21	6.88	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	08:34	17.1	4.98	24.6	7.24	6.86	9.7	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	08:34							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	08:34							2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.3	3	1	08:34	17.1	5.02	24.9	7.08	6.58	10.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.3	3	2	08:34	17.2	5.01	25	7.06	6.62	10.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	09:51	17.1	8.11	24.7	7.36	6.57	9.4	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	09:51	17	8.12	24.8	7.33	6.6	9.6	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)5	Middle	5.6	2	1	09:51	17.1	8.04	25	7.11	7.01	10	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)5	Middle	5.6	2	2	09:51	17.1	8.06	24.9	7.14	7.04	9.8	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.1	3	1	09:51	17.2	7.96	25.2	7.02	7.08	10.3	2015-01-30
TMCLKL	HY/2012/07	2015-01-29	Mid-Ebb	Fine	CS(Mf)5	Bottom	10.1	3	2	09:51	17.1	7.99	25.3	7.04	7.06	10.1	2015-01-30

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	14:33	17.3	8.17	28.2	7.44	6.74	9.4	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	14:33	17.3	8.18	28.1	7.47	6.67	9.3	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.7	2	1	14:33	17.3	8.12	28.3	7.38	6.48	9.1	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.4	2	2	14:33	17.4	8.13	28.3	7.35	6.53	8.5	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.4	3	1	14:33	17.5	8.06	28.4	7.21	6.87	10.3	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)5	Bottom	10.4	3	2	14:33	17.5	8.07	28.5	7.17	6.81	8.9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	15:03	17.3	8.08	28.2	7.39	6.54	10.5	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	15:03	17.3	8.09	28.2	7.41	6.49	9.7	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4a	Middle		2	1	15:03							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4a	Middle		2	2	15:03							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4a	Bottom	4.4	3	1	15:03	17.3	8.15	28.2	7.32	6.62	8.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4a	Bottom	4.4	3	2	15:03	17.4	8.16	28.3	7.28	6.58	8.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4	Surface	1	1	1	15:28	17.2	8.08	28.2	7.45	6.73	8.8	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4	Surface	1	1	2	15:28	17.3	8.06	28.2	7.41	6.81	10.2	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4	Middle		2	1	15:28							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4	Middle		2	2	15:28							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4	Bottom	4.4	3	1	15:28	17.3	8.25	28.3	7.38	6.95	10.4	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	SR4	Bottom	4.4	3	2	15:28	17.4	8.26	28.3	7.35	7	9.1	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS8	Surface	1	1	1	15:50	17.3	8.08	28.1	7.51	6.75	10.1	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS8	Surface	1	1	2	15:50	17.3	8.09	28.2	7.48	6.84	9.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS8	Middle		2	1	15:50							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS8	Middle		2	2	15:50							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS8	Bottom	4	3	1	15:50	17.3	8.11	28.3	7.36	6.7	8.7	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS8	Bottom	4	3	2	15:50	17.3	8.12	28.3	7.31	6.66	10	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	16:15	17.3	8.12	28.2	7.43	6.57	8.5	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	16:15	17.4	8.13	28.2	7.39	6.63	10.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.4	2	1	16:15	17.4	8.18	28.2	7.32	6.68	8.7	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.4	2	2	16:15	17.4	8.19	28.3	7.3	6.61	7.9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.8	3	1	16:15	17.4	8.06	28.5	7.26	6.73	10.1	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)16	Bottom	7.8	3	2	16:15	17.4	8.05	28.5	7.22	6.79	8.8	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	16:41	17.3	8.08	28.2	7.42	6.64	10	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	16:41	17.3	8.09	28.2	7.38	6.58	9.2	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	1	16:41							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	16:41							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.6	3	1	16:41	17.3	8.24	28.3	7.3	6.77	9.5	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.6	3	2	16:41	17.4	8.25	28.3	7.27	6.84	9.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	17:05	17.3	8.07	28.3	7.44	6.61	8.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	17:05	17.4	8.06	28.3	7.47	6.55	7.9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.6	2	1	17:05	17.4	8.12	28.4	7.39	6.68	8.7	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.6	2	2	17:05	17.4	8.13	28.4	7.36	6.74	8.1	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.2	3	1	17:05	17.4	8.18	28.5	7.25	6.88	8.9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Flood	Cloudy	CS(Mf)3	Bottom	10.2	3	2	17:05	17.5	8.19	28.5	7.22	6.8	8.2	2015-01-31

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	09:30	17.1	8.08	28.2	7.32	6.67	9.3	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	09:30	17.2	8.1	28.3	7.34	6.69	9.4	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.4	2	1	09:30	17.4	8.17	28.3	7.24	6.76	8.1	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.4	2	2	09:30	17.3	8.19	28.4	7.26	6.79	8.8	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	9.8	3	1	09:30	17.4	8.3	28.5	7.13	6.94	9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	9.8	3	2	09:30	17.5	8.28	28.4	7.15	6.92	10.4	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	12:00	17.2	8.05	28.1	7.34	6.37	7.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	12:00	17.3	8.07	28.2	7.36	6.35	7.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4a	Middle		2	1	12:00							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4a	Middle		2	2	12:00							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4a	Bottom	3.8	3	1	12:00	17.3	8.21	28.4	7.2	6.46	8.4	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4a	Bottom	3.8	3	2	12:00	17.4	8.23	28.3	7.22	6.44	10.3	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	11:30	17	8.06	28.1	7.38	6.98	11.2	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	11:30	17.3	8.08	28.2	7.36	7	9.8	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4	Middle		2	1	11:30							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4	Middle		2	2	11:30							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4	Bottom	4.2	3	1	11:30	17.4	8.33	28.3	7.24	7.07	10.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	SR4	Bottom	4.2	3	2	11:30	17.5	8.31	28.4	7.22	7.09	10.6	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	11:00	17.1	8.12	28.1	7.45	6.9	10.4	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	11:00	17	8.14	28.2	7.47	6.88	10.3	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS8	Middle		2	1	11:00							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS8	Middle		2	2	11:00							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS8	Bottom	3.6	3	1	11:00	17.2	8.17	28.4	7.15	6.98	9.1	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS8	Bottom	3.6	3	2	11:00	17.3	8.19	28.3	7.17	7	9.8	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	10:30	17.3	8.17	28.1	7.52	6.69	8	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	10:30	17.2	8.19	28.2	7.54	6.71	8.7	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.2	2	1	10:30	17.3	8.3	28.3	7.27	6.77	10.8	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.2	2	2	10:30	17.4	8.28	28.4	7.25	6.79	8.8	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.4	3	1	10:30	17.5	7.99	28.5	7.12	6.83	10.3	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	7.4	3	2	10:30	17.5	8.01	28.4	7.1	6.85	8.9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	10:00	17.1	8.06	28.1	7.27	6.77	9.5	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	10:00	17.2	8.08	28.2	7.25	6.75	8.1	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	10:00							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	10:00							2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4.2	3	1	10:00	17.4	8.09	28.4	7.04	6.88	8.9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4.2	3	2	10:00	17.5	8.11	28.3	7.06	6.9	9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	12:30	17.1	8.2	28.1	7.34	6.55	7.9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	12:30	17.2	8.22	28.2	7.39	6.57	10.5	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.6	2	1	12:30	17.4	8.09	28.3	7.17	6.58	9.9	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)5	Middle	5.6	2	2	12:30	17.3	8.11	28.2	7.19	6.56	9.2	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.2	3	1	12:30	17.5	7.98	28.3	7.06	6.99	9.8	2015-01-31
TMCLKL	HY/2012/07	2015-01-31	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	10.2	3	2	12:30	17.6	8	28.4	7.08	7.01	10.5	2015-01-31



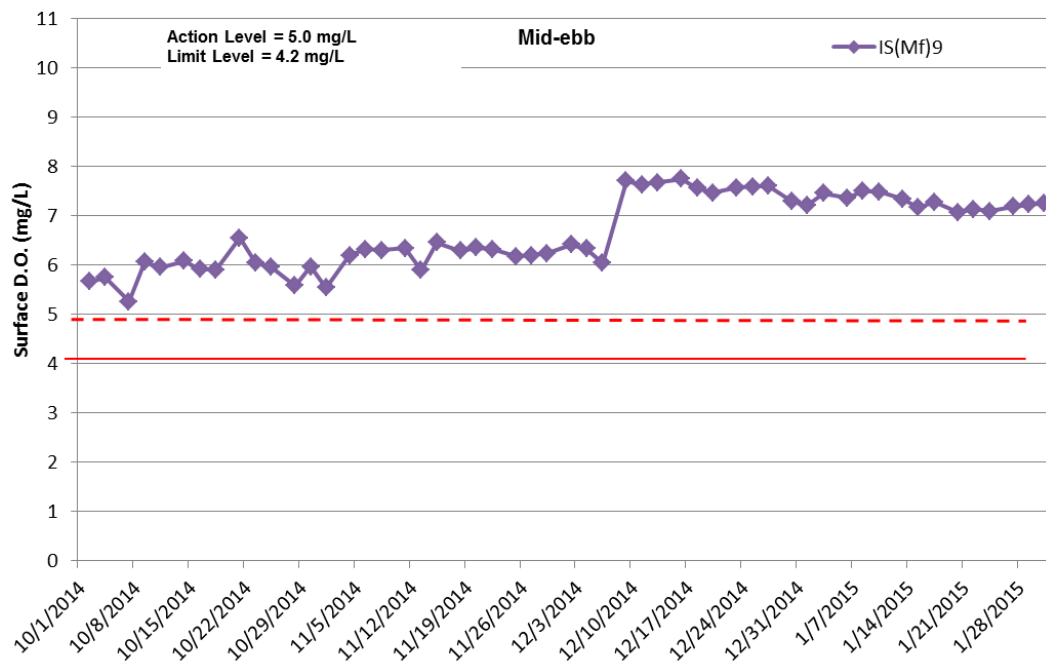
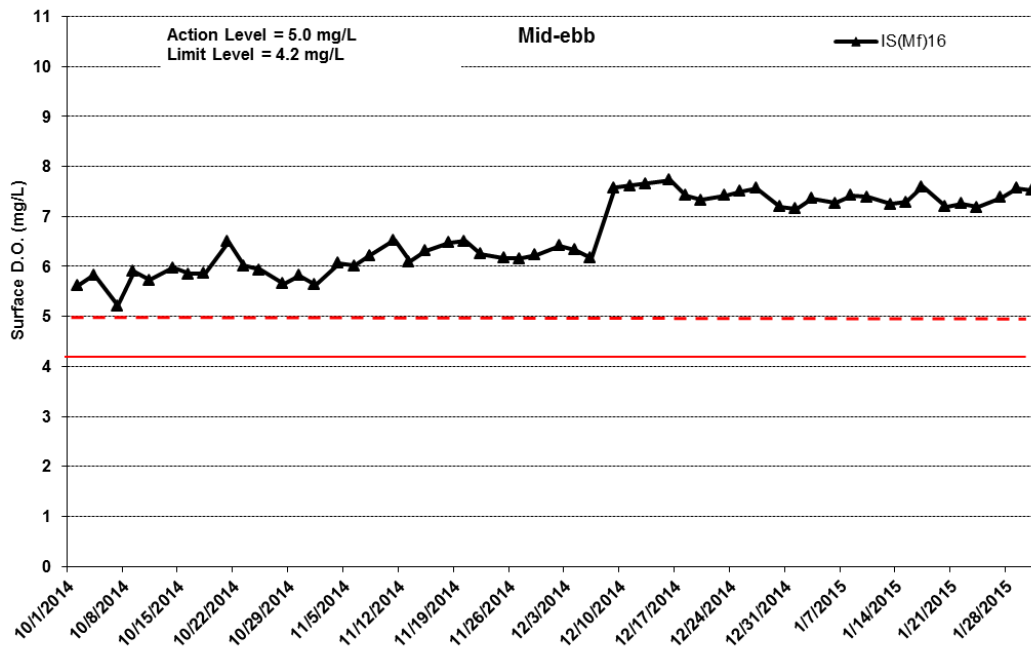


**Figure J1 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(Mf)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



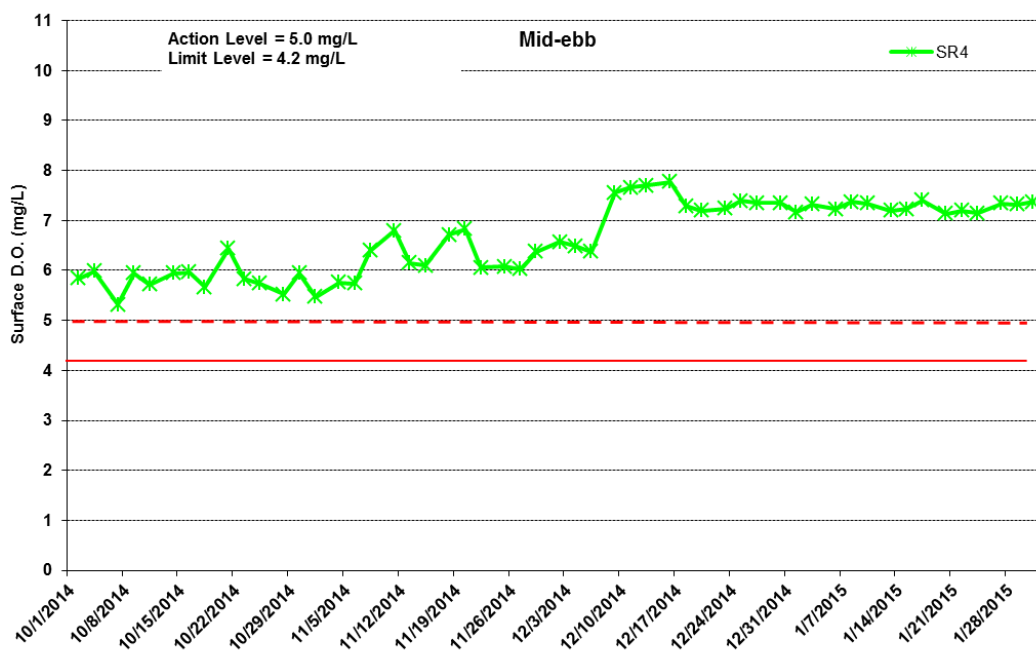
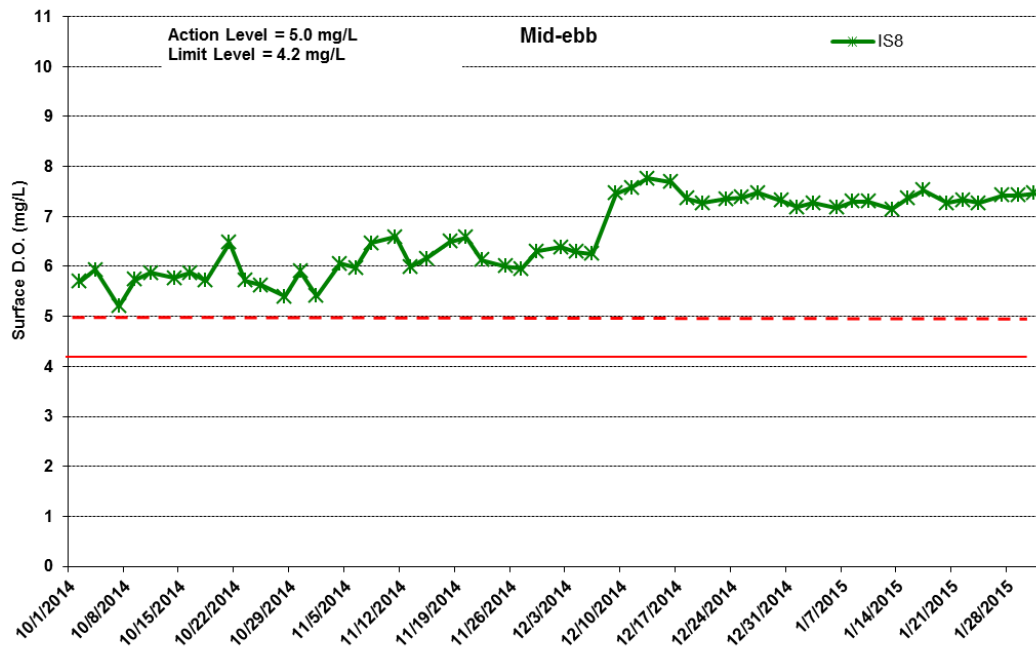


**Figure J2 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at IS(Mf)16 and IS(Mf)9.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



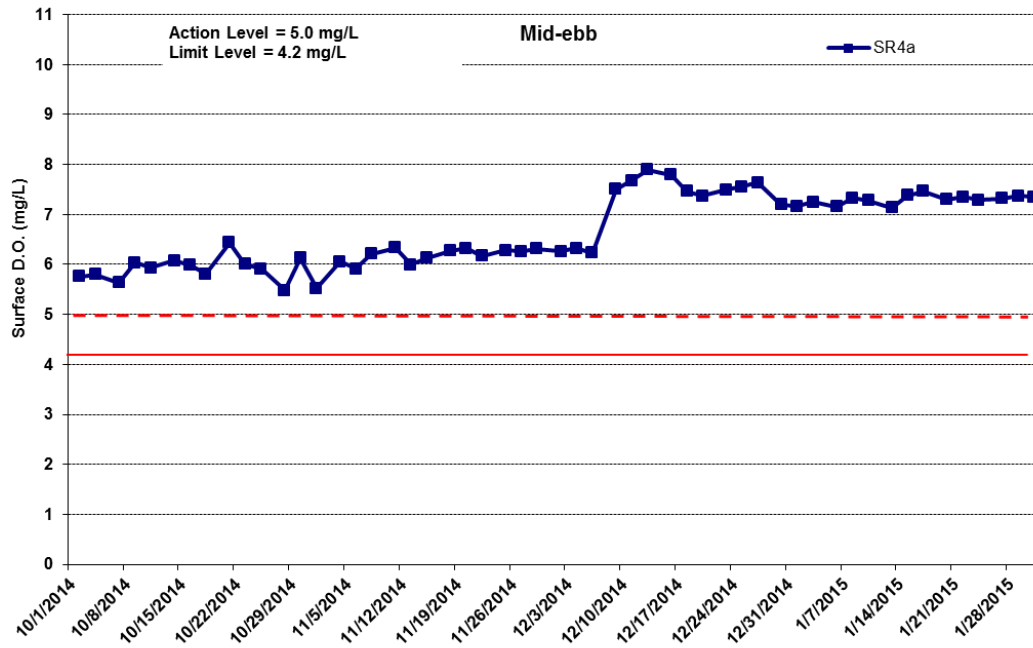


**Figure J3 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at IS8 and SR4.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



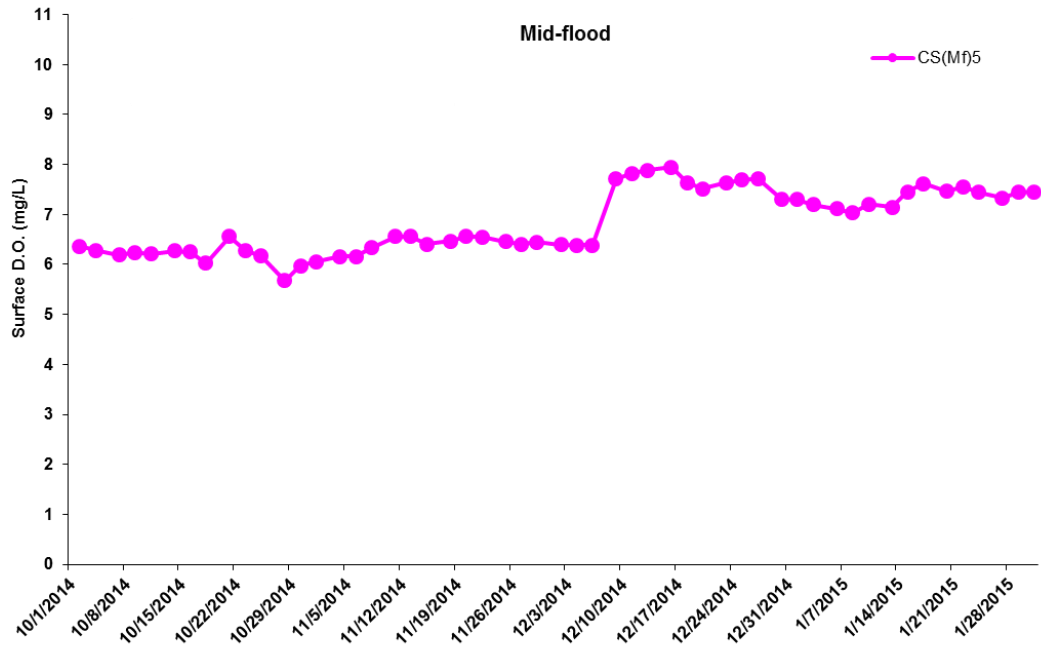
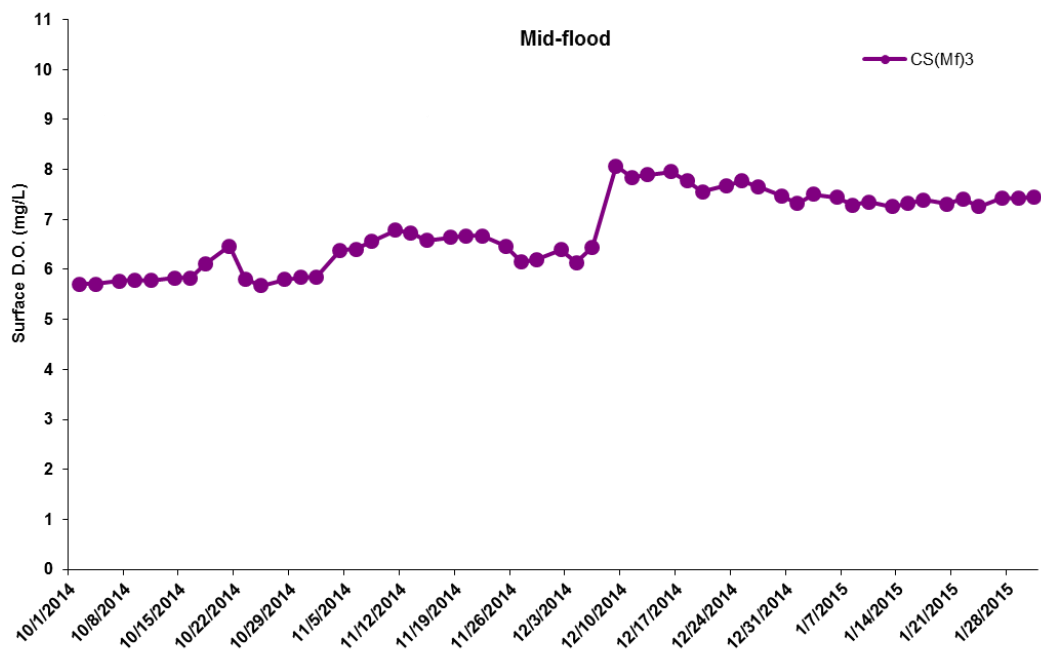


