

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

Sixth Quarterly Environmental Monitoring & Audit (EM&A) Report

19 October 2015

Environmental Resources Management

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This document presents the Sixth Quarterly EM&A Report for Tuen Mun – Chek Lap Kok Link Southern Connection Viaduct Section.		Approved by:				
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		Certif		oy:		
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	6 th Quarterly EM&A Report	VA	R	JT	CAR	19/10/15
Revision	Description	Ву	/	Checked	Approved	Date
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Ref.: HYDHZMBEEM00_0_3497L.15

22 October 2015

AECOM Supervising Officer's Representative's Office 780 Cheung Tung Road, Lantau, N.T. By Fax (3691 2899) and By Post

Attention: Mr. Daniel Ip

Dear Mr. Ip,

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

Contract No. HY/2012/07 TM-CLKL Southern Connection Viaduct Section Sixth Quarterly EM&A Report (EP-354/2009/D)

Reference is made to the Sixth Quarterly Environmental Monitoring and Audit (EM&A) Report (ET's ref.: "0215660_6th Qtr EM&A_20151002.doc" dated 19 Oct. 2015) certified by the ET Leader and provided to us via e-mail on 19 Oct. 2015.

We are pleased to inform you that we have no adverse comments on the captioned quarterly EM&A report.

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

Yours sincerely,

Haffenbleog

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)

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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*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

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

This is the sixth quarterly EM&A report presenting the EM&A works carried out during the period from 1 March to 31 May 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:

March 2015

Marine Works

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

Land-based Works

- Construction of pile cap superstructure of Viaduct B;
- 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, C, D & E;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

<u>April 2015</u>

Marine Works

- Construction and installation of pile caps;
- Marine piling platform installation & uninstallation;
- Pier construction;
- Installation of launching gantry;
- Marine piling; and,
- Installation of pier head segment.

Land-based Works

- Construction and installation of pile caps;
- Pier construction;
- Drainage works;
- Land piling;
- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Tree survey, felling and transplanting;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

<u>May 2015</u>

Marine Works

- Construction and installation of pile caps;
- Marine piling platform installation & uninstallation;
- Pier construction;
- Installation of launching gantry;
- Marine piling and
- Installation of pier head segment.

Land-based Works

- Construction and installation of pile caps;
- Pier construction;
- Drainage works;
- Re-alignment of Cheung Tung Road;
- Land piling;
- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Tree survey, felling and transplanting;
- Relocation of MTRC fence; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

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

24-hour TSP monitoring

17 sessions

1-hour TSP monitoring	17 sessions
Noise monitoring	17 sessions
Water quality monitoring	39 sessions
Dolphin monitoring	6 sessions
Joint Environmental site inspection	13 sessions

Breaches of Action and Limit Levels for Air Quality

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

Breaches of Action and Limit Levels for Noise

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

Breaches of Action and Limit Levels for Water Quality

One (1) exceedance of Action Level for depth-averaged SS during mid-ebb tide was recorded for water quality monitoring in the reporting period.

Impact Dolphin Monitoring

Whilst one (1) Limit Level exceedance was observed for the quarterly dolphin monitoring data between March and May 2015, no unacceptable impact from the construction activities of the TM-CLKL Southern Connection Viaduct Section on Chinese White Dolphins was noticeable from general observations during the dolphin monitoring in this reporting quarter. The exceedance is considered unlikely due to the works of this Project upon further investigation.

Daily marine mammal exclusion zone monitoring was undertaken during the period of marine works under this Contract. Passive Acoustic Monitoring (PAM) was also implemented for the detection of marine mammal when marine works were carried out outside the daylight hours under this Contract. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was recorded in the monitoring period during the exclusion zone monitoring.

Environmental Complaints, Non-compliance & Summons

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

Reporting Change

The landscape and visual impact mitigation measures was reported in a separated checklist instead of reported in the weekly checklist with other mitigation measures, and the status of landscape and visual impact mitigation measures are summarized in the EMIS of the EM&A Reports. A complete

proposal for Landscape and Visual (L&V) mitigation measures monitoring was submitted which was justified by the Environmental Team Leader (ETL) and the Independent Environmental Checker (IEC) had no adverse comment.

Upcoming Works for the Next Reporting Period

Works to be undertaken in the coming quarter include the following:

June 2015

Marine Works

- Construction and installation of pile caps;
- Uninstallation of marine piling platform;
- Pile cap installation;
- Pier construction;
- Launching gantry assembly;
- Marine piling and
- Installation of pier head segment

Land-based Works

- Construction and installation of pile caps;
- Pier construction;
- Pile cap installation;
- Re-alignment of Cheung Tung Road;
- Land piling;
- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Relocation of MTRC fence; and
- Slope work of Slopes 9SE-B/C9 and 9SE-B/F85

July 2015

Marine Works

- Construction and installation of pile caps;
- Uninstallation of marine piling platform;
- Pile cap installation;
- Pier construction;
- Launching gantry assembly;
- Marine piling; and,
- Installation of pier head segment

Land-based Works

- Predrilling at Viaduct F;
- Construction and installation of pile caps;
- Pier construction;
- Pile cap installation;
- Re-alignment of Cheung Tung Road;

- Land piling;
- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Relocation of MTRC fence; and,
- Slope work of Viaducts A & B

August 2015

Marine Works

- Construction and installation of pile caps;
- Uninstallation of marine piling platform;
- Pile cap installation;
- Pier construction;
- Launching gantry assembly;
- Marine piling and
- Installation of pier head segment

Land-based Works

- Predrilling at Viaduct F;
- Construction and installation of pile caps;
- Pier construction;
- Pile cap installation;
- Re-alignment of Cheung Tung Road;
- Land piling;
- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Relocation of MTRC fence; and
- Slope work of Viaducts A & B.

Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the coming quarterly period are mainly associated with air quality, noise, marine water quality, marine ecology and waste management issue.

1.1 BACKGROUND

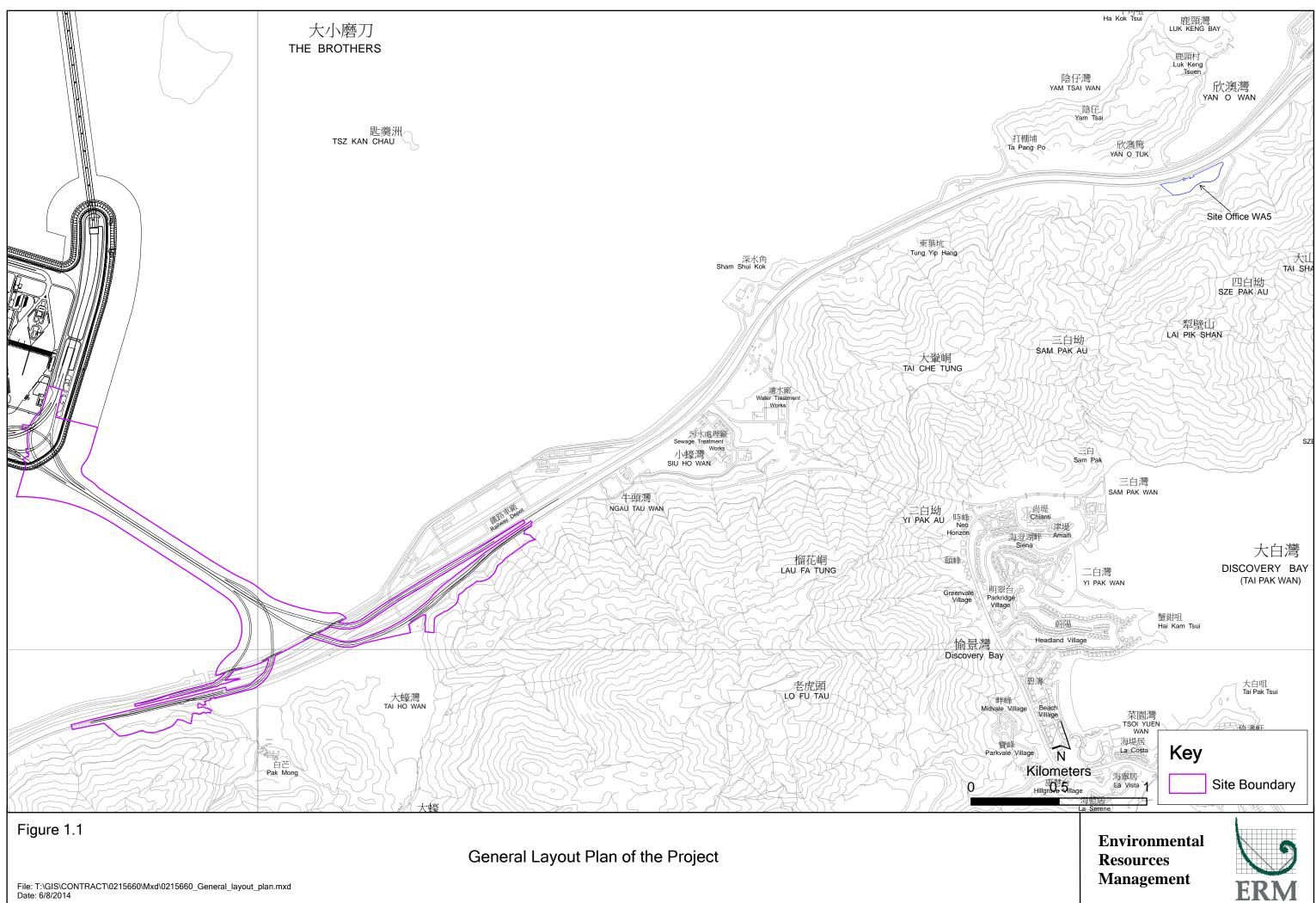
According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated 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.

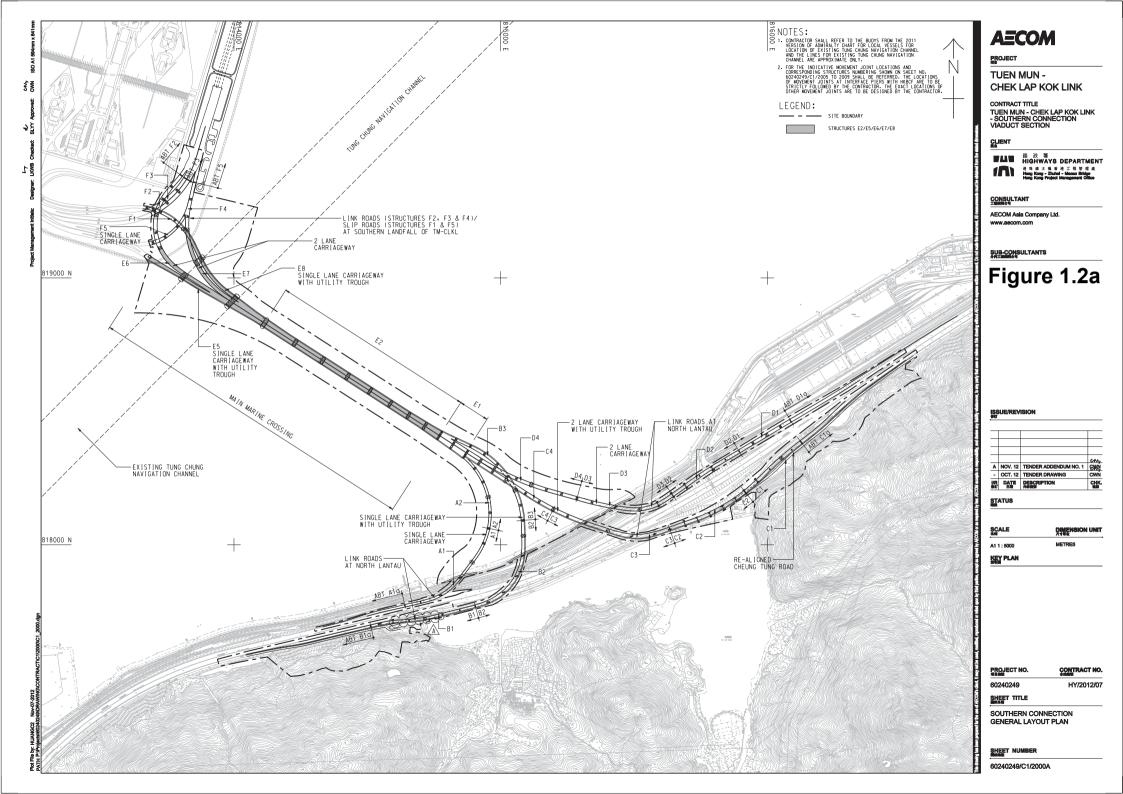
An Environmental Impact Assessment (EIA) of TM-CLKL (the Project) was prepared in accordance with the EIA Study Brief (No. *ESB*-175/2007) and the *Technical Memorandum of the Environmental Impact Assessment Process (EIAO-TM*). The EIA Report was submitted under the Environmental Impact Assessment Ordinance (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*-354/2009A) was issued on 8 December 2010. Further applications for variation of environmental permit (VEP), *EP*-354/2009/B, *EP*-354/2009/C and *EP*-354/2009/D, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

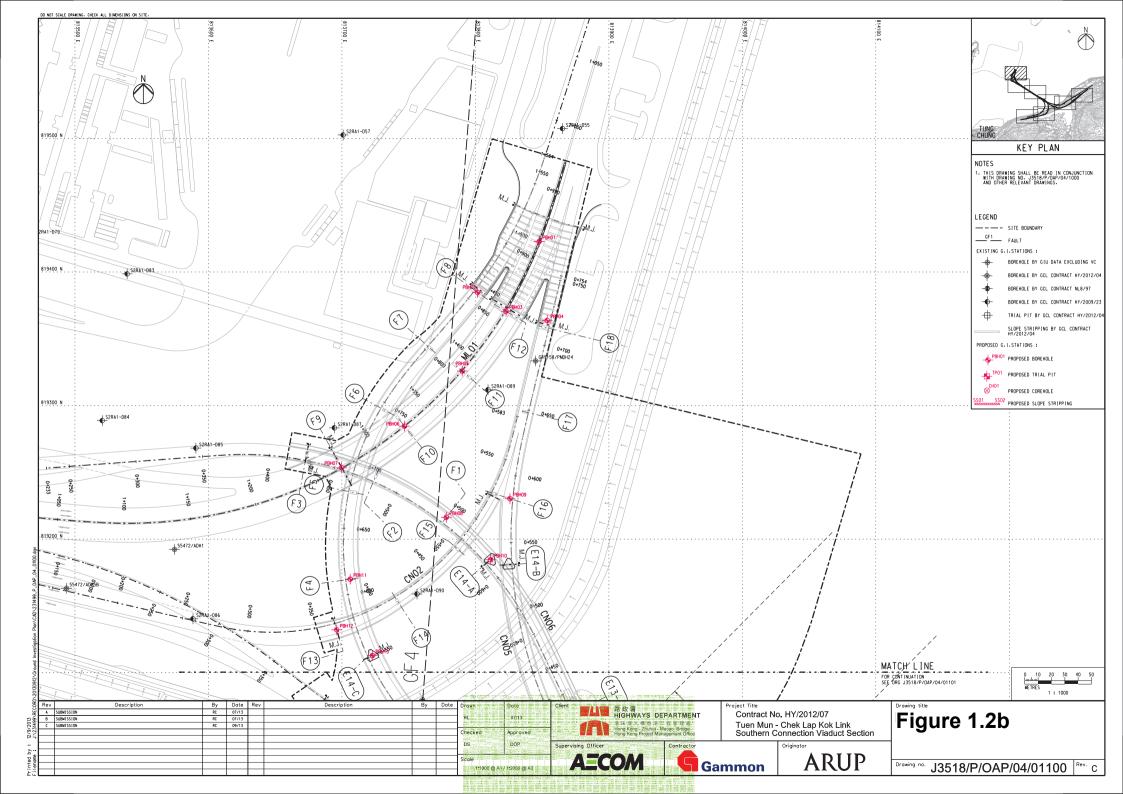
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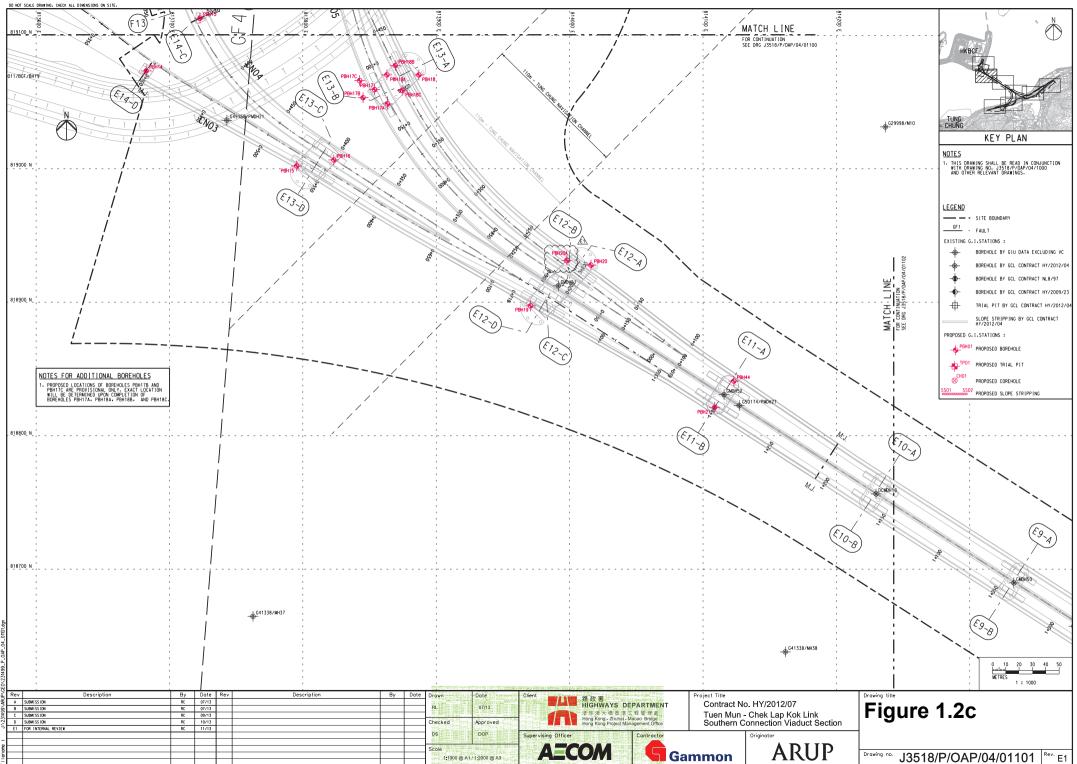
The construction phase of the Contract commenced on 31 October 2013 and will be tentatively be completed by 2018. The impact monitoring phase of the EM&A programme, including air quality, noise, water quality and marine ecological monitoring as well environmental site inspections, commenced on 31 October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

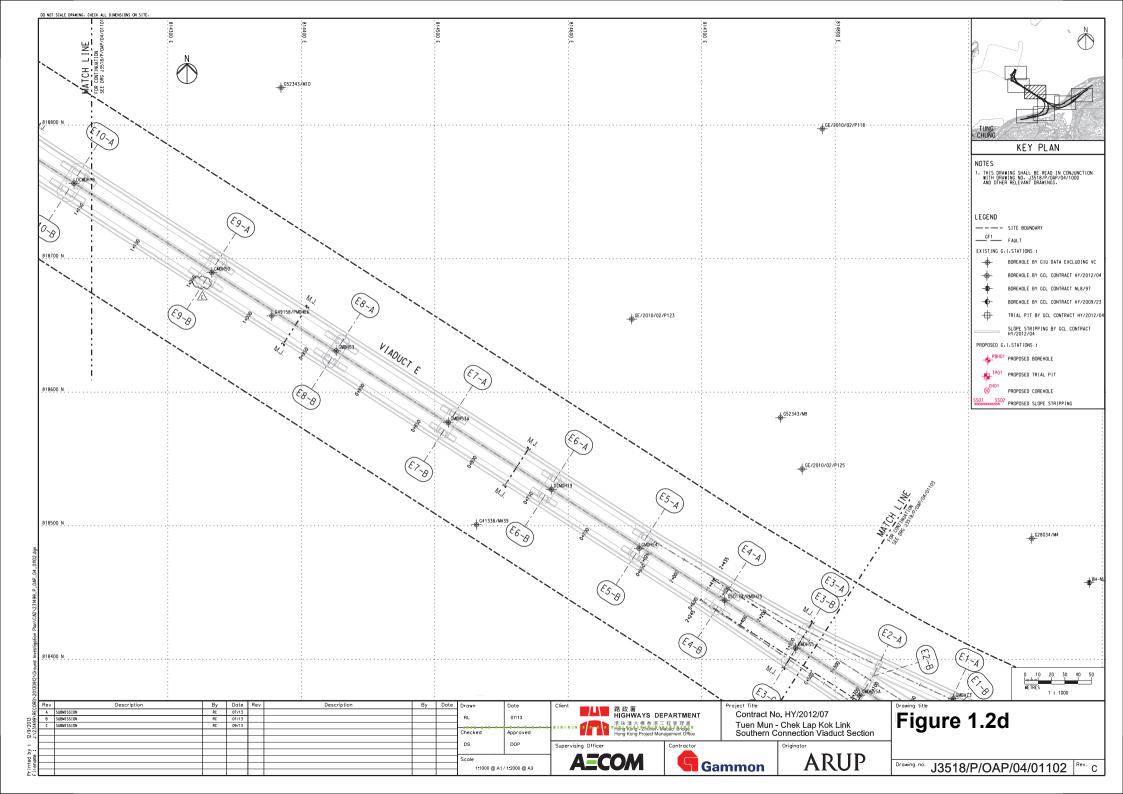
The general layout plan of the Contract components is presented in *Figures 1.1* & *1.2a to l.*



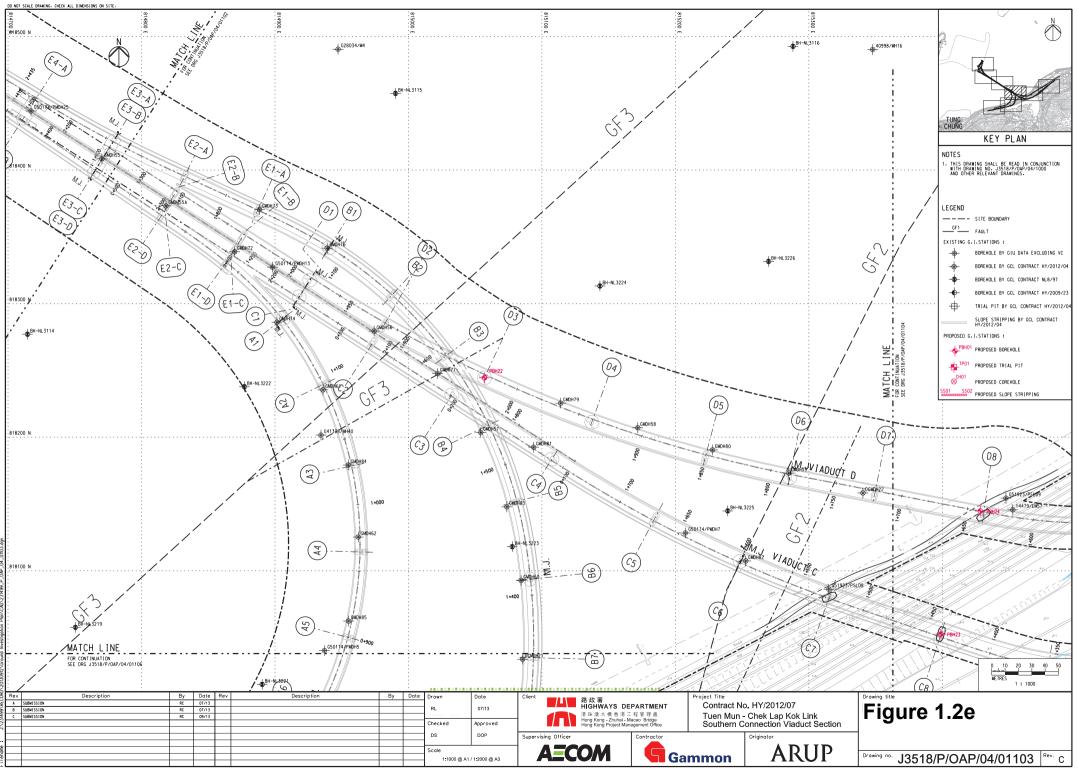


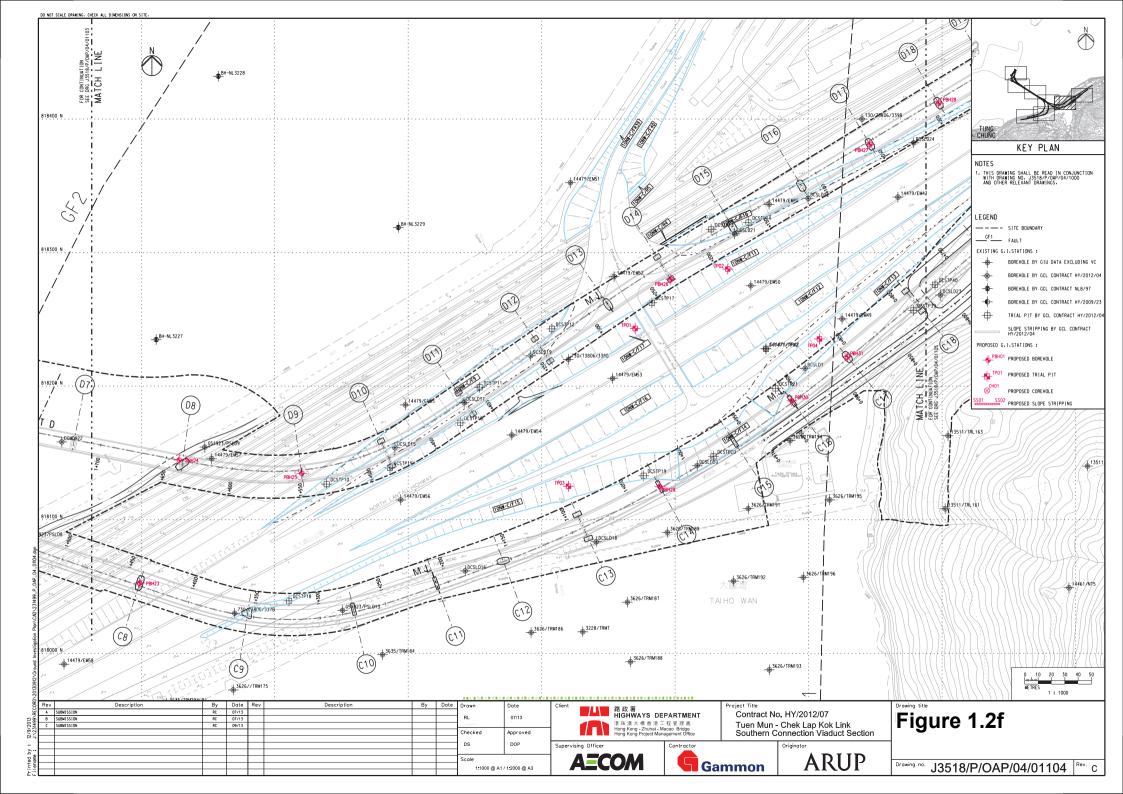


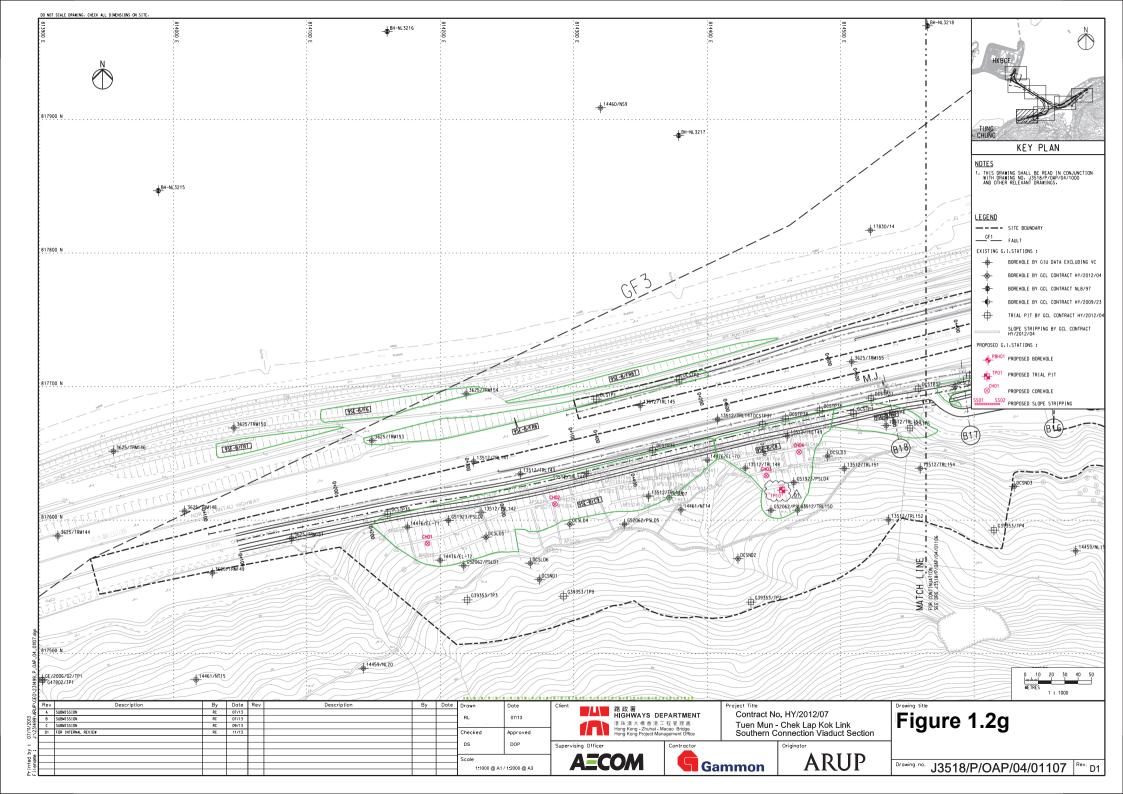


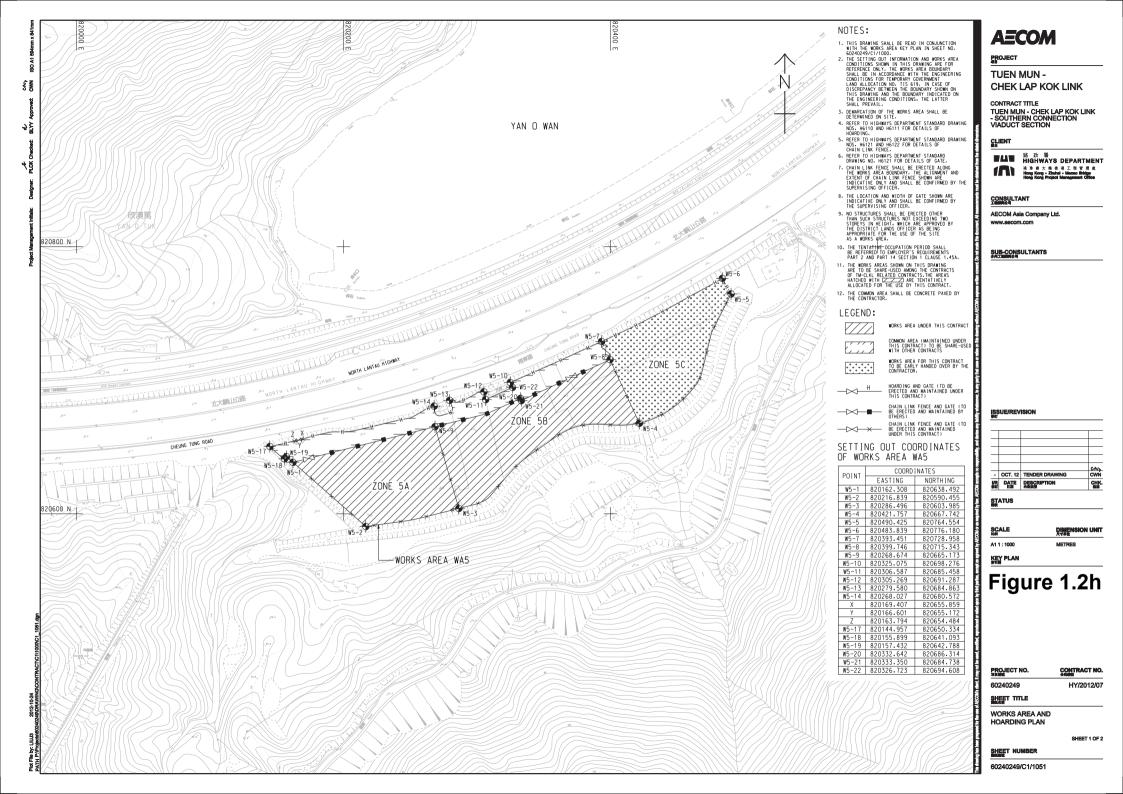


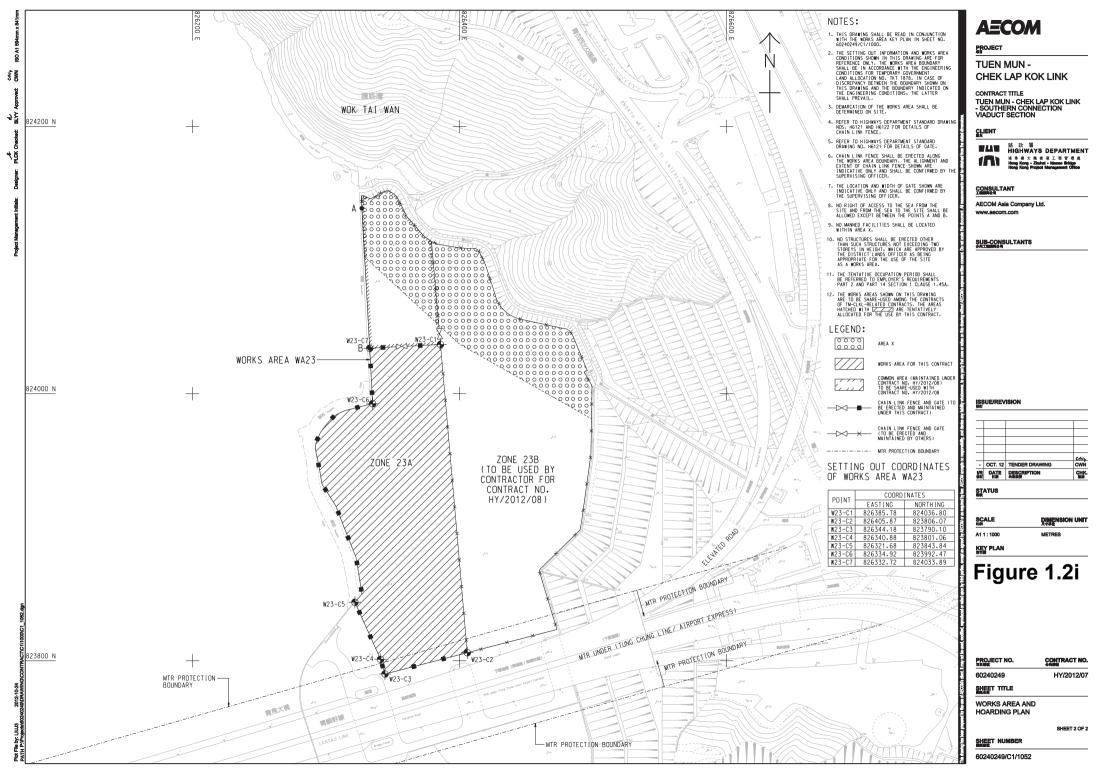


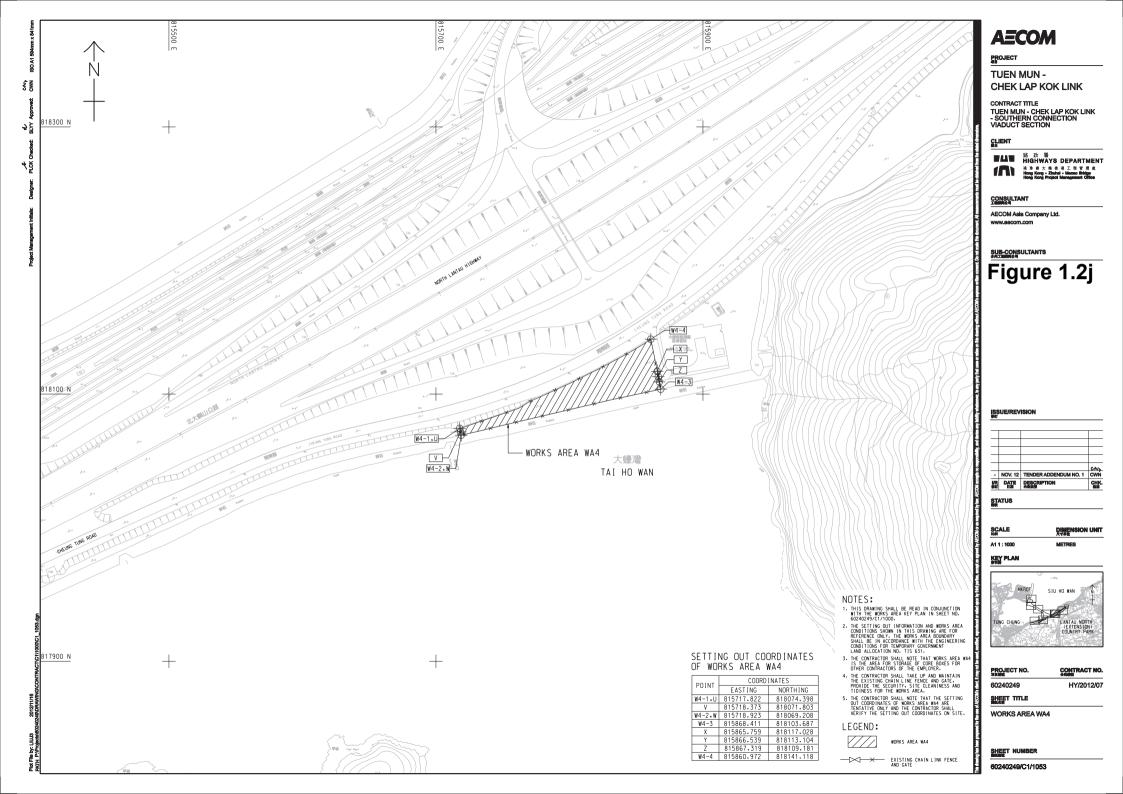


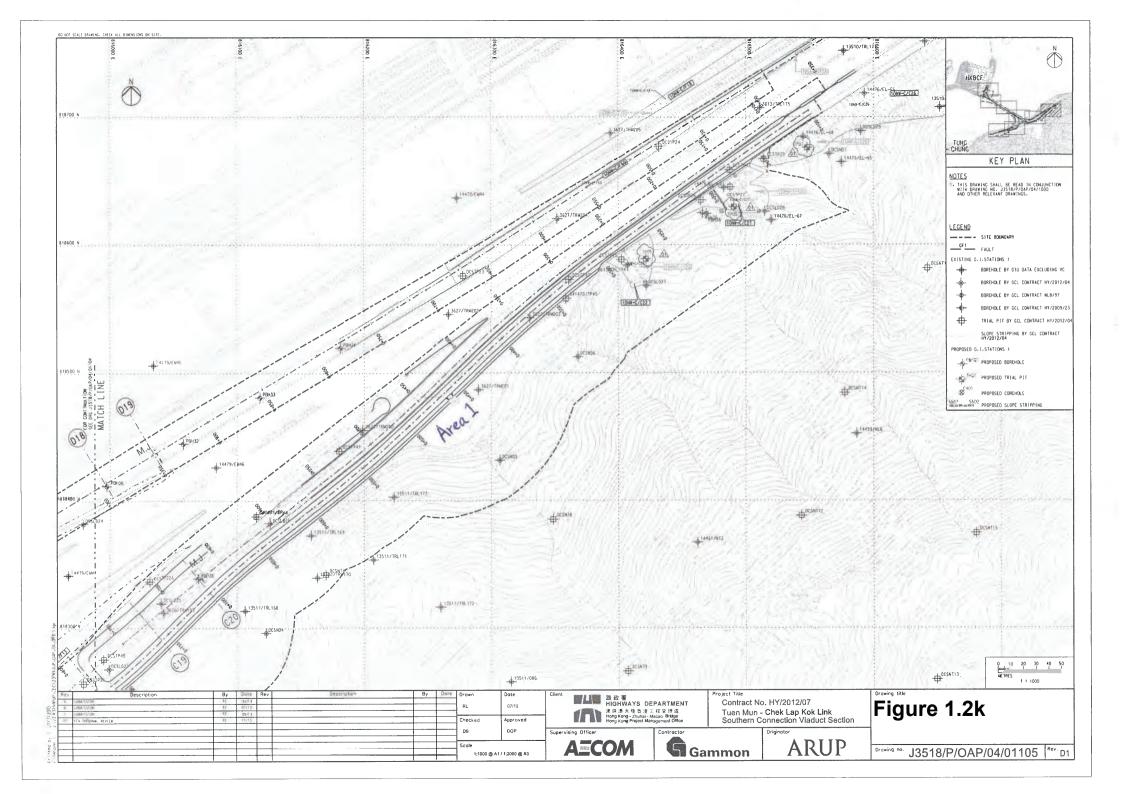


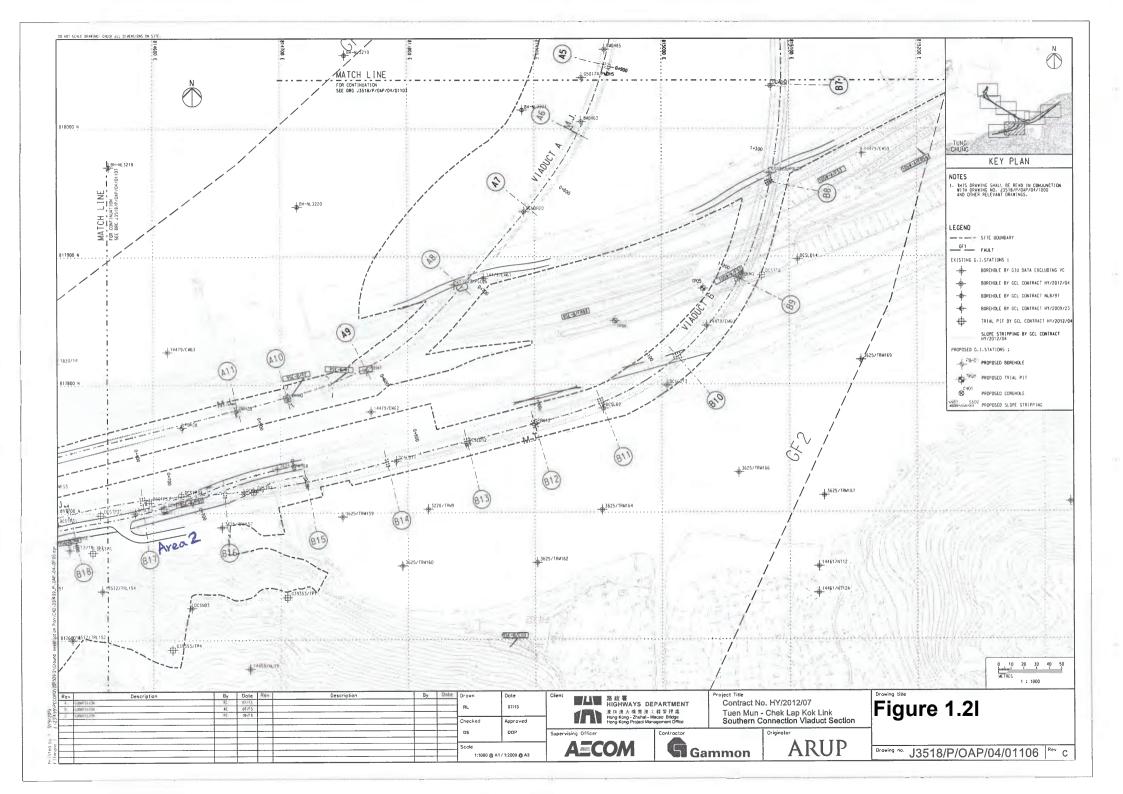












1.2 SCOPE OF REPORT

This is the Sixth Quarterly 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 from 1 March to 31 May 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.

Party	Position	Name	Telephone	Fax
SOR	Chief Resident	Daniel Ip	3553 3800	2492 2057
(AECOM Asia Company Limited)	Engineer			
	Resident Engineer	Kingman Chan	3691 2950	3691 2899
ENPO / IEC (Ramboll Environ	ENPO Leader	Y.H. Hui	3547 2133	3465 2899
Hong Kong Ltd.)	IEC	Dr. F.C. Tsang	3547 2134	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

Table 1.1Contact Information of Key Personnel

1.4 SUMMARY OF CONSTRUCTION WORKS

The construction phase of the Contract commenced on 31 October 2013. The rolling construction programme for the period of March to May 2015 is shown in *Appendix B*.

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

March 2015

Marine Works

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

Land-based Works

- Construction of pile cap superstructure of Viaduct B;
- 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, C, D & E;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

<u>April 2015</u>

Marine Works

- Construction and installation of pile caps;
- Marine piling platform installation & uninstallation;
- Pier construction;
- Installation of launching gantry;
- Marine piling; and,
- Installation of pier head segment.

Land-based Works

- Construction and installation of pile caps;
- Pier construction;
- Drainage works;
- Land piling;
- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Tree survey, felling and transplanting;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

<u>May 2015</u>

Marine Works

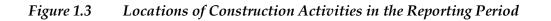
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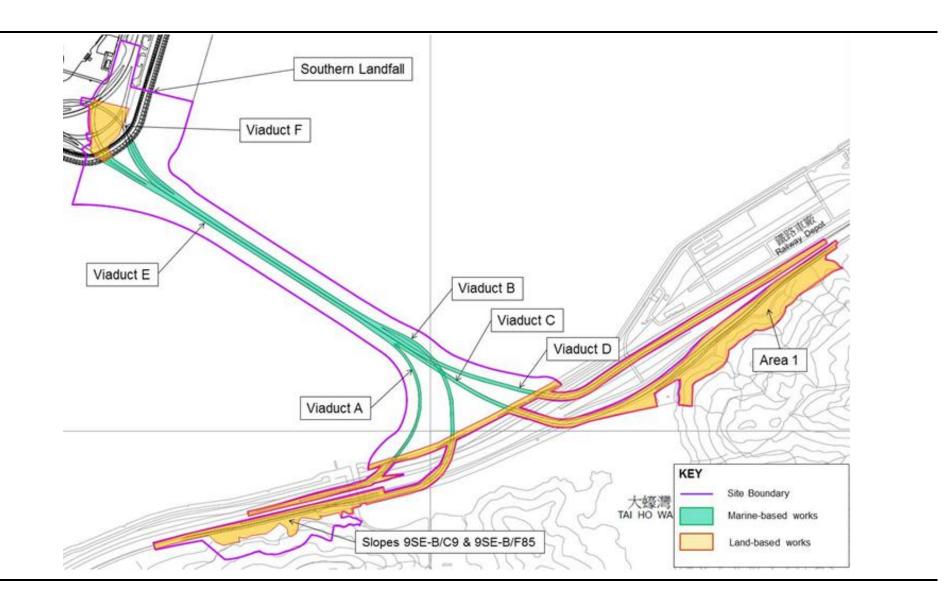
Land-based Works

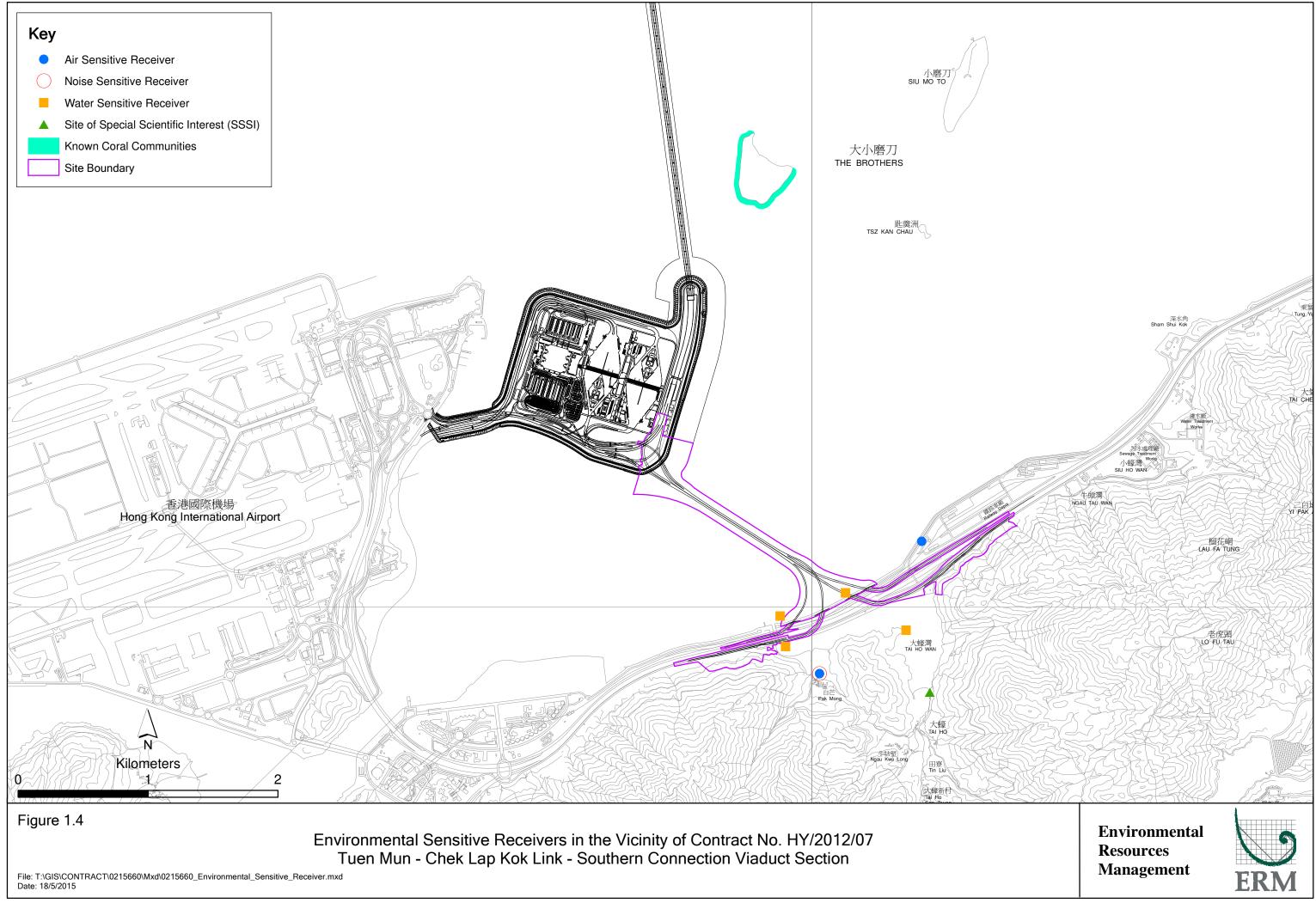
- Construction and installation of pile caps;
- Pier construction;
- Drainage works;
- Re-alignment of Cheung Tung Road;
- Land piling;

- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Tree survey, felling and transplanting;
- Relocation of MTRC fence; 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 is presented in *Appendix C*.

1.5 SUMMARY OF EM&A PROGRAMME REQUIREMENTS

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 described in the following sections, which include:

- Monitoring parameters;
- Monitoring schedules for the reporting months and forthcoming months;
- Action and Limit levels for all environmental parameters;
- Event Action Plan;
- Results and observations;
- Environmental mitigation measures, as recommended in the approved EIA Report; and
- Environmental requirement in contract documents.

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

The baseline air quality monitoring undertaken by the Hong Kong – Zhuhai – Macao Bridge Hong Kong Projects (HKZMB) during October 2011 has included the two monitoring stations ASR9A and ASR9C for this project. Thus, the baseline monitoring results and Action/ Limit Level presented in HKZMB Baseline Monitoring Report ⁽¹⁾ are adopted for this Project.

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 while the highest dust impact was expected. Impact 24-hour TSP monitoring was carried out once every six (6) days. The Action and Limit Levels of the air quality monitoring is provided in *Appendix D*.

1-hour TSP and 24-hour TSP monitoring were conducted at 2 alternative air quality monitoring stations, ASR8A (Area 4) and ASR9 (Entrance of MTR Depot) during the reporting period in accordance with the requirement of the Updated EM&A Manual. The monitoring stations are indicated in *Figure 2.1* and details are presented in *Table 2.1*.

High Volume Samplers (HVSs) were used for carrying out 1-hour and 24-hour TSP monitoring during the reporting period. The HVS meets all requirements of the Updated EM&A Manual. Brand and model of the equipment are given in *Table 2.2*.

Wind data monitoring equipment was installed at Area 4 during the reporting period for logging wind speed and wind direction. The wind sensor was setup such that it was clear of obstructions or turbulence caused by building. The wind data monitoring equipment is recalibrated at least once every six months.

2

 ⁽¹⁾ Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring for Hong Kong - Zhuhai - Macao Bridge Hong Kong Projects
 - Investigation. Baseline Environmental Monitoring Report (Version C). Submitted on 8 March 2012 and subsequently approved by EPD.