**Figure J4 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at SR4a.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





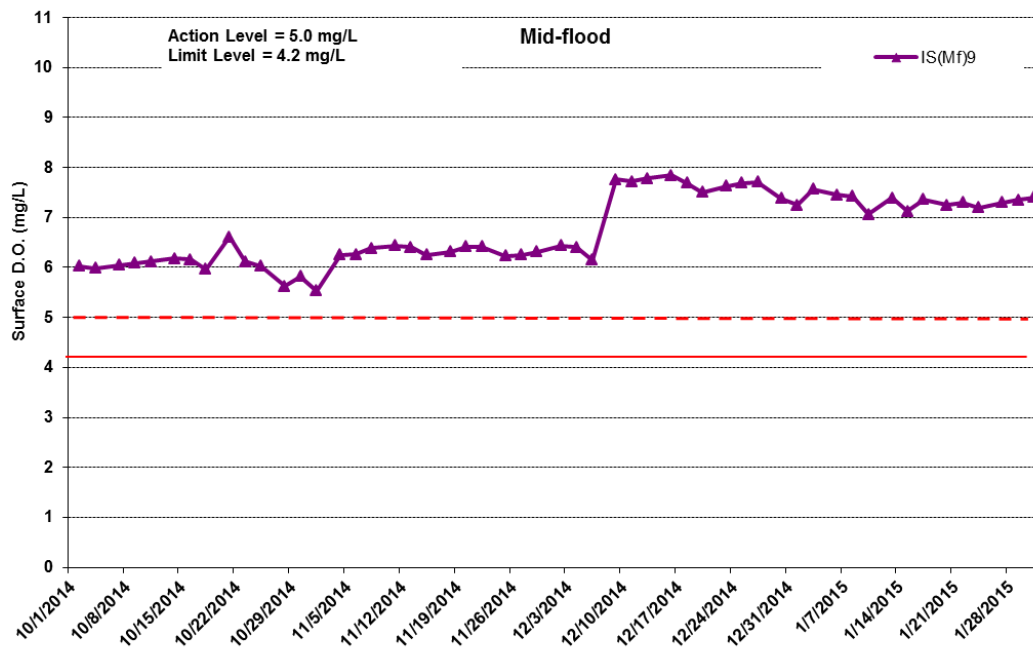
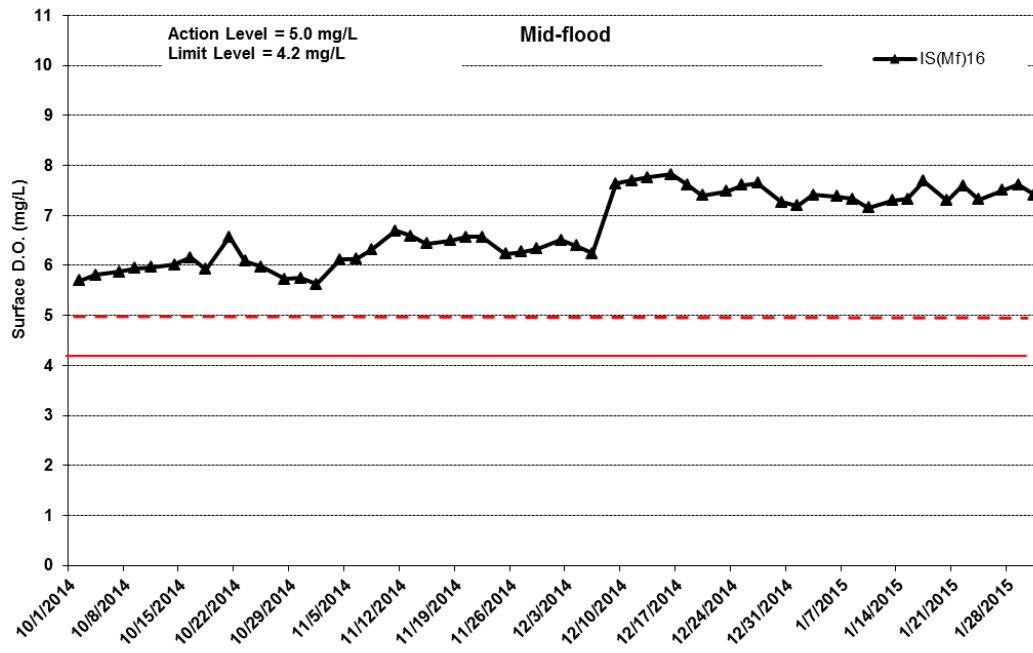
**Figure J5 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(Mf)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





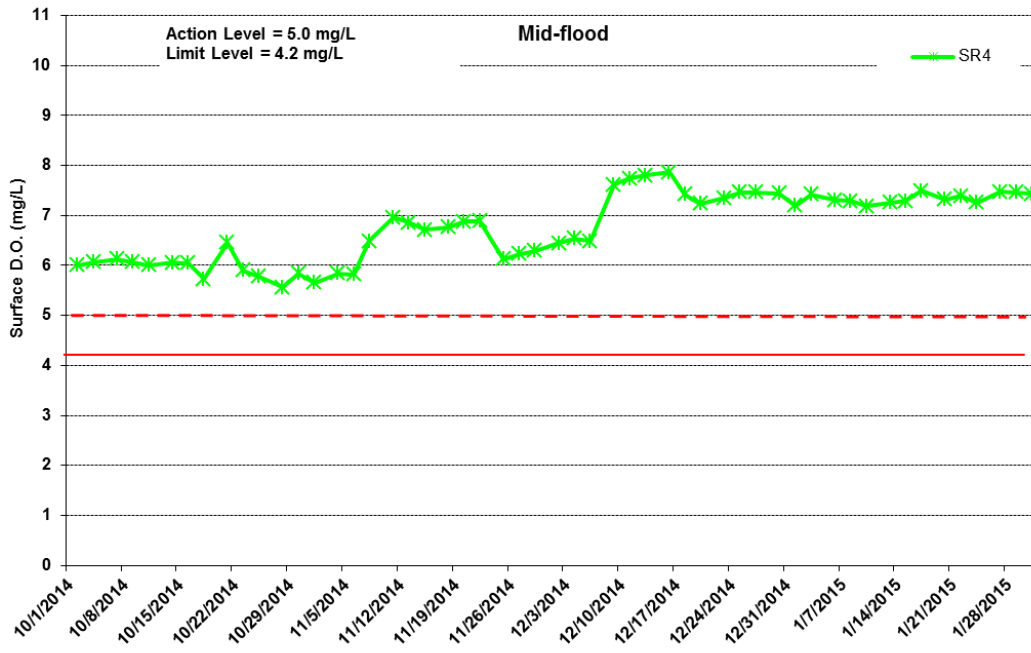
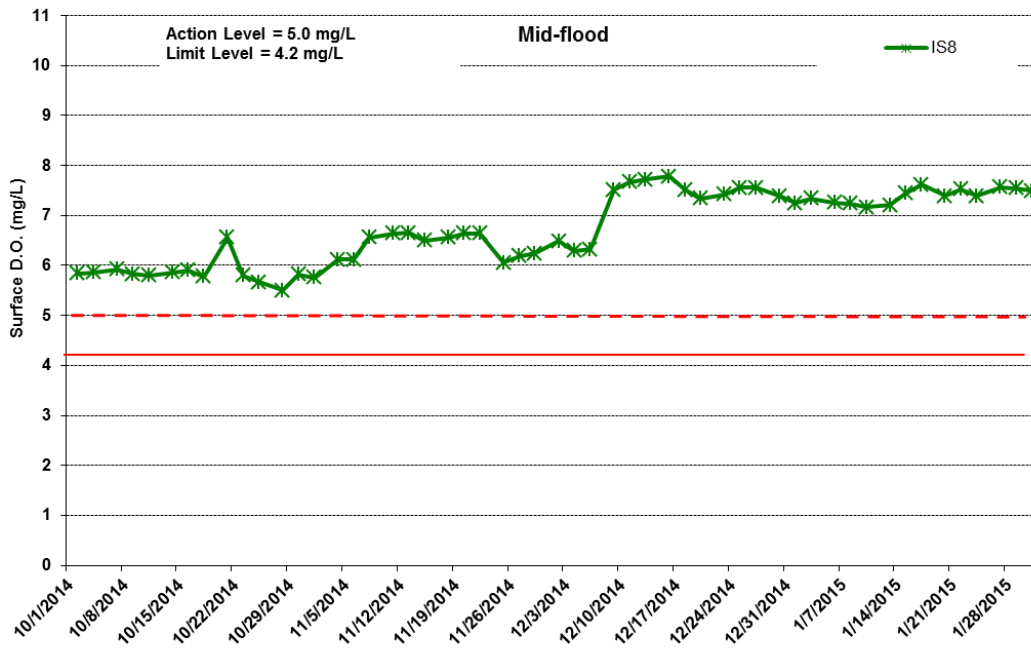


**Figure J6 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 October 2014 and 31 January 2015 at IS(Mf)16 and IS(Mf)9.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental Resources Management**



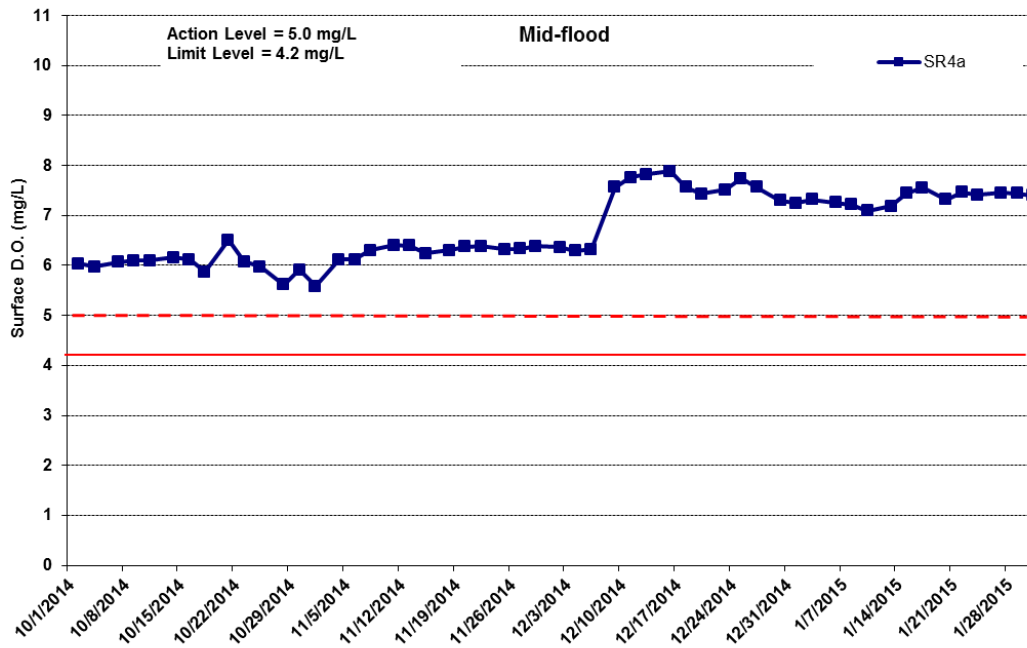


**Figure J7 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 October 2014 and 31 January 2015 at IS8 and SR4.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



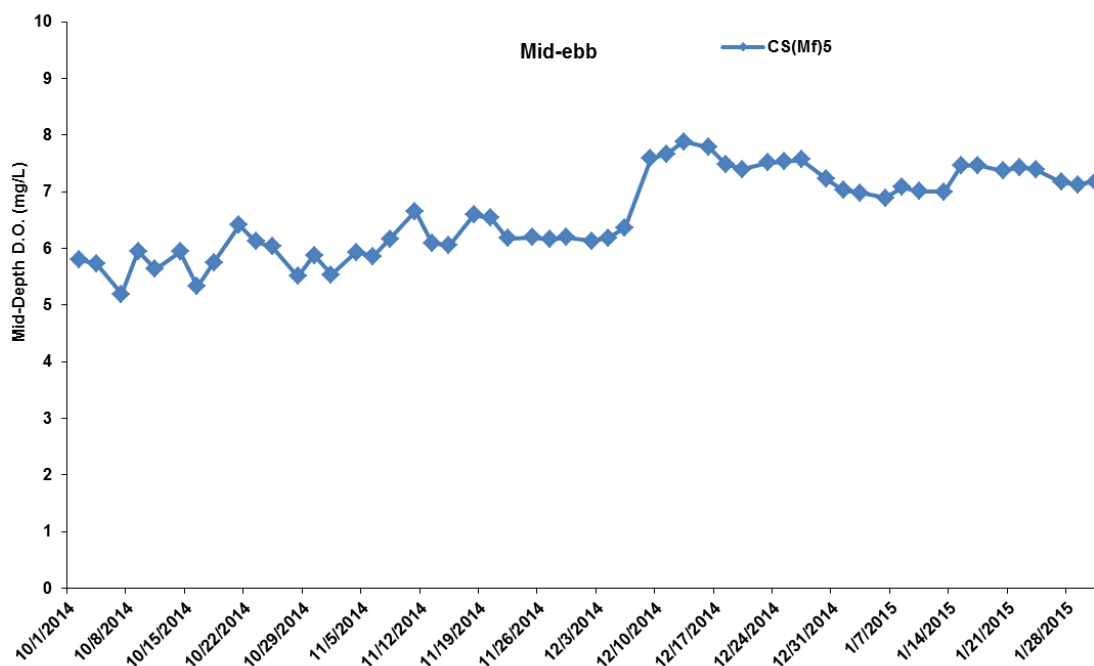
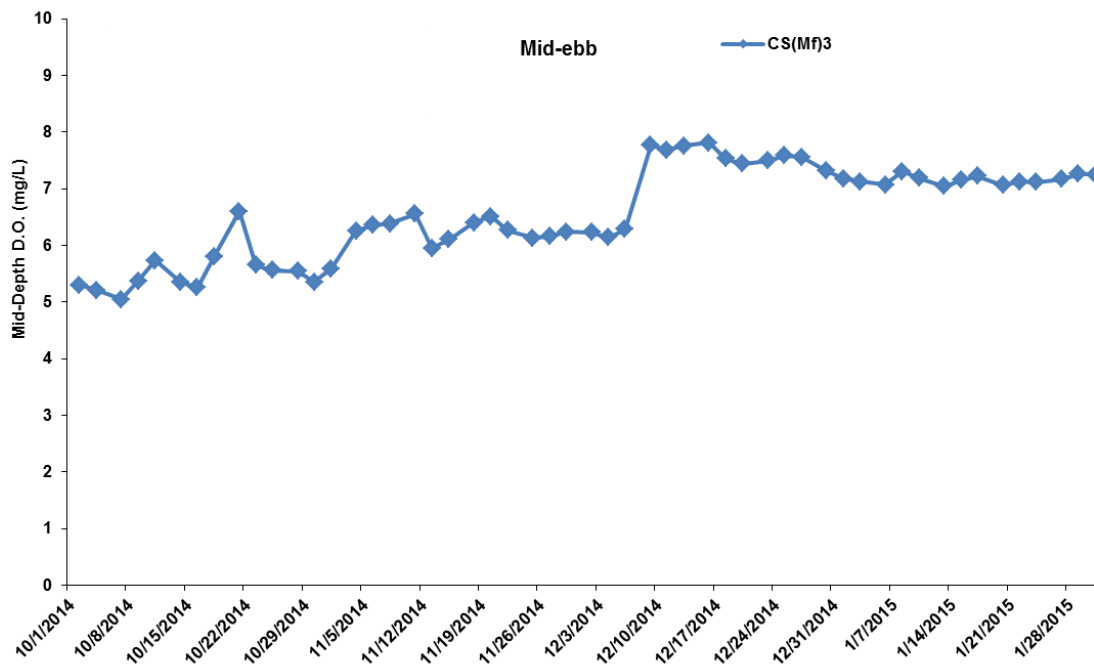


**Figure J8 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 October 2014 and 31 January 2015 at SR4a.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



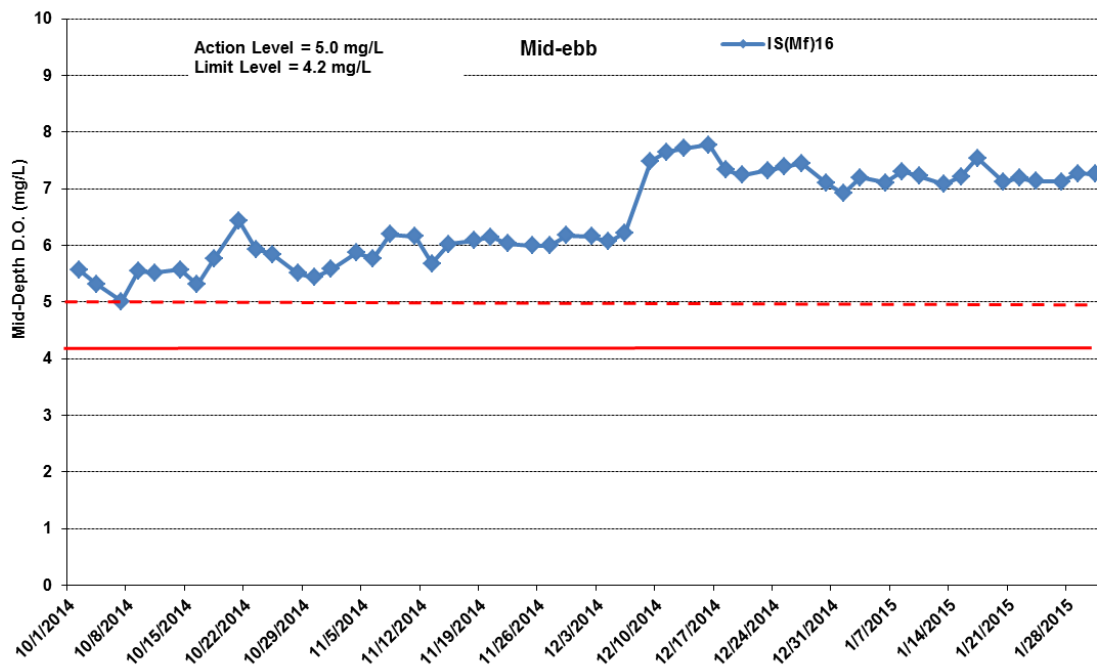


**Figure J9 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(Mf)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**

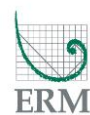




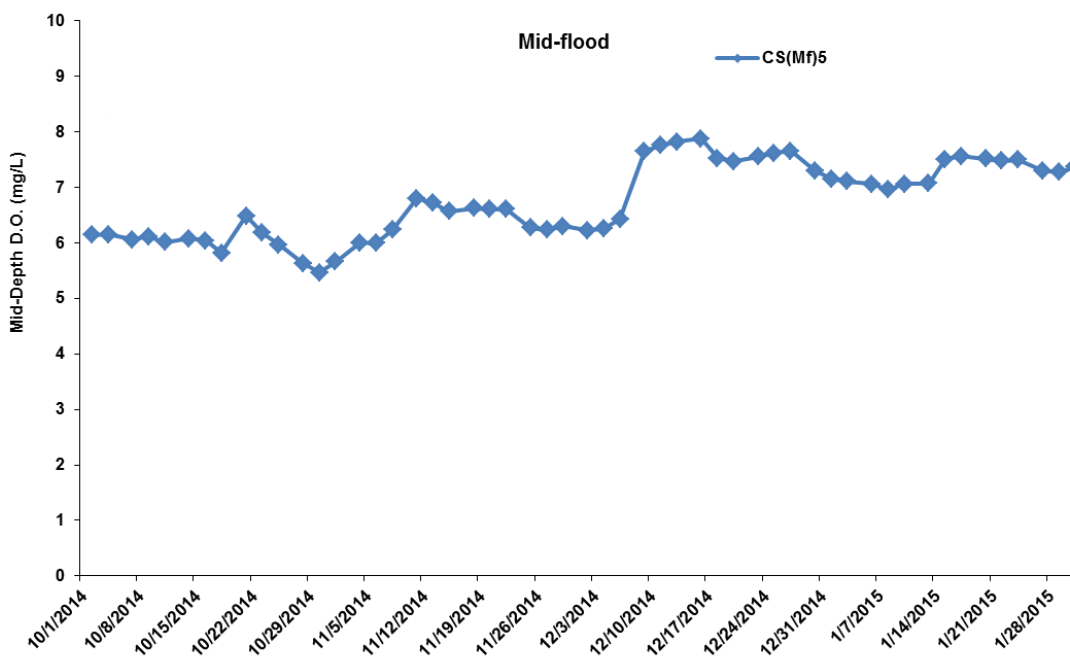
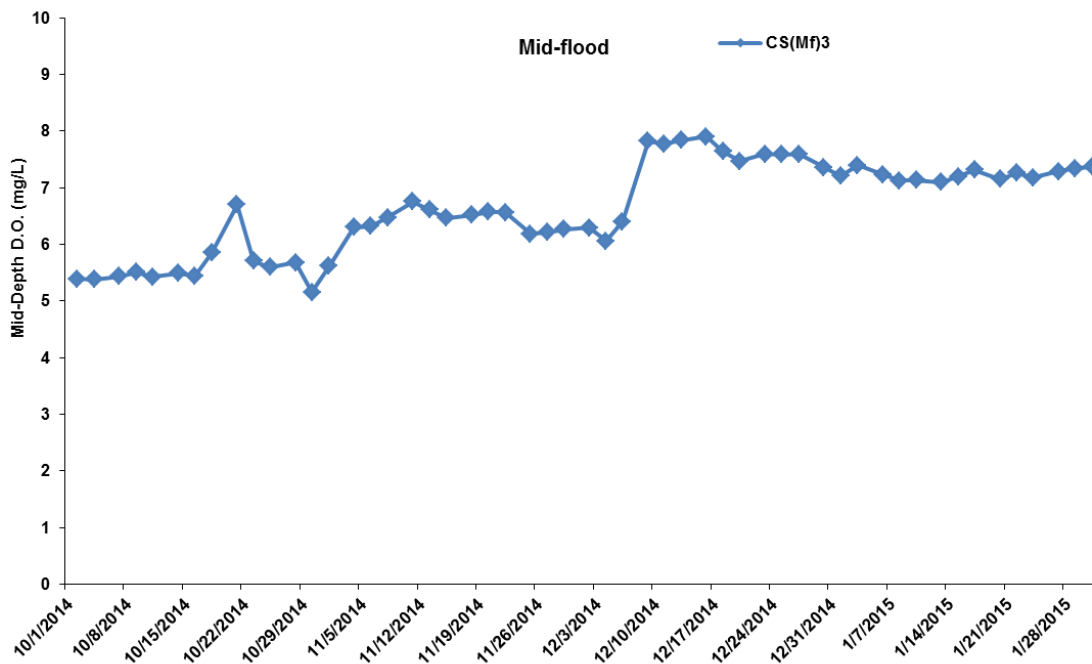
**Figure J10 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at IS(Mf)16.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