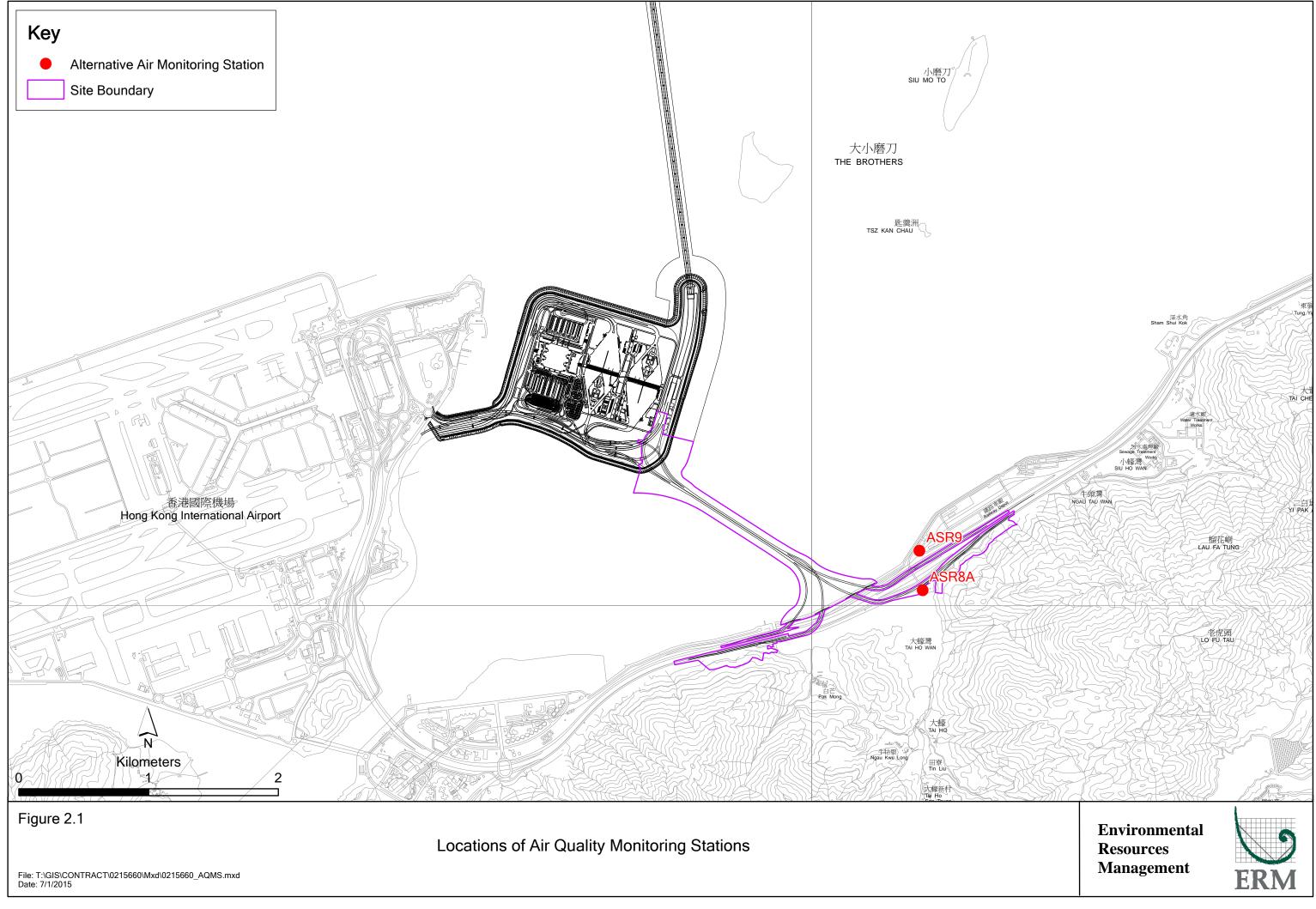


Table 2.1Locations of Impact Air Quality Monitoring Stations and Monitoring Dates
in this Reporting Period

Monitoring Station ⁽¹⁾	Monitoring Period	Location	Description	Parameters & Frequency
ASR8A	4, 10, 16, 19, 25 and 31 March 2015	Area 4	On ground at the Area 4	• 1-hour Total Suspended
ASR9	6, 9, 15, 21, 27 and 30 April 2015 6, 12, 18, 21 and 27 May 2015	MTR Depot	On the ground nearby MTR Depot Entrance	 Particulates (1-hour TSP, µg/m³), 3 times per day every 6 days 24-hour Total Suspended Particulates (24-hour TSP, µg/m³), daily for 24-hour every 6 days

Note:

(1) Air Quality Monitoring Stations ASR9A and ASR9C at Siu Ho Wan MTRC Depot proposed in accordance with the Updated EM&A were relocated to ASR9 and ASR8A respectively.

Table 2.2Air Quality Monitoring Equipment

Equipment	Brand and Model
High Volume Sampler	Tisch Environmental Mass Flow Controlled
(1-hour TSP and 24-hour TSP)	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 Action & Limit Levels

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

2.1.3 Monitoring Schedule for the Reporting Quarter

The schedules for air quality monitoring in the reporting quarter are provided in *Appendix E*.

2.1.4 Results and Observations

The monitoring results for 1-hour TSP and 24-hour TSP are summarized in *Tables 2.3* and *2.4*, respectively. Monitoring results are presented graphically in *Appendix F*. Detailed impact air quality monitoring results and meteorological information were reported in the *Seventeenth* to *Nineteenth Monthly EM&A Report*.

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

Month	Station	Average (µg/m³)	Range (µg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
March 2015	ASR 8A	88	58 - 156	394	500
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Month	Station	Average (µg/m³)	Range (µg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
	ASR 9	109	60 - 235	393	500
April 2015	ASR 8A	86	59 - 124	394	500
	ASR 9	112	59 - 217	393	500
May 2015	ASR 8A	64	49 - 149	394	500
	ASR 9	77	53 - 119	393	500

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

Month	Station	Average (µg/m³)	Range (µg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
March 2015	ASR 8A	57	43 - 76	178	260
	ASR 9	77	54 - 101	178	260
April 2015	ASR 8A	56	50 - 60	178	260
	ASR 9	65	56 - 72	178	260
May 2015	ASR 8A	48	43 - 52	178	260
	ASR 9	56	46 - 71	178	260

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

In this reporting period, a total of seventeen (17) monitoring events were undertaken within the reporting period, in which no Action or Limit Level exceedance for 1-hour and 24-hour TSP for air quality was recorded during the reporting period.

2.2 NOISE MONITORING

The baseline noise monitoring undertaken by the Hong Kong – Zhuhai – Macao Bridge Hong Kong Projects (HKZMB) during the period of 18 October to 1 November 2011 has included the monitoring station NSR1 for this project. Thus, the baseline monitoring results and Action/ Limit Level presented in *HKZMB Baseline Monitoring Report* ⁽¹⁾ are adopted for this Project.

2.2.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual, impact noise monitoring should be conducted once per week during the construction phase of the Contract.

Noise monitoring was conducted at the alternative noise monitoring station, NSR1A (Pak Mong Village Pavilion) during the reporting period in accordance with the requirement of Updated EM&A Manual. *Figure 2.2* shows the location of the monitoring station. *Table 2.5* describes the details of the monitoring station.

Noise monitoring was performed using sound level meter at the designated monitoring station in the reporting quarter. The deployed sound level meter complies with the International Electrotechnical Commission Publications (IEC) 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was deployed to check the sound level meter at a known sound pressure level. Brand and model of the equipment is given in *Table 2.6.*

⁽¹⁾ Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring for Hong Kong - Zhuhai - Macao Bridge Hong Kong Projects - Investigation. Baseline Environmental Monitoring Report (Version C). Submitted on 8 March 2012 and subsequently approved by EPD.

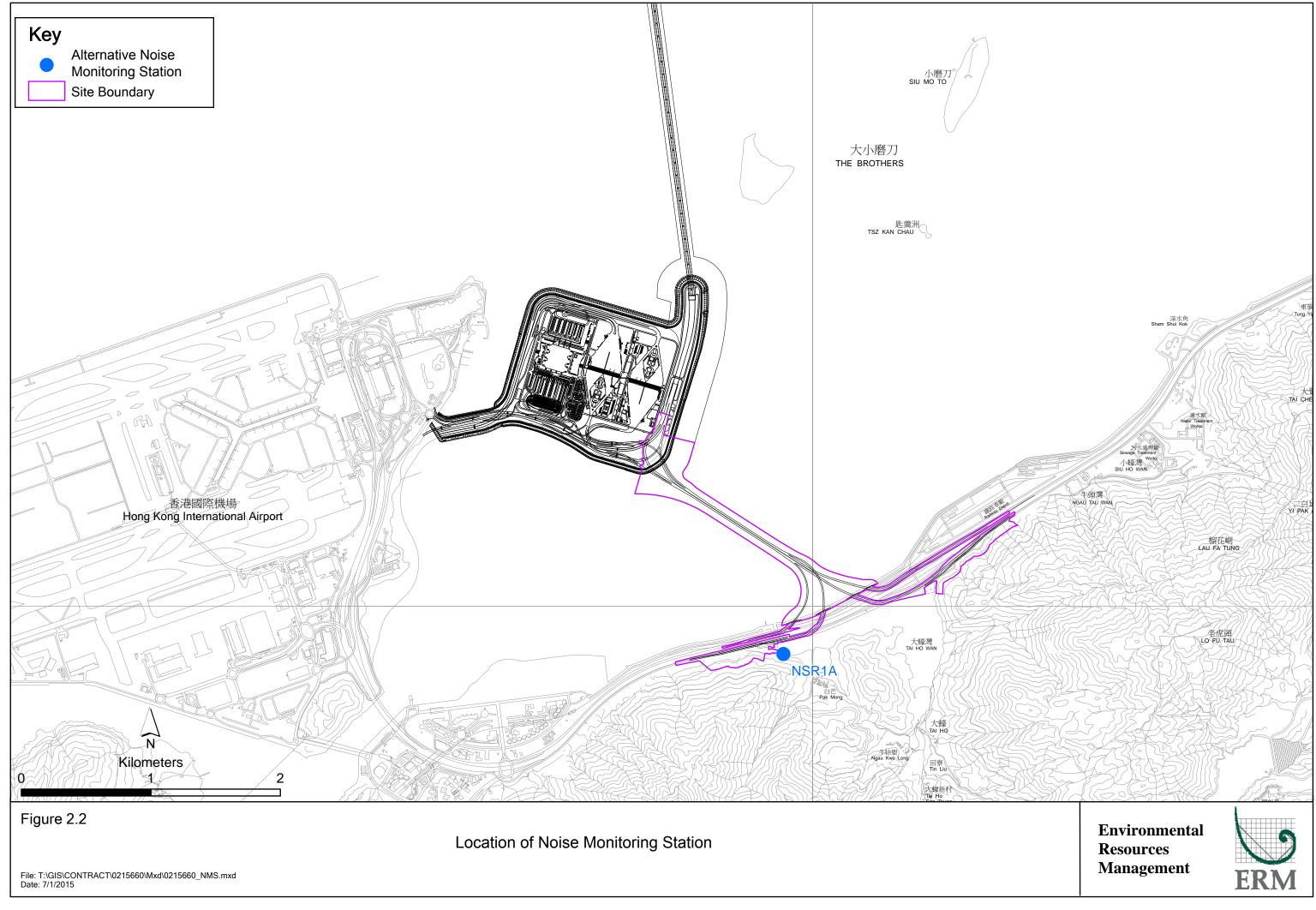


Table 2.5Location of Impact Noise Monitoring Station and Monitoring Dates in this
Reporting Period

Monitoring Station	Monitoring Period	Location	Parameters & Frequency
NSR1A	March to May 2015	Pak Mong Village Pavilion	 30-mins measurement at each monitoring station between 0700 and 1900 on normal weekdays (Monday to Saturday). L_{eq} L₁₀ and L₉₀ would be recorded. At least once a week
Note:			

(1) Noise Monitoring Station NSR1 at Pak Mong Village proposed in accordance with the Updated EM&A was relocated to NSR1A.

Table 2.6Noise Monitoring Equipment

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

2.2.2 Action and Limit Levels

The Action and Limit levels of the noise monitoring are provided in *Appendix D*. The Event and Action plan is presented in *Appendix J*.

2.2.3 Monitoring Schedule for the Reporting Quarter

The schedules for noise monitoring in the reporting quarter are provided in *Appendix E*.

2.2.4 Results and Observations

The monitoring results for noise monitoring are summarized in *Table 2.7*. Monitoring results are presented graphically in *Appendix G* and detailed impact noise monitoring results are reported in the *Seventeenth* to *Nineteenth Monthly EM&A Report*.

Table 2.7Summary of Construction Noise Monitoring Results at NSR1A in the
Reporting Period

Month	Average , dB(A), L _{eq}	Range, dB(A), L _{eq}	Limit Level, dB(A), L _{eq}	
	(30mins)	(30mins)	(30mins)	
March 2015	60	57 - 61	75	
April 2015	60	57 - 61	75	
May 2015	60	57 – 61	75	

A total of seventeen (17) monitoring events were undertaken in the reporting period with no Action Level and Limit Level exceedance recorded at the monitoring station in the reporting period. No action is thus required to be undertaken in accordance with the Event Action Plan presented in *Appendix J*.

Major noise sources during the noise monitoring included construction activities, nearby traffic noise and aircraft noise.

2.3 WATER QUALITY MONITORING

The baseline water quality monitoring undertaken by the Hong Kong – Zhuhai – Macao Bridge Hong Kong Projects (HKZMB) between 6 and 31 October 2011 has included all monitoring stations except SR4a for the Project. Thus, the baseline monitoring results except for station SR4a and Action/Limit Level presented in HKZMB Baseline Monitoring Report ⁽¹⁾ are adopted for this Project. Baseline water quality monitoring was conducted at station SR4a from 29 August to 24 September 2013.

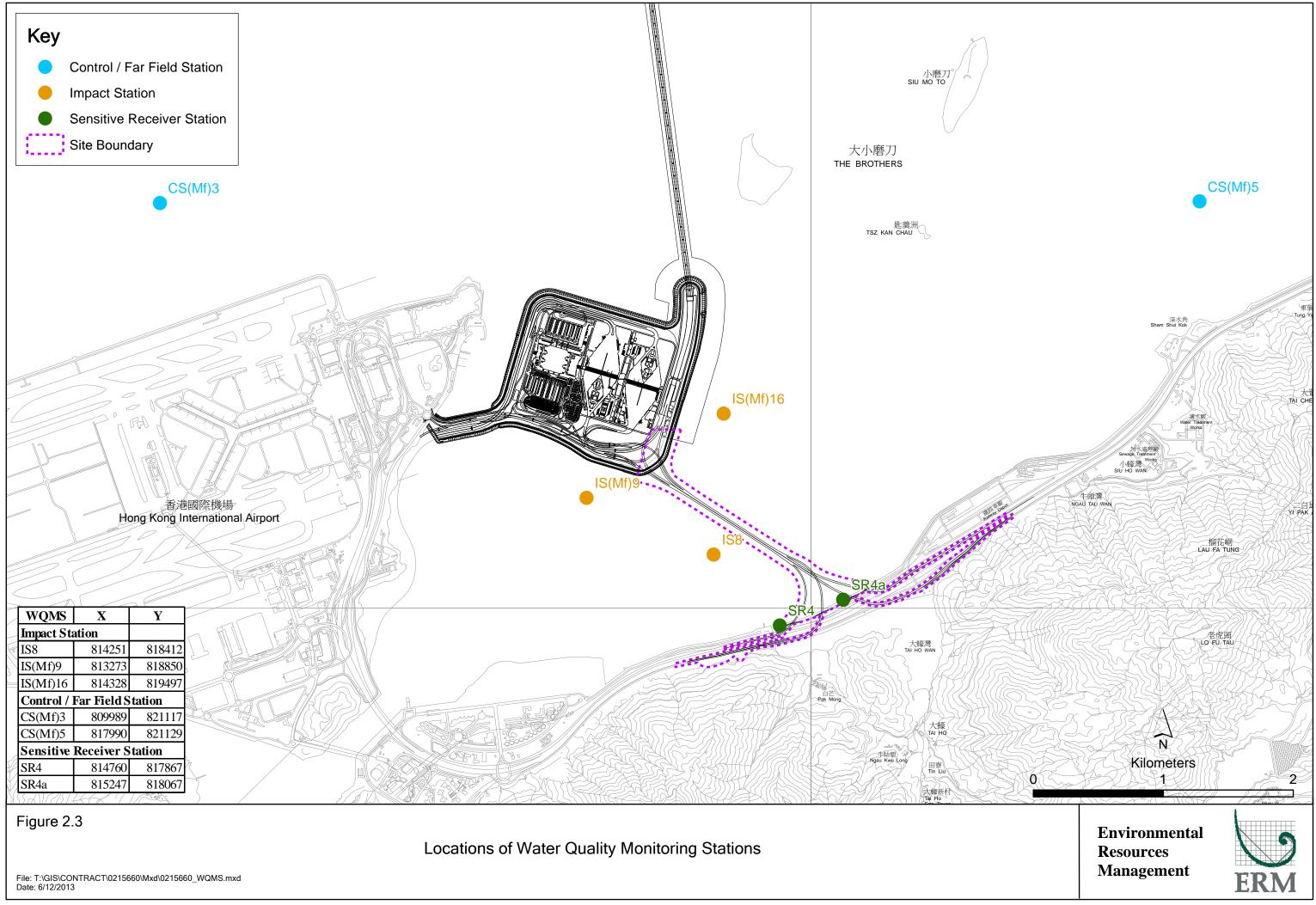
2.3.1 Monitoring Requirements and Equipment

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 at seven water quality monitoring stations in accordance with the Updated EM&A Manual (*Figure 2.3; Table 2.8*).

Table 2.8Locations of Water Quality Monitoring Stations and the Corresponding
Monitoring Requirements

Station ID	Туре	Coordinates		*Parameters, unit	Depth	Frequency
		Easting	Northing			
IS(Mf)9	Impact Station (Close to HKBCF construction site)	813273	818850	 Temperature(°C) pH(pH unit) Turbidity (NTU) Water depth (m) Salinity (ppt) 	3 water depths: 1m below sea surface, mid-depth	Impact monitoring: 3 days per week, at mid-flood and mid-ebb
IS(Mf)16	Impact Station (Close to HKBCF construction site)	814328	819497	 DO (mg/L and % of saturation) SS (mg/L) 	and 1m above sea bed. If the water depth is less than	tides during the construction period of the Contract.
IS8	Impact Station(Close to HKBCF construction site)	814251	818412		3m, mid- depth sampling only. If water depth	
SR4	Sensitive receiver (Tai Ho Inlet)	814760	817867		less than 6m, mid- depth may	
SR4a	Sensitive receiver	815247	818067		be omitted.	
CS(Mf)3	Control Station	809989	821117			
CS(Mf)5	Control Station	817990	821129			

⁽¹⁾ Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring for Hong Kong - Zhuhai - Macao Bridge Hong Kong Projects - Investigation. Baseline Environmental Monitoring Report (Version C). Submitted on 8 March 2012 and subsequently approved by EPD.



Station ID	Туре	Coordinates	*Parameters, unit	Depth	Frequency
		Easting Northing			

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 summarizes the equipment used in the impact water quality monitoring programme.

Table 2.9Water Quality Monitoring Equipment

Equipment	Brand and Model
DO, Temperature meter and Salinity	YSI Pro2030
Turbidimeter	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 Action & Limit Levels

The Action and Limit Levels of the water quality monitoring are provided in *Appendix D*.

2.3.3 Monitoring Schedule for the Reporting Quarter

The schedules for water quality monitoring in the reporting quarter are provided in *Appendix E*.

2.3.4 Results and Observations

Impact water quality monitoring was conducted at all designated monitoring stations in the reporting period. Monitoring results are presented graphically in *Appendix H* and detailed impact water quality monitoring results were reported in the *Seventeenth* to *Nineteenth Monthly EM&A Reports*.

In this reporting period, a total of thirty-nine (39) monitoring events were undertaken. One (1) Action level exceedance of depth-averaged SS during mid-ebb tide was recorded on 19 May 2015 at monitoring station SR4a. Actions were taken in accordance with the Event Action Plan as presented in *Appendix J*. The exceedance was considered not related to this Contract upon further investigation.

Apart from the observed exceedance, there were some results of depthaveraged turbidity and depth averaged- SS higher than the corresponding Action Levels at the impact stations and sensitive receivers, but the results were lower than 120% of the upstream control at the same tide of the same day (*Table 2.10*). As such, these observations were not regarded as exceedance. No action is thus required to be undertaken for these observations in accordance with the Event Action Plan (*Appendix L*).

Table 2.10Summary of WQM Results Breaching the Action Level without Exceedance

Date	Tide	Parameter	Station
24 March 2015	Mid-ebb and mid-flood	SS	IS(Mf)16, IS(Mf)9, IS8, SR4 and
			SR4a
28 March 2015	Mid-ebb and mid-flood	SS	IS(Mf)16, IS(Mf)9, IS8, SR4 and
			SR4a
31 March 2015	Mid-ebb and mid-flood	SS	IS(Mf)16, IS(Mf)9, IS8, SR4 and
			SR4a
2 April 2015	Mid-ebb	SS	IS(Mf)16, IS(Mf)9, IS8, SR4 and
-			SR4a
2 April 2015	Mid-flood	SS	IS(Mf)16 and IS8
7 April 2015	Mid-ebb	SS	IS(Mf)9, SR4 and SR4a
7 April 2015	Mid-flood	SS	SR4
28 April 2015	Mid-ebb	SS	IS8
14 May 2015	Mid-flood	Turbidity	IS8 and SR4
14 May 2015	Mid-ebb and mid-flood	SS	IS(Mf)16, IS(Mf)9, IS8, SR4 and
			SR4a
16 May 2015	Mid-ebb and mid-flood	SS	IS(Mf)16, IS(Mf)9, IS8, SR4 and
-			SR4a
19 May 2015	Mid-ebb and mid-flood	SS	IS(Mf)16, IS(Mf)9, IS8, SR4 and
-			SR4a
23 May 2015	Mid-ebb	SS	IS(Mf)16, IS(Mf)9, IS8 and SR4
23 May 2015	Mid-flood	SS	IS8 and SR4

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 2.11 summarises the equipment used for the impact dolphin monitoring.

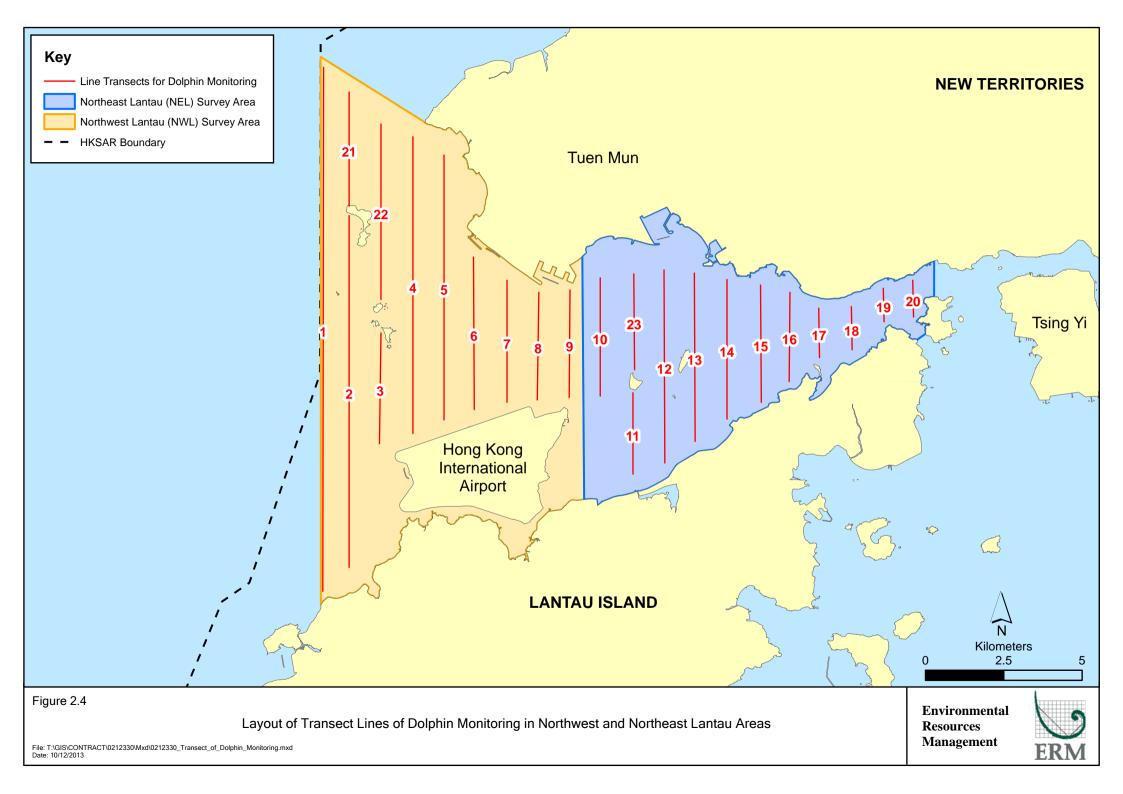
Equipment	Model
Global Positioning System (GPS)	Garmin 18X-PC
	Geo One Phottix
Camera	Nikon D90 300m 2.8D fixed focus
	Nikon D90 20-300m zoom lens
Laser Binoculars	Infinitor LRF 1000
Marine Binocular	Bushell 7 x 50 marine binocular with compass
Vessel for Monitoring	and reticules
	65 foot single engine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

2.4.3 Monitoring Parameter, Frequencies & Duration

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

2.4.4 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 2.12* below.



	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				

Table 2.12 Impact Dolphin Monitoring Line Transect Co-ordinates

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 J*.

2.4.6 Monitoring Schedule for the Reporting Period

The dolphin monitoring schedules for the reporting period are shown in *Appendix E*.

2.4.7 Results & Observations

A total of 899.81 km of survey effort was collected, with 97.7% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility). Among the two areas,

344.55 km and 555.26 km of survey effort were conducted in NEL and NWL survey areas respectively. The total survey effort conducted on primary lines was 655.32 km, while the effort on secondary lines was 244.49 km. Survey effort conducted on both primary and secondary lines were considered as on-effort survey data. The survey efforts are summarized in *Appendix I*.

During the six sets of monitoring surveys in March to May 2015, a total of seven groups of twenty-five (25) Chinese White Dolphins were sighted. Four (4) of the seven (7) dolphin sightings were made during on-effort search. Two (2) of the four (4) on-effort sightings were made on primary lines, while the other two were made on secondary lines. No sighting was made in the proximity of the Project's alignment. In this quarterly period, all dolphin groups were sighted in NWL, while none of them were sighted in NEL. Summary table of the dolphin sightings is shown in *Appendix I*.

Encounter rates of Chinese White Dolphins deduced from the survey effort and on-effort sighting data from the primary transect lines under favourable conditions (Beaufort 3 or below) in the reporting period with the results presented in *Tables 2.13* and 2.14.