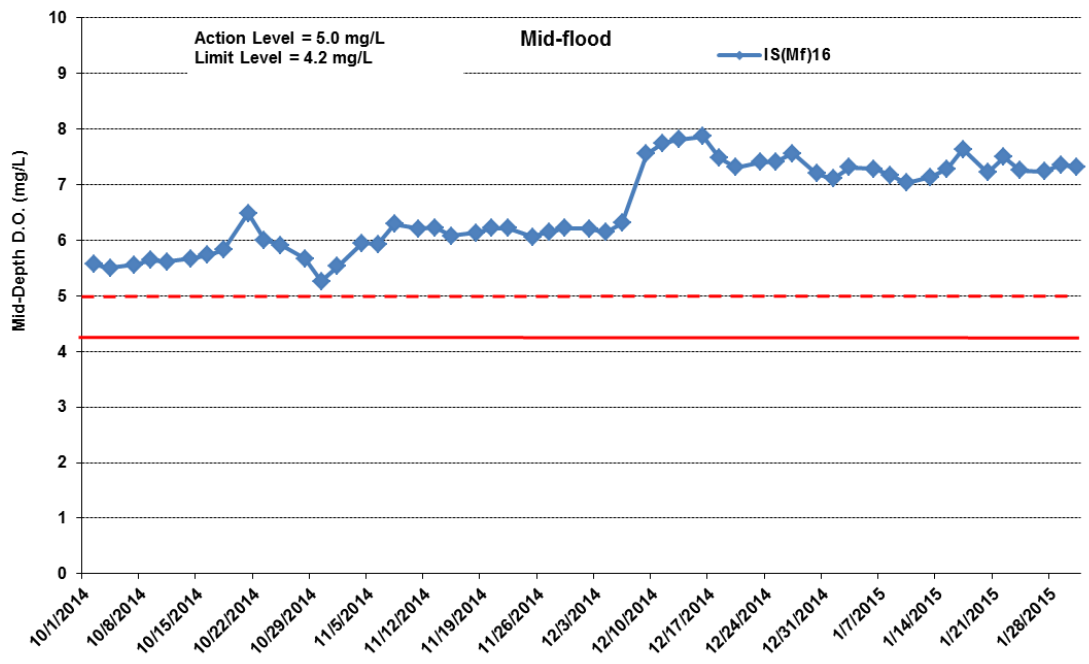


**Figure J11 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(Mf)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



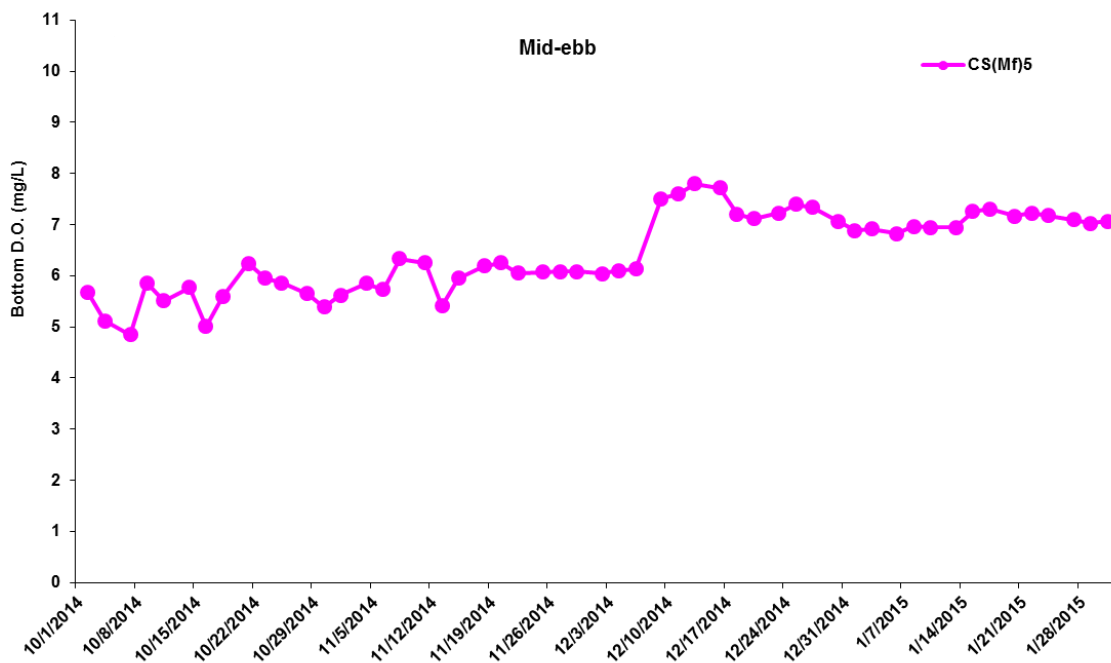
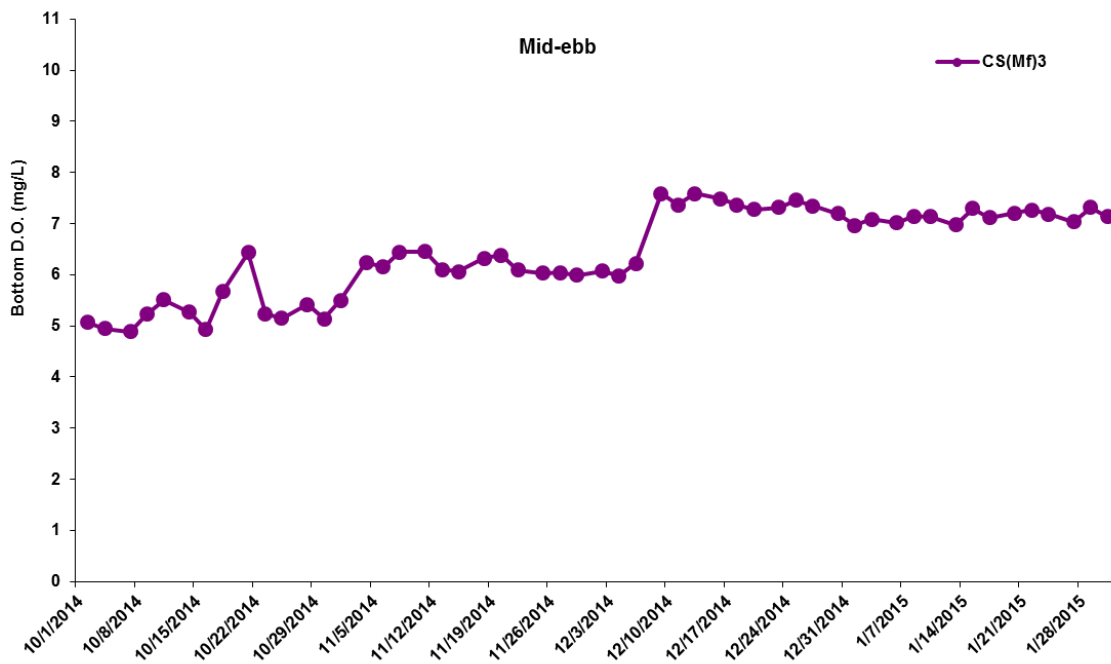


**Figure J12 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between 1 October 2014 and 31 January 2015 at IS(Mf)16.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



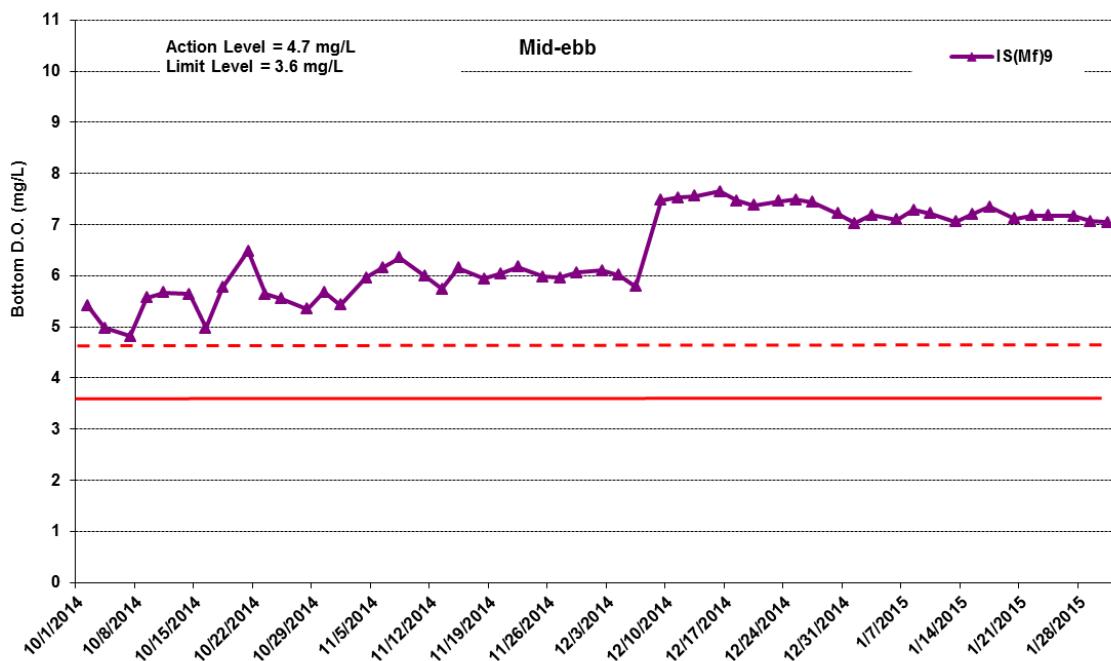
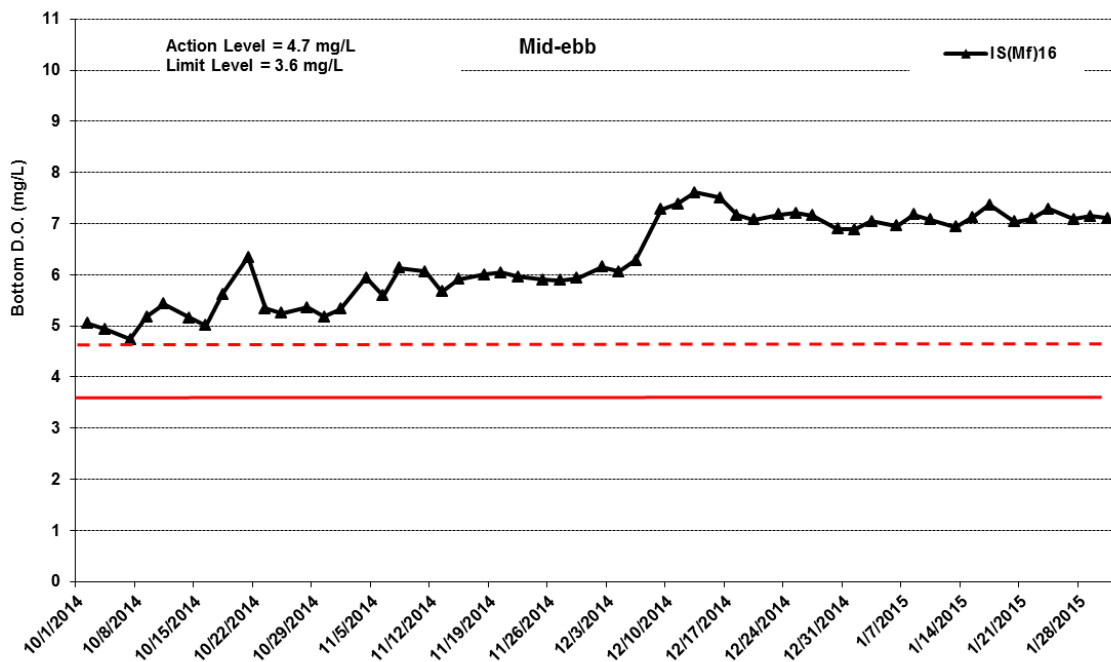


**Figure J13 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(Mf)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



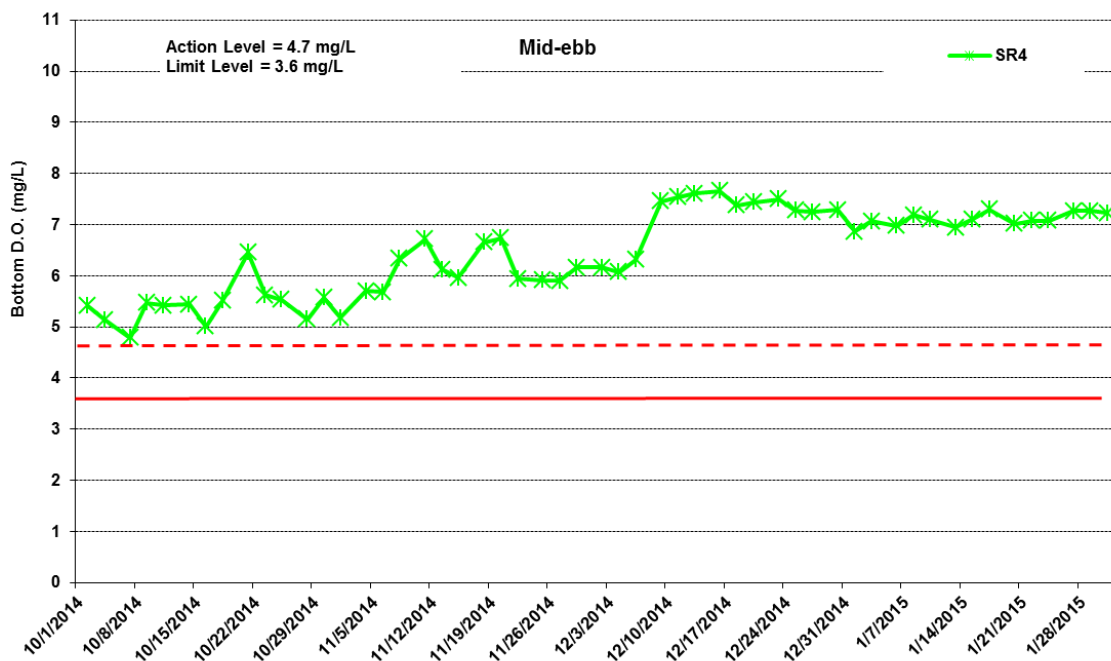
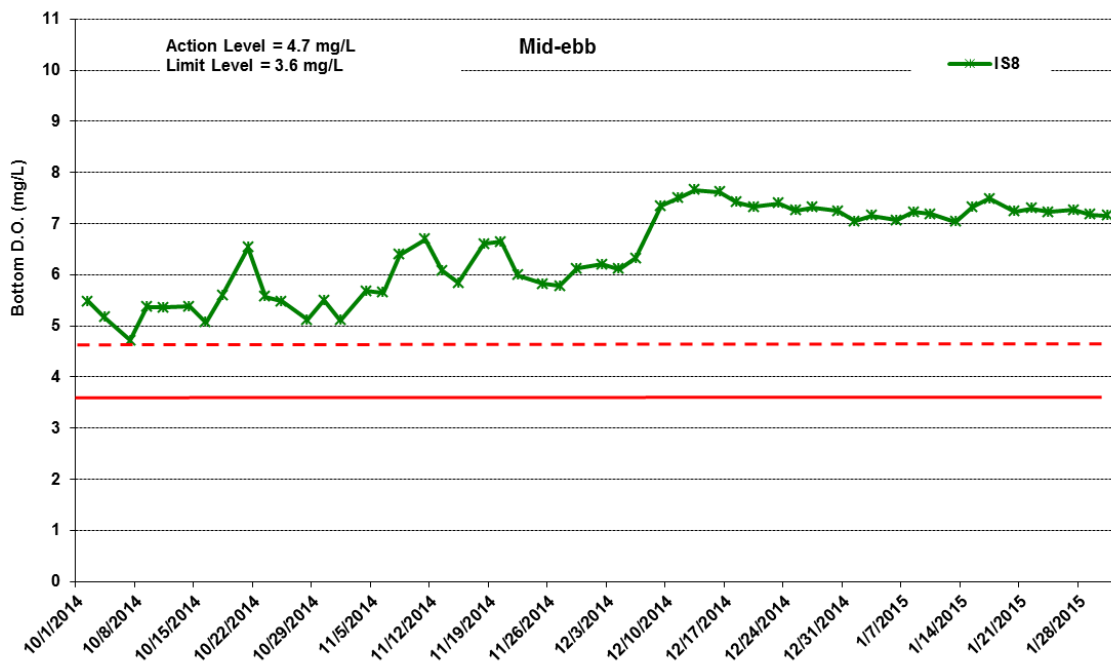


**Figure J14 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at IS(Mf)16 and IS(Mf)9.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





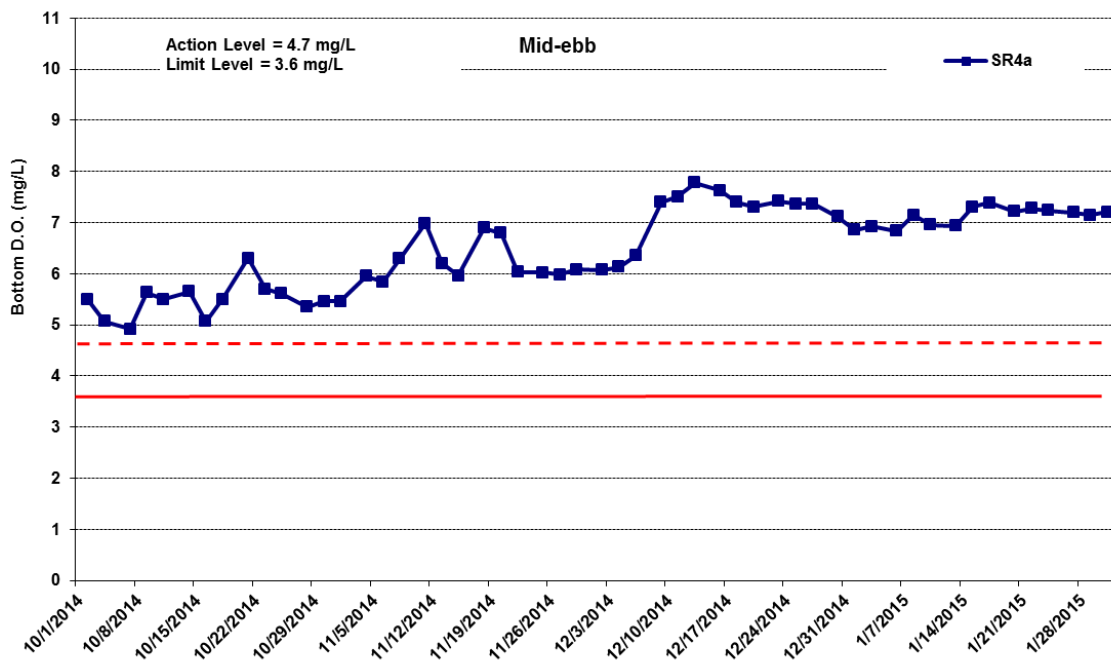
**Figure J15 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at IS8 and SR4.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





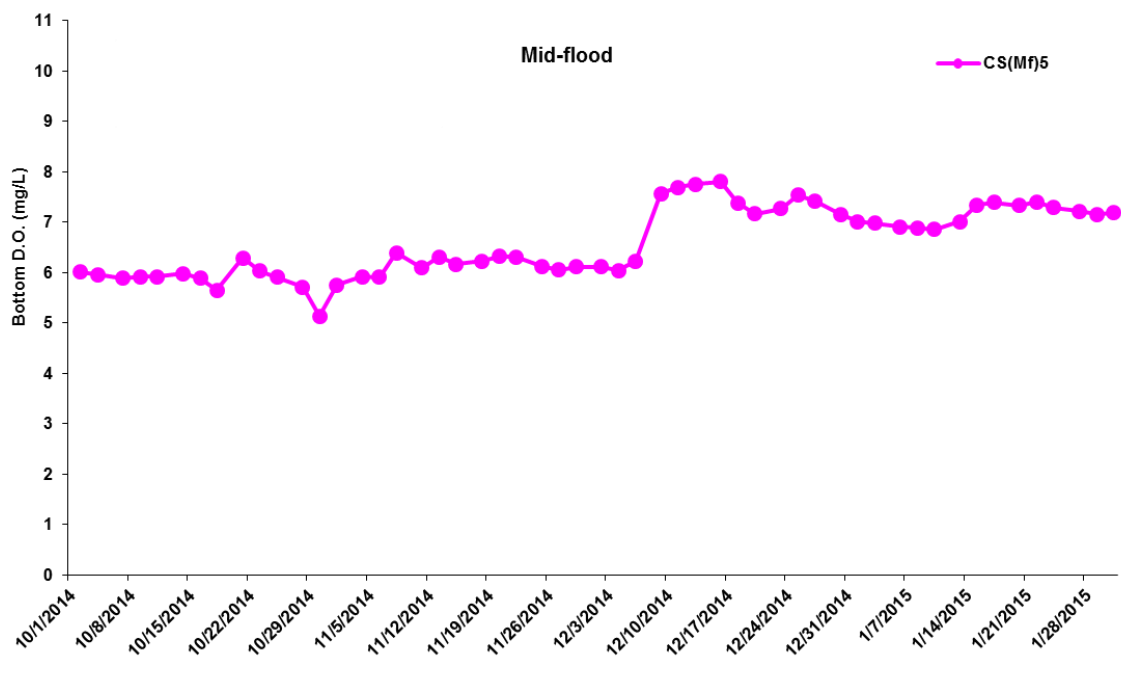
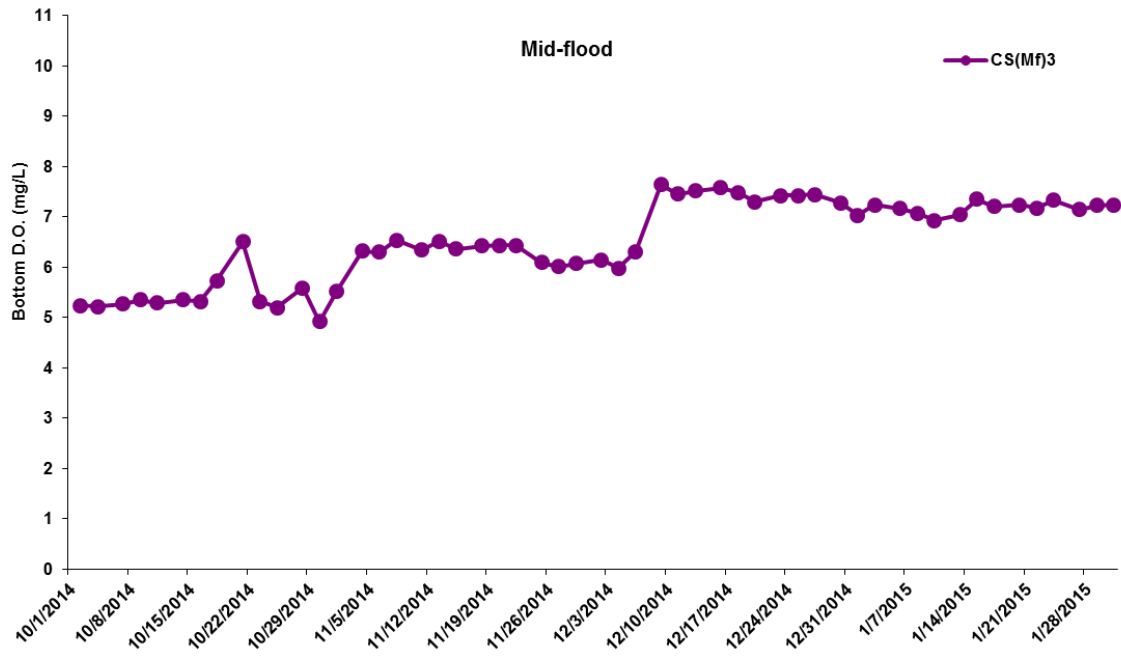