Survey	Survey period	Encounter rate (STG)	Encounter rate (ANI)	
Area		(no. of on-effort	(no. of dolphins from all	
		dolphin sightings per	on-effort sightings per	
		100 km of survey	100 km of survey effort)	
		effort)		
		Primary Lines Only	Primary Lines Only	
	Set 1: 4 th & 11 th Mar 2015	0.0	0.0	
	Set 2: 17th & 26th Mar 2015	0.0	0.0	
NEL	Set 3: 8th & 10th Apr 2015	0.0	0.0	
INEL	Set 4: 17th & 22nd Apr 2015	0.0	0.0	
	Set 5: 4th & 8th May 2015	0.0	0.0	
	Set 6: 14th & 18th May 2015	0.0	0.0	
NWL	Set 1: 4 th & 11 th Mar 2015	1.42	9.93	
	Set 2: 17th & 26th Mar 2015	0.00	0.00	
	Set 3: 8th & 10th Apr 2015	1.40	4.20	
	Set 4: 17th & 22nd Apr 2015	0.00	0.00	
	Set 5: 4th & 8th May 2015	0.00	0.00	
	Set 6: 14th & 18th May 2015	0.00	0.00	

Table 2.13Individual Survey Event Encounter Rates

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

Survey Area	Encounter (no. of on-effort of per 100 km of	lolphin sightings	Encounter rate (ANI) (no. of dolphins from all on-effort sightings per 100 km of survey effort)		
	March - May September - 2015 November 2011		March - May 2015	September - November 2011	
Northeast Lantau	0.00	6.00 ± 5.05	0.00	22.19 ± 26.81	
Northwest Lantau	0.47 ± 0.73	9.85 ± 5.85	2.36 ± 4.07	44.66 ± 29.85	

Note: encounter rates deduced from the baseline monitoring period (September – November 2011) have been recalculated based only on survey effort and on-effort sighting data made along the primary transect lines under favourable conditions

Group size of Chinese White Dolphins ranged from one (1) to three (3) individuals per group in North Lantau region during March 2015 to May 2015. The average dolphin group sizes from these three months were compared with the ones deduced from the baseline period in September to November 2011, as shown in *Table 2.15*.

Table 2.15Comparison of Quarterly Average Encounter Rates

	Average Dolphin Group Size				
	March - May 2015	September - November 2011			
Overall	3.57 ± 2.82 (n = 7)	3.72 ± 3.13 (n = 66)			
Northeast Lantau	0.00	3.18 ± 2.16 (n = 17)			
Northwest Lantau	3.57 ± 2.82 (n = 7)	3.92 ± 3.40 (n = 49)			

Whilst one (1) Limit Level exceedance was observed for the quarterly dolphin monitoring data between March and May 2015. During this quarter of dolphin monitoring, no unacceptable impact from the activities of this Contract on Chinese White Dolphins was noticeable from the general observations.

Although the dolphins infrequently occurred along the alignment of TMCLKL Southern Connection Viaduct in the past and during the baseline monitoring period, it is apparent that dolphin usage has been significantly reduced in NEL, and many individuals have shifted away from the important habitat around the Brothers Islands.

It is critical to monitor the dolphin usage in North Lantau region in the upcoming quarters, to determine whether the dolphins are continuously affected by the various construction activities in relation to the HZMB-related works, and whether suitable mitigation measure can be applied to revert the situation.

2.4.8 Marine Mammal Exclusion Zone Monitoring

Daily marine mammal exclusion zone monitoring was undertaken during the period of marine works under this Contract. Passive Acoustic Monitoring (PAM) was also implemented for the detection of marine mammal when marine works were carried out outside the daylight hours under this Contract. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was recorded in the monitoring period 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. Thirteen (13) site inspections were carried out in the reporting quarter on 4, 11, 19 and 26 March 2015; 2, 9, 15, 22 and 30 April 2015; 8, 13, 20 and 28 May 2015.

Key observations during the site inspections in this reporting period are summarized in *Table 2.16*.

Table 2.16	Specific Observations Identified during the Weekly Site Inspection in this
	Reporting Period

Inspection Date	Location & Environmental Observations	Recommendations/ Remarks
4 March 2015	 Pier E12 The updated dumping permit was not displayed. The checklist for wet sep was not displayed. The label of sediment at barge Kin Yip was not well displayed. Pier B1 An air compressor was not placed on decoupling pad. 	 Pier E12 Dumping permit, checklist for wet sep and sediment label should be well displayed. Pier B1 The air compressor should be placed on decoupling pad.
11 March 2015	 Area 1 A slope close to drainage was partially unpaved. Pier C14B Refuse was found placed next to drainage. Site Access 9B An old EP was displayed. 	 Area 1 The unpaved slope should be covered by tarpaulin sheet Pier C14B Refuse or waste container should be placed away from drainage. Site Access 9B Only the most updated permit should be displayed.
19 March 2015	 Seafront Refuse was found disposed improperly. Chemical containers were placed without drip tray. Pier ACD1 Some chemical containers were not placed in drip tray. 	 Seafront Refuse should be cleaned up regularly. Chemical containers should be placed in drip tray. Pier ACD1 Chemical containers should be placed in drip tray.

Inspection Date	Location & Environmental Observations	Recommendations/ Remarks
26 March 2015	Pak Mong	Pak Mong
	 Soil stockpile was not covered. 	• Soil stockpile should be covered by tarpaulin
	Barge Gammon 38 (next to Pier E7)	sheet or watered.
	• An air compressor was not placed on	Barge Gammon 38 (next to Pier E7)
	acoustic decoupling pad.	• Air compressor on marine platform should
		be placed on acoustic decoupling pad.
2 April 2015	Dockyard near Area 23	Dockyard near Area 23
-	 Drip trays were not plugged. 	• Drip trays should be plugged.
	Area 1	Area 1
	• Soil stockpile was not covered.	• Soil stockpile should be covered by tarpaulin
	-	sheet or watered to avoid dust emission.
9 April 2015	Pier E13AB	Pier E13AB
-	• The updated checklist for wetsep was not	• The updated checklist should be displayed at
	displayed.	the wetsep.
	Pier E9	Pier E9
	A generator was not placed on acoustic	• Operating generators on marine platform
	decoupling pad.	should be placed on acoustic decoupling pad.
15 April 2015	Slope B/F9	Slope B/F9
-	• The exposed area was partially dry.	Watering was applied immediately.
	Pier B14	Pier B14
	• The updated EP was not displayed.	• The updated EP should be displayed.
	Pier D12	Pier D12
	• The updated EP was not displayed.	• The updated EP should be displayed.
	• A drip tray for generator was not plugged.	• The drip tray should be plugged.
22 April 2015	Seafront	Seafront
-	• Some chemical containers were not placed in	• Chemical containers should be placed in drip
	drip trip.	trip.
	Pier D3	Pier D3
	• Gutter was not properly installed.	• Gutter should be properly installed.
	Pier E11	Pier E11
	A generator was not placed on acoustic	• Generator on marine platform should be
	decoupling pad.	placed on acoustic decoupling pad.
30 April 2015	Pier ACD1	Pier ACD1
-	• A drip tray for generator was placed without	• Acoustic decoupling pad should be provided
	acoustic decoupling pad and containing	and stagnant water should be removed.
	stagnant water.	• A drip tray for generator should be plugged.
	• A drip tray for generator was not plugged.	
8 May 2015	Area 1	Area 1
	• Some chemical containers were not placed in	• Chemical containers should be placed in drip
	drip tray.	tray.
	 Soil stockpile near drainage was not well 	• Soil stockpile should be well covered.
	covered.	Site Access 4A
	Site Access 4A	• Chemical waste storage should be secured as
	 Chemical waste storage was not secured 	appropriate.
	properly.	Pier D14B
	Pier D14B	• Refuse in drainage should be cleaned up.
	 Refuse was accumulated in drainage. 	Pier D10
	Pier D10	• Checklist for wet sep should be displayed.
	Checklist for wet sep was not displayed.	
13 May 2015	Seafront	Seafront
	• Stagnant water was accumulated in drainage.	Stagnant water in drainage and drip tray
	Stagnant water was accumulated in a drip	should be regularly cleaned up regularly.
	tray for generator.	Gammon 39 (Pier E1)
	Gammon 39 (Pier E1)	• Excessive soil on barge should be cleaned up
	• Excessive soil was accumulated on barge.	regularly.

Inspection Date	Location & Environmental Observations	Recommendations/ Remarks						
20 May 2015	Slope B/C8	Slope B/C8 & B/C9						
	• Tarpaulin sheet for rock drilling was not well	• Tarpaulin sheet for rock drilling and cement						
	covered.	loading station should be well covered.						
	Slope B/C9							
	Tarpaulin sheet for cement loading station							
	was not well covered.							
28 May 2015	Pier E6	Pier E6						
	• Excessive soil was accumulated in gutter and	• Gutter should be cleaned up regularly and						
	the gutter was not properly installed	properly installed.						

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

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 sediments (Categories L & M). Reference has been made to the waste flow table prepared by the Contractor (*Appendix K*). The quantities of different types of wastes are summarized in *Table 2.17*.

Table 2.17Quantities of Different Waste Generated in the Reporting Period

Month/	Inert	Imported	Inert	Non-inert	Recyclable	Chemical	Marine Sec	diment (m ³)
Year	Construction	Fill (m³)	Construction	Construction	Materials (c)	Wastes	Category	Category
	Waste ^(a) (m ³)		Waste Re-	Waste (b) (kg)	(kg)	(kg)	L	Μ
			used					
			(m ³)					
March 2015	9,600	77	473	120,940	203	0	618	222
April 2015	7,694	32	2,261	133,630	105	0	0	0
May 2015	8,091	0	653	107,920	42	0	550	0
Total	25,385	109	3,387	362,490	350	0	1,168	222
Notes:								

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

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

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

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

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

2.7 Environmental Licenses and Permits

The status of environmental licensing and permit is summarized in *Table 2.18* below.

Tuen Mun- Chek Lap Kok Link Viaducts A, B, C, D & E Area1 adjacent to Cheung Ting Road, Siu Ho Wan
Area1 adjacent to Cheung Ting Road, Siu Ho Wan
Ho Wan
Area 2 a dia contrto Choung Tung Pood
Area 2 adjacent to Cheung Tung Road, Pak Mong Village
WA5 adjacent to Cheung Tung Road, Yan O
NA
For Area 23
For Plant mobilization using tractor with trailer
Pre-casted pile cap shell installation at E10-E13
Pier A8A9 Safety Fence Erection
TTA Case 009 Ch.2.1E-4.2E
B8 Pier Head Segment Erection and Formwork Installation
For Load unload at NLH near Viaduct D
B9-B16 Pier Head Segments Erection

Table 2.18Summary of Environmental Licensing and Permit Status

ENVIRONMENTAL RESOURCES MANAGEMENT 0215660_6TH QTR EM&A_20151002.DOC

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-RS0470-14	29-Apr-15	28-Oct-15	GCL	For Broad Permit
Construction Noise Permit for night works and works in general holidays	GW-RS0489-15	08-May-15	07-Aug-15	GCL	B8 Pier Head Temp Works Lifting
Construction Noise Permit for night works and works in general holidays	GW-RS0491-15	08-May-15	30-Jun-15	GCL	TTA Case 009 Ch.2.1E-4.2E
Construction Noise Permit for night works and works in general holidays	GW-RS1032-14	27-Mar-15	27-Sep-15	GCL	For Load unload at NLH near Viaduct D
Construction Noise Permit for night works and works in general holidays	GW-RS1225-14	31-Oct-14	02-May-15	GCL	For Broad Permit
Construction Noise Permit for night works and works in general holidays	GW-RS1406-15	30-Mar-15	31-May-15	GCL	B9-B16 Pier Head Segments Erection
Construction Noise Permit for night works and works in general holidays	GW-RW0093-15	26-Feb-15	26-Aug-15	GCL	General works at WA5
Construction Noise Permit	Nil	N/A	N/A	GCL	For Piling Works
Construction Waste Disposal Account	7017735	10-Jul-13	NA	GCL	NA
Construction Waste Disposal Account	7019470	03-Mar-14	NA	GCL	Vessel CHIT Account
Effluent Discharge License	WT00019017-2014	13-May-14	31-May-19	GCL	Marine Portion
Effluent Discharge License	WT00019018-2014	13-May-14	31-May-19	GCL	Land Portion
Marine Dumping Permit	EP/MD/15-248	27 Mar 2015	26 Apr 2015	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
Marine Dumping Permit	EP/MD/16-002	17 Apr 2015	26 May 2015	GCL	For dumping Type I (Dedicated Site) and Type II sediment
Marine Dumping Permit	EP/MD/16-020	22 May 2015	26 Jun 2015	GCL	For dumping Type I (Dedicated Site) and Type II sediment

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Marine Dumping Permit	EP/MD/15-257	2 Apr 2015	7 Oct 2015	GCL	For dumping Type I sediment

2.8 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

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

A summary of the Environmental Mitigation and Enhancement Measure Implementation Schedules (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 and construction noise complied with the Action/ Limit levels in the reporting period.

One (1) Action level exceedance of depth-averaged SS during mid-ebb tide was recorded on 19 May 2015 at monitoring station SR4a. Actions were taken in accordance with the Event Action Plan as presented in *Appendix J*. The exceedance was considered not related to this Contract upon further investigation.

The construction impact on depth-averaged SS was assessed by comparing the quarterly mean values of depth-averaged SS with the relevant ambient mean values. Except for IS(Mf)9 during mid-flood tide, results showed that the quarterly means of depth-averaged SS at all sampling stations during both mid-ebb and mid-flood tides were higher than the corresponding ambient means (Table 2.19). One-way ANOVA was conducted to examine whether there is significant difference of depth-averaged SS between ambient mean and quarterly mean. Apart from IS(Mf)16 ($F_{1,68}$ = 2.5, p = 0.12) during midebb tide, CS(Mf)3 ($F_{1,71}$ = 0.9, p = 0.35), CS(Mf)5 ($F_{1,73}$ = 2.6, p = 0.11) and IS8 ($F_{1,61} = 0.4$, p = 0.54) during mid-flood tide, statistically significant (p < 0.05) difference was detected for depth-averaged SS between ambient mean and quarterly mean at the other monitoring stations. The observed difference is due to the highly variable SS results at the corresponding upstream control stations in the reporting period, which is considered as natural fluctuation in the western waters of Hong Kong. The ET will monitor the trend of depthaveraged SS in the upcoming quarters to determine whether there is any change in water quality associated with this Project and further mitigation measures will be recommended if deemed necessary.

Table 2.19Comparison between Quarterly Mean and Ambient Mean Values of Depth-
averaged Suspended Solids

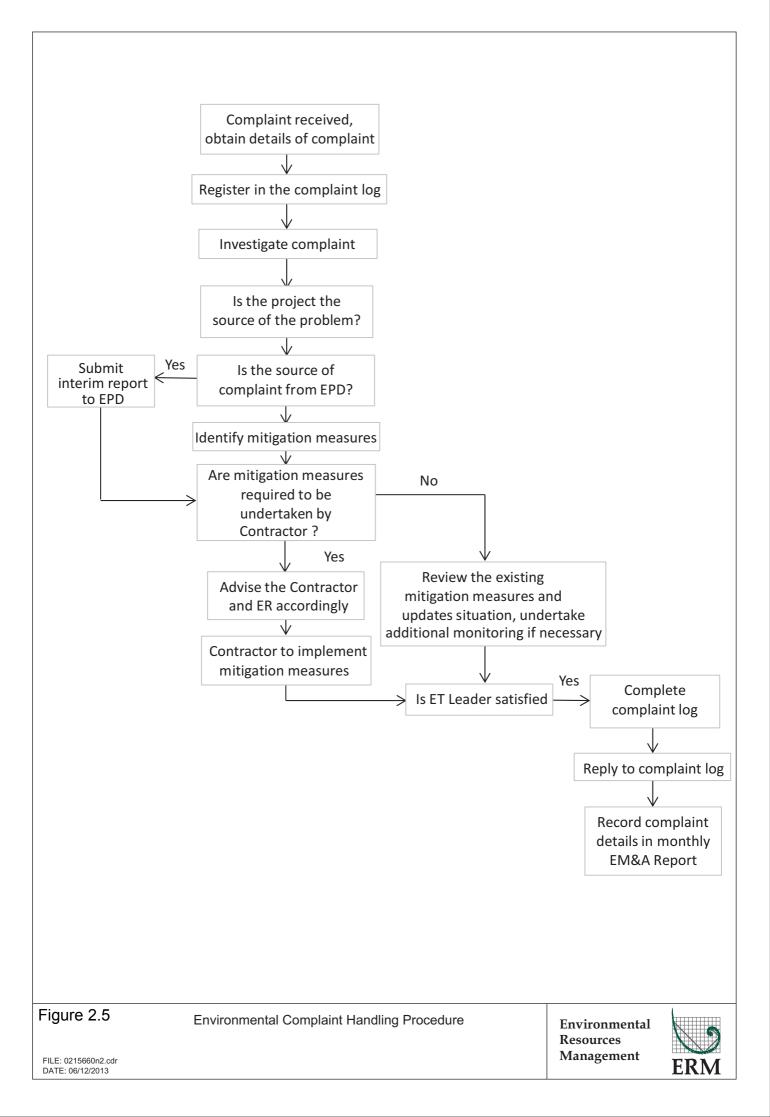
Station	Baselir	ne Mean	Ambien	t Mean ^(a)		Mean (March May 2015)
	Mid-ebb	Mid-flood	Mid-ebb	Mid-flood	Mid-ebb	Mid-flood
CS(Mf)3	9.2	12.8	12.0	16.6	19.9	19.2
CS(Mf)5	9.2	11.5	11.9	14.9	19.0	18.5
SR4	10.3	12.3	13.4	16.0	18.9	18.7
SR4a	9.1	9.8	11.9	12.7	18.4	18.0
IS8	11.3	13.5	14.6	17.6	19.2	19.0
IS(Mf)9	10.9	14.3	14.2	18.5	19.1	18.5
IS(Mf)16	11.4	10.3	14.8	13.4	18.9	18.5
Notes:						
(a) Ambient	mean value is d	efined as a 30%	increase of th	e baseline mea	n value	

One (1) Limit Level exceedance was recorded for impact dolphin monitoring in this reporting quarter. Following the review of the monitoring data and marine works details as per the procedure stipulated in the Event and Action Plan of the Updated EM&A Manual, there is no evidence showing that the sources of impact directly related to the construction works under this Contract that may have affected the dolphin usage in the North Lantau region. Investigation findings were detailed in *Appendix L*.

2.10 SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

The Environmental Complaint Handling Procedure is provided in Figure 2.5.

There was no complaint, notification of summons or successful prosecution recorded in the reporting period. Statistics on complaint, notification of summons of successful prosecution are summarized in *Appendix L*.



3.1 CONSTRUCTION ACTIVITIES FOR THE COMING QUARTER

As informed by the Contractor, the major works for the Contract in the coming quarter are summarized below:

June 2015

Marine Works

- Construction and installation of pile caps;
- Uninstallation of marine piling platform;
- Pile cap installation;
- Pier construction;
- Launching gantry assembly;
- Marine piling and
- Installation of pier head segment

Land-based Works

- Construction and installation of pile caps;
- Pier construction;
- Pile cap installation;
- Re-alignment of Cheung Tung Road;
- Land piling;
- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Relocation of MTRC fence; and
- Slope work of Slopes 9SE-B/C9 and 9SE-B/F85

<u>July 2015</u>

Marine Works

- Construction and installation of pile caps;
- Uninstallation of marine piling platform;
- Pile cap installation;
- Pier construction;
- Launching gantry assembly;
- Marine piling; and,
- Installation of pier head segment

Land-based Works

- Predrilling at Viaduct F;
- Construction and installation of pile caps;
- Pier construction;
- Pile cap installation;

3

- Re-alignment of Cheung Tung Road;
- Land piling;
- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Relocation of MTRC fence; and,
- Slope work of Viaducts A & B

<u>August 2015</u>

Marine Works

- Construction and installation of pile caps;
- Uninstallation of marine piling platform;
- Pile cap installation;
- Pier construction;
- Launching gantry assembly;
- Marine piling and
- Installation of pier head segment

Land-based Works

- Predrilling at Viaduct F;
- Construction and installation of pile caps;
- Pier construction;
- Pile cap installation;
- Re-alignment of Cheung Tung Road;
- Land piling;
- Pre-drilling works;
- Installation of pier head segment;
- Additional land GI, trial pits & lab testing;
- Relocation of MTRC fence; and
- Slope work of Viaducts A & B.

3.2 KEY ISSUES FOR THE COMING QUARTER

Potential environmental impacts arising from the above upcoming construction activities are mainly associated with air quality, noise, marine water quality, marine ecology and waste management issues.

3.3 MONITORING SCHEDULE FOR THE COMING QUARTER

Impact monitoring for air quality, noise, marine water quality and dolphin monitoring are scheduled to continue for the next reporting period.

The monitoring programme has been reviewed and was considered as adequate to cater for the nature of works in progress.

4.1 CONCLUSIONS

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

Neither Action Level nor Limit Level exceedances were observed for air quality and noise monitoring in this reporting period.

One (1) exceedance of Action Level for depth-averaged SS during mid-ebb tide was recorded for water quality monitoring on 19 May 2015.

A total of seven groups of twenty-five (25) Chinese White Dolphins were sighted during the six sets of survey from March to May 2015. Whilst one (1) Limit Level exceedance was recorded for the quarterly dolphin monitoring data between March to May 2015, no unacceptable impact from the activities of this Contract on Chinese White Dolphins was noticeable from the general observations. It is critical to monitor the dolphin usage in North Lantau region in the upcoming quarters, to determine whether the dolphins are continuously affected by the various construction activities in relation to the HZMB-related works, and whether suitable mitigation measure can be applied to revert the situation.

Environmental site inspection was carried out thirteen (13) times in the reporting period. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audits.

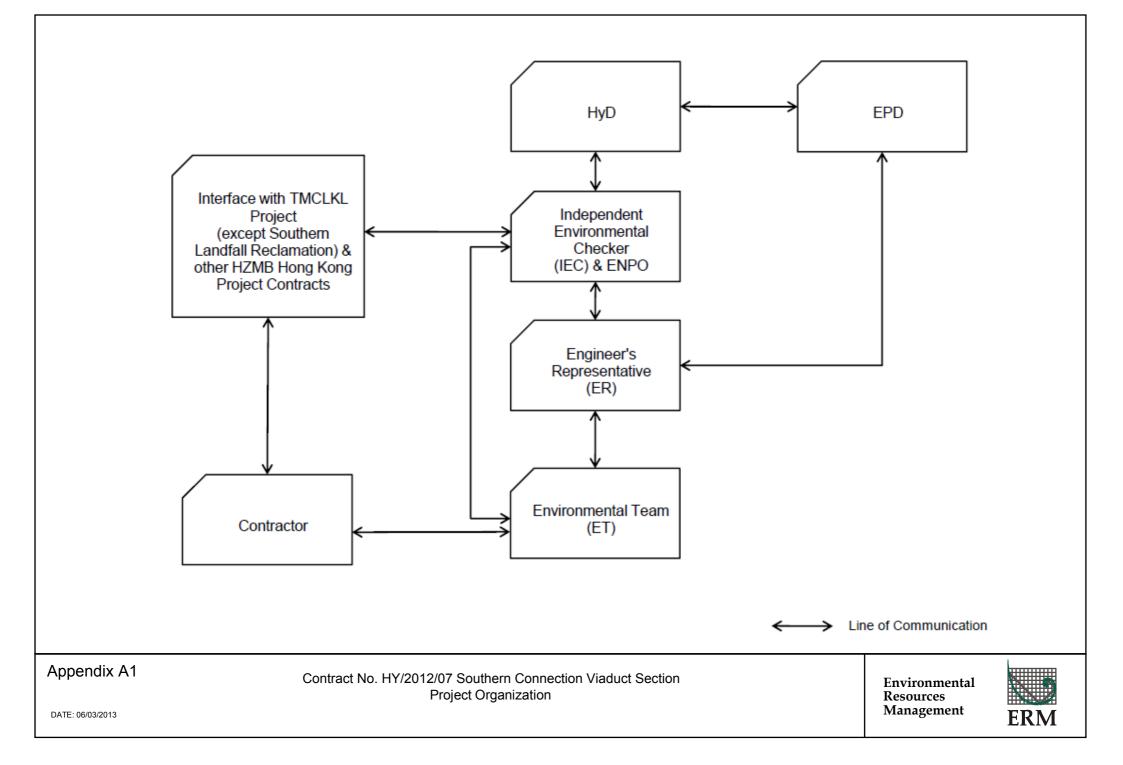
No environmental complaint, summons/ prosecution were received during the reporting period.