**Figure J16 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 October 2014 and 31 January 2015 at SR4a.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



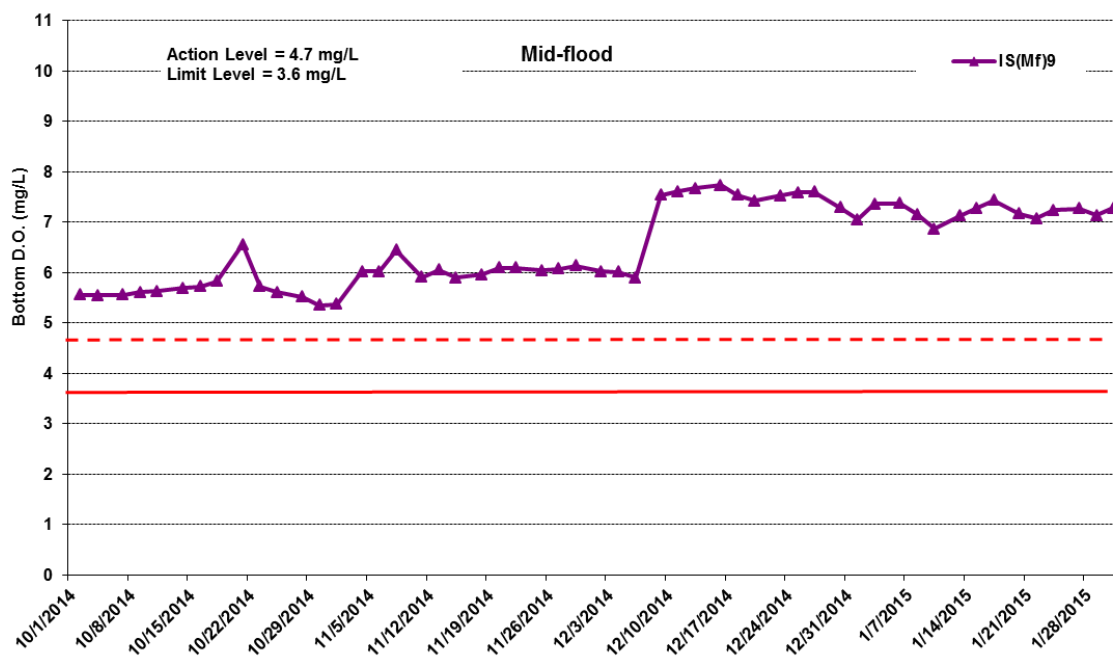
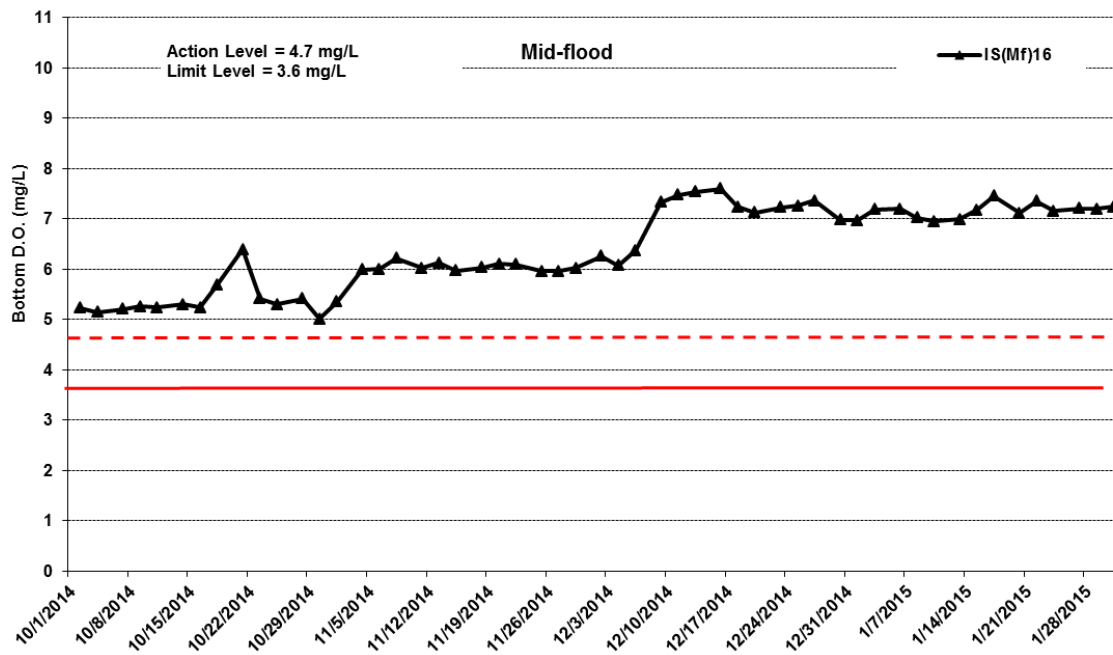


**Figure J17 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(Mf)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



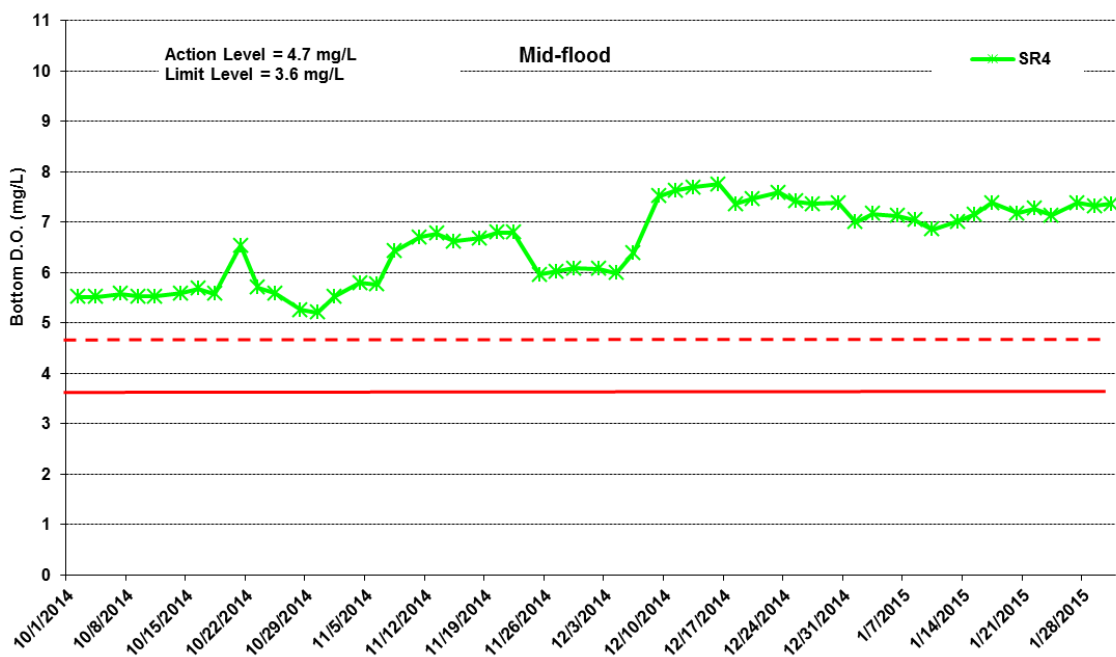
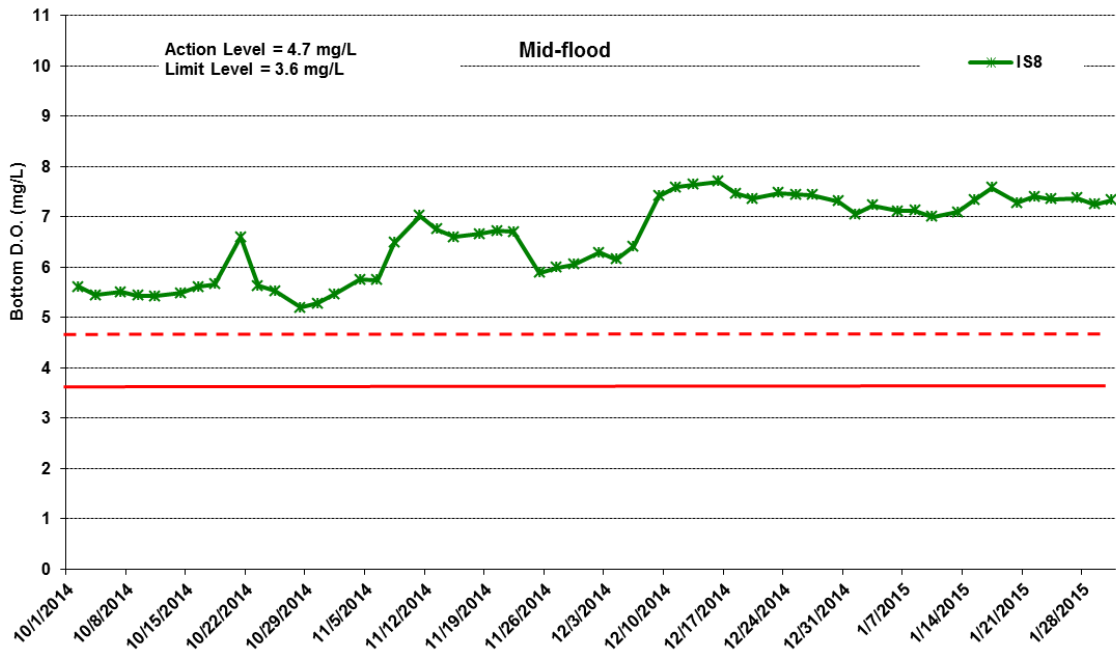


**Figure J18 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 October 2014 and 31 January 2015 at IS(Mf)16 and IS(Mf)9.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



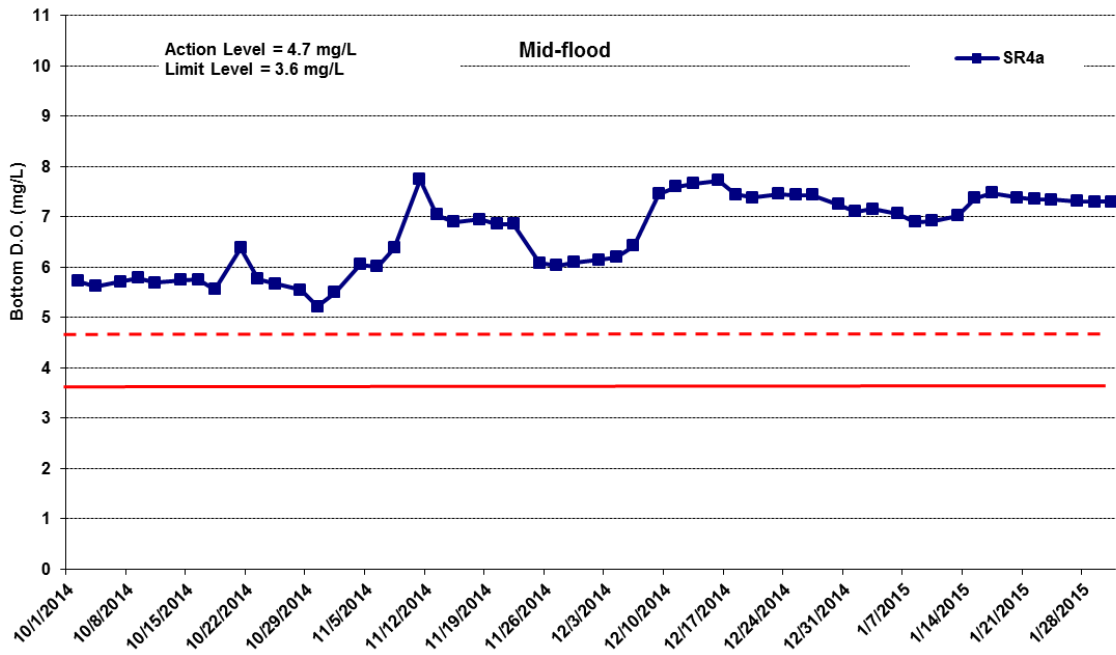


**Figure J19 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 October 2014 and 31 January 2015 at IS8 and SR4.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



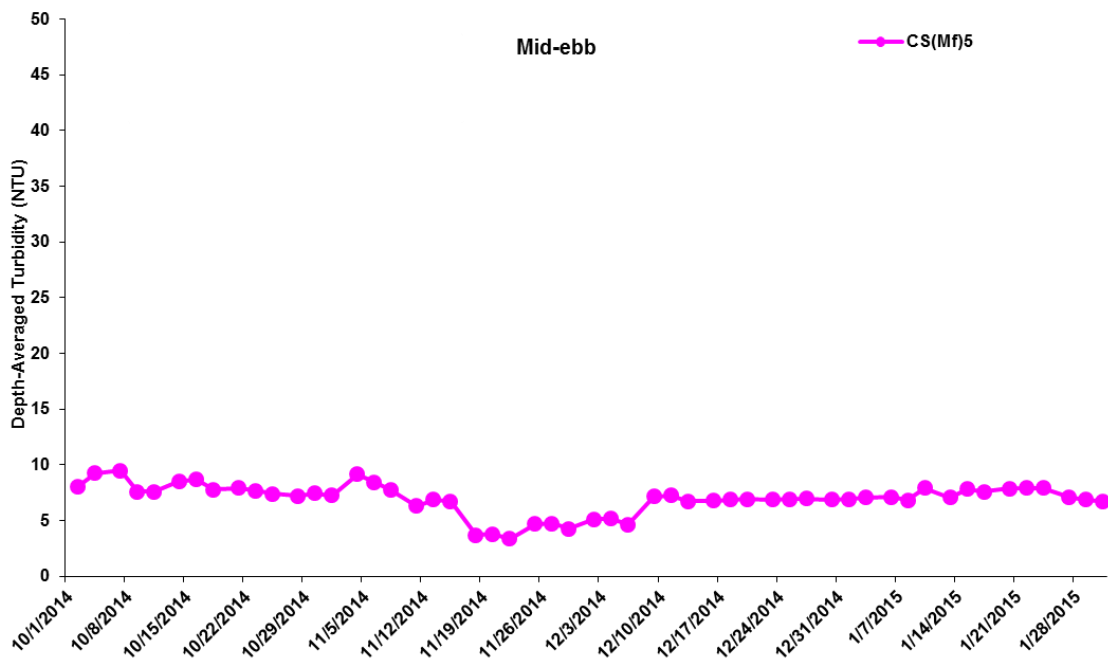
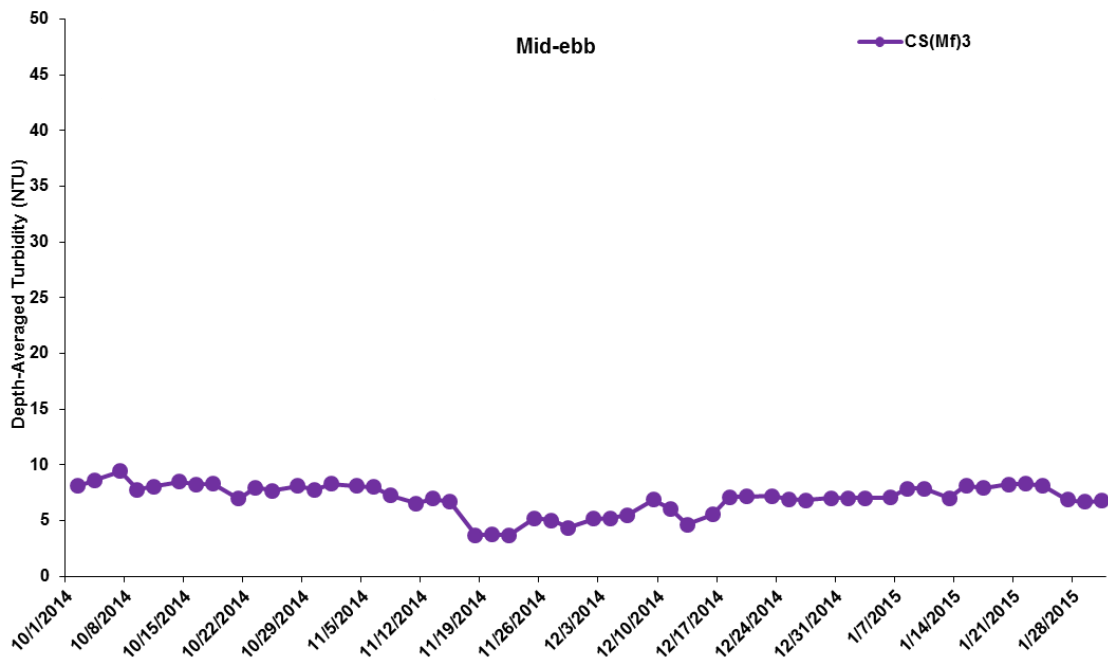


**Figure J20 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 October 2014 and 31 January 2015 at SR4a.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





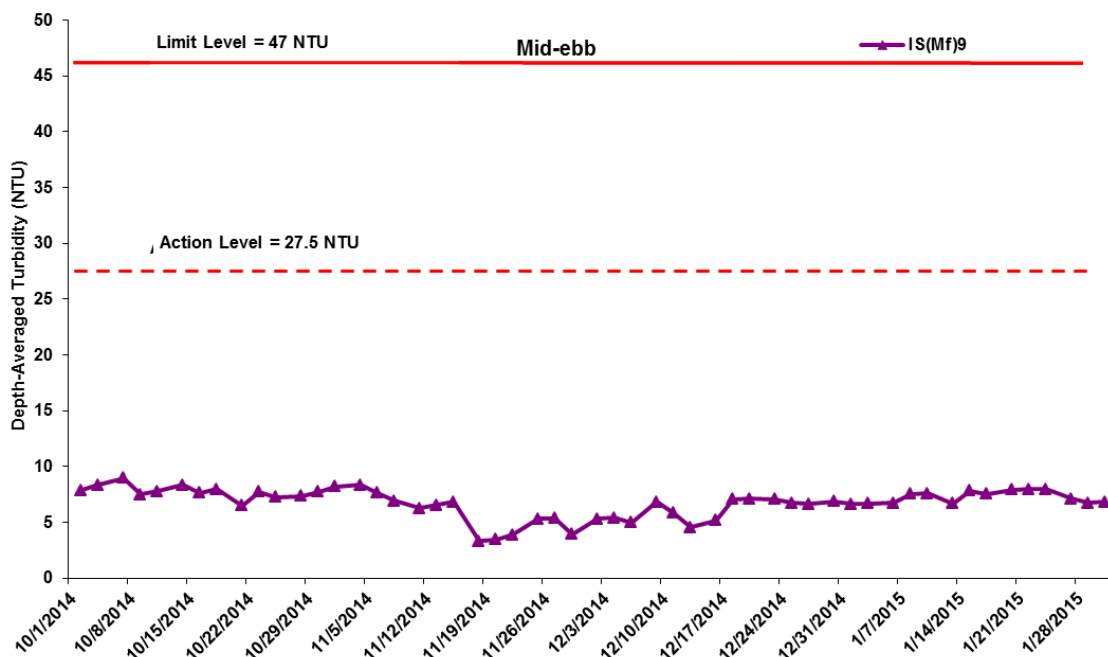
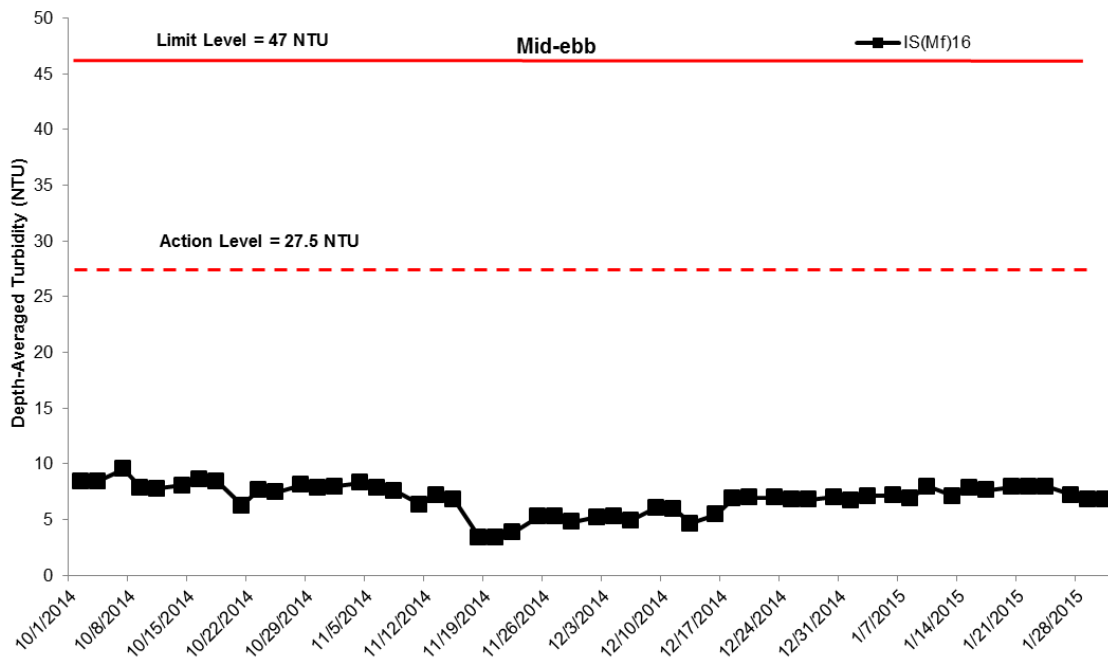
**Figure J21 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(Mf)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