The monitoring programme has been reviewed and was considered as adequate to cater for the nature of works in progress. Change to the monitoring programme was thus not recommended at this stage. The monitoring programme will be evaluated as appropriate in the next reporting period. The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

4

Appendix A

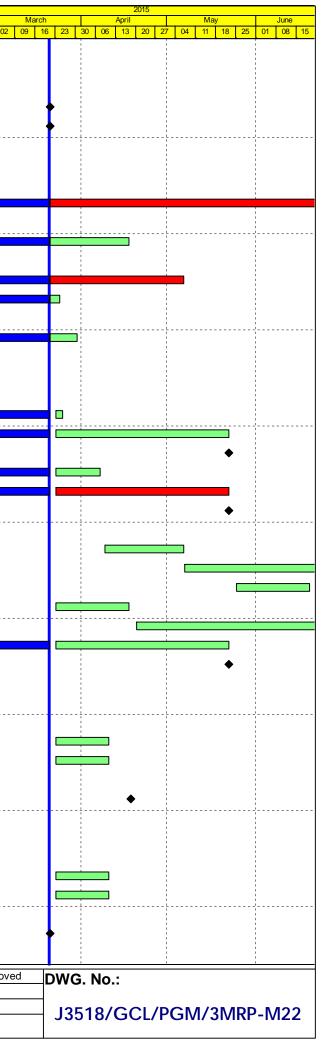
Project Organization for Environmental Works



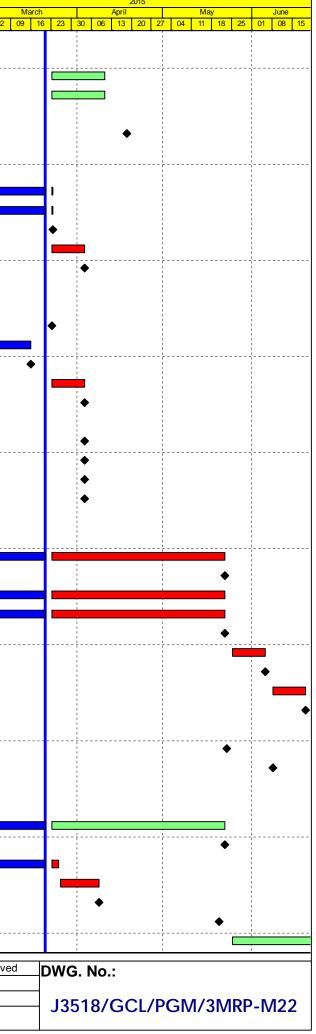
Appendix B

Construction Programme for the Reporting Quarter

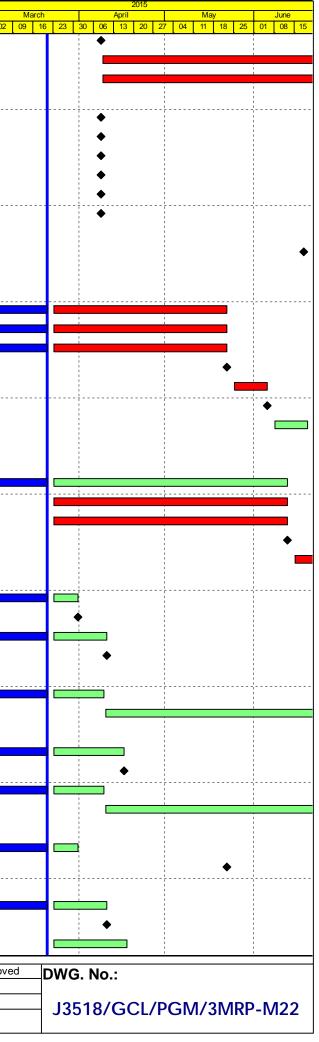
ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
IY/2012/07 -	· TM-CLK Link-SC [DWP rE] - Status Update 21-03-2015										
Contract Key I											
the second s	Dates / Access Period										
POS02	Portion A (Commencement of Works+499 days)	0	21-Mar-15*	0%	0		01-Nov-14		-139	0	0%
POS03	Portion B (Commencement of Works+619 days)	0	21-Mar-15*	0%	0		03-Mar-15		-18	307	0%
General Subm	issions										
General Requ	irements										
	Vorks Design										
PR00130	Unloading Jetty at HKBCF - Working Platform design and approval	90	02-Jun-14 A	10%	81	02-Jul-15	12-Nov-14	17-Feb-15	-105	15	10%
Land Works			1				<u> </u>				
PR00160	Propose/submit a performance review for piled fnds in accordance w/ ETWB TCW No. 4/20	101	26-May-14 A	80.2%	20	17-Apr-15	11-Jan-16	02-Feb-16	239	353	80%
Land GI Worl	(\$										
PR02204	SQR Sampling & Testing and Approval	110	14-Aug-14 A	68.18%	35	06-May-15	27-Nov-14	09-Jan-15	-92	2	68%
PR03110	Trial Pits along Cheung Tung Road	20	21-Oct-13 A	85%	3	24-Mar-15	27-Apr-18	30-Apr-18	917	5	85%
Additional La											
PR03200	PBH25, 29, 30, 31 (Piers D9, C14, C16, C17)	33	11-Jan-14 A	75.76%	8	30-Mar-15	21-Apr-18	30-Apr-18	912	912	75%
Design Submi				10.1070	Ŭ		217,0110	007.0110	012	012	10/0
	gn (v18.8 18-08-14)										
Ground Inve											
ARDD0009	Consultation with GEO	20	13-Aug-13 A	85%	3	25-Mar-15	14-Apr-15	16-Apr-15	16	42	85%
ARDD0010	IC/SO Approval of Ground Investigation Interpretative Report - AP03.00	75	13-Aug-13 A	40%	45	22-May-15	30-Jan-17	31-Mar-17	485	0	50%
ARDD0010-1	IC/SO Approval of Ground Investigation Interpretative Report - AP03.00	0	13-Aug-13 A	0%	43 0	22-May-15	30-3aii-17	31-Mar-17	485	0	0%
ARDD0010-1 ARDD0013-2		60	16-Jul-13 A	80%	12	07-Apr-15	13-Apr-18	30-Apr-18	799	799	90%
	Additional GI Fieldwork, Lab Testing and Permitting - Other areas					· ·	· ·	•			
ARDD0017-2	IC/SO Approval of Additional GI Interpretative Report - AP03.00	75	29-Jan-14 A	40%	45	22-May-15	13-Feb-15	16-Apr-15	-26	0	30%
ARDD0017-4	IC/SO Approval of Additional GI Interpretative Report - AP03.00	0		0%	0	22-May-15		16-Apr-15	-26	0	0%
General Sub											
ARDD0037-1	Preparation of Seismic Performance Report Viaduct A,B,C,D - AP12.01	20	09-Apr-15	0%	20	06-May-15	23-Sep-15	20-Oct-15	119	0	0%
ARDD0037-2	IC/SO Approval of Seismic Performance Report Viaduct A,B,C,D - AP12.01	75	07-May-15	0%	75	19-Aug-15	21-Oct-15	02-Feb-16	119	222	0%
ARDD0037-4	Preparation of Seismic Performance Report Viaduct E - AP12.02	20	25-May-15	0%	20	19-Jun-15	23-Sep-15	20-Oct-15	87	0	0%
ARDD0037-7	Preparation of Seismic Performance Report Viaduct F - AP12.03	20	23-Mar-15	0%	20	17-Apr-15	23-Sep-15	20-Oct-15	132	0	0%
ARDD0037-8	IC/SO Approval of Seismic Performance Report Viaduct F - AP12.03	75	20-Apr-15	0%	75	31-Jul-15	21-Oct-15	02-Feb-16	132	0	0%
ARDD0042-2	IC/SO Approval of O&M Facility Provisions DDA - BP11.01	75	14-Jan-15 A	40%	45	22-May-15	19-Aug-15	20-Oct-15	107	0	50%
ARDD0042-4	IC/SO Approval of O&M Facility Provisions DDA - BP11.01	0		0%	0	22-May-15		20-Oct-15	107	65	0%
Viaduct E5 a	nd E6										
Viaduct Desi	gn										
Viaduct E5 E	6 Superstructure Optimisation										
TGP0540	Viaduct E5 & E6 - Preparation of Optimised Bearing Schedule	15	23-Mar-15	0%	15	10-Apr-15	27-Mar-18	16-Apr-18	786	17	0%
TGP0550	Viaduct E5 & E6 - Preparation of Optimised Movement Joint Schedule	15	23-Mar-15	0%	15	10-Apr-15	10-Apr-18	30-Apr-18	796	796	0%
Associated C	Construction Milestones										
ARDD0175	Viaduct E5 & E6 - DDA approval ready for Initial Segment Casting	0	18-Apr-15	0%	0		21-Apr-15		4	82	0%
Viaduct E7 8	E8		,	1	1	1					
Viaduct Desi	gn										
Viaduct E7 E	8 Superstructure Optimisation										
TGP0740	Viaduct E7 & E8 - Preparation of Optimised Bearing Schedule	15	23-Mar-15	0%	15	10-Apr-15	27-Mar-18	16-Apr-18	786	17	0%
TGP0750	Viaduct E7 & E8 - Preparation of Optimised Movement Joint Schedule	15	23-Mar-15	0%	15	10-Apr-15	10-Apr-18	30-Apr-18	796	796	0%
	Construction Milestones										
ARDD0220	Viaduct E7 & E8 - DDA approval ready for Initial Segment Casting	0	21-Mar-15	0%	0		22-Apr-15		33	111	0%
Viaduct E2					-						0,0
										ing T	Oheelert
Actual Work			hek Lap Kok I					Date 09-Mar-15	Revis		Checked DB
Planned Bar Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CC		ing Program	-	-	-	es)	31-Mar-15			VY
 Milestone 	Milestones, No Level of Effort.	(P	Progress as	OT 21-IV	ar-15)		I		I	



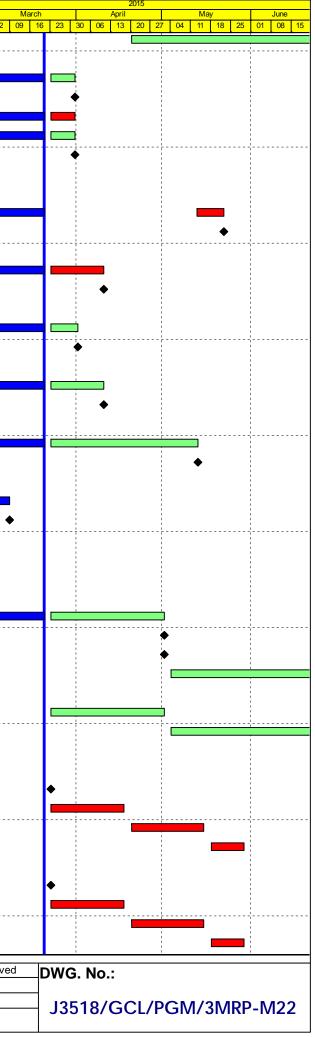
Activity ID	Activity Name		Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
													23 02
Viaduct Desi	<u> </u>	d'an											
	uperstructure Optimis		45	00 Mar 45	00/	45	40.4.5	07 14-1 40	40.4	700	47	00/	[
TGP0240	· ·	n of Optimised Bearing Schedule	15	23-Mar-15	0%	15	10-Apr-15	27-Mar-18	16-Apr-18	786	17	0%	
TGP0250	Construction Milestor	n of Optimised Movement Joint Schedule	15	23-Mar-15	0%	15	10-Apr-15	10-Apr-18	30-Apr-18	796	796	0%	
ARDD0266		by a ready for Initial Segment Casting	0	18-Apr-15	0%	0		06-Feb-15		-71	0	0%	
Viaduct E1		, , ,											
Viaduct Desi	qn												
	<u> </u>	on and Further Issue of Construction Method and Temporary W	/orks [60	30-Jul-14 A	98.33%	1	23-Mar-15	30-Apr-18	30-Apr-18	810	0	98%	
ARDD0287-4	Viaduct E1 - Preparatio	n of Draft Working Drawing Set	60	30-Jul-14 A	98.33%	1	23-Mar-15	30-Apr-18	30-Apr-18	810	0	98%	
ARDD0287-5	Viaduct E1 - GCL/FRE	Final Coordinated Construction Method/Temporary Work Detail	ls 0		0%	0	23-Mar-15	· ·	30-Apr-18	810	810	0%	1
		nsent of Supplemental Working Drawings Viaduct E1	10	23-Mar-15	0%	10	03-Apr-15	24-Dec-14	07-Jan-15	-63	0	0%	
		nsent of Supplemental Working Drawings Viaduct E1	0		0%	0	03-Apr-15		07-Jan-15	-63	10	0%	
Viaduct D													
Viaduct Desi	gn												
	<u> </u>	Final Coordinated Construction Method/Temporary Work Details	s 0		0%	0	23-Mar-15		30-Apr-18	811	811	0%	
ARDD0333-6	Viaduct D - Preparation	and Coordination of Working Drawing Set	10	17-Feb-15 A	100%	0	16-Mar-15 A					100%	
ARDD0333-7	Viaduct D - Issue of Re	vised DDA Submission - DP14.03	0		100%	0	16-Mar-15 A					100%	
ARDD0333-8	Viaduct D - IC/SO Con	sent of Supplemental Working Drawings Viaduct D	10	23-Mar-15	0%	10	03-Apr-15	07-Jan-15	20-Jan-15	-53	0	0%	I
		sent of Supplemental Working Drawings Viaduct D	0		0%	0	03-Apr-15		20-Jan-15	-53	18	0%	I
	o Contractor												
ARDD0348		ent Types and Reinforcement	0		0%	0	03-Apr-15		20-Jan-15	-53	18	0%	
ARDD0350	-	rage and PT Requirements	0		0%	0	03-Apr-15		20-Jan-15	-53	18	0%	
ARDD0352	Viaduct D - Final Bearin		0		0%	0	03-Apr-15		30-Apr-18	801	801	0%	
ARDD0354		ment Joint (MJ) Schedule	0		0%	0	03-Apr-15		20-Oct-15	142	49	0%	
Viaduct C					0,0	Ū	00 / pi 10		20 0 01 10		10	0,0	
Viaduct Desi	an												
ARDD0384	7	oval of Sub & Superstructure DDA - DP13.03	75	22-Dec-14 A	40%	45	22-May-15	06-Jan-15	10-Mar-15	-54	0	50%	
		oval of Sub & Superstructure DDA - DP13.03	0		0%	0	22-May-15		10-Mar-15	-54	0	0%	
		n and Further Issue of Construction Method and Temporary Wo	-	02-Mar-15 A	25%	45	22-May-15	16-Dec-14	17-Feb-15	-69	0	25%	
		of Draft DDA Working Drawing Set	60	02-Mar-15 A	25%	45	22-May-15	16-Dec-14	17-Feb-15	-69	0	25%	
	· .	Final Coordinated Construction Method/Temporary Work Details			0%	0	22-May-15	10 200 11	17-Feb-15	-69	0	0%	
		and Coordination of Working Drawing Set	10	25-May-15	0%	10	05-Jun-15	17-Feb-15	03-Mar-15	-69	0	0%	
	· · ·	of Working DDA Drawings for Viaduct C DP13.03	0		0%	0	05-Jun-15		03-Mar-15	-69	0	0%	
		sent of Supplemental Working Drawings Viaduct C	10	08-Jun-15	0%	10	19-Jun-15	03-Mar-15	17-Mar-15	-69	0	0%	
		sent of Supplemental Working Drawings Viaduct C	0		0%	0	19-Jun-15		17-Mar-15	-69	0	0%	
	Construction Milestor		0		070	U	10-001-10		17-10141-15	-03	0	070	
ARDD0413		val ready for Commencement of Pilecaps C1-C17	0	23-May-15	0%	0		10-Mar-15		-74	0	0%	
ARDD0413		val ready for Initial Segment Casting	0	08-Jun-15	0%	0		16-Mar-15		-84	13	0%	
Viaduct A	Viaduoi O - DDA appio		0	00-0011-10	070	U		10-10101-10		-0-	10	070	
Viaduct A	an												
	<u> </u>	oval of Foundation DDA - DP11.01	75	04-Oct-14 A	40%	45	22-May-15	16-Apr-15	17-Jun-15	18	0	50%	
		oval of Foundation DDA - DP11.01	0	04 00 147	0%		22-May-15	10-70-10	17-Jun-15	18	0	0%	
		v of Draft DDA Rev A1 - DP11.03	5	19-Feb-15 A	40%	3	25-May-15	23-Dec-14	25-Dec-14	-64	0	0%	
		ncorporate GCL Comments	10	26-Mar-15	0%	10	08-Apr-15	23-Dec-14 26-Dec-14	08-Jan-15	-64	0	0%	
ARDD0433-2 ARDD0434	·	•	0	20-iviai - 10	0%	0	08-Apr-15 08-Apr-15	20-060-14	08-Jan-15	-64	0	0%	
ARDD0434 ARDD0434-1	Viaduct A - Submission of DDA - DP11.03 1 Viaduct A - Earliest IC Certificate for DDA DP11.02, DP11.03				0%	0	20-May-15		24-Aug-15	68	8	0%	
ARDD0434-1 ARDD0435	Viaduct A - Earliest IC C	·	0 75	25-May-15	0%	75	20-May-15 04-Sep-15	09-Jul-15	24-Aug-15 21-Oct-15	33	0	0%	
			10	20-1viay-10	0 /0	13	04-3ep-13	03-30-13	21-00-13		U	U70	
Actual Work		Project ID: J3518DWPrE-M22	Tuen Mun - C	-					Date	Revis		Checked	Approve
Planned Bar		Layout: J3518-DWP-3MRP Submission - M22_ Filter: TASK filters: 3-Month Lookahead, No CQ 3	-Month Roll		•	-	-	es)	09-Mar-15 31-Mar-15		D	/B /Y	
Critical Bar		Milestones, No Level of Effort.	(F	Progress as	s of 21-N	lar-15)		51-IVIAI-13			<u> </u>	
· · ·													



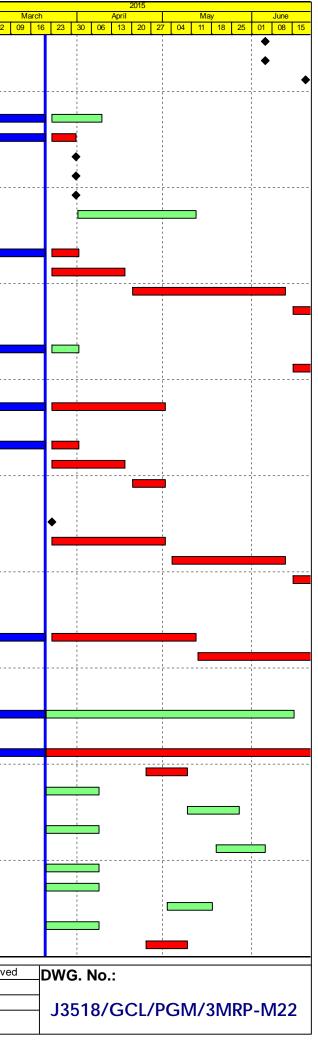
Activity ID		Activity Name	Or	rig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
	ARDD0435-2	Viaduct A - GCL/FRE Issue of Construction Method/Temporary Work Da	a la	0		0%	0	08-Apr-15		08-Jan-15	-64	0	0%	23 02
	ARDD0435-3	Viaduct A - Coordination and Further Issue of Construction Method and T	emporary Works Da	60	09-Apr-15	0%	60	01-Jul-15	09-Jan-15	02-Apr-15	-64	0	0%	-
		Viaduct A - Preparation of Draft DDA Working Drawing Set		60	09-Apr-15	0%	60	01-Jul-15	09-Jan-15	02-Apr-15	-64	0	0%	-
	Information to	o Contractor												
	ARDD0445	Viaduct A - Final Pilecap Reinforcement		0		0%	0	08-Apr-15		13-Feb-15	-38	0	0%	 >
	ARDD0447	Viaduct A - Final Pier Shapes and Reinforcement		0		0%	0	08-Apr-15		27-Feb-15	-28	11	0%	- >
	ARDD0450	Viaduct A - Final Segment Types and Reinforcement		0		0%	0	08-Apr-15		22-Jan-16	207	107	0%	-)
	ARDD0452	Viaduct A - Final Anchorage and PT Requirements		0		0%	0	08-Apr-15		22-Jan-16	207	107	0%	-
	ARDD0454	Viaduct A - Final Bearing Schedule		0		0%	0	08-Apr-15		23-Dec-15	185	57	0%	-
	ARDD0456	Viaduct A - Final Movement Joint (MJ) Schedule		0		0%	0	08-Apr-15		20-Oct-15	139	46	0%	»)
	Associated C	onstruction Milestones												
	ARDD0463	Viaduct A - DDA approval ready for Commencement of Piling		0	18-Jun-15	0%	0		22-Oct-15		126	0	0%	_
<u>ا</u>	/iaduct F1 &	F3							11					
	Viaduct Desig	gn												
	ARDD0485	Viaduct F1 & F3 - IC/SO Approval of DDA - DP16.02, 16.03, 16.08, 16.0	9	75	25-Nov-14 A	40%	45	22-May-15	02-Mar-15	01-May-15	-15	25	50%	• •
	ARDD0486-2	Viaduct F1 & F3 - Coordination and Further Issue of Construction Metho	d and Temporary W	60	02-Mar-15 A	25%	45	22-May-15	16-Feb-15	17-Apr-15	-25	0	25%	,
	ARDD0486-3	Viaduct F1 & F3 - Preparation of Draft Working Drawing Set		60	02-Mar-15 A	25%	45	22-May-15	16-Feb-15	17-Apr-15	-25	0	25%	, _
	ARDD0486-4	Viaduct F1 & F3 - GCL/FRE Final Coordinated Construction Method/Ten	nporary Work Detail	0		0%	0	22-May-15		17-Apr-15	-25	0	0%	- >
	ARDD0486-5	Viaduct F1 & F3 - Preparation and Coordination of DDA/Working Drawin	g Set	10	25-May-15	0%	10	05-Jun-15	20-Apr-15	01-May-15	-25	0	0%	-
	ARDD0486-6	Viaduct F1 & F3 - Submission of Working DDA Drawings Viaduct F1,F3 I	DP16.03, DP16.09	0		0%	0	05-Jun-15		06-Jul-15	21	0	0%	,
	ARDD0486-7	Viaduct F1 & F3 - IC/SO Consent of Supplemental Working Drawings Via	aduct F1,F3	10	08-Jun-15	0%	10	19-Jun-15	07-Jul-15	20-Jul-15	21	5	0%	-
1	/iaduct F2, F	F4 and F5							11					
	Viaduct Desig	gn												
	ARDD0529	Viaduct F2, F4 & F5 - IC/SO Approval of DDA - DP16.05, 06, 11, 12, 14,	15	75	25-Nov-14 A	20%	60	12-Jun-15	27-Apr-15	17-Jul-15	25	10	20%	
	ARDD0530-3	Viaduct F2, F4 & F5 - Coordination and Further Issue of Construction Me	ethod and Temporar	60	23-Mar-15	0%	60	12-Jun-15	26-Jan-15	17-Apr-15	-40	0	0%	,
	ARDD0530-4	Viaduct F2, F4 & F5 - Preparation of Draft Working Drawing Set		60	23-Mar-15	0%	60	12-Jun-15	26-Jan-15	17-Apr-15	-40	0	0%	-
	ARDD0530-5	Viaduct F2, F4 & F5 - GCL/FRE Final Coordination Construction Method	/Temporary Work D	0		0%	0	12-Jun-15		17-Apr-15	-40	0	0%	-
	ARDD0530-6	Viaduct F2, F4 & F5 - Preparation and Coordination of DDA/Working Dra	awing Set	10	15-Jun-15	0%	10	26-Jun-15	20-Apr-15	01-May-15	-40	0	0%	-
F	Parapet and	Utility Trough												
	ARDD0562-4	IC/SO Approval of DDA -DP30.01		75	31-Jul-14 A	90.67%	7	31-Mar-15	07-Oct-15	15-Oct-15	142	0	90%	· · · · · · · · · · · · · · · · · · ·
	ARDD0562-5	IC/SO Approval of DDA -DP30.01		0		0%	0	31-Mar-15		15-Oct-15	142	0	0%	,
	ARDD0566	IC/SO Approval of DDA -DP31.01		75	24-Oct-14 A	80%	15	10-Apr-15	25-Sep-15	15-Oct-15	134	0	60%	
	ARDD0566-1	IC/SO Approval of DDA -DP31.01		0		0%	0	10-Apr-15		15-Oct-15	134	22	0%	
5	Slopeworks f	or Viaduct B: 9SE- B/C8, B/C9, B/F9, B/F85+ 10SW-A/F52	2, A/F53											
	ARDD0580-5	Preparation of Slope A/F52 Submission - CP12.03		20	10-Feb-15 A	30%	14	09-Apr-15	07-Apr-15	24-Apr-15	11	0	30%	
	ARDD0580-6	IC/SO Approval of Slope - CP12.03		75	10-Apr-15	0%	75	23-Jul-15	27-Apr-15	07-Aug-15	11	0	0%	-
5	Slopeworks f	for Viaduct C: 10NW -C/C22, C/C26, C/C27, C/F13, C/F14.	C/F15											
	ARDD0587	IC/SO Approval of Slope Combined AIP/DDA -CP13.01		190	19-Nov-13 A	90%	19	16-Apr-15	23-Jun-16	19-Jul-16	328	0	90%	·
	ARDD0587-1	IC/SO Approval of Slope Combined AIP/DDA -CP13.01		0		0%	0	16-Apr-15		19-Jul-16	328	162	0%	,
	ARDD0588-1	Preparation of Fill Slope Combined AIP/DDA - CP13.02		20	21-Nov-14 A	30%	14	09-Apr-15	17-Mar-16	05-Apr-16	258	0	30%	·
	ARDD0588-2	IC/SO Approval of Combined AIP/DDA -CP13.02		75	10-Apr-15	0%	75	23-Jul-15	06-Apr-16	19-Jul-16	258	0	0%	,
۽	Slopeworks f	for Viaduct A: 9SE-B/FR8, B/R1, B/R2												
	ARDD0595	IC/SO Approval of Slope Combined AIP/DDA - CP11.01		75	31-Jul-14 A	90.67%	7	31-Mar-15	06-Nov-15	16-Nov-15	164	38	90%	,
	ARDD0595-1	IC/SO Approval of Slope Combined AIP/DDA -CP11.01		0		0%	0	22-May-15		16-Nov-15	126	101	0%	·
		for Viaduct D: 10NW -C/R4, C/F9, C/F10, C/F11, C/F17, C/F	50											
	ARDD0603	IC/SO Approval of Slope Combined AIP/DDA -CP14.01		75	16-Dec-14 A	80%	15	10-Apr-15	15-May-15	04-Jun-15	39	0	90%	
		IC/SO Approval of Slope Combined AIP/DDA-CP14.01		0		0%	0	10-Apr-15		04-Jun-15	39	30	0%	- :
	ARDD0604-1	Further Update of Combined AIP/DDA - CP14.02		20	23-Mar-15	0%	20	17-Apr-15	29-May-15	25-Jun-15	49	0	0%	·
	Actual Work	Project ID: J3518DWPrE-M22	Tuen Mi	un - Ch	nek Lap Kok L	ink - Sout	hern C	onnection		Date	Revis	sion (Checked	Approved
	Planned Bar	Layout: J3518-DWP-3MRP Submission - M22_			ng Progran				es)	09-Mar-15	-	DI	В	
1		Filter: TASK filters: 3-Month Lookahead, No CO							,	1 T				
	Critical Bar Milestone 	Milestones, No Level of Effort.		(P	rogress as	of 21-M	ar-15)		-	31-Mar-15		W	Υ	