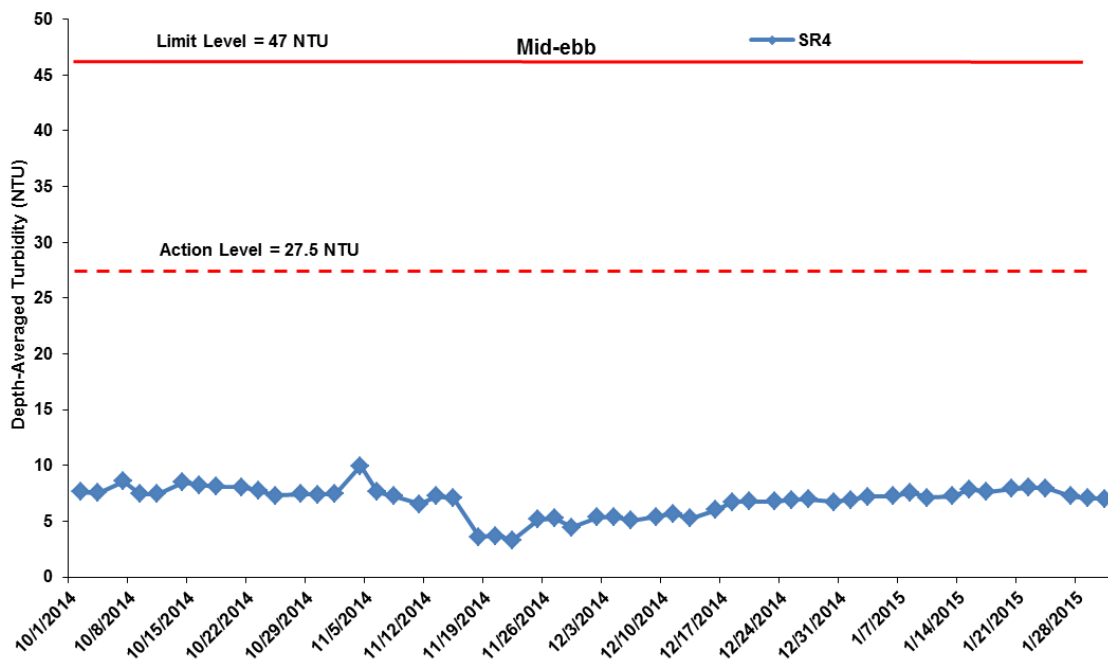
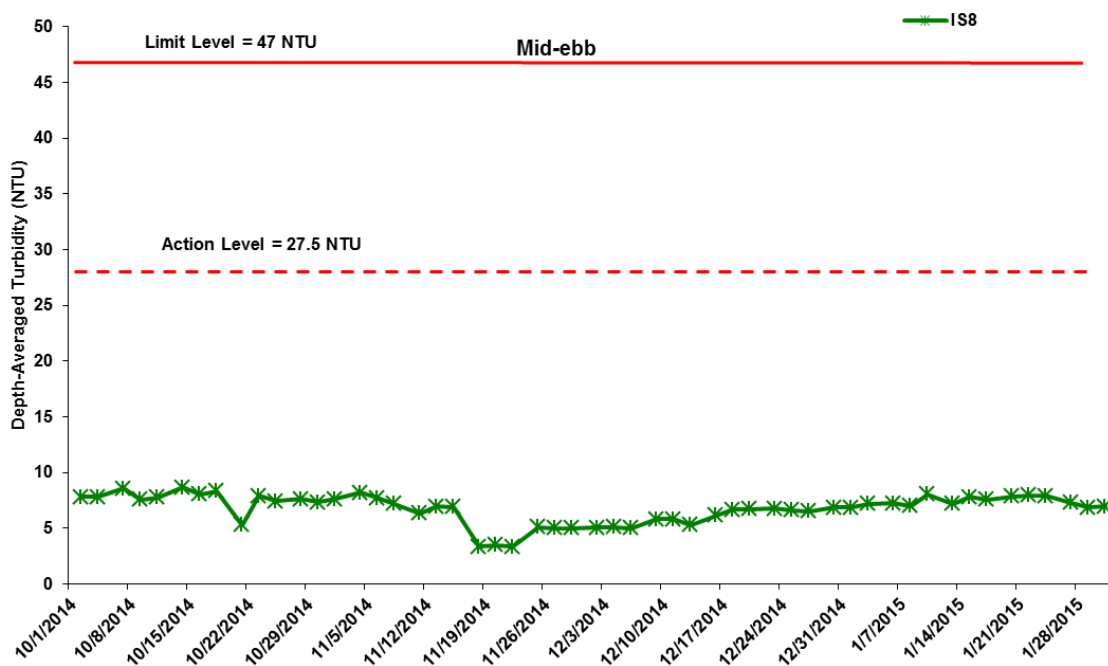


**Figure J22 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 October 2014 and 31 January 2015 at IS(Mf)16 and IS(Mf)9.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



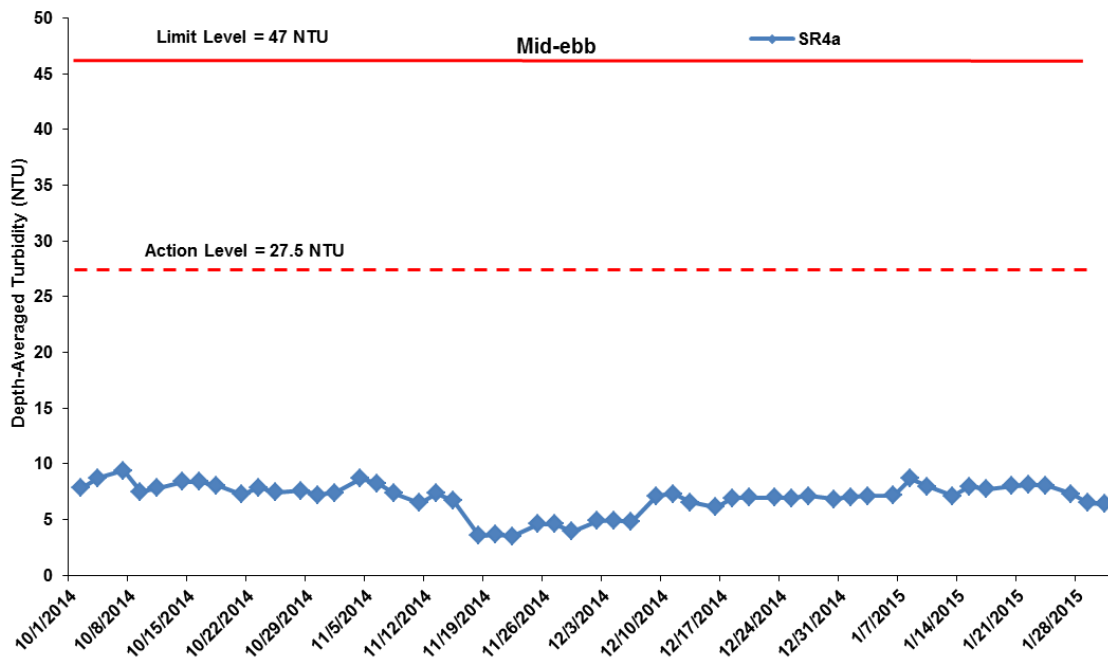


**Figure J23 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 October 2014 and 31 January 2015 at IS8 and SR4.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



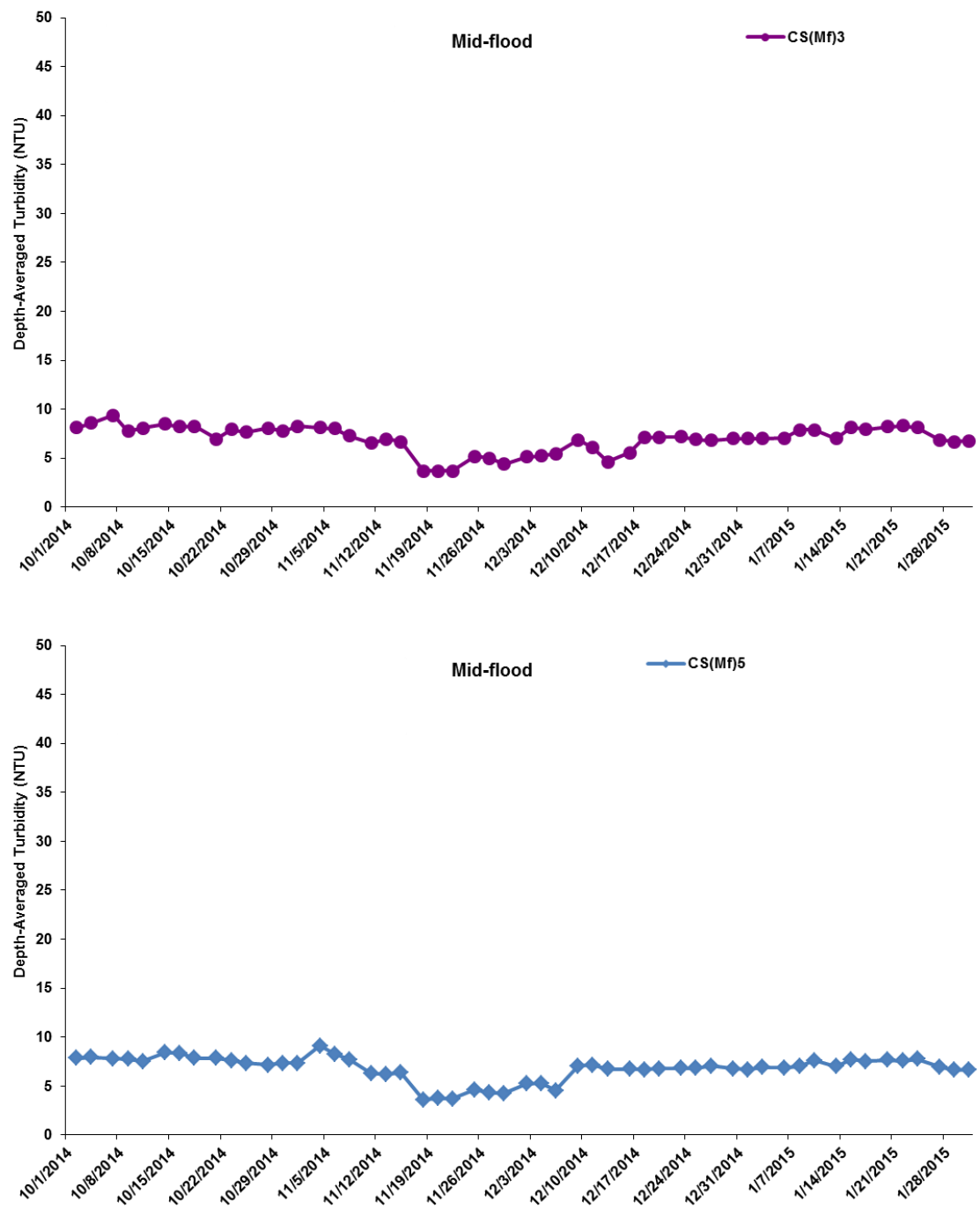


**Figure J24 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 October 2014 and 31 January 2015 at SR4a.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



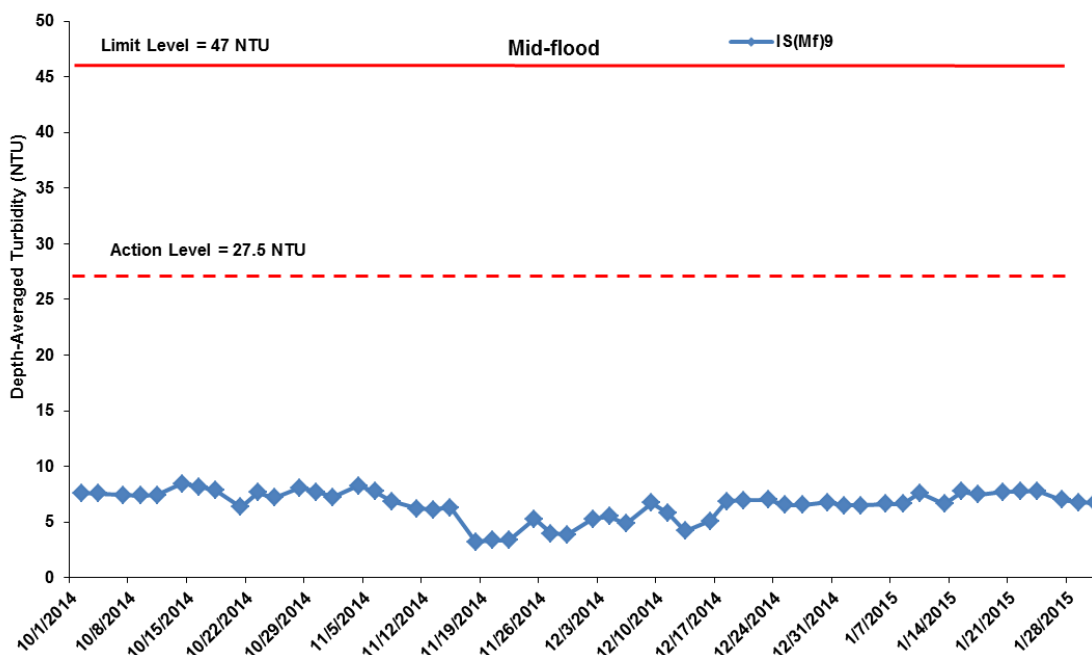
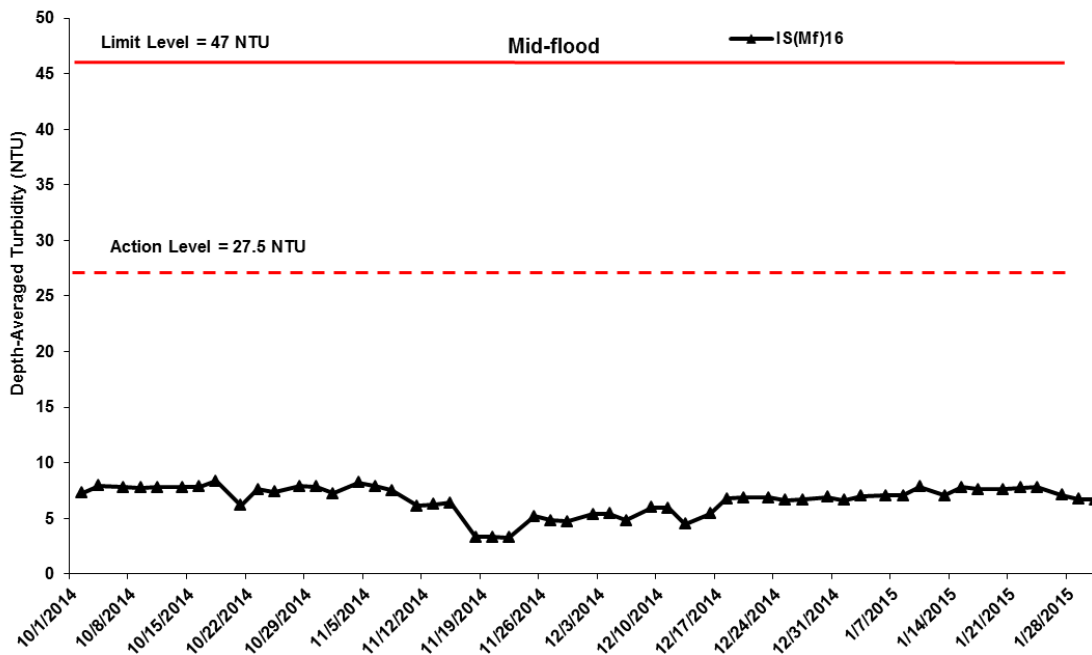


**Figure J25 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(MF)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental Resources Management**



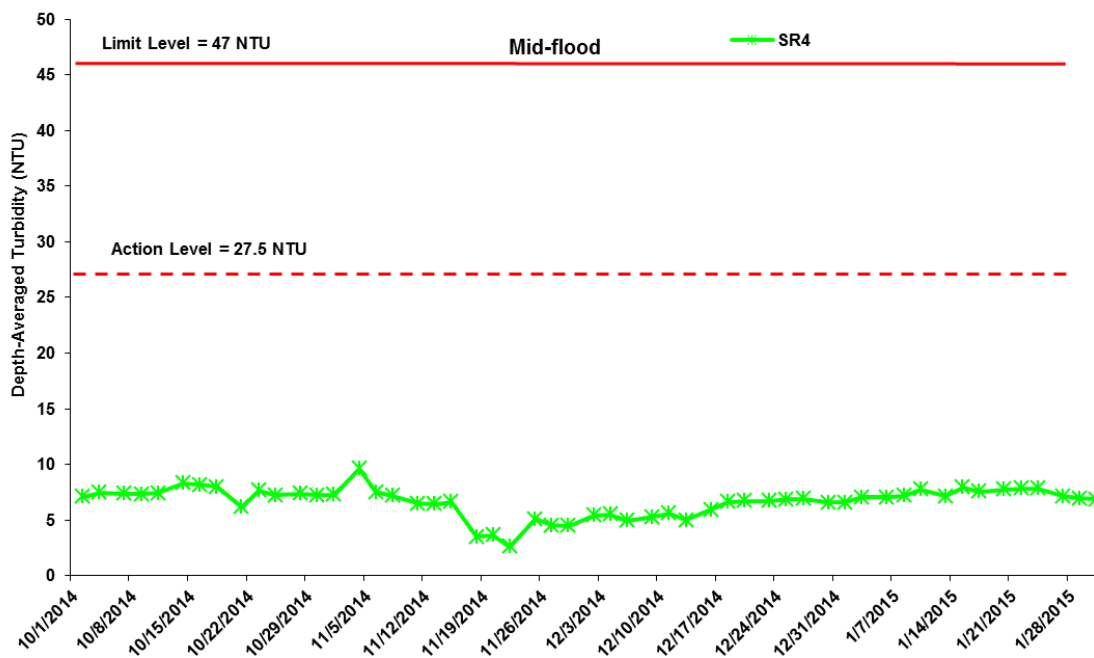
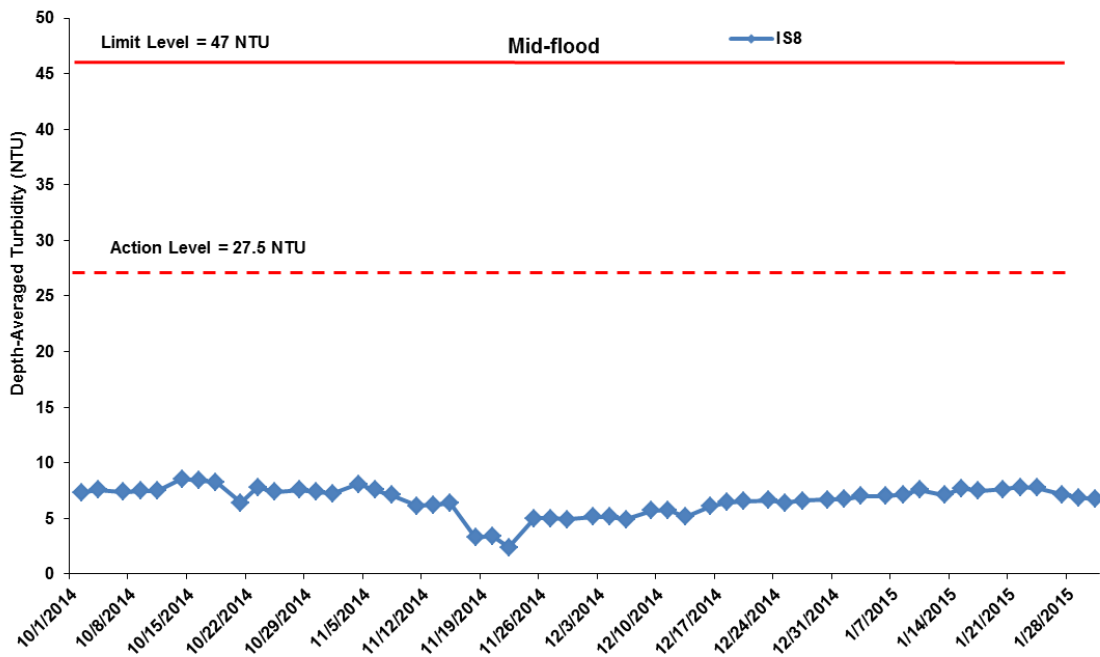


**Figure J26 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 October 2014 and 31 January 2015 at IS(Mf)16 and IS(Mf)9.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





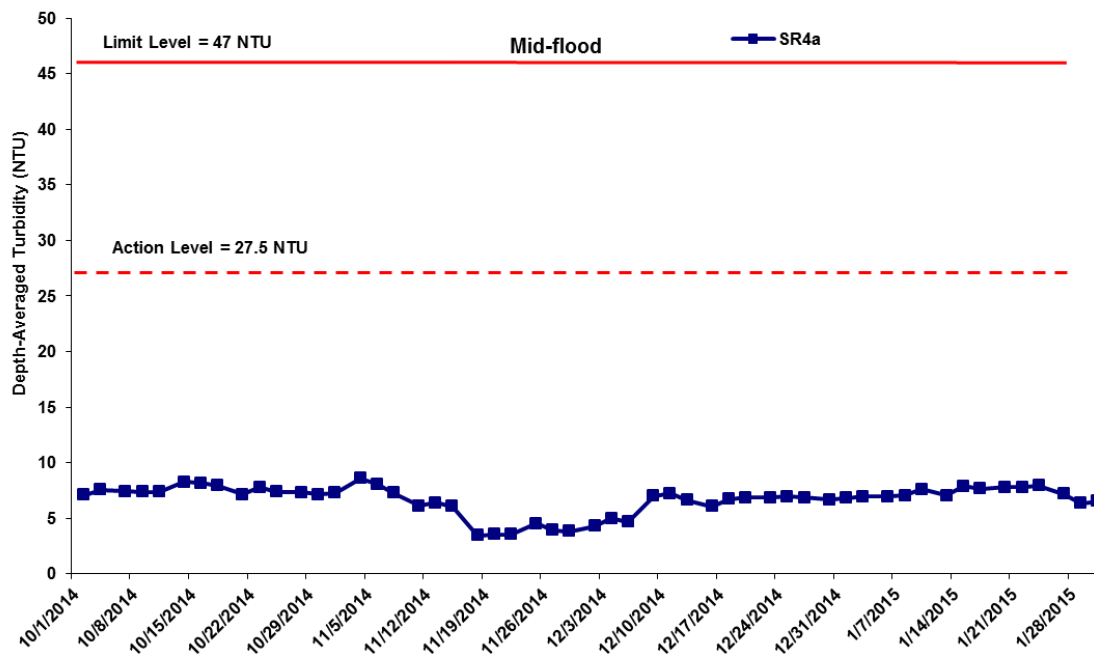
**Figure J27 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 October 2014 and 31 January 2015 at IS8 and SR4.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