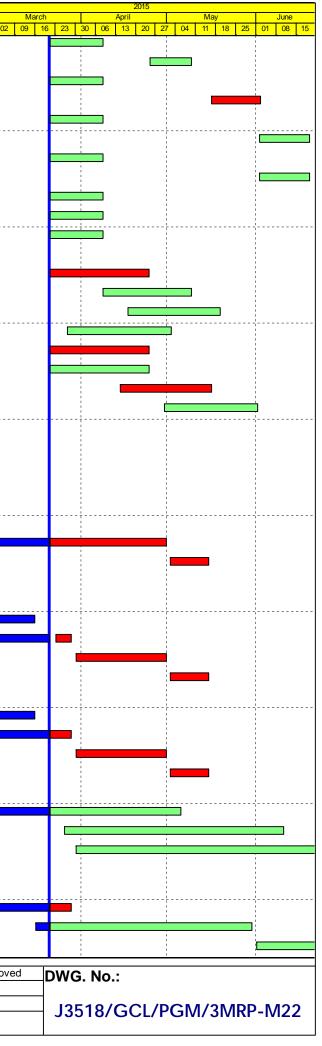
Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	23 02
ARDD0604-2	2 IC/SO Approval of Slope Combined AIP/DDA-CP14.02	75	20-Apr-15	0%	75	31-Jul-15	26-Jun-15	08-Oct-15	49	0	0%	23 02
Waterwork	s, Drainage & Utility Diversions		· ·		<u> </u>							
ARDD0629	IC/SO Approval of Waterworks, Drainage & Utility DDA - BP20.01	75	22-Jul-14 A	90.67%	7	31-Mar-15	12-May-15	20-May-15	36	0	90%	
ARDD0629-	I IC/SO Approval of Waterworks, Drainage & Utility DDA - BP20.01	0		0%	0	31-Mar-15		20-May-15	36	0	0%	
ARDD0629-2	2 Gov't Approval of Submissions for Waterworks, Drainage & Utility Diversions	75	02-Jan-14 A	90.67%	7	31-Mar-15	13-Feb-15	23-Feb-15	-26	0	90%	
ARDD0630-3	3 IC/SO Approval of Deck Drainage DDA - BP20.02	75	30-Jun-14 A	90.67%	7	31-Mar-15	23-Mar-17	31-Mar-17	523	0	90%	
ARDD0630-4	IC/SO Approval of Deck Drainage DDA - BP20.02	0		0%	0	31-Mar-15		31-Mar-17	523	0	0%	
Viaduct Ap	proach Ramp Retaining Walls											
Approach I												
ARDD0652	Approach D - IC/SO Approval of Approach Ramp D DDA - DP23.01	75	25-Sep-14 A	89.33%	8	22-May-15	07-Apr-15	16-Apr-15	-26	0	90%	
ARDD0652	1 Approach D - IC/SO Approval of Approach Ramp D DDA - DP23.01	0		0%	0	22-May-15		16-Apr-15	-26	0	0%	
Approach I	Ramp C											
ARDD0658	Approach C - IC/SO Approval of Approach Ramp C DDA - DP20.01	75	03-Oct-14 A	80%	15	10-Apr-15	24-Feb-15	17-Mar-15	-19	0	80%	
ARDD0658	1 Approach C - IC/SO Approval of Approach Ramp C DDA - DP20.01	0		0%	0	10-Apr-15		17-Mar-15	-19	0	0%	
Approach I	Ramp B									1		
ARDD0664	Approach B - IC/SO Approval of Approach Ramp B DDA - DP21.01	75	14-Oct-14 A	89.33%	8	01-Apr-15	30-Dec-15	08-Jan-16	202	0	90%	
ARDD0664	1 Approach B - IC/SO Approval of Approach Ramp B DDA - DP21.01	0		0%	0	01-Apr-15		08-Jan-16	202	230	0%	
Approach A												
ARDD0670	Approach A - IC/SO Approval of Approach Ramp A DDA - DP20.01	75	03-Oct-14 A	80%	15	10-Apr-15	21-Jul-15	10-Aug-15	86	0	80%	
ARDD0670	1 Approach A - IC/SO Approval of Approach Ramp A DDA - DP20.01	0		0%	0	10-Apr-15		10-Aug-15	86	69	0%	
Approach I												
ARDD0676	Approach F - IC/SO Approval of Approach Ramp F DDA - DP24.01	75	23-Dec-14 A	49.33%	38	13-May-15	31-Mar-15	21-May-15	6	0	50%	· · · · · · · · · · · · · · · · · · ·
ARDD0676	1 Approach F - IC/SO Approval of Approach Ramp F DDA - DP24.01	0		0%	0	13-May-15		08-Dec-15	149	32	0%	
Viaduct Pa	vement											
ARDD871	Viaduct Pavement - IC/SO Approval of AIP/DDA - BP02.01	75	27-Jun-14 A	100%	0	09-Mar-15 A					100%	
ARDD871-1	Viaduct Pavement - IC/SO Approval of AIP/DDA - BP02.01	0		100%	0	09-Mar-15 A					100%	•
	kings and Street Furniture											
ARDD0688		75	16-Oct-14 A	100%	0	26-Feb-15 A					100%	
ARDD0688	1 IC/SO Approval of Signs, Markings & Street Furniture DDA - BP03.01	0		100%	0	26-Feb-15 A					100%	•
ARDD0700		75	15-Oct-14 A	60%	30	01-May-15	23-Nov-15	01-Jan-16	175	0	60%	
ARDD0700		0		0%	0	01-May-15		01-Jan-16	175	0	0%	
ARDD0701	Water Supply Application to WSD	0		0%	0	01-May-15		01-Jan-16	175	0	0%	
ARDD0702	Gov't Approval of LVIA	40	04-May-15	0%	40	26-Jun-15	04-Jan-16	26-Feb-16	175	168	0%	
Remaining	Works											
ARDD0704	Preparation of Remaining Works AIP - ZP01.00	30	23-Mar-15	0%	30	01-May-15	29-Aug-16	07-Oct-16	375	0	0%	
ARDD0705	IC/SO Approval of Remaining Works AIP - ZP01.00	40	04-May-15	0%	40	26-Jun-15	10-Oct-16	02-Dec-16	375	0	0%	
Segment T	arget Geometry And Erection Engineering				<u> </u>		.]]]		
Viaduct A												
ARDD0716	Viaduct A - Confirmation of Erection Sequence from Freyssinet	0		0%	0	23-Mar-15	Í	05-Feb-15	-31	0	0%	
ARDD0717	Viaduct A - Erection Sequence Analysis	20	23-Mar-15	0%	20	17-Apr-15	06-Feb-15	05-Mar-15	-31	0	0%	
ARDD0718	Viaduct A - Target Geometry Analysis	20	20-Apr-15	0%	20	15-May-15	06-Mar-15	02-Apr-15	-31	0	0%	
ARDD0719	Viaduct A - Segment Geometry Schedules	10	18-May-15	0%	10	29-May-15	03-Apr-15	16-Apr-15	-31	33	0%	
Viaduct C												
ARDD0721	Viaduct C - Confirmation of Erection Sequence from Freyssinet	0		0%	0	23-Mar-15		05-Jan-15	-55	0	0%	
ARDD0722	Viaduct C - Erection Sequence Analysis	20	23-Mar-15	0%	20	17-Apr-15	05-Jan-15	02-Feb-15	-55	0	0%	
ARDD0723	Viaduct C - Target Geometry Analysis	20	20-Apr-15	0%	20	15-May-15	02-Feb-15	02-Mar-15	-55	0	0%	
ARDD0724	Viaduct C - Segment Geometry Schedules	10	18-May-15	0%	10	29-May-15	02-Mar-15	16-Mar-15	-55	5	0%	
Actual Work	Project ID: J3518DWPrE-M22	Tuen Mun - C	hek Lap Kok I	_ink - Sou	thern	Connection		Date	Revis	sion (Checked	Approved
Planned Bar	Layout: J3518-DWP-3MRP Submission - M22_	3-Month Rolli	-					09-Mar-15		D	В	
Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.		Progress as	•	-	-	,	31-Mar-15		M	IΥ	
Milestone			-			-						



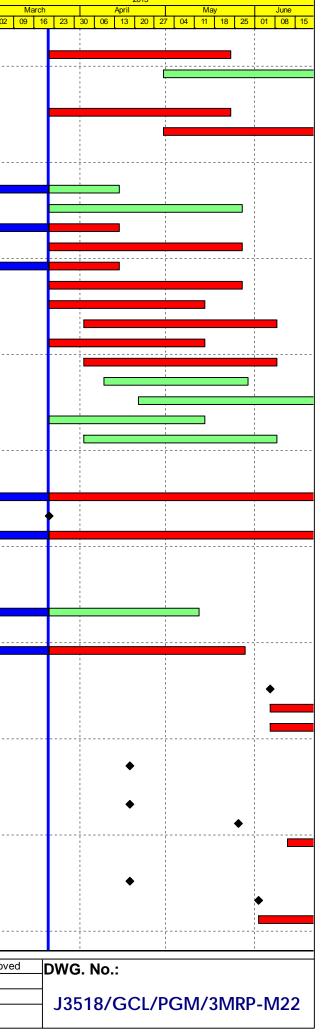
Activity ID		Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
							05 1 45		10.14 15				23 02
		Viaduct C - Issue of Pierhead Segments Bridge C1, C2, C3, C4	0		0%	0	05-Jun-15		16-Mar-15	-60	0	0%	
		Viaduct C - Issue of Casting Data and Segment Catalogue Bridge C4, C3 (Final)	0		0%	0	05-Jun-15		16-Mar-15	-60	0	0%	
		Viaduct C - Issue of Casting Data and Segment Catalogue Bridge C2, C1 (Final)	0		0%	0	19-Jun-15		17-Mar-15	-69	0	0%	
	/iaduct D				0.001/								
	ARDD0728	Viaduct D - Target Geometry Analysis	20	11-Dec-14 A	30%	14	09-Apr-15	11-Apr-18	30-Apr-18	797	797	30%	
	ARDD0729	Viaduct D - Segment Geometry Schedules	10	11-Dec-14 A	30%	7	31-Mar-15	12-Jan-15	20-Jan-15	-50	0	30%	
	ARDD0729-1	Viaduct D - Issue of Pierhead Segments Bridge D1, D2, D3	0		0%	0	31-Mar-15		20-Jan-15	-50	3	0%	
		Viaduct D - Issue of Casting Data and Segment Catalogue Bridge D2, D3 (Final)	0		0%	0	31-Mar-15		20-Jan-15	-50	3	0%	
	ARDD0729-4	Viaduct D - Issue of Casting Data and Segment Catalogue Bridge D1 (Final)	0	<u> </u>	0%	0	31-Mar-15	40.14 45	20-Jan-15	-50	0	0%	
		Viaduct D - Issue Erection Manual	30	01-Apr-15	0%	30	12-May-15	13-May-15	23-Jun-15	30	0	0%	
	/iaduct E5 ar			1						1	1		
	ARDD0734	Viaduct E5 & E6 - Segment Geometry Schedules	10	05-May-14 A	20%	8	01-Apr-15	28-Oct-14	07-Nov-14	-103	0	20%	
	TGP0560	Viaduct E5 & E6 - Issue of Optimised Casting Data and Segment Catalogue Bridge E5	20	23-Mar-15	0%	20	17-Apr-15	16-Dec-14	13-Jan-15	-69	0	0%	
	TGP0570	Viaduct E5 & E6 - Issue of Optimised Casting Data and Segment Catalogue Bridge E6	40	20-Apr-15	0%	40	12-Jun-15	13-Jan-15	10-Mar-15	-69	0	0%	
	TGP0590	Viaduct E5 & E6 - Issue Erection Manual	10	15-Jun-15	0%	10	26-Jun-15	02-Jun-15	16-Jun-15	-9	100	0%	
\\	/iaduct E7 &												
	ARDD0739	Viaduct E7 & E8 - Segment Geometry Schedules	10	05-May-14 A	20%	8	01-Apr-15	21-May-15	02-Jun-15	44	112	20%	
	TGP0760	Viaduct E7 & E8 - Issue of Optimised Casting Data and Segment Catalogue Bridge E7	40	15-Jun-15	0%	40	07-Aug-15	10-Mar-15	05-May-15	-69	0	0%	
\\	/iaduct E1												
	ARDD0744-3	Viaduct E1 - Issue Erection Manual	30	11-Dec-14 A	0%	30	01-May-15	19-Jan-15	02-Mar-15	-45	1	0%	
۱	/iaduct E2												
	ARDD0749	Viaduct E2 - Segment Geometry Schedules	10	24-Mar-14 A	20%	8	01-Apr-15	23-Feb-15	04-Mar-15	-20	12	20%	
	TGP0260	Viaduct E2 - Issue of Optimised Casting Data and Segment Catalogue Bridge E2	20	23-Mar-15	0%	20	17-Apr-15	09-Jan-15	05-Feb-15	-51	0	0%	
	TGP0290	Viaduct E2 - Issue of Erection Manual	10	20-Apr-15	0%	10	01-May-15	05-Mar-15	18-Mar-15	-32	44	0%	
۱ ۱	/iaduct F												
	ARDD0751	Viaduct F - Confirmation of Erection Sequence from Freyssinet	0		0%	0	23-Mar-15		23-Jan-15	-40	0	0%	
	ARDD0752	Viaduct F - Erection Sequence Analysis	30	23-Mar-15	0%	30	01-May-15	26-Jan-15	06-Mar-15	-40	0	0%	
	ARDD0753	Viaduct F - Target Geometry Analysis	30	04-May-15	0%	30	12-Jun-15	09-Mar-15	17-Apr-15	-40	0	0%	
	ARDD0754	Viaduct F - Segment Geometry Schedules	10	15-Jun-15	0%	10	26-Jun-15	20-Apr-15	01-May-15	-40	0	0%	
Ot	her Design												
M	arine Perm	anent Navigation Aids											
E	3MT0135	Preparation of MPNA DDA - BP36.01	46	11-Jun-14 A	19.57%	37	12-May-15	09-Mar-15	28-Apr-15	-10	0	20%	
E	BMT0140	IC/SO Approval of MPNA DDA BP36.01	75	13-May-15	0%	75	25-Aug-15	29-Apr-15	11-Aug-15	-10	0	0%	
Ma	jor Procure	nent											
Ma	arine Perma	nent Navigaion Aids											
PI	R65011	Design & Approvals for Marine Navigation Aids	150	23-Oct-13 A	54.67%	68	15-Jun-15	21-May-15	11-Aug-15	47	59	55%	
То	wer Cranes												
PI	R66011	Procure & Deliver Tower Cranes	325	01-Oct-14 A	53.85%	150	21-Sep-15	19-Jan-15	25-Jul-15	-50	770	50%	
PI	R66013	Erect & Commission Tower Crane @ E4	12	25-Apr-15	0%	12	09-May-15	19-Jan-15	02-Feb-15	-74	0	0%	
PI	R66013-1	Dismantle Tower Crane @ E4	12	21-Mar-15	0%	12	08-Apr-15	14-Apr-18	30-Apr-18	851	851	0%	
Pi	R66014	Erect & Commission Tower Crane @ E5	12	09-May-15	0%	12	27-May-15	08-Jun-15	29-Jun-15	21	47	0%	
PI	R66014-1	Dismantle Tower Crane @ E5	12	21-Mar-15	0%	12	08-Apr-15	14-Apr-18	30-Apr-18	851	851	0%	
Pi	R66015	Erect & Commission Tower Crane @ E6	12	19-May-15	0%	12	05-Jun-15	12-Aug-15	27-Aug-15	60	97	0%	
PI	R66015-1	Dismantle Tower Crane @ E6	12	21-Mar-15	0%	12	08-Apr-15	14-Apr-18	30-Apr-18	851	851	0%	
PI	R66016-1	Dismantle Tower Crane @ E7	12	21-Mar-15	0%	12	08-Apr-15	14-Apr-18	30-Apr-18	851	851	0%	
PI	R66017	Erect & Commission Tower Crane @ E8	12	02-May-15	0%	12	18-May-15	08-Aug-15	25-Aug-15	71	132	0%	
PI	R66017-1	Dismantle Tower Crane @ E8	12	21-Mar-15	0%	12	08-Apr-15	14-Apr-18	30-Apr-18	851	851	0%	
PI	R66018	Erect & Commission Tower Crane @ E9	12	25-Apr-15	0%	12	09-May-15	22-Jan-15	05-Feb-15	-70	2	0%	
		Project ID: J3518DWPrE-M22		hak Lan Kat I	ink C-	-			Doto	Revi	sion	Checked	Approve
	Actual Work	Leventh 12540 DW/D OMDD Culturing MOO		hek Lap Kok I				oc)	Date 09-Mar-15	Kevi		DB	Approve
	Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CO		ing Program	•	-	-	5)	31-Mar-15			VY	·
٠	Milestone	Milestones, No Level of Effort.	1)	Progress as		ar-15)						
L													



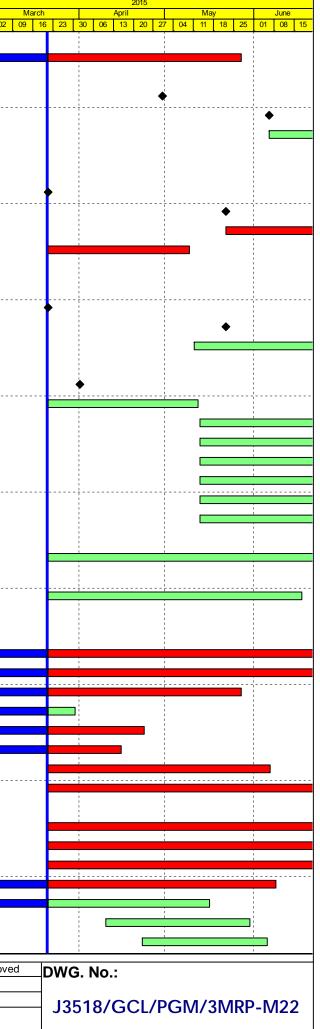
Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
PR66018-1	Dismantle Tower Crane @ E9	12	21-Mar-15	0%	12	08-Apr-15	14-Apr-18	30-Apr-18	851	851	23 0%	02
PR66019	Erect & Commission Tower Crane @ E10	12	21-Mai-15 25-Apr-15	0%	12	08-Apr-15 09-May-15	14-Api-18 11-May-15	28-May-15	13	18	0%	
PR66019-1	Dismantle Tower Crane @ E10	12	23-Apr-15 21-Mar-15	0%	12	09-May-15 08-Apr-15	14-Apr-18	30-Apr-18	851	851	0%	
PR66020	Erect & Commission Tower Crane @ E11	12	16-May-15	0%	12	02-Jun-15	17-Feb-15	06-Mar-15	-65	61	0%	
PR66020-1	Dismantle Tower Crane @ E11	12	21-Mar-15	0%	12	02-501-15 08-Apr-15	14-Apr-18	30-Apr-18	851	851	0%	
PR66020-1	Erect & Commission Tower Crane @ E12A	12	02-Jun-15	0%	12	19-Jun-15	08-Sep-15	24-Sep-15	73	110	0%	
PR66021-1	Dismantle Tower Crane @ E12A	12	21-Mar-15	0%	12			•		851	0%	
PR66021-1 PR66022				0%		08-Apr-15	14-Apr-18 06-Aug-15	30-Apr-18	851 47	91	0%	
	Erect & Commission Tower Crane @ E12B	12	02-Jun-15		12	19-Jun-15		22-Aug-15		-		
PR66022-1	Dismantle Tower Crane @ E12B	12	21-Mar-15	0%	12	08-Apr-15	14-Apr-18	30-Apr-18	851	851	0% 0%	
PR66023-1 PR66024-1	Dismantle Tower Crane @ E13-Sth Dismantle Tower Crane @ E13-Nth	12	21-Mar-15 21-Mar-15	0% 0%	12 12	08-Apr-15 08-Apr-15	14-Apr-18 14-Apr-18	30-Apr-18 30-Apr-18	851 851	851 851	0%	
	latforms for Tower Cranes	12	21-10101-15	0%	12	06-Api-15	14-Api-16	30-Api-16	100	651	0%	
PR66026	Inst.Temp.Eqpt.Platform (piles & deck) @ E4	24	21-Mar-15	0%	24	24-Apr-15	18-Dec-14	19-Jan-15	-74	0	0%	
PR66027	Inst.Temp.Eqpt.Platform (piles & deck) @ E5	24	08-Apr-15	0%	24	09-May-15	06-May-15	08-Jun-15	21	0	0%	
PR66028	Inst.Temp.Eqpt.Platform (piles & deck) @ E6	24	17-Apr-15	0%	24	19-May-15	11-Jul-15	12-Aug-15	60	0	0%	
PR66030	Inst.Temp.Eqpt.Platform (piles & deck) @ E8	24	27-Mar-15	0%	24	02-May-15	09-Jul-15	08-Aug-15	71	0	0%	
PR66030	Inst. Temp.Eqpt.Platform (piles & deck) @ E9	24	21-Mar-15	0%	24	24-Apr-15	22-Dec-14	22-Jan-15	-70	0	0%	
PR66032	Inst. Temp.Eqpt.Platform (piles & deck) @ E9		21-Mar-15 21-Mar-15	0%	24	· ·	09-Apr-15			0	0%	
		24				24-Apr-15		11-May-15 17-Feb-15	13	-	0%	
PR66033 PR66034	Inst.Temp.Eqpt.Platform (piles & deck) @ E11	24	14-Apr-15	0% 0%	24	16-May-15	20-Jan-15		-65 47	0	0%	
	Re-arrange temp.platform @ E12	24	30-Apr-15	0%	24	01-Jun-15	07-Jul-15	06-Aug-15	47	0	0%	
	nt Installation Equipment											
Launching (PR67040	Launching Gantry Design	130	05-Feb-14 A	100%	0	23-Feb-15 A					100%	
PR67040	Launching Gantry Design	130	10-Mar-14 A	100%	0	23-Feb-15 A					100%	
PR67041	Launching Gantry 1 Pablication	24		100%	0	26-Feb-15 A					100%	
		24	25-Aug-14 A	100%	0	20-FeD-15 A					100%	
Launching (PR67043	Launching Gantry 2 Fabrication	142	16-Jun-14 A	78.17%	31	20 Apr 15	27-Nov-14	05-Jan-15	-92	0	60%	
PR67043	Launching Gantry 2 Pablication	142	02-May-15	0%	12	30-Apr-15 15-May-15	06-Jan-15	19-Jan-15	-92	0	0%	
		12	02-1viay-15	0 78	12	15-iviay-15	00-Jan-15	19-Jan-15	-92	0	078	
Lifting Fram												
PR68011	Lifting Frame 1&2 Design	86	02-Jun-14 A	100%	0	16-Mar-15 A			1	ĺ	100%	
PR68012	Lifting Frame 1&2 Approval	24	28-Feb-15 A	75%	6	28-Mar-15		06-Jan-15	-68	0	80%	
PR68013	Lifting Frame 1&2 Fabrication	24	30-Mar-15	0%	24	30-Apr-15	06-Jan-15	03-Feb-15	-68	0	0%	
PR68014	Lifting Frame 1&2 Delivery	12	02-May-15	0%	12		03-Feb-15	17-Feb-15	-68	11	0%	
Lifting Fram		12	02 May 10	070	12	To May To	0010010	11 1 65 10	00		070	
PR68015	Lifting Frame 3&4 Design	70	02-Jun-14 A	100%	0	16-Mar-15 A					100%	
PR68016	Lifting Frame 3&4 Approval	24	28-Feb-15 A	70.83%	7		05-Feb-15	13-Feb-15	-35	0	80%	
PR68017	Lifting Frame 3&4 Fabrication	24	30-Mar-15	0%	24	30-Apr-15	13-Feb-15	17-Mar-15	-35	0	0%	
PR68018	Lifting Frame 3&4 Delivery	12	02-May-15	0%	12		17-Mar-15	31-Mar-15	-35	24	0%	
Lifting Fram	-	12		070		To may To		of mar to	00		0,0	
PR68019	Lifting Frame 5&6 Design	70	22-Dec-14 A	51.43%	34	05-May-15	08-Jun-15	18-Jul-15	61	0	15%	
PR68020	Lifting Frame 5&6 Approval	60	26-Mar-15	0%	60	10-Jun-15	12-Jun-15	22-Aug-15	61	4	0%	
PR68021	Lifting Frame 5&6 Fabrication	85	30-Mar-15	0%	85	15-Jul-15	11-Jun-15	19-Sep-15	57	0	0%	
Unloading F				070			in call ic	10 000 10			0,0	
Type 1 (at B												
PR69100	Unloading Frame Type 1 Design	50	05-May-14 A	86%	7	28-Mar-15	10-Jan-15	17-Jan-15	-57	0	40%	
PR69110	Unloading Frame Type 1 Fabrication	80	16-Mar-15 A	31.25%	55	30-May-15	06-Jan-18	14-Mar-18	829	0	0%	
PR69120	Unloading Frame Type 1 Delivery	24	01-Jun-15	0%	24	29-Jun-15	15-Mar-18	16-Apr-18	829	24	0%	
Actual Work	LAND LIDEAD DIVID ONDE ON LAND MOO		hek Lap Kok I				\	Date 09-Mar-15	Revi		Checked App DB	orove
Planned Bar Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CC		ing Program	•	-	-	es)	09-Mar-15 31-Mar-15			VY	
♦ ♦ Milestone	Milestones, No Level of Effort.	(F	Progress as	of 21-M	ar-15)				I*	I	



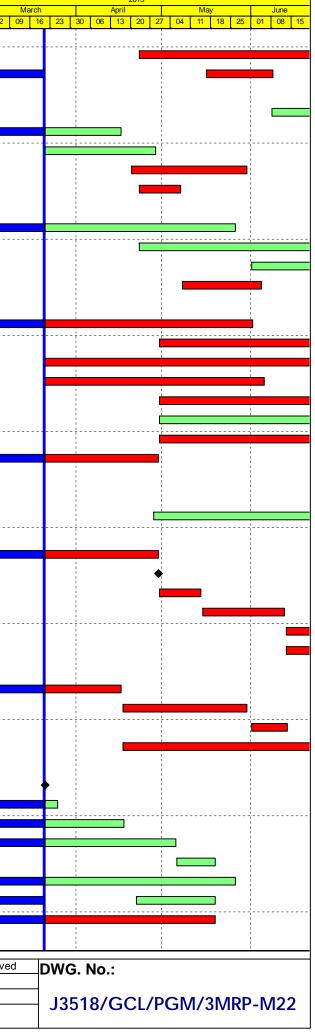
/ ID	Activity Name	Orig. Durn.	Act. Start / FC Early	Duration %	Rem.	Act. Finish / FC	Late Start	Late Finish	Total Float	Free Float	Physical %
		Ĵ	Start	Complete	Durn.	Early Finish					Complete
Type 2 (at B	ridge E1)						1 1				
PR69170	Unloading Frame Type 2 Design	50	21-Mar-15	0%	50	23-May-15	10-Jan-15	12-Mar-15	-57	0	0%
PR69180	Unloading Frame Type 2 Fabrication	80	30-Apr-15	0%	80	05-Aug-15	07-Dec-17	16-Mar-18	776	0	0%
Type 4 (at H	KBCF)										
PR69250	Unloading Frame Type 4 Design	50	21-Mar-15	0%	50	23-May-15	10-Jan-15	12-Mar-15	-57	0	0%
PR69260	Unloading Frame Type 4 (BCF) Fabrication	80	30-Apr-15	0%	80	05-Aug-15		28-May-15	-57	0	0%
Deck Segme	nts & Precast Pile Cap Shells		•			J		ļ			
Preliminarie	-										
MBBE0018	Precast Segment Mould Design (Viaduct E5, E6, E7 & E8)	42	05-Jul-14 A	59.52%	17	14-Apr-15	25-Mar-15	18-Apr-15	4	903	60%
MBBE0020	Precast Segment Mould Fabrication & Assembly (Viaduct E5, E6, E7 & E8)	52	21-Mar-15	0%	52	27-May-15	25-Mar-15	01-Jun-15	4	67	0%
MBBE0024	Precast Segment Mould Design (Viaduct E2)	42	28-Jun-14 A	59.52%	17	14-Apr-15	14-Jan-15	02-Feb-15	-54	903	60%
MBBE0024	Precast Segment Mould Design (Vladuct E2) Precast Segment Mould Fabrication & Assembly (Vladuct E2)	52	20-Jun- 14 A 21-Mar-15	0%	52	27-May-15	14-Jan-15	18-Mar-15	-54	903	00%
MBBE0020			30-Jul-14 A	59.52%		,		02-Feb-15		-	
	Precast Segment Mould Design (Viaduct E1)	42			17	14-Apr-15	11-Dec-14		-80	878	40%
MBBE0032	Precast Segment Mould Fabrication & Assembly (Viaduct E1)	52	21-Mar-15	0%	52	27-May-15	11-Dec-14	13-Feb-15	-80	0	0%
MBBE0036	Precast Segment Mould Design (Viaduct D)	42	21-Mar-15	0%	42	14-May-15	13-Dec-14	03-Feb-15	-78	0	0%
MBBE0038	Precast Segment Mould Fabrication & Assembly (Viaduct D)	52	02-Apr-15	0%	52	08-Jun-15	27-Dec-14	02-Mar-15	-78	0	0%
MBBE0042	Precast Segment Mould Design (Viaduct C)	42	21-Mar-15	0%	42	14-May-15	06-Feb-15	31-Mar-15	-34	0	0%
MBBE0044	Precast Segment Mould Fabrication & Assembly (Viaduct C)	52	02-Apr-15	0%	52	08-Jun-15	18-Feb-15	28-Apr-15	-34	42	0%
MBBE0048	Precast Segment Mould Design (Viaduct A)	42	09-Apr-15	0%	42	29-May-15	17-Dec-15	06-Feb-16	209	0	0%
MBBE0050	Precast Segment Mould Fabrication & Erection (Viaduct A)	52	21-Apr-15	0%	52	23-Jun-15	31-Dec-15	04-Mar-16	209	95	0%
MBBE0054	Precast Segment Mould Design (Viaduct F1 to F5)	42	21-Mar-15	0%	42	14-May-15	15-Jun-15	04-Aug-15	67	0	0%
MBBE0056	Precast Segment Mould Fabrication & Erection (Viaduct F1 to F5)	52	02-Apr-15	0%	52	08-Jun-15	27-Jun-15	27-Aug-15	67	58	0%
Viaduct B											
Precast Dec	k Segments										
MBBE0130-1	B: Progressive Pier Head Segment Manufacture & Delivery remaining segments	54	02-Dec-14 A	0%	157	30-Sep-15	07-Mar-15	04-May-15	-12	875	16.7%
MBBE130	B: Commence Match Cast Segment Delivery	0	21-Mar-15	0%	0		30-Apr-18		920	920	0%
MBBE130-1	B: Progressive Match Cast Segment Manufacture & Delivery remaining segments (334 Nr)	96	24-Oct-14 A	10.42%	86	08-Jul-15	19-Nov-14	05-Mar-15	-99	0	10.48%
Viaduct E											
Precast Pile	Caps										
Viaduct E1											
PP7330	Production of Viaduct E1 Marine Precast Pile Cap Shells	80									
Viaduct E2			17-Oct-14 A	50%	40	12-May-15	10-Mar-18	30-Apr-18	880	880	50%
			17-Oct-14 A	50%	40	12-May-15	10-Mar-18	30-Apr-18	880	880	50%
PP7260	Production of Viaduct E2 Marine Precast Pile Cap Shells	80	17-Oct-14 A 27-Oct-14 A	50% 33.75%	40 53	12-May-15 28-May-15	10-Mar-18 29-Jan-15	30-Apr-18 09-Apr-15	880	880	33%
	·	80					<u> </u>			jj	
Viaduct E5,	E6, E7 & E8	80	27-Oct-14 A				<u> </u>			jj	
Viaduct E5,	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA	0	27-Oct-14 A 06-Jun-15	33.75% 0%	53 0	28-May-15	29-Jan-15	09-Apr-15	-41 -137	0	33%
Viaduct E5, MBEC0120- PP7120	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells	0 60	27-Oct-14 A 06-Jun-15 06-Jun-15	33.75% 0% 0%	53 0 60	28-May-15	29-Jan-15 15-Dec-14 15-Dec-14	09-Apr-15 02-Mar-15	-41 -137 -137	0	33% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA 7 Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells 8 Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells	0	27-Oct-14 A 06-Jun-15	33.75% 0%	53 0	28-May-15	29-Jan-15 15-Dec-14 15-Dec-14	09-Apr-15	-41 -137	0	33%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA 7 Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells 8 Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells ck Segments	0 60 60	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15	33.75% 0% 0% 0%	53 0 60 60	28-May-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14	09-Apr-15 02-Mar-15	-41 -137 -137 -137	0 0 0 0 0 0	33% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA 7 Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells 8 Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells	0 60	27-Oct-14 A 06-Jun-15 06-Jun-15	33.75% 0% 0%	53 0 60	28-May-15	29-Jan-15 15-Dec-14 15-Dec-14	09-Apr-15 02-Mar-15	-41 -137 -137	0	33% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA 7 Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells 8 Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells ck Segments Viaduct E2 - Pier Head Segment Casting	0 60 60 0	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15	33.75% 0% 0% 0%	53 0 60 60 0	28-May-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15	09-Apr-15 02-Mar-15	-41 -137 -137 -137 -54	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	33% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120-	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells K Segments Viaduct E2 - Pier Head Segment Casting 3 E1: Commence Segment Casting on Approval of DDA	0 60 60 0	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15	33.75% 0% 0% 0% 0%	53 0 60 60 0	28-May-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 06-Feb-15	09-Apr-15 02-Mar-15	-41 -137 -137 -137 -54 -54	0 0 0 0 0	33% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120- MBEE0130-	 E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells CK Segments Viaduct E2 - Pier Head Segment Casting 3 E1: Commence Segment Casting on Approval of DDA 3 E1: Commence Segment Delivery 	0 60 60 0 0	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15 26-May-15	33.75% 0% 0% 0% 0% 0%	53 0 60 60 0 0 0	28-May-15 17-Aug-15 17-Aug-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 06-Feb-15	09-Apr-15 02-Mar-15 02-Mar-15	-41 -137 -137 -137 -54 -54 -80 -65	0 0 0 0 0 0 0 15	33% 0% 0% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120- MBEE0130- MBEE0130-	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells K Segments Viaduct E2 - Pier Head Segment Casting 3 E1: Commence Segment Casting on Approval of DDA	0 60 60 0	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15	33.75% 0% 0% 0% 0%	53 0 60 60 0	28-May-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 06-Feb-15	09-Apr-15 02-Mar-15	-41 -137 -137 -137 -54 -80	0 0 0 0 0	33% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE0014 Viaduct E1 MBEE0120- MBEE0130- MBEE0130- Viaduct E2	 E6, E7 & E8 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells K Segments Viaduct E2 - Pier Head Segment Casting a E1: Commence Segment Casting on Approval of DDA E1: Commence Segment Delivery E1: Progressive Segment Manufacture & Delivery remaining segments (189 Nr) 	0 60 60 0 0	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15 26-May-15	33.75% 0% 0% 0% 0% 0%	53 0 60 60 0 0 0	28-May-15 17-Aug-15 17-Aug-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 06-Feb-15 07-Jan-15 04-Mar-15	09-Apr-15 02-Mar-15 02-Mar-15	-41 -137 -137 -137 -54 -54 -80 -65	0 0 0 0 0 0 0 15	33% 0% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120- MBEE0130- MBEE0130- Viaduct E2 MBEE0120-	 E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells K Segments Viaduct E2 - Pier Head Segment Casting a E1: Commence Segment Casting on Approval of DDA a E1: Commence Segment Delivery 5 E1: Progressive Segment Manufacture & Delivery remaining segments (189 Nr) 2 E2: Commence Segment Casting on Approval of DDA 	0 60 60 0 0 0 120	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15 26-May-15 12-Jun-15 18-Apr-15	33.75% 0% 0% 0% 0% 0% 0% 0%	53 0 60 60 0 0 0 120 0 0	28-May-15 17-Aug-15 17-Aug-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 04-Mar-15 04-Mar-15 04-Mar-15	09-Apr-15 02-Mar-15 02-Mar-15	-41 -137 -137 -137 -54 -54 -80 -65 -80	0 0 0 0 0 0 15 0	33% 0% 0% 0% 0% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120- MBEE0130- MBEE0130- Viaduct E2 MBEE0120-	 E6, E7 & E8 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells K Segments Viaduct E2 - Pier Head Segment Casting a E1: Commence Segment Casting on Approval of DDA E1: Commence Segment Delivery E1: Progressive Segment Manufacture & Delivery remaining segments (189 Nr) 	0 60 60 0 0 0 120	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15 26-May-15 12-Jun-15	33.75% 0% 0% 0% 0% 0% 0%	53 0 60 60 0 0 0 120	28-May-15 17-Aug-15 17-Aug-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 06-Feb-15 07-Jan-15 04-Mar-15	09-Apr-15 02-Mar-15 02-Mar-15	-41 -137 -137 -137 -54 -54 -80 -65 -80	0 0 0 0 0 0 15 0	33% 0% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120- MBEE0130- Viaduct E2 MBEE0120- MBEE0120-	 E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells K Segments Viaduct E2 - Pier Head Segment Casting a E1: Commence Segment Casting on Approval of DDA a E1: Commence Segment Delivery 5 E1: Progressive Segment Manufacture & Delivery remaining segments (189 Nr) 2 E2: Commence Segment Casting on Approval of DDA 	0 60 60 0 0 0 120	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15 26-May-15 12-Jun-15 18-Apr-15	33.75% 0% 0% 0% 0% 0% 0% 0%	53 0 60 60 0 0 0 120 0 0	28-May-15 17-Aug-15 17-Aug-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 04-Mar-15 04-Mar-15 04-Mar-15	09-Apr-15 02-Mar-15 02-Mar-15	-41 -137 -137 -137 -54 -54 -80 -65 -80	0 0 0 0 0 0 15 0	33% 0% 0% 0% 0% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120- MBEE0130- Viaduct E2 MBEE0120- MBEE0120-	 E6, E7 & E8 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells K Segments Viaduct E2 - Pier Head Segment Casting E1: Commence Segment Casting on Approval of DDA E1: Commence Segment Delivery E1: Progressive Segment Manufacture & Delivery remaining segments (189 Nr) E2: Commence Segment Delivery 	0 60 60 0 0 0 120 0 120	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15 12-Jun-15 12-Jun-15 02-Jun-15	33.75% 0% 0% 0% 0% 0% 0% 0% 0% 0%	53 0 60 60 0 0 0 120 0 0 0 0 0 0	28-May-15 28-May-15 17-Aug-15 17-Aug-15 04-Nov-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 06-Feb-15 04-Mar-15 04-Mar-15 04-Mar-15	09-Apr-15 02-Mar-15 02-Mar-15 31-Jul-15	-41 -137 -137 -137 -54 -54 -80 -65 -80 -65 -80	0 0 0 0 0 0 15 0 15 0	33% 0% 0% 0% 0% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120- MBEE0130- Viaduct E2 MBEE0130- MBEE0130- MBEE0130- Viaduct D	 E6, E7 & E8 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells Esegments Viaduct E2 - Pier Head Segment Casting I - Commence Segment Casting on Approval of DDA E1: Commence Segment Delivery E1: Progressive Segment Casting on Approval of DDA E2: Commence Segment Delivery F2: Commence Segment Delivery F2: Progressive Segment Manufacture & Delivery remaining segments (358 Nr) 	0 60 60 0 0 0 120	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15 26-May-15 12-Jun-15 12-Jun-15 02-Jun-15	33.75% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	53 0 60 60 0 0 0 120	28-May-15 28-May-15 17-Aug-15 17-Aug-15 04-Nov-15 04-Nov-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 06-Feb-15 04-Mar-15 04-Mar-15 04-Mar-15	09-Apr-15 02-Mar-15 02-Mar-15 31-Jul-15 31-Jul-15	-41 -137 -137 -137 -54 -54 -65 -80 -65 -80	0 0 0 0 0 0 15 0 15 0 0 0 15 0 0 15	33% 0% 0% 0% 0% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120- MBEE0130- Viaduct E2 MBEE0130- MBEE0130- MBEE0130- Viaduct D	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells X Segments Viaduct E2 - Pier Head Segment Casting 3 E1: Commence Segment Casting on Approval of DDA 3 E1: Commence Segment Delivery 5 E1: Progressive Segment Manufacture & Delivery remaining segments (189 Nr) 2 E2: Commence Segment Delivery 7 E2: Progressive Segment Manufacture & Delivery remaining segments (358 Nr) Project ID: J3518DWPrE-M22 Tue	 0 60 60 0 0 0 120 120 120 	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15 12-Jun-15 18-Apr-15 02-Jun-15 02-Jun-15 02-Jun-15	33.75% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	53 0 60 60 0 0 120 0 120 0 120	28-May-15 28-May-15 17-Aug-15 17-Aug-15 04-Nov-15 04-Nov-15 24-Oct-15	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 04-Mar-15 04-Mar-15 04-Mar-15 24-Mar-15 24-Mar-15	09-Apr-15 02-Mar-15 02-Mar-15 31-Jul-15	-41 -137 -137 -137 -54 -54 -80 -65 -80 -65 -80	0 0 0 0 0 15 0 15 0 0 0 35 sion C	333% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
Viaduct E5, MBEC0120- PP7120 PP7190 Precast Dec MBE00014 Viaduct E1 MBEE0120- MBEE0130- Viaduct E2 MBEE0130- MBEE0130- MBEE0130- Viaduct D	E6, E7 & E8 5 E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells X Segments Viaduct E2 - Pier Head Segment Casting 3 E1: Commence Segment Casting on Approval of DDA 3 E1: Commence Segment Delivery 5 E1: Progressive Segment Manufacture & Delivery remaining segments (189 Nr) 2 E2: Commence Segment Delivery 7 E2: Progressive Segment Manufacture & Delivery remaining segments (358 Nr) Project ID: J3518DWPrE-M22 Tue	0 60 60 0 0 120 0 120 120	27-Oct-14 A 06-Jun-15 06-Jun-15 06-Jun-15 18-Apr-15 18-Apr-15 26-May-15 12-Jun-15 12-Jun-15 02-Jun-15	33.75% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	53 0 60 60 0 0 120 0 120 120 120	28-May-15 17-Aug-15 17-Aug-15 17-Aug-15 04-Nov-15 04-Nov-15 24-Oct-15 Connection	29-Jan-15 15-Dec-14 15-Dec-14 15-Dec-14 15-Dec-14 06-Feb-15 04-Mar-15 04-Mar-15 04-Mar-15 24-Mar-15 24-Mar-15	09-Apr-15 02-Mar-15 02-Mar-15 31-Jul-15 31-Jul-15 19-Aug-15	-41 -137 -137 -137 -54 -54 -65 -80 -65 -80	0 0 0 0 0 15 0 15 0 0 35 sion C	33% 0% 0% 0% 0% 0% 0% 0%



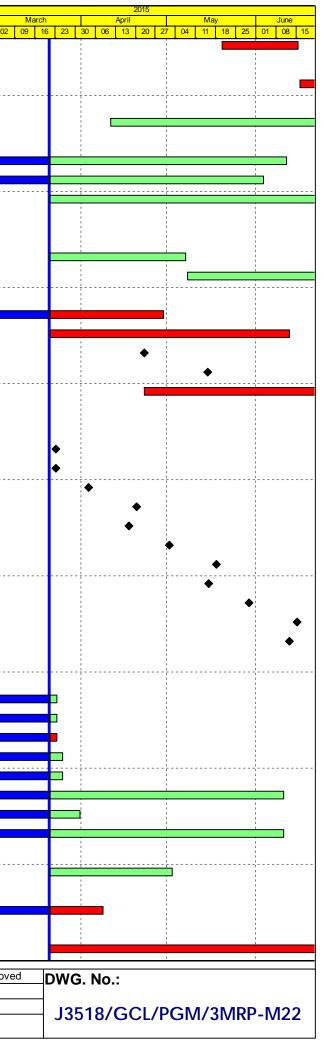
	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
Precast Pile (Caps						II				
MBDC0130-8	D: Progressive Pile Cap Shell Manufacture & Delivery remaining shells	90	07-Dec-14 A	42.22%	52	27-May-15	09-Feb-15	17-Apr-15	-32	868	42.8%
Precast Deck	k Segments				2						
MBDE0120	D: Commence Segment Casting on Approval of DDA	0	30-Apr-15	0%	0		21-Jan-15		-78	0	0%
MBDE0130-1	D: Commence Pier Head Segment Delivery	0	06-Jun-15	0%	0		03-Jul-15		21	0	0%
MBDE0130-5	D: Progressive Pier Head Segment Manufacture & Delivery	107	06-Jun-15	0%	107	13-Oct-15	03-Jul-15	07-Nov-15	21	23	0%
/iaduct C											
Precast Pile	Caps										
MBCC0120	C: Commence Pile Cap Shell Casting on Approval of DDA	0	21-Mar-15	0%	0		17-Jan-15		-51	0	0%
MBCC0130	C: Commence Pile Cap Shell Delivery	0	22-May-15	0%	0		18-Mar-15		-51	0	0%
MBCC0130-1	C: Progressive Pile Cap Shell Manufacture & Delivery remaining shells	80	22-May-15	0%	80	26-Aug-15	18-Mar-15	27-Jun-15	-51	0	0%
PP7490	Production of initial Viaduct C Marine Precast Pile Cap Shells	38	21-Mar-15	0%	38	09-May-15	21-Jan-15	10-Mar-15	-48	0	0%
/iaduct A											
Precast Pile	Caps		,								
MBAC0120	A: Commence Pile Cap Shell Casting on Approval of DDA	0	21-Mar-15	0%	0		02-Sep-15		133	0	0%
MBAC0130	A: Commence Pile Cap Shell Delivery	0	22-May-15	0%	0		11-Dec-15		168	30	0%
PP7570	Production of initial Viaduct A Marine Precast Pile Cap Shells	40	11-May-15	0%	40	27-Jun-15	02-Sep-15	20-Oct-15	95	0	0%
arapets						,					
IBEE0090	Approval of DDA to start Precast Parapets/Barriers Casting	0	01-Apr-15	0%	0		16-Oct-15		160	31	0%
P6010	Procure Sub-Contractor for Precast Parapets/Barriers	40	21-Mar-15	0%	40	12-May-15	28-Aug-15	15-Oct-15	129	0	0%
P6011	Precast Parapets/Barriers Detail Design & Procure Moulds	120	13-May-15	0%	120	05-Oct-15	16-Oct-15	11-Mar-16	129	0	0%
P6011-02	Viaduct B - Precast Parapets/Barriers Production & Delivery	120	13-May-15	0%	120	05-Oct-15	12-Feb-16	09-Jul-16	224	62	0%
P6011-03	Viaduct C - Precast Parapets/Barriers Production & Delivery	120	13-May-15	0%	120	05-Oct-15	16-Dec-15	17-May-16	180	0	0%
P6011-04	Viaduct D - Precast Parapets/Barriers Production & Delivery	120	13-May-15	0%	120	05-Oct-15	10-Dec-15	10-May-16	175	0	0%
P6011-05	Viaduct E - Precast Parapets/Barriers Production & Delivery	180	13-May-15	0%	180	15-Dec-15	16-Oct-15	27-May-16	129	173	0%
P6011-06	Viaduct F - Precast Parapets/Barriers Production & Delivery	120	13-May-15	0%	120	05-Oct-15	28-Jan-16	27-Jun-16	214	275	0%
aterials			04 M 45	00/		40.1.1.45		00 NL 45			
P7010	Procure Sub-contractor for Signs & Street Furniture	90	21-Mar-15	0%	90	13-Jul-15	24-Jul-15	09-Nov-15	99	0	0%
I-Piles		70	01 Mar 45	001	70	47 1 45	00 1 45	00.0.445	100		00/
PP7550	Procurement of Viaduct A Socketted H-Piles	70	21-Mar-15	0%	70	17-Jun-15	29-Jul-15	20-Oct-15	103	0	0%
Reinforceme	nt										
Bored Piles PP7100	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct E5 & E6 Piles	105	07-Jul-14 A	40.54%	110	05-Aug-15	16 Oct 14	28-Feb-15	100	810	40%
PP7100 PP7170		185			110	-	16-Oct-14 15-Dec-14		-128	810	40%
PP7170 PP7240	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct E7 & E8 Piles Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct E2 Piles	185	07-Jul-14 A 15-Apr-14 A	40.54% 50.94%	110 52	27-May-15	06-Dec-14	05-May-15 09-Feb-15	-77 -84	810 133	40% 50%
PP7240 PP7380	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct E2 Piles	25	28-Jul-14 A	68%	8	30-Mar-15	08-Jun-15	16-Jun-15	-04 61	6	68%
PP7460	Rebar - Cut, Bend & Fabricate File Cage for Viaduct D Files	35	18-Aug-14 A	28.57%	25	23-Apr-15	10-Feb-15	14-Mar-15	-31	0	28%
PP7540	Rebar - Cut, Bend & Fabricate File Cage for Viaduct C Files Rebar - Cut, Bend & Fabricate File Cage for Viaduct A Piles	21	12-Aug-14 A	14.29%	18	15-Apr-15	04-Feb-15	28-Feb-15	-31	6	14%
PP7620	Rebar - Cut, Bend & Fabricate File Cage for Viaduct A Files Rebar - Cut, Bend & Fabricate File Cage for Viaduct F1 & F3 Files	61	21-Mar-15	0%	61	06-Jun-15	17-Dec-14	04-Mar-15	-35	0	0%
PP7690	Rebar - Cut, Bend & Fabricate File Cage for Viaduct F 2, F4 & F5 Piles	73	21-Mar-15	0%	73	22-Jun-15	14-Jan-15	16-Apr-15	-54	0	0%
Marine Pile C		10	21 100 10	070	10	22 001110		107.0110	04	Ű	070
PP7110	Rebar - Cut, Bend & Fabricate for Viaduct E5 & E6 Pile Caps	245	21-Mar-15	0%	245	16-Jan-16	16-Oct-14	14-Aug-15	-128	0	0%
PP7180	Rebar - Cut, Bend & Fabricate for Viaduct E7 & E8 Pile Caps	102	21-Mar-15	0%	102	27-Jul-15	15-Dec-14	24-Apr-15	-77	0	0%
PP7250	Rebar - Cut, Bend & Fabricate for Viaduct E2 Pile Caps	185	21-Mar-15	0%	185	04-Nov-15	06-Dec-14	27-Jul-15	-84	0	0%
PP7320	Rebar - Cut, Bend & Fabricate for Viaduct E2 File Caps	67	11-Dec-14 A	7.46%	62	08-Jun-15	26-Nov-14	09-Feb-15	-93	0	7%
PP7400	Rebar - Cut, Bend & Fabricate for Viaduct D Marine Pile Caps	47	18-Dec-14 A	6.38%	44	16-May-15	06-Mar-18	30-Apr-18	876	876	6%
PP7480	Rebar - Cut, Bend & Fabricate for Viaduct D Marine File Caps	42	10-Apr-15	0%	42	30-May-15	08-Mar-18	30-Apr-18	865	865	0%
PP7560	Rebar - Cut, Bend & Fabricate for Viaduct & Marine Pile Caps	36	23-Apr-15	0%	36	05-Jun-15	07-Sep-15	20-Oct-15	113	76	0%
			· ·				··•				
Actual Work	Project ID: J3518DWPrE-M22 Layout: J3518-DWP-3MRP Submission - M22_	Tuen Mun - C	-					Date	Revi		Checked B
		3-Month Polli	na Proarar	nmo (Pa	N & AN	nt /11 Pan	661	09-Mar-15		טן	ט
Planned Bar Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CC	3-Month Rolli	Progress as	•	-	-		31-Mar-15		v	/Y