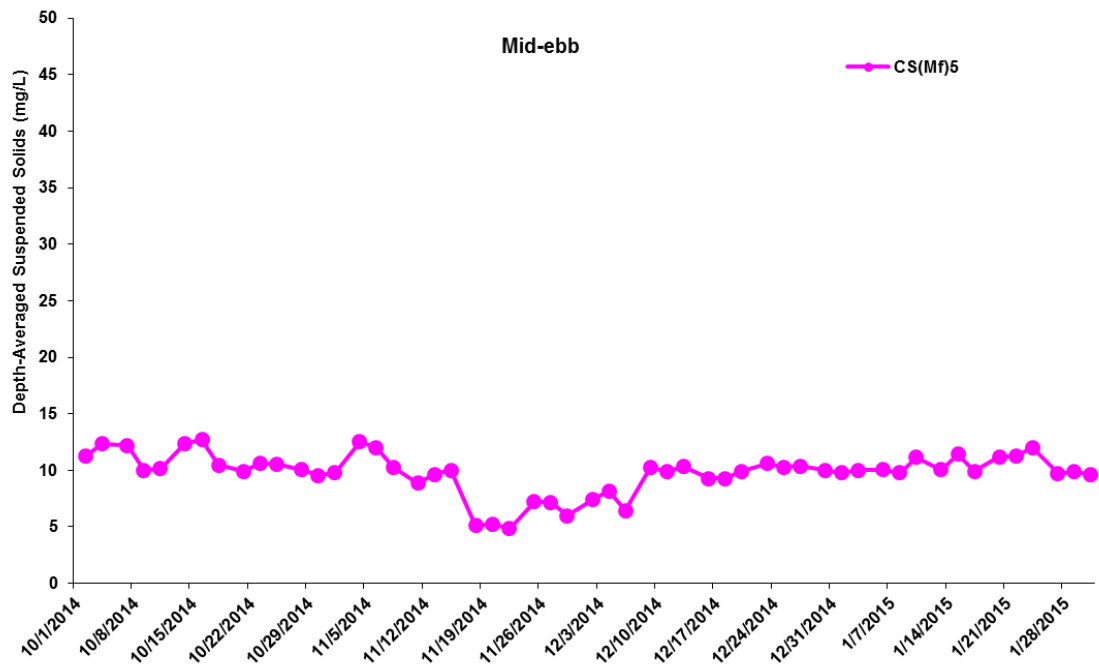
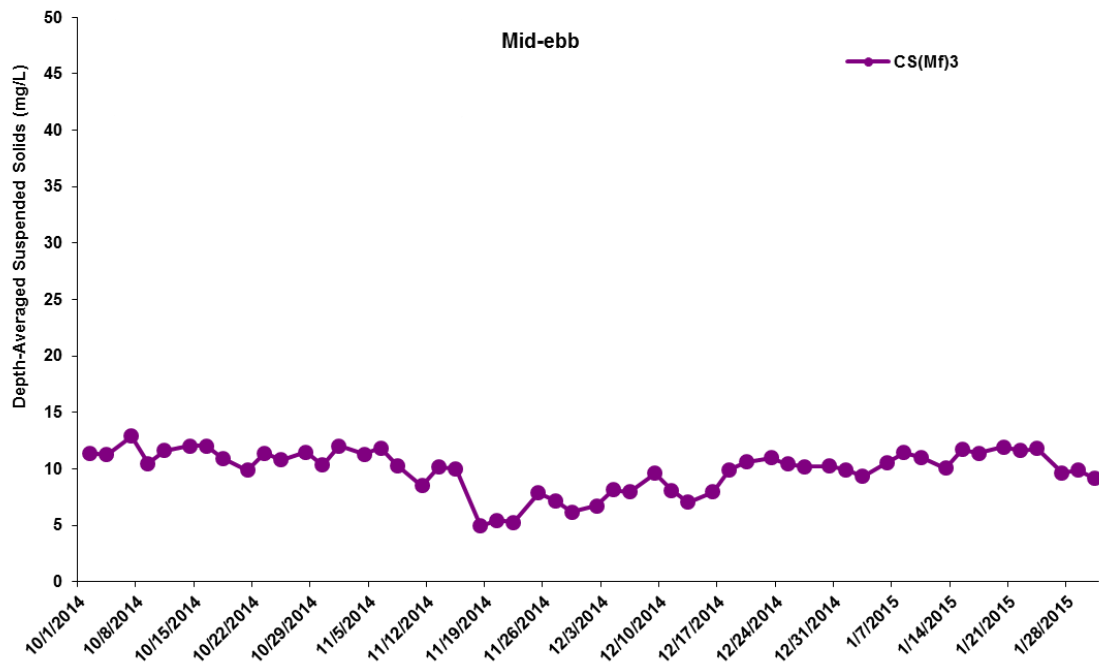


**Figure J28 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 October 2014 and 31 January 2015 at SR4a.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



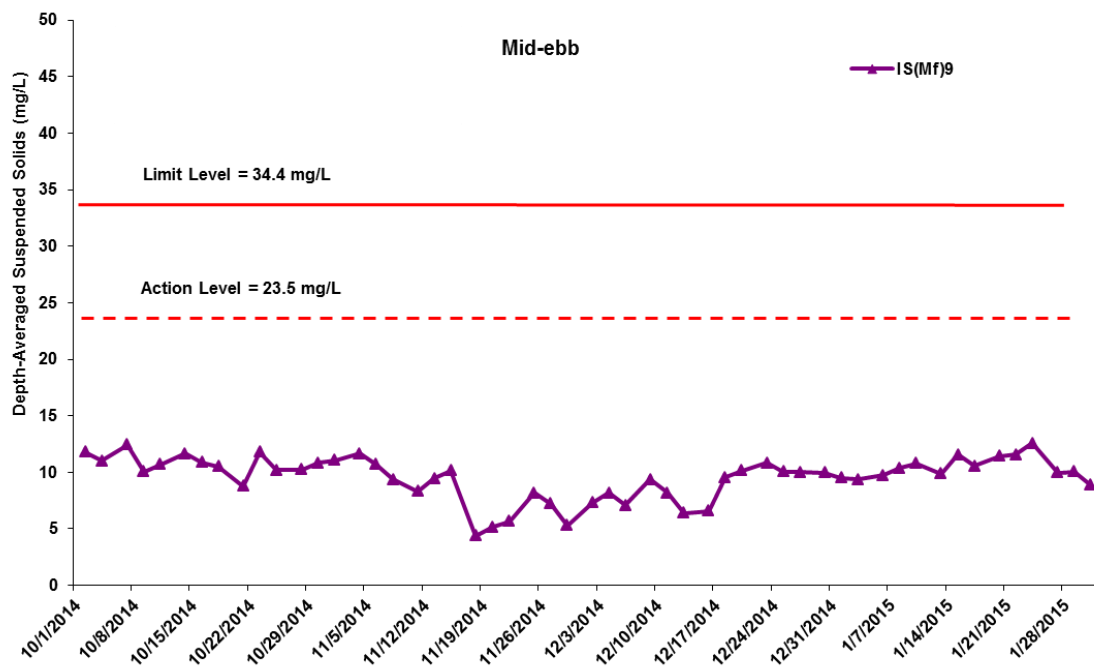
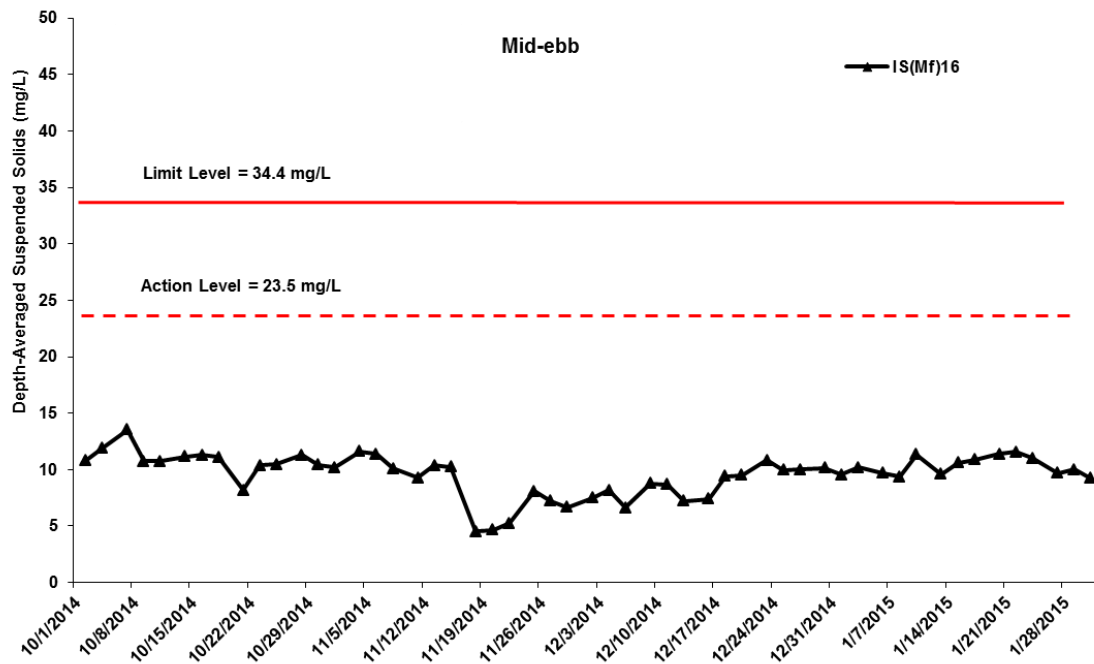


**Figure J29 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(Mf)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



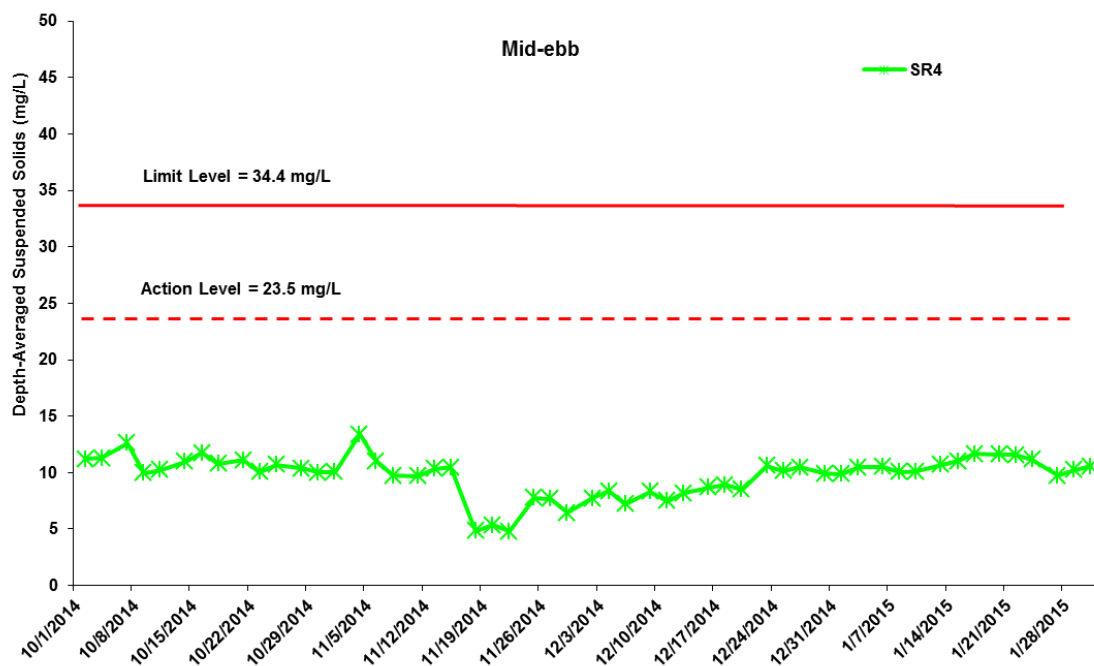
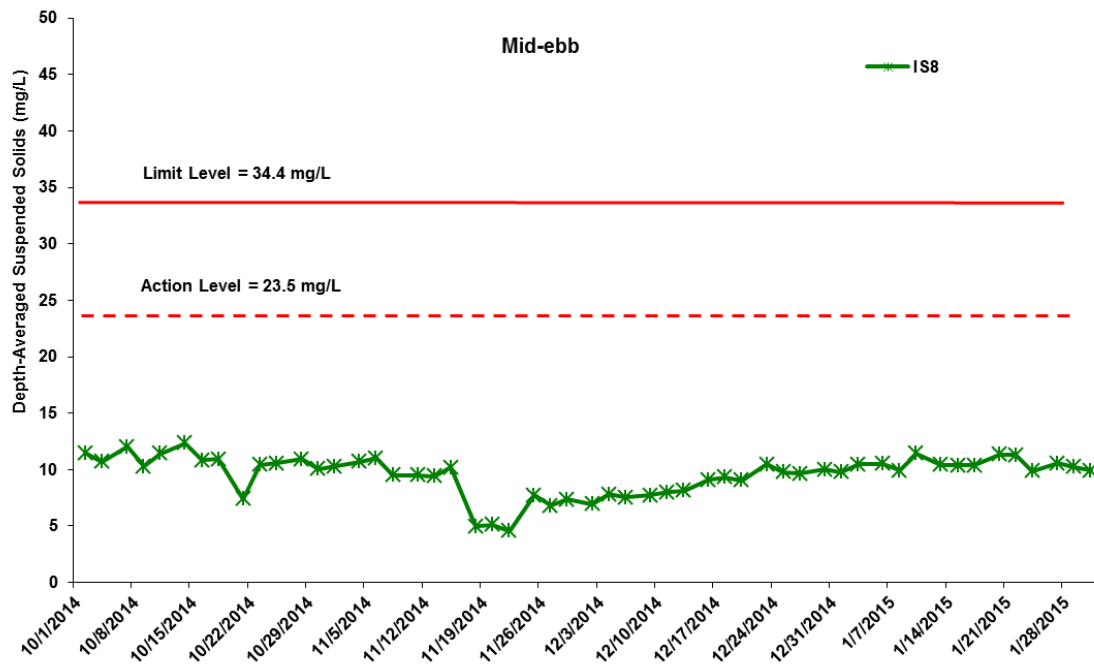


**Figure J30 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 October 2014 and 31 January 2015 at IS(Mf)16 and IS(Mf)9.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



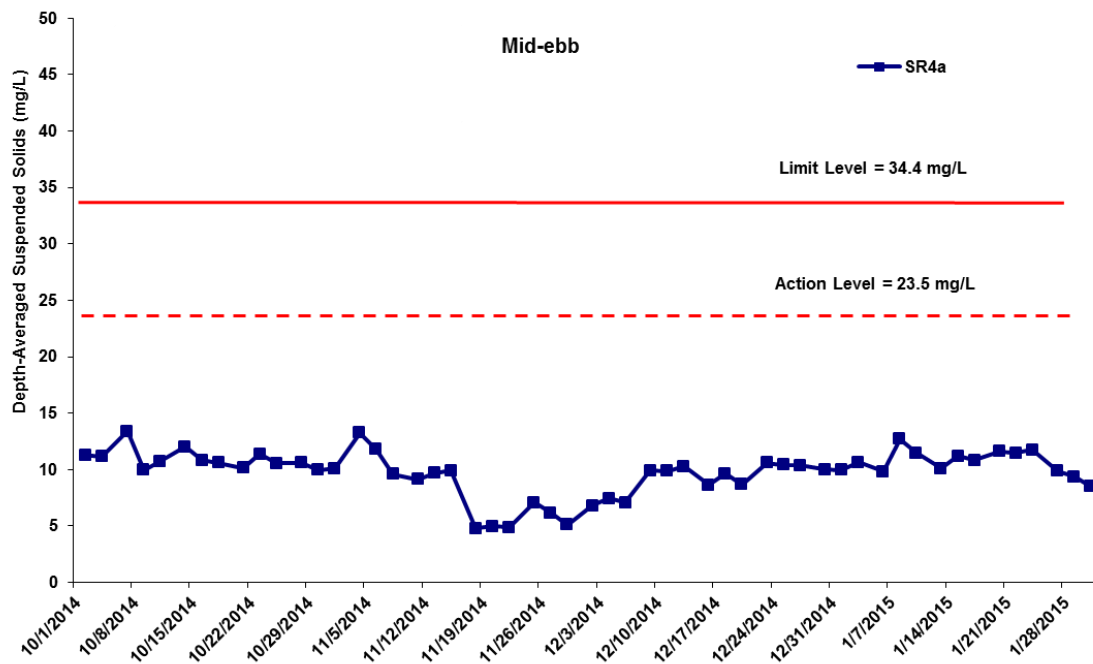


**Figure J31 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 October 2014 and 31 January 2015 at IS8 and SR4.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



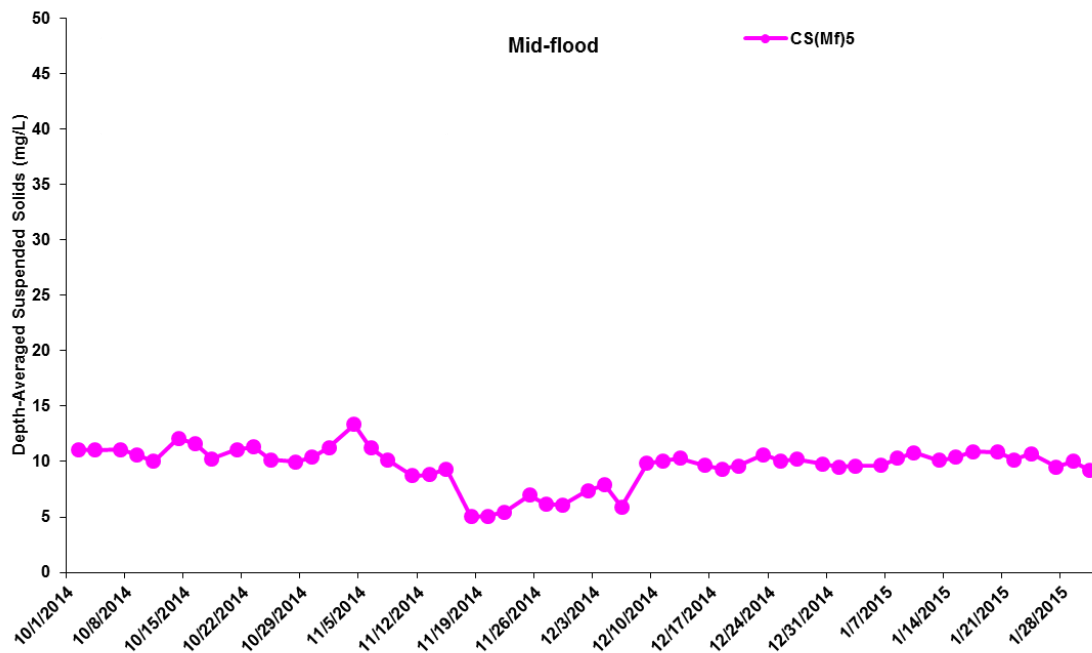
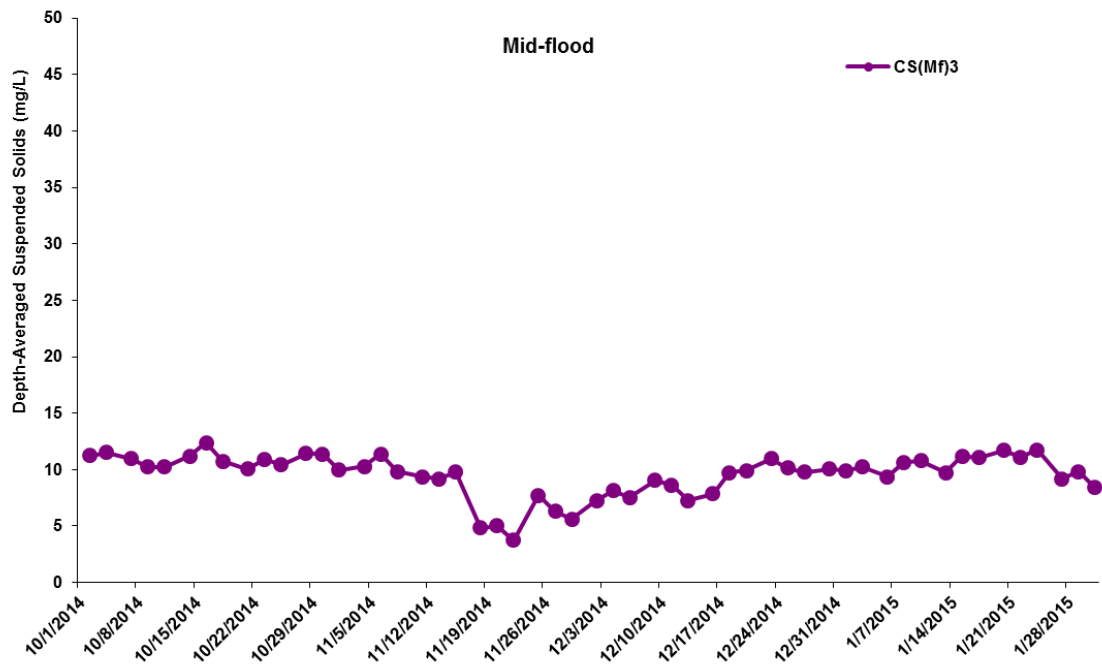


**Figure J32 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 October 2014 and 31 January 2015 at SR4a.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





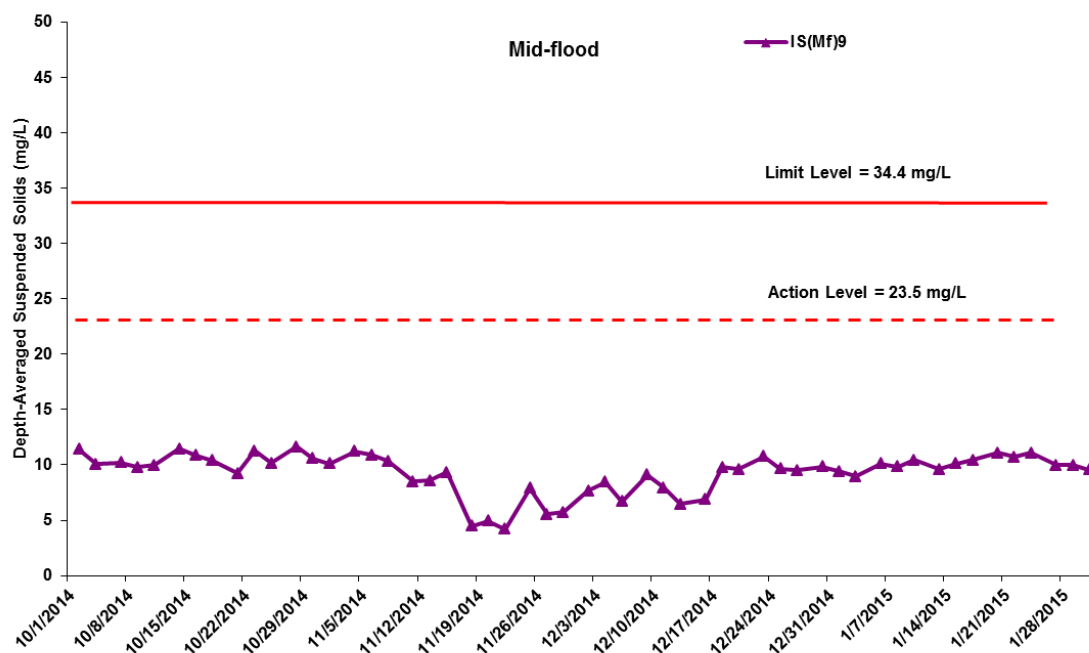
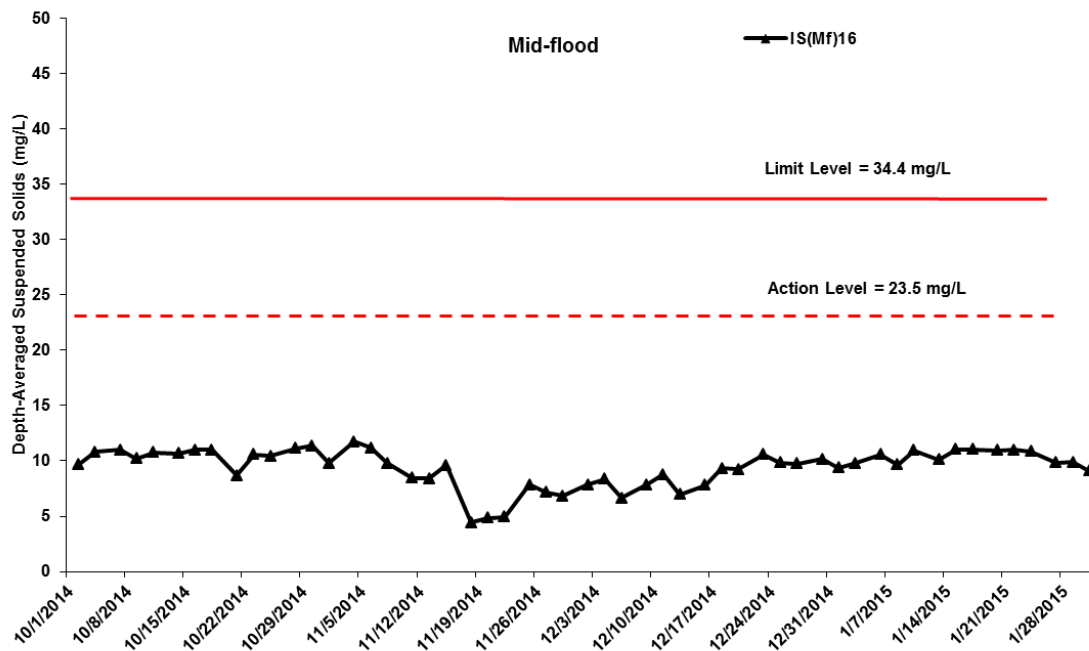
**Figure J33 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 October 2014 and 31 January 2015 at CS(Mf)3 and CS(Mf)5.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





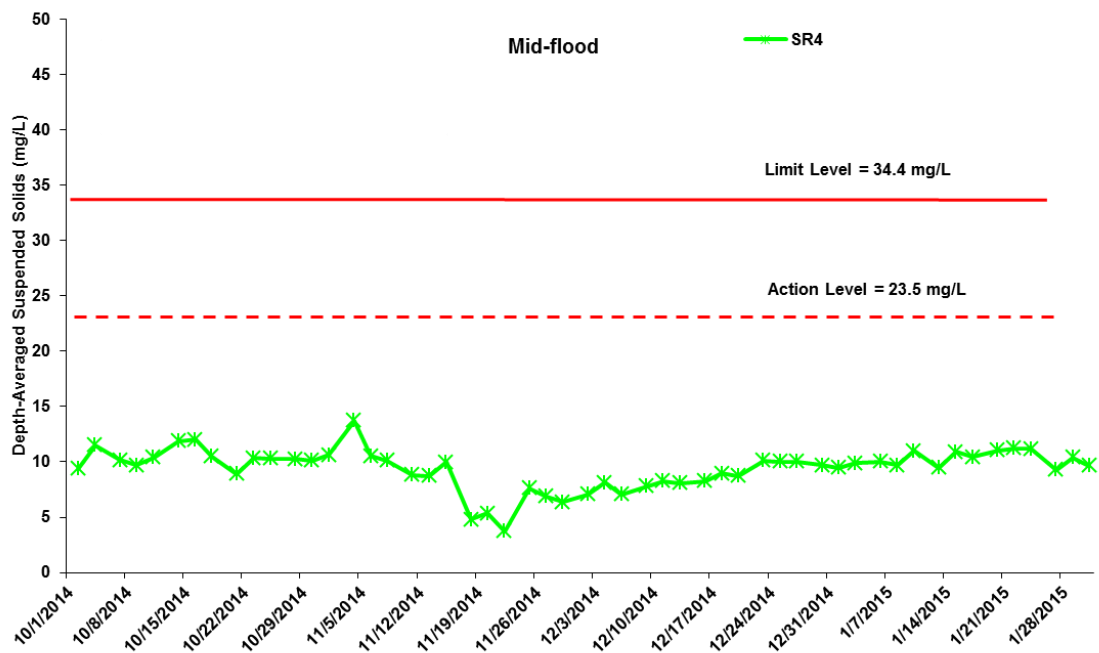
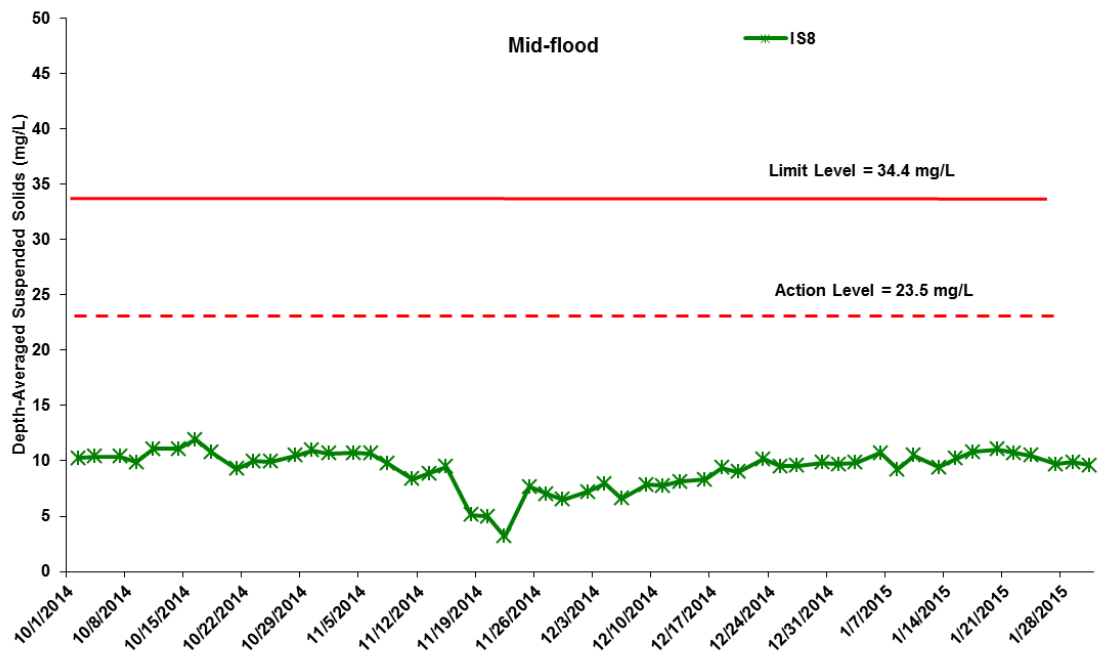


**Figure J34 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 October 2014 and 31 January 2015 at IS(Mf)16 and IS(Mf)9.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



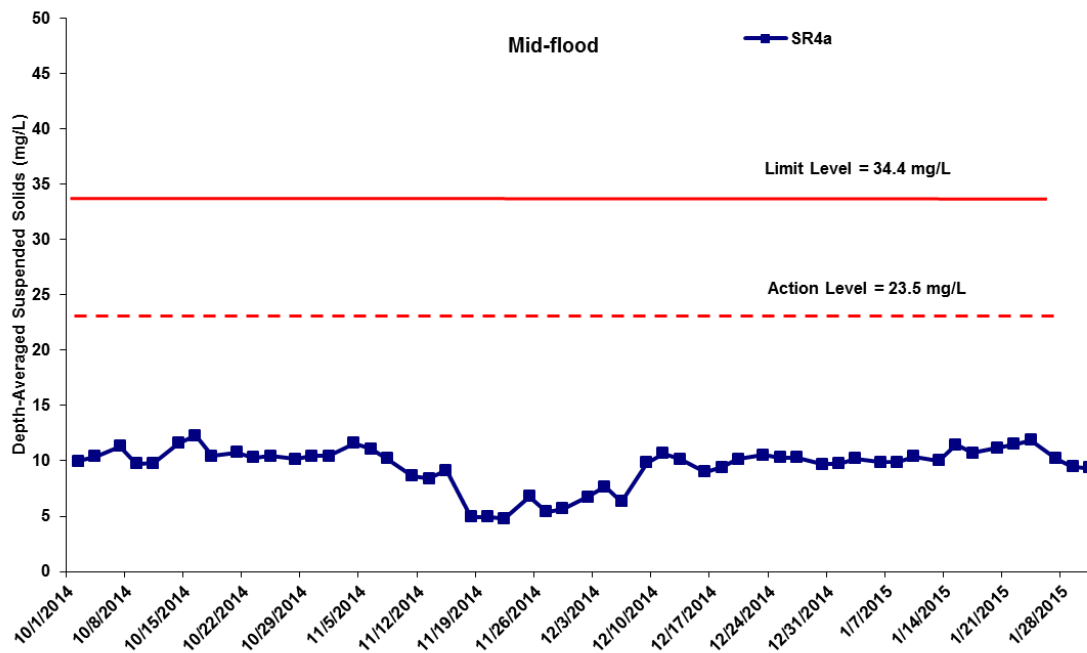


**Figure J35 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 October 2014 and 31 January 2015 at IS8 and SR4.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**





**Figure J36 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 October 2014 and 31 January 2015 at SR4a.**

*(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.)*

**Environmental  
Resources  
Management**



Appendix K

## Impact Dolphin Monitoring Survey Results

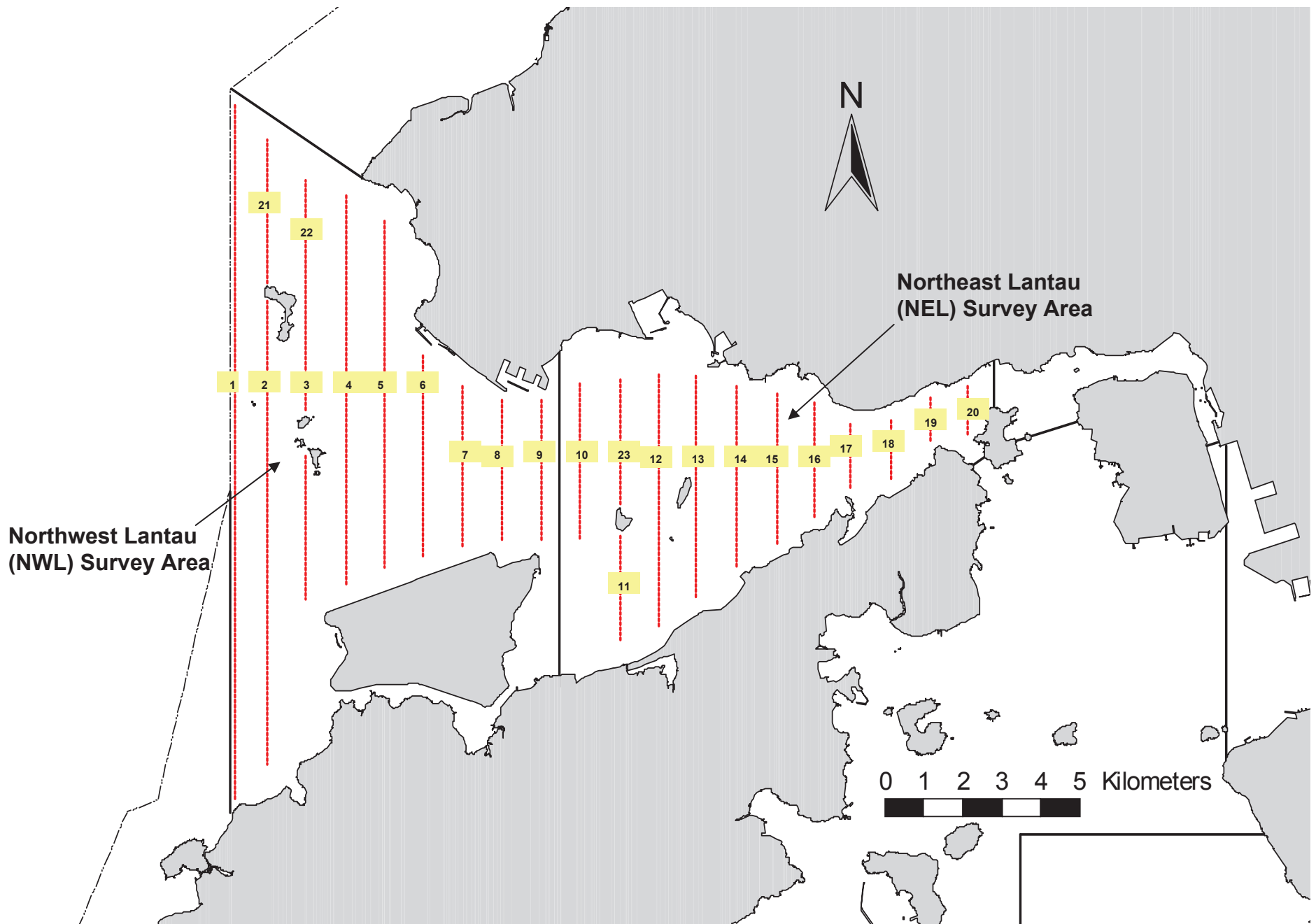


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas

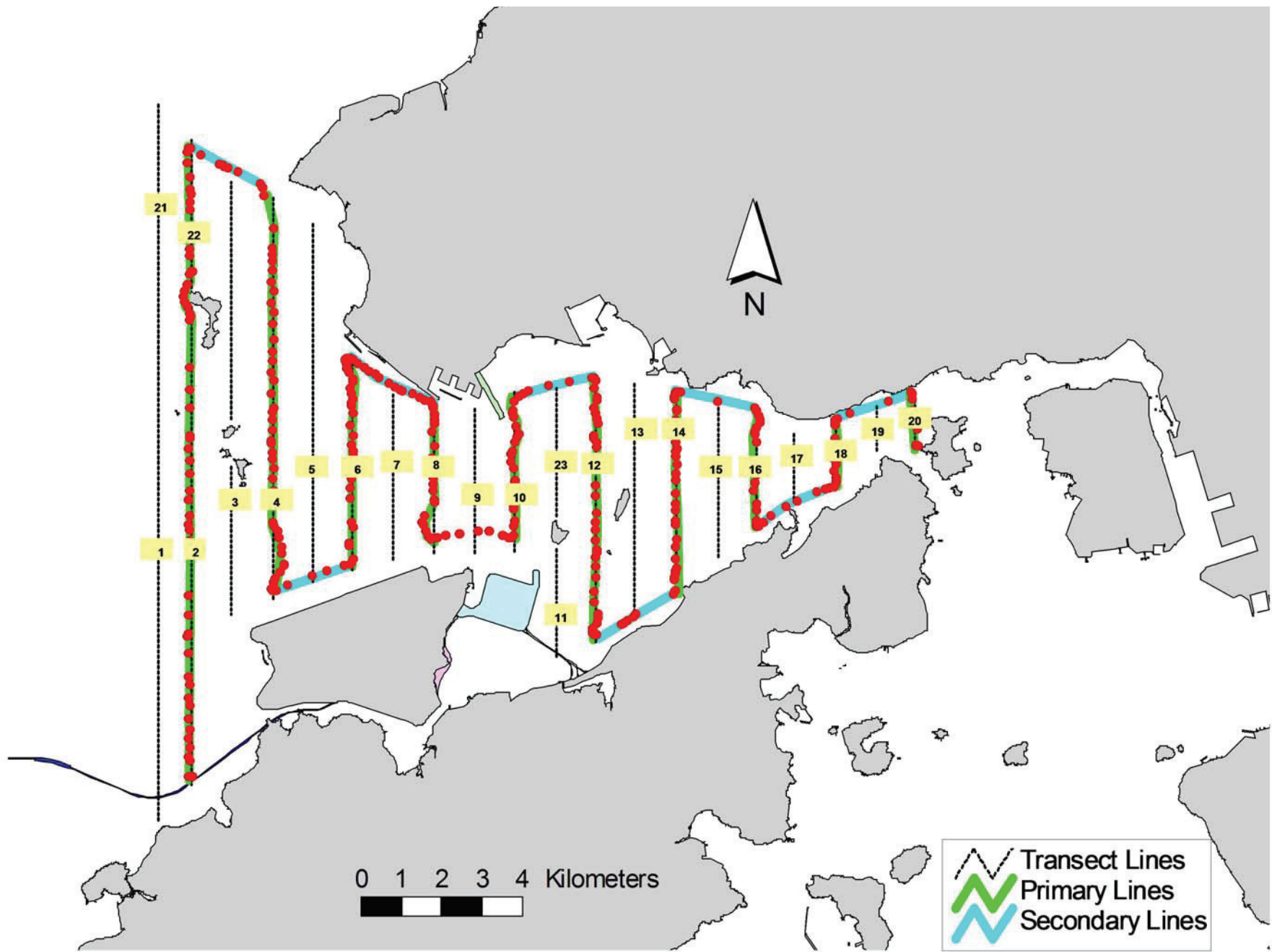


Figure 2. Survey Route on January 8<sup>th</sup>, 2015 (from HKLR03 project)



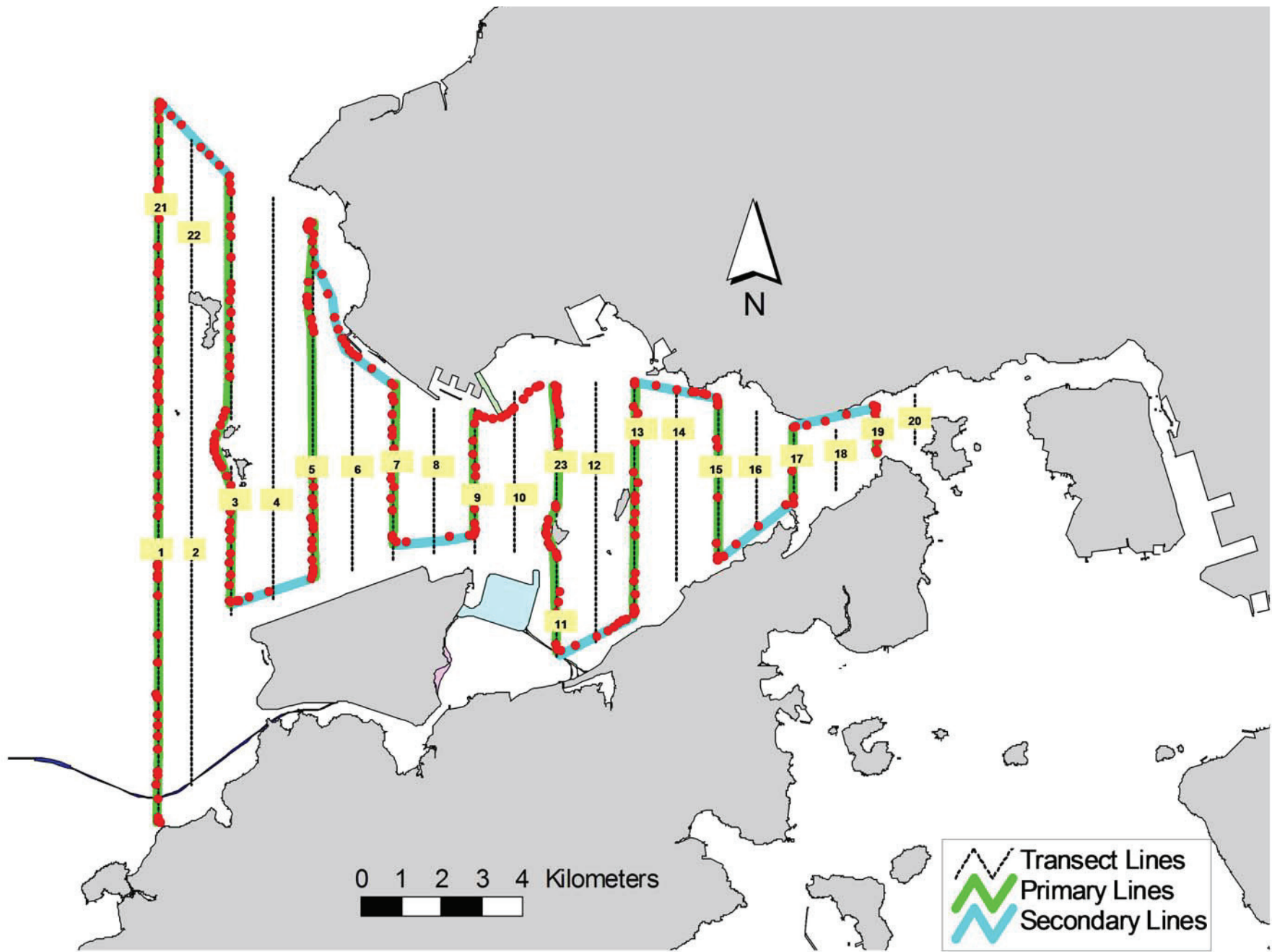


Figure 3. Survey Route on January 15<sup>th</sup>, 2015 (from HKLR03 project)