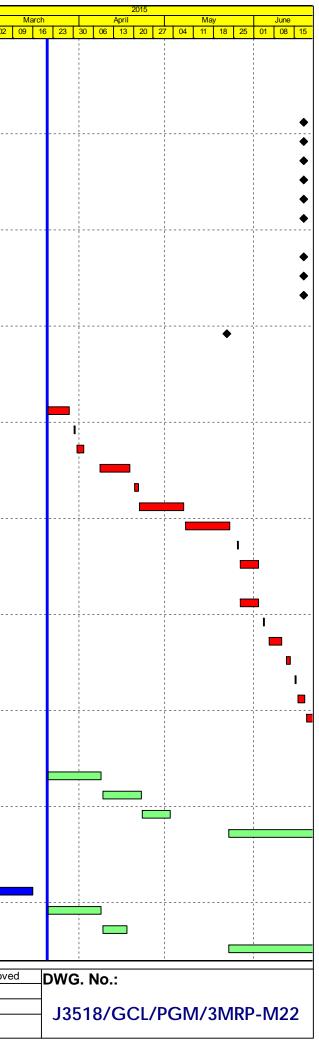
	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
Marine Piers	s - Viaduct E		I								
PP7270	Rebar - Cut, Bend & Fabricate for Viaduct E2 Piers	180	23-Apr-15	0%	180	26-Nov-15	07-Jan-15	18-Aug-15	-84	31	0%
PP7340	Rebar - Cut, Bend & Fabricate for Viaduct E1 Piers	31	22-Feb-15 A	40%	19	08-Jun-15	19-Jan-15	09-Feb-15	-93	1	0%
Land Pile Ca	ips										
PP7630	Rebar - Cut, Bend & Fabricate for Viaduct F1 & F3 Pile Caps	47	08-Jun-15	0%	47	03-Aug-15	08-Aug-15	03-Oct-15	51	0	0%
PP7752	Rebar - Cut, Bend & Fabricate for Viaduct B Land Pile Caps	26	16-Jul-14 A	26.92%	19	16-Apr-15	09-Apr-18	30-Apr-18	901	901	26%
PP7754	Rebar - Cut, Bend & Fabricate for Viaduct D Land Pile Caps	29	21-Mar-15	0%	29	28-Apr-15	08-Jun-15	13-Jul-15	61	0	0%
PP7756	Rebar - Cut, Bend & Fabricate for Viaduct C Land Pile Caps	34	20-Apr-15	0%	34	30-May-15	10-Mar-15	23-Apr-15	-31	0	0%
PP7758	Rebar - Cut, Bend & Fabricate for Viaduct A Land Pile Caps	12	23-Apr-15	0%	12	07-May-15	28-Feb-15	14-Mar-15	-41	0	0%
	e Piers - Viaduct A, B, C, D & F			0,0		or may re	201.00.10			, in the second	
PP7060	Bending of Rebar for Viaduct B Piers	64	11-Aug-14 A	20.31%	51	26-May-15	26-Feb-18	30-Apr-18	869	869	20%
PP7420	Bending of Rebar for Viaduct D Piers	71	23-Apr-15	0%	71	18-Jul-15	08-Jul-15	29-Sep-15	61	75	0%
PP7500	Bending of Rebar for Viaduct D Fiers	78	01-Jun-15	0%	78	01-Sep-15	13-Aug-15	14-Nov-15	61	0	0%
PP7580					-	04-Jun-15			-41	0	0%
	Bending of Rebar for Viaduct A Piers	23	08-May-15	0%	23	04-Jun-15	14-Mar-15	15-Apr-15	-41	0	0%
	works / Falseworks	70	00.0	00%	50	04 1 45	47 5 . 45	00 455 45	05	0.1	0.001/
PP7070	On-Site Preparation & Assembly of Pier Formwork for Viaduct B Piers	70	03-Sep-14 A	20%	56	01-Jun-15	17-Feb-15	30-Apr-15	-25	24	20%
PP7140	On-Site Preparation & Assembly of Pier Formwork for Viaduct E5 & E6 Piers	90	30-Apr-15	0%	90	17-Aug-15	29-Nov-14	21-Mar-15	-120	22	0%
PP7280	On-Site Preparation & Assembly of Pier Formwork for Viaduct E2 Piers	80	21-Mar-15	0%	80	30-Jun-15	01-Nov-14	06-Feb-15	-114	0	0%
PP7350	On-Site Preparation & Assembly of Pier Formwork for Viaduct E1 Piers	60	21-Mar-15	0%	60	05-Jun-15	16-Dec-14	02-Mar-15	-76	5	0%
PP7430	On-Site Preparation & Assembly of Pier Formwork for Viaduct D Piers	80	30-Apr-15	0%	80	05-Aug-15	18-Apr-15	24-Jul-15	-10	0	0%
PP7510	On-Site Preparation & Assembly of Pier Formwork for Viaduct C Piers	80	30-Apr-15	0%	80	05-Aug-15	10-Jun-15	12-Sep-15	33	0	0%
PP7710	On-Site Preparation & Assembly of Pier Formwork for Viaduct F2, F4 & F5 Pile Caps	60	30-Apr-15	0%	60	13-Jul-15	18-Apr-15	30-Jun-15	-10	0	0%
PPPF02	Design & Fabrication of Falsework / Formwork & Delivery	120	20-Feb-14 A	75%	30	29-Apr-15	25-Oct-14	29-Nov-14	-120	0	75%
Bearings											
Journigs											
Viaduct A											
	Preliminary Design of Bearings - Viaduct A	50	28-Apr-15	0%	50	27-Jun-15	27-Oct-15	23-Dec-15	149	0	0%
Viaduct A	Preliminary Design of Bearings - Viaduct A	50	28-Apr-15	0%	50	27-Jun-15	27-Oct-15	23-Dec-15	149	0	0%
Viaduct A PPBRA1	Preliminary Design of Bearings - Viaduct A Preliminary Design of Bearings - Viaduct C	50 50	28-Apr-15 22-Dec-14 A	0% 40%	50 30	27-Jun-15 29-Apr-15	27-Oct-15 16-Dec-14	23-Dec-15 22-Jan-15	149 -76	0	0%
Viaduct A PPBRA1 Viaduct C											
Viaduct A PPBRA1 Viaduct C PPBRC1	Preliminary Design of Bearings - Viaduct C	50		40%	30	29-Apr-15		22-Jan-15	-76	0	40%
Viaduct A PPBRA1 Viaduct C PPBRC1 PPBRC2	Preliminary Design of Bearings - Viaduct C Confirmation of bearing assumption - Viaduct C	50 0	22-Dec-14 A	40% 0%	30 0	29-Apr-15 29-Apr-15	16-Dec-14	22-Jan-15 22-Jan-15	-76 -76	0 0	40% 0%
Viaduct A PPBRA1 Viaduct C PPBRC1 PPBRC2 PPBRC3	Preliminary Design of Bearings - Viaduct C Confirmation of bearing assumption - Viaduct C Bearing design and submission - Viaduct C	50 0 12	22-Dec-14 A 30-Apr-15	40% 0% 0%	30 0 12	29-Apr-15 29-Apr-15 14-May-15	16-Dec-14 23-Jan-15	22-Jan-15 22-Jan-15 05-Feb-15	-76 -76 -76	0 0 0	40% 0% 0%
Viaduct A PPBRA1 Viaduct C PPBRC1 PPBRC2 PPBRC3 PPBRC4	Preliminary Design of Bearings - Viaduct C Confirmation of bearing assumption - Viaduct C Bearing design and submission - Viaduct C Design check by ICE - Viaduct C	50 0 12 24	22-Dec-14 A 30-Apr-15 15-May-15	40% 0% 0% 0%	30 0 12 24	29-Apr-15 29-Apr-15 14-May-15 12-Jun-15	16-Dec-14 23-Jan-15 06-Feb-15	22-Jan-15 22-Jan-15 05-Feb-15 09-Mar-15	-76 -76 -76 -76	0 0 0 0	40% 0% 0%
Viaduct A PPBRA1 Viaduct C PPBRC1 PPBRC2 PPBRC3 PPBRC4 PPBRC5 PPBRC7	Preliminary Design of Bearings - Viaduct C Confirmation of bearing assumption - Viaduct C Bearing design and submission - Viaduct C Design check by ICE - Viaduct C SO review & comment on design submission - Viaduct C	50 0 12 24 36	22-Dec-14 A 30-Apr-15 15-May-15 13-Jun-15	40% 0% 0% 0%	30 0 12 24 36	29-Apr-15 29-Apr-15 14-May-15 12-Jun-15 27-Jul-15	16-Dec-14 23-Jan-15 06-Feb-15 10-Mar-15	22-Jan-15 22-Jan-15 05-Feb-15 09-Mar-15 24-Apr-15	-76 -76 -76 -76 -76	0 0 0 0 0	40% 0% 0% 0%
Viaduct A PPBRA1 Viaduct C PPBRC1 PPBRC2 PPBRC3 PPBRC4 PPBRC5 PPBRC7	Preliminary Design of Bearings - Viaduct C Confirmation of bearing assumption - Viaduct C Bearing design and submission - Viaduct C Design check by ICE - Viaduct C SO review & comment on design submission - Viaduct C	50 0 12 24 36	22-Dec-14 A 30-Apr-15 15-May-15 13-Jun-15	40% 0% 0% 0%	30 0 12 24 36	29-Apr-15 29-Apr-15 14-May-15 12-Jun-15 27-Jul-15	16-Dec-14 23-Jan-15 06-Feb-15 10-Mar-15	22-Jan-15 22-Jan-15 05-Feb-15 09-Mar-15 24-Apr-15	-76 -76 -76 -76 -76	0 0 0 0 0	40% 0% 0% 0%
Viaduct A PPBRA1 Viaduct C PPBRC1 PPBRC2 PPBRC3 PPBRC4 PPBRC5 PPBRC7 Viaduct D	Preliminary Design of Bearings - Viaduct C Confirmation of bearing assumption - Viaduct C Bearing design and submission - Viaduct C Design check by ICE - Viaduct C SO review & comment on design submission - Viaduct C Manufacture of Bearing - Viaduct C	50 0 12 24 36 54	22-Dec-14 A 30-Apr-15 15-May-15 13-Jun-15 13-Jun-15	40% 0% 0% 0% 0%	30 0 12 24 36 54	29-Apr-15 29-Apr-15 14-May-15 12-Jun-15 27-Jul-15 17-Aug-15	16-Dec-14 23-Jan-15 06-Feb-15 10-Mar-15 10-Mar-15	22-Jan-15 22-Jan-15 05-Feb-15 09-Mar-15 24-Apr-15 16-May-15	-76 -76 -76 -76 -76 -76 -76	0 0 0 0 0 0	40% 0% 0% 0% 0%
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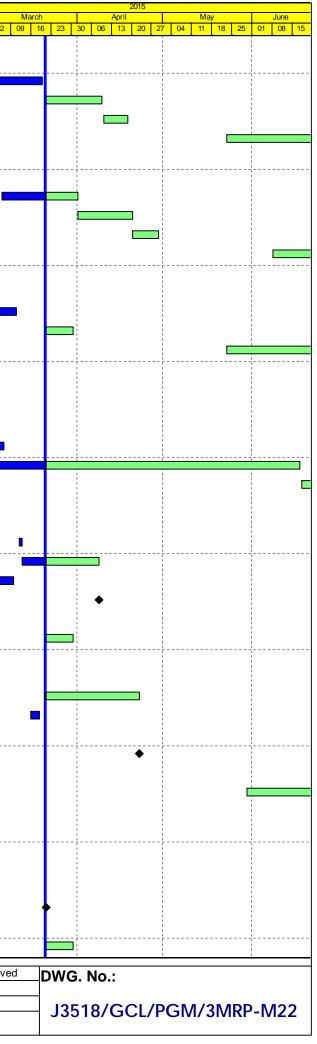
Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
					D ann							23 02
PP7360	Site preparation Bearings for Viaduct E1	18	20-May-15	0%	18	15-Jun-15	04-Feb-15	27-Feb-15	-79	0	0%	
Bridge E2												
PP7290	Site preparation Bearings for Viaduct E2	18	16-Jun-15	0%	18	11-Jul-15	28-Feb-15	20-Mar-15	-79	0	0%	
Viaduct F												
PPBRF1	Preliminary Design of Bearings - Viaduct F	70	11-Apr-15	0%	70	06-Jul-15	17-Apr-15	11-Jul-15	5	0	0%	
Movement .	loints											
PPMJ01	Design & Submission of MJ	138	08-Feb-14 A	52.9%	65	11-Jun-15	04-Aug-15	20-Oct-15	108	855	30%	
PPMJ02-1	MJ Design Approval	96	26-May-14 A	39.58%	58	03-Jun-15	04-Aug-15	12-Oct-15	108	130	40%	<u> </u>
PPMJ02-2	Manufacture & delivery of MJ	188	21-Mar-15	0%	188	07-Nov-15	04-Aug-15	19-Mar-16	108	0	0%	
Other Sub-C	ontract Procurement											
Pavement												
PP7760-2	Procure Pavement Viaduct Sub-Contractor	36	21-Mar-15	0%	36	07-May-15	08-Oct-15	19-Nov-15	162	0	0%	
PP7760-4	Pavement Viaduct Sub-Contractor - Materials approvals & MS	90	08-May-15	0%	90	24-Aug-15	20-Nov-15	10-Mar-16	162	101	0%	
Structural H	ealth Monitoring System (SHMS)				1							
PP7778	SHMS - So approval of Final System Proposal	30	16-Dec-14 A	0%	30	29-Apr-15	10-Nov-14	15-Dec-14	-107	30	0%	
PP7780	SHMS - Prepare Civil Work Provision	66	21-Mar-15	0%	66	12-Jun-15	06-Oct-14	22-Dec-14	-137	0	0%	
PP7782	SHMS - Submit Precast Pile Cap Shell SHMS details for E5-E6-E7-E8	0	23-Apr-15	0%	0		03-Nov-14		-137	0	0%	
PP7786	SHMS - Submit Segment SHMS details for E5-E6-E7-E8	0	15-May-15	0%	0		24-Feb-15		-64	0	0%	
PP7788	SHMS - FAT & Delivery for Bridge E5-E6-E7-E8 equipment	54	23-Apr-15	0%	54	27-Jun-15	01-Dec-14	05-Feb-15	-113	14	0%	
	on / Mobilisations								-			
	Mgt Submission & Approval											
TTM00640	Earliest Implementation of TTM after TMLG Meeting No. 18	0	23-Mar-15	0%	0	Ì	08-Dec-15		186	20	0%	
TTM00650	Send TTMs to SO & Govt Depts for TMLG Meeting No. 19	0		0%	0	23-Mar-15		14-May-15	39	0	0%	
TTM00660	TMLG Meeting No. 19	0		0%	0	03-Apr-15*		28-May-15	39	0	0%	
TTM00670	Earliest Implementation of TTM after TMLG Meeting No. 19	0	20-Apr-15	0%	0	00-Api-10	08-Dec-15	20-May-10	166	20	0%	
TTM00670	Send TTMs to SO & Govt Depts for TMLG Meeting No. 20	0	20-Api-13	0%	0	17-Apr-15	00-Dec-15	11-Jun-15	39	0	0%	
					-	· · ·						
TTM00690	TMLG Meeting No. 20	0	40.14.45	0%	0	01-May-15*	00 D 45	25-Jun-15	39	0	0%	
TTM00700	Earliest Implementation of TTM after TMLG Meeting No. 20	0	18-May-15	0%	0	15.14	08-Dec-15	00 1 1 4 5	146	20	0%	
TTM00710	Send TTMs to SO & Govt Depts for TMLG Meeting No. 21	0		0%	0	15-May-15		09-Jul-15	39	0	0%	
TTM00720	TMLG Meeting No. 21	0		0%	0	29-May-15*		23-Jul-15	39	0	0%	
TTM00730	Earliest Implementation of TTM after TMLG Meeting No. 21	0	15-Jun-15	0%	0		08-Dec-15		126	20	0%	
TTM00740	Send TTMs to SO & Govt Depts for TMLG Meeting No. 22	0		0%	0	12-Jun-15		06-Aug-15	39	0	0%	
Tree Felling												
	rees in Contract			1	1	1						
TR00200	Tree transplant for Viaduct B - affecting Piers B11 to B17	90	17-Feb-14 A	97.78%	2	23-Mar-15	09-May-16	10-May-16	313	861	95%	
TR00220	Tree transplant for Viaduct B - affecting Pier B18 & Abutment B	90	17-Feb-14 A	97.78%	2	23-Mar-15	09-Jan-16	11-Jan-16	220	861	95%	
TR00240	Tree transplant for Viaduct B - affecting realigned CTR	90	17-Feb-14 A	97.78%	2	23-Mar-15	24-Feb-15	25-Feb-15	-22	861	95%	
TR00250	Tree felling for Viaduct B - affecting Slopes 9SE-B/F9, C8 & C9	48	05-May-14 A	91.67%	4	25-Mar-15	25-Apr-18	30-Apr-18	859	859	90%	
TR00260	Tree felling for Viaduct C - affecting Piers C9 to Abutment C	24	30-Jan-14 A	83.33%	4	25-Mar-15	25-Apr-18	30-Apr-18	859	859	70%	
TR00270	Tree transplant for Viaduct C - affecting Piers C9 to Abutment C	90	17-Feb-14 A	35.56%	58	10-Jun-15	12-Feb-18	30-Apr-18	805	805	35%	<u> </u>
TR00280	Tree felling for Viaduct C - affecting realigned CTR	30	30-Jan-14 A	70%	9	31-Mar-15	19-Apr-18	30-Apr-18	854	854	70%	<u> </u>
TR00290	Tree transplant for Viaduct C - affecting realigned CTR	90	17-Feb-14 A	35.56%	58	10-Jun-15	12-Feb-18	30-Apr-18	805	805	35%	_
Site Set Up f	or Works Area 3 and Site Offices along CEDD Access Road			, 							,	
PR30030	Works Area 3-A1/3-A2 - Construct 1.5m steel access bridge	30	21-Mar-15	0%	30	02-May-15	20-Mar-18	30-Apr-18	833	833	0%	
Temporary V	/orking Platform at North Lantau	1	1	J			, , , , , , , , , , , , , , , , , , ,		1			
PR08080	Inst.Unloading Frame incl. T&C for seg.lift (incl. Load Test)	15	24-Oct-14 A	20%	12	08-Apr-15	29-Dec-14	12-Jan-15	-67	0	20%	
Unloading J	etty at HKBCF											
PR09010	Unloading Jetty at HKBCF - Procurement of materials and lifting gantry	85	21-Mar-15	0%	85	20-Jul-15	12-Nov-14	25-Feb-15	-105	0	0%	
Actual Work	Lawards 12540 DW/D 2MDD Cubrainsian M00		hek Lap Kok I					Date 09-Mar-15	Revis		Checked B	Appro
Planned Bar Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CC		ng Program	•	-	-	jes)	31-Mar-15			/Y	
Milestone	Milestones, No Level of Effort.	(F	Progress as	of 21-M	ar-15)			ب ــــــ		I	



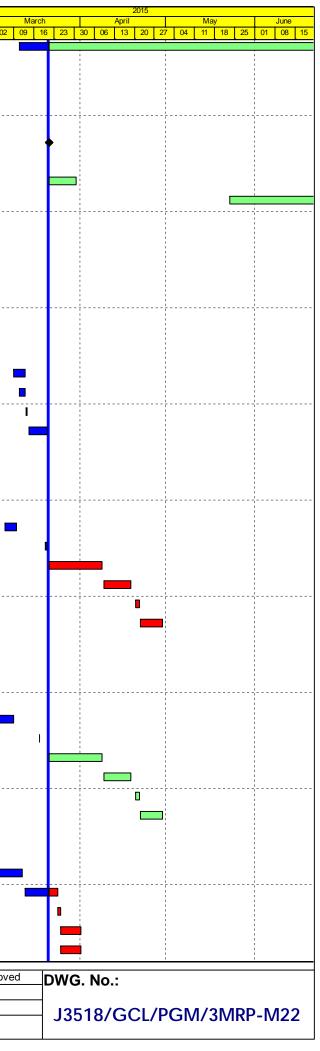
Activity ID		Activity Name		Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
CC	ONSTRUCTIO	DN												23 02
		SUBSTRUCTURE			- <u></u>									
	/iaduct A													
	Milestones -	Marine Foundation												
	GFXX113-1	A7 (A1e) - Start date fo	or piling	0	18-Jun-15	0%	0		14-Dec-15		148	0	0%	
	GFXX118-1	A6 (A1f) - Start date for		0	18-Jun-15	0%	0		31-Oct-15		111	69	0%	
	GFXX123-1	A5 (A2a) - Start date fo		0	18-Jun-15	0%	0		13-Nov-15		122	81	0%	
	GFXX128-1	A4 (A2b) - Start date fo	, ,	0	18-Jun-15	0%	0		15-Mar-16		221	69	0%	
	GFXX133-1	A3 (A2c) - Start date fo		0	18-Jun-15	0%	0		14-Jan-16		172	74	0%	
	GFXX138-1	A2 (A2d) - Start date for		0	18-Jun-15	0%	0		14-Nov-15		123	69	0%	
		Land Foundation	, k			0,0	Ŭ							
	ZA00030	A9 (A1c) - Start date fo	ar piling	0	18-Jun-15	0%	0	İ	12-Feb-16		194	104	0%	
	ZA00040	A10 (A1b) - Start date f		0	18-Jun-15	0%	0		22-Oct-15		103	66	0%	
	ZA00040	A11 (A1a) - Start date f		0	18-Jun-15	0%	0		15-Dec-15		149	128	0%	
		ATT (ATA) - Start date T	or pling	0	18-3011-13	0 /8	0		13-Dec-13		149	120	078	
	General ZA00010	Vieduct A Approval of	Foundation DDA DP11.01	0	1	0%	0	22-May-15		17-Jun-15	10	0	0%	
		Viaduci A - Approvaror		0		0%	0	22-10lay-15		17-Jun-15	18	0	0%	
	Bridge A2													
	Pier A1 (A2e)													
	Pile Cap Wo			-	04 M 45 A	00/	_	00.14 45		44 5 4 45	00	2		
	SA2E0070		Cap M2 - Inst. Floating Seal & Casing Head Steelwork	7	21-Mar-15 A	0%	7	28-Mar-15	03-Feb-15	11-Feb-15	-36	0	0%	
	SA2E0080	, , ,	Cap M2 - Install precast shell in position	1	30-Mar-15	0%	1	30-Mar-15	11-Feb-15	12-Feb-15	-36	0	0%	
	SA2E0090	. ,	Cap M2 - Inst.Access & make Watertight	3	31-Mar-15	0%	3	02-Apr-15	12-Feb-15	16-Feb-15	-36	0	0%	
			Cap M2 - Weld Fin plates/Plug Rebar & Concrete	9	08-Apr-15	0%	9	18-Apr-15	16-Feb-15	02-Mar-15	-36	0	0%	
	SA2E0110	A1 (A2e) - Marine Pile	Cap M2 - Dewater precast shell / Remove Lifting Frame	2	20-Apr-15	0%	2	21-Apr-15	02-Mar-15	04-Mar-15	-36	0	0%	
	SA2E0120	A1 (A2e) - Marine Pile	Cap M2 - Pile cut down	12	22-Apr-15	0%	12	07-May-15	04-Mar-15	18-Mar-15	-36	0	0%	
	SA2E0130	A1 (A2e) - Marine Pile	Cap M2 - Rebar fixing, inst.inserts etc	12	08-May-15	0%	12	23-May-15	18-Mar-15	01-Apr-15	-36	0	0%	
	SA2E0140	A1 (A2e) - Marine Pile	Cap M2 - Concreting	1	26-May-15	0%	1	26-May-15	01-Apr-15	02-Apr-15	-36	0	0%	
	SA2E0164	A1 (A2e) - Marine Pile	Cap M2 - Curing incl. CJ preparation	6	27-May-15	0%	6	02-Jun-15	02-Apr-15	14-Apr-15	-36	0	0%	
	Pier Works													
	SA2E0170	A1 (A2e) - Type 4B-MJ	Pier Temp. Support Platform	6	27-May-15	0%	6	02-Jun-15	02-Apr-15	14-Apr-15	-36	0	0%	
	SA2E0172	A1 (A2e) - Type 4B-MJ	Pier Scaffolding (1st Lift)	1	04-Jun-15	0%	1	04-Jun-15	14-Apr-15	16-Apr-15	-36	1	0%	
	SA2E0180	A1 (A2e) - Type 4B-MJ	Pier Rebarwork (1st Lift)	3	06-Jun-15	0%	3	10-Jun-15	16-Apr-15	20-Apr-15	-37	0	0%	
	SA2E0190	A1 (A2e) - Type 4B-MJ	Pier Formwork & Prep for Concreting (1st Lift)	2	12-Jun-15	0%	2	13-Jun-15	20-Apr-15	22-Apr-15	-37	0	0%	
	SA2E0200	A1 (A2e) - Type 4B-MJ	Pier Concreting (1st Lift)	1	15-Jun-15	0%	1	15-Jun-15	22-Apr-15	24-Apr-15	-37	0	0%	
	SA2E0202	A1 (A2e) - Type 4B-MJ	Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	16-Jun-15	0%	2	18-Jun-15	24-Apr-15	27-Apr-15	-37	0	0%	
	SA2E0210	A1 (A2e) - Type 4B-MJ	Pier Scaffolding (2nd Lift)	2	19-Jun-15	0%	2	22-Jun-15	28-Apr-15	29-Apr-15	-37	0	0%	
	Pier A2 (A2d)	1			,									
	Foundation	Works												
	GFXX137	A2 (A2d) - Inst.Temp.W	/orking Platform	12	21-Mar-15*	0%	12	08-Apr-15	19-Jun-15	04-Jul-15	71	0	0%	
	GFXX138	A2 (A2d) - Pre-drilling (2 nos)	12	09-Apr-15	0%	12	22-Apr-15	06-Jul-15	18-Jul-15	71	0	0%	
	GFXX138-2	A2 (A2d) - Confirm Roo	ckhead Levels	8	23-Apr-15	0%	8	02-May-15	20-Jul-15	28-Jul-15	71	17	0%	
	GFXX139	A2 (A2d) - Bored Piles	(2.20m dia. x 2 nos)	90	23-May-15	0%	90	08-Sep-15	29-Jul-15	13-Nov-15	54	0	0%	
	Pier A3 (A2c)	. ,		J	· · · ·			· ·						
	Foundation													
	GFXX132	A3 (A2c) - Inst.Temp.W	/orking Platform	12	06-Feb-15 A	100%	0	16-Mar-15 A					100%	į
	GFXX133	A3 (A2c) - Pre-drilling (2	5	12	21-Mar-15 A	0%	12	08-Apr-15	26-Aug-15	08-Sep-15	127	0	0%	
		A3 (A2c) - Confirm Roc	·	8	09-Apr-15	0%	8	17-Apr-15	09-Sep-15	17-Sep-15	127	29	0%	
	GFXX133-2	A3 (A2c) - Bored Piles (95	23-May-15	0%	95	14-Sep-15	18-Sep-15	13-Jan-16	98	0	0%	
								•					070	
	Actual Work		Project ID: J3518DWPrE-M22	Tuen Mun - C	-					Date	Revis			Approve
	Planned Bar		Layout: J3518-DWP-3MRP Submission - M22_ Filter: TASK filters: 3-Month Lookahead, No CQ	3-Month Rollin		• •	-	-	es)	09-Mar-15 31-Mar-15		D	B /Y	
•	Critical Bar Milestone 		Milestones, No Level of Effort.	(F	Progress as	of 21-M	ar-15)		51-IVIAI-15			<u> </u>	
-	•													



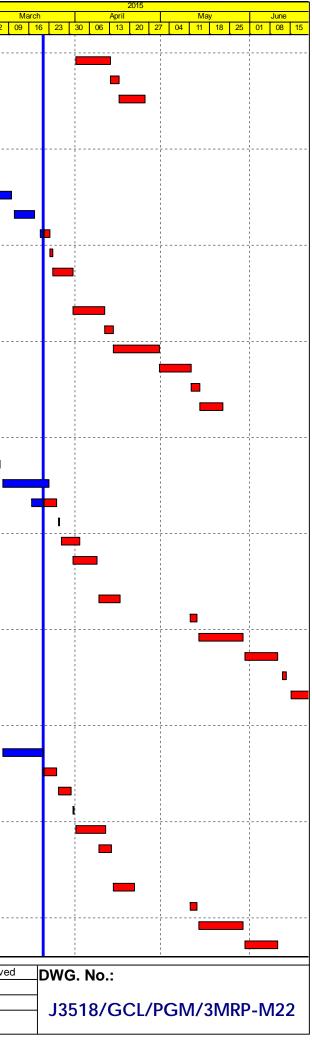
tivity ID	Activity Name			Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
Pier A4 (A2b)														23 02
Foundation														
GFXX127	A4 (A2b) - Inst.Temp.V	Vorking Platform		12	26-Feb-15 A	100%	0	20-Mar-15 A					100%	
GFXX128	A4 (A2b) - Pre-drilling (<u> </u>		13	21-Mar-15	0%	13	09-Apr-15	17-Jun-15	03-Jul-15	69	0	0%	
	A4 (A2b) - Confirm Ro	· · ·		8	10-Apr-15	0%	8	18-Apr-15	04-Jul-15	13-Jul-15	69	28	0%	
GFXX129	A4 (A2b) - Bored Piles			90	23-May-15	0%	90	08-Sep-15	14-Jul-15	29-Oct-15	41	0	0%	
Pier A5 (A2a)	. ,				20 may 10	0,0		00 000 10		20 000 10		Ū	0,0	
Foundation														
GFXX122	A5 (A2a) - Inst.Temp.V			13	06-Mar-15 A	27%	9	01-Apr-15	22-Jun-15	03-Jul-15	73	0	50%	
GFXX122 GFXX123	A5 (A2a) - Pre-drilling (-		12	01-Apr-15	0%	12	20-Apr-15	04-Jul-15	17-Jul-15	73	0	0%	
	A5 (A2a) - Confirm Ro			8	20-Apr-15	0%	8	20-Apr-15 29-Apr-15	18-Jul-15	27-Jul-15	73	32	0%	
	. ,				•		90	· ·			41	0	0%	
GFXX124	A5 (A2a) - Bored Piles	(2.2011 dia. X 2 hos)		90	08-Jun-15	0%	90	22-Sep-15	28-Jul-15	12-Nov-15	41	0	0%	
Pier A6 (A1f)														
Foundation		~ .		10	00 M 45 A	1000/	•	44.84 45.4					1000/	
	A6 (A1f) - Pre-drilling (,		12	03-Mar-15 A	100%	0	11-Mar-15 A					100%	
	A6 (A1f) - Confirm Roc			8	21-Mar-15	0%	8	30-Mar-15	06-Jul