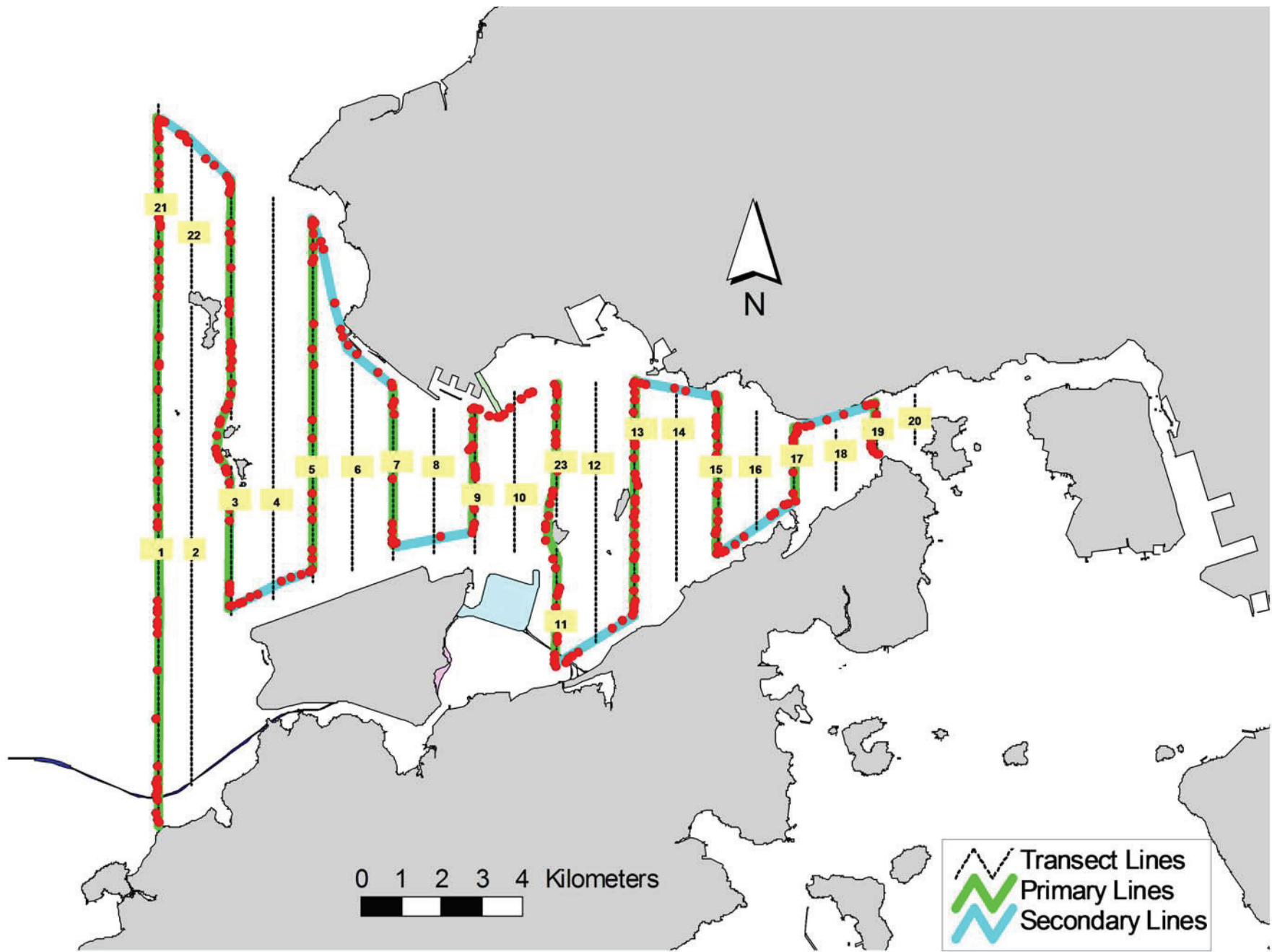


Figure 4. Survey Route on January 27<sup>th</sup>, 2015 (from HKLR03 project)

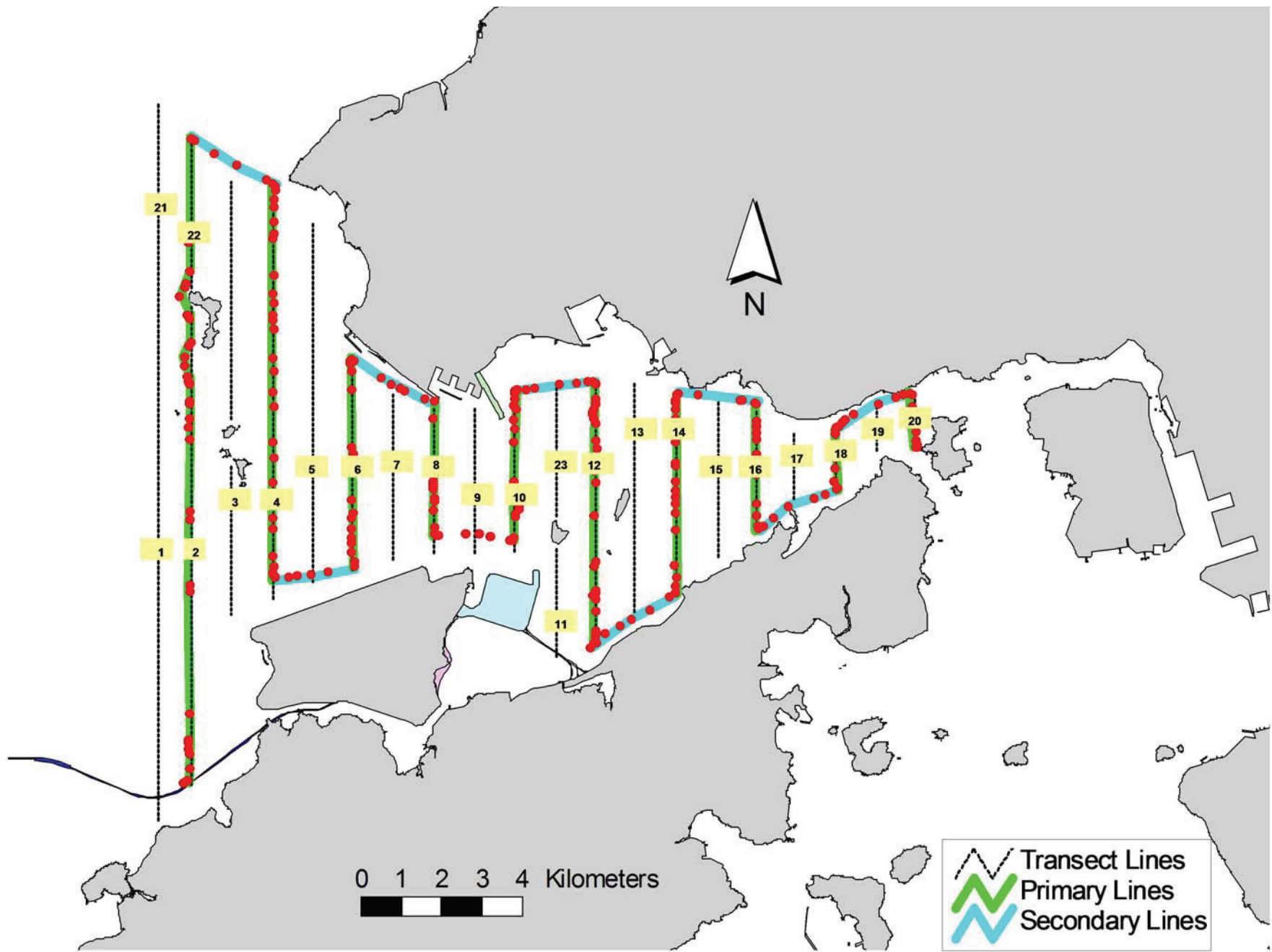


Figure 5. Survey Route on January 29<sup>th</sup>, 2015 (from HKLR03 project)

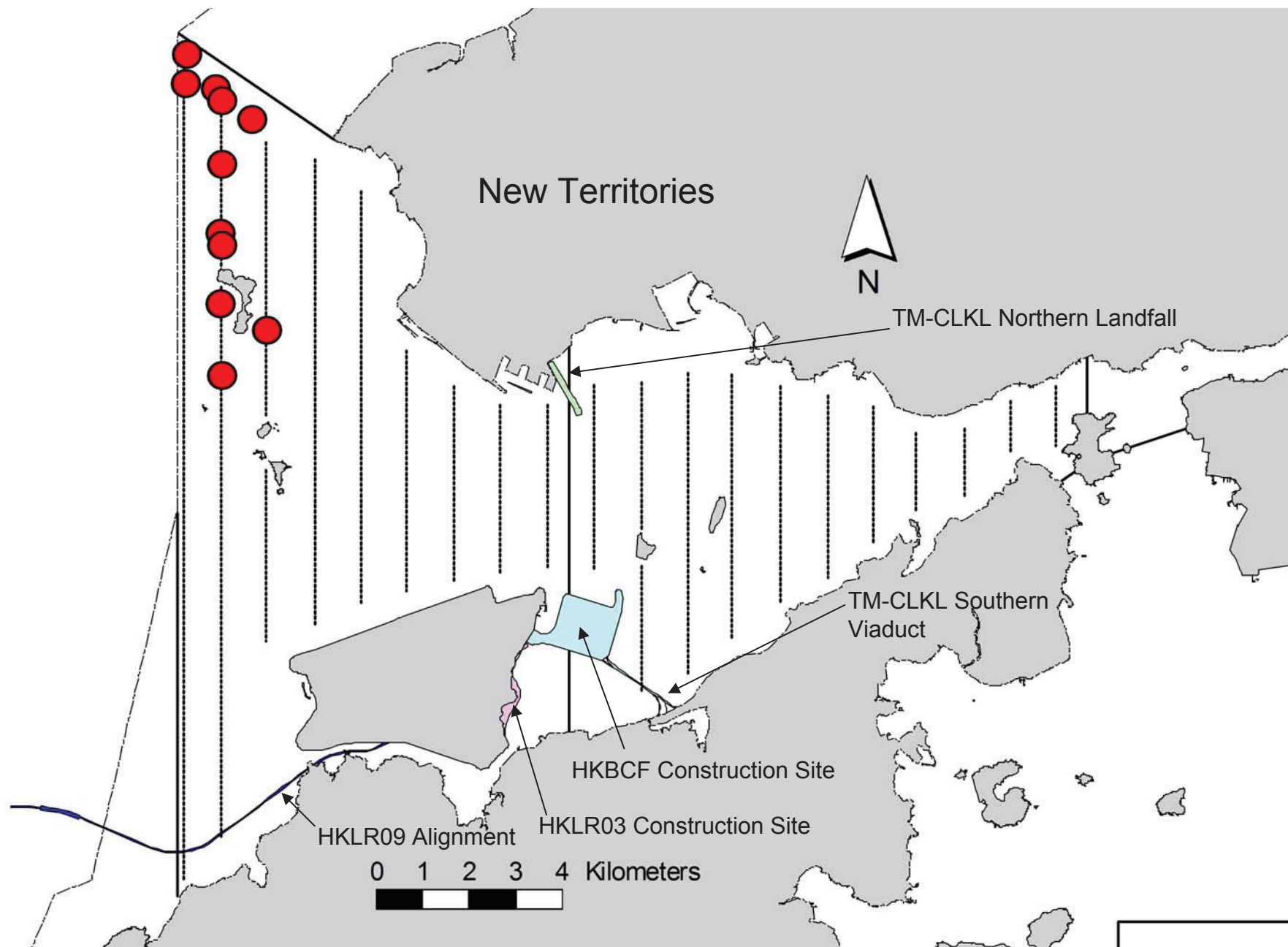


Figure 6. Distribution of Chinese White Dolphin Sightings During January 2015 HKLR03 Monitoring Surveys



## Appendix I. HKLR03 Survey Effort Database (January 2015)

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

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
8-Jan-15	NE LANTAU	2	20.00	WINTER	STANDARD31516	HKLR	P
8-Jan-15	NE LANTAU	2	10.40	WINTER	STANDARD31516	HKLR	S
8-Jan-15	NW LANTAU	2	10.06	WINTER	STANDARD31516	HKLR	P
8-Jan-15	NW LANTAU	3	21.99	WINTER	STANDARD31516	HKLR	P
8-Jan-15	NW LANTAU	2	5.53	WINTER	STANDARD31516	HKLR	S
8-Jan-15	NW LANTAU	3	1.94	WINTER	STANDARD31516	HKLR	S
15-Jan-15	NW LANTAU	2	0.89	WINTER	STANDARD31516	HKLR	P
15-Jan-15	NW LANTAU	3	36.39	WINTER	STANDARD31516	HKLR	P
15-Jan-15	NW LANTAU	2	1.05	WINTER	STANDARD31516	HKLR	S
15-Jan-15	NW LANTAU	3	11.06	WINTER	STANDARD31516	HKLR	S
15-Jan-15	NE LANTAU	2	9.56	WINTER	STANDARD31516	HKLR	P
15-Jan-15	NE LANTAU	3	7.91	WINTER	STANDARD31516	HKLR	P
15-Jan-15	NE LANTAU	2	8.56	WINTER	STANDARD31516	HKLR	S
15-Jan-15	NE LANTAU	3	1.17	WINTER	STANDARD31516	HKLR	S
27-Jan-15	NE LANTAU	2	10.35	WINTER	STANDARD31516	HKLR	P
27-Jan-15	NE LANTAU	3	7.00	WINTER	STANDARD31516	HKLR	P
27-Jan-15	NE LANTAU	2	6.55	WINTER	STANDARD31516	HKLR	S
27-Jan-15	NE LANTAU	3	3.90	WINTER	STANDARD31516	HKLR	S
27-Jan-15	NW LANTAU	2	10.38	WINTER	STANDARD31516	HKLR	P
27-Jan-15	NW LANTAU	3	26.22	WINTER	STANDARD31516	HKLR	P
27-Jan-15	NW LANTAU	4	3.10	WINTER	STANDARD31516	HKLR	P
27-Jan-15	NW LANTAU	2	7.53	WINTER	STANDARD31516	HKLR	S
27-Jan-15	NW LANTAU	3	4.15	WINTER	STANDARD31516	HKLR	S
27-Jan-15	NW LANTAU	4	0.80	WINTER	STANDARD31516	HKLR	S
29-Jan-15	NW LANTAU	1	1.41	WINTER	STANDARD31516	HKLR	P
29-Jan-15	NW LANTAU	2	15.47	WINTER	STANDARD31516	HKLR	P
29-Jan-15	NW LANTAU	3	13.03	WINTER	STANDARD31516	HKLR	P
29-Jan-15	NW LANTAU	1	2.34	WINTER	STANDARD31516	HKLR	S
29-Jan-15	NW LANTAU	2	4.25	WINTER	STANDARD31516	HKLR	S
29-Jan-15	NW LANTAU	3	0.60	WINTER	STANDARD31516	HKLR	S
29-Jan-15	NE LANTAU	1	4.67	WINTER	STANDARD31516	HKLR	P
29-Jan-15	NE LANTAU	2	15.57	WINTER	STANDARD31516	HKLR	P
29-Jan-15	NE LANTAU	2	10.56	WINTER	STANDARD31516	HKLR	S

**Appendix II. HKLR03 Chinese White Dolphin Sighting Database (January 2015)**

(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
8-Jan-15	1	1355	1	NW LANTAU	2	148	ON	HKLR	830029	806123	WINTER	NONE	S
8-Jan-15	2	1421	8	NW LANTAU	3	556	ON	HKLR	827716	805449	WINTER	NONE	P
15-Jan-15	1	1132	2	NW LANTAU	3	189	ON	HKLR	830762	804693	WINTER	NONE	P
15-Jan-15	2	1143	5	NW LANTAU	3	24	ON	HKLR	831349	804705	WINTER	NONE	P
15-Jan-15	3	1156	3	NW LANTAU	3	464	ON	HKLR	830673	805331	WINTER	NONE	S
27-Jan-15	1	1409	2	NW LANTAU	3	163	ON	HKLR	825753	806454	WINTER	NONE	S
27-Jan-15	2	1442	3	NW LANTAU	3	410	ON	HKLR	830429	805475	WINTER	NONE	P
29-Jan-15	1	1104	4	NW LANTAU	3	63	ON	HKLR	824825	805464	WINTER	NONE	P
29-Jan-15	2	1128	6	NW LANTAU	2	143	ON	HKLR	826287	805456	WINTER	NONE	P
29-Jan-15	3	1150	7	NW LANTAU	2	343	ON	HKLR	827483	805469	WINTER	NONE	P
29-Jan-15	4	1208	5	NW LANTAU	2	143	ON	HKLR	829122	805472	WINTER	NONE	P



**Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in January 2015**

<b>ID#</b>	<b>DATE</b>	<b>STG#</b>	<b>AREA</b>
CH34	15/01/15	1	NW LANTAU
	15/01/15	2	NW LANTAU
	29/01/15	4	NW LANTAU
NL48	15/01/15	3	NW LANTAU
NL98	15/01/15	2	NW LANTAU
NL103	29/01/15	2	NW LANTAU
NL104	08/01/15	2	NW LANTAU
NL123	08/01/15	2	NW LANTAU
NL145	08/01/15	2	NW LANTAU
	29/01/15	2	NW LANTAU
NL182	15/01/15	1	NW LANTAU
	15/01/15	2	NW LANTAU
NL202	08/01/15	2	NW LANTAU
NL210	29/01/15	2	NW LANTAU
NL259	15/01/15	3	NW LANTAU
NL261	08/01/15	2	NW LANTAU
NL284	15/01/15	2	NW LANTAU
	29/01/15	2	NW LANTAU
NL285	08/01/15	2	NW LANTAU
NL286	08/01/15	2	NW LANTAU
NL287	29/01/15	1	NW LANTAU
NL305	29/01/15	2	NW LANTAU
NL306	29/01/15	1	NW LANTAU
NL307	29/01/15	1	NW LANTAU
WL17	27/01/15	1	NW LANTAU
WL231	29/01/15	2	NW LANTAU



Appendix IV. Photographs of Identified Individual Dolphins in January 2015 (HKLR03)





Appendix IV. (cont'd)





Appendix IV. (cont'd)

Appendix L

## Event Action Plan

*Appendix L1 Event/ Action Plan for Air Quality*

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



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

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

8. If the exceedance stops, cease  
additional monitoring.

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*Appendix L2 Event/ Action Plan for Construction Noise*

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

**Appendix L3**      *Event/ Action Plan for Water Quality*

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

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**

<b>Event</b>	<b>ET Leader</b>	<b>IEC</b>	<b>SOR</b>	<b>Contractor</b>
Action Level	<ol style="list-style-type: none"> <li>1. Repeat statistical data analysis to confirm findings;</li> <li>2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&amp;A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences;</li> <li>3. Identify source(s) of impact;</li> <li>4. Inform the IEC, SOR and Contractor;</li> <li>5. Check monitoring data.</li> <li>6. Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor;</li> <li>2. Discuss monitoring results and findings with the ET and the Contractor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss monitoring with the IEC and any other measures proposed by the ET;</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the SOR and confirm notification of the non-compliance in writing;</li> <li>2. Discuss with the ET and the IEC and propose measures to the IEC and the SOR;</li> <li>3. Implement the agreed measures.</li> </ol>



<b>Event</b>	<b>ET Leader</b>	<b>IEC</b>	<b>SOR</b>	<b>Contractor</b>
Limit Level	<ol style="list-style-type: none"> <li>1. Repeat statistical data analysis to confirm findings;</li> <li>2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&amp;A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences;</li> <li>3. Identify source(s) of impact;</li> <li>4. Inform the IEC, ER/SOR and Contractor of findings;</li> <li>5. Check monitoring data;</li> <li>6. Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary;</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor;</li> <li>2. Discuss monitoring results and findings with the ET and the Contractor;</li> <li>3. Attend the meeting to discuss with ET, ER/SOR and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures;</li> <li>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;</li> <li>5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise ER/SOR the results and findings accordingly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures;</li> <li>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;</li> <li>3. Supervise the implementation of additional monitoring and/or any other mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the ER/SOR and confirm notification of the non-compliance in writing;</li> <li>2. Attend the meeting to discuss with ET, IEC and ER/SOR the necessity of additional dolphin monitoring and any other potential mitigation measures;</li> <li>3. Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary;</li> <li>4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures.</li> </ol>

*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"> <li>1. Repeat statistical data analysis to confirm findings;</li> <li>2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences;</li> <li>3. Identify source(s) of impact;</li> <li>4. Inform the IEC, SO and Contractor;</li> <li>5. Check monitoring data;</li> <li>6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor;</li> <li>2. Discuss monitoring with the ET and the Contractor;</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET;</li> <li>2. Make agreement on measures to be implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the SO and confirm notification of the non-compliance in writing;</li> <li>2. Discuss with the ET and the IEC and propose measures to the IEC and the SO;</li> <li>3. Implement the agreed measures.</li> </ol>

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"> <li>1. Repeat statistical data analysis to confirm findings;</li> <li>2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences;</li> <li>3. Identify source(s) of impact;</li> <li>4. Inform the IEC, SO and Contractor;</li> <li>5. Check monitoring data;</li> <li>6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor;</li> <li>2. Discuss monitoring with the ET and the Contractor;</li> <li>3. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise ER accordingly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET;</li> <li>2. Make agreement on measures to be implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the SO and confirm notification of the non-compliance in writing;</li> <li>2. Discuss with the ET and the IEC and propose measures to the IEC and the SO;</li> <li>3. Implement the agreed measures.</li> </ol>

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 2015 (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	Chemical Waste	General Refuse	Metals	Felled trees	Paper/ cardboard packaging	Plastics
Unit	('000m <sup>3</sup> )	('000m <sup>3</sup> )	('000m <sup>3</sup> )	('000m <sup>3</sup> )	('000m <sup>3</sup> )	('000m <sup>3</sup> )	('000m <sup>3</sup> )	('000m <sup>3</sup> )	('000m <sup>3</sup> )	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)
Jan	13.578	0.081	0.990	-	12.474	0.115	0.178	0.229	0.258	-	132.170	-	-	0.091	-
Feb	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-
Apr	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>SUB-TOTAL</b>	<b>13.578</b>	<b>0.081</b>	<b>0.990</b>	<b>-</b>	<b>12.474</b>	<b>0.115</b>	<b>0.178</b>	<b>0.229</b>	<b>0.258</b>	<b>-</b>	<b>132.170</b>	<b>-</b>	<b>0.000</b>	<b>0.091</b>	<b>-</b>
Jul	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>13.578</b>	<b>0.081</b>	<b>0.990</b>	<b>-</b>	<b>12.474</b>	<b>0.115</b>	<b>0.178</b>	<b>0.229</b>	<b>0.258</b>	<b>-</b>	<b>132.170</b>	<b>-</b>	<b>-</b>	<b>0.091</b>	<b>-</b>

**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	0	1
	Limit	0	0
Impact Dolphin Monitoring	Action	0	7
	Limit	0	0

*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 (January 2015)	0	0	0
Total No. received since project commencement	2	0	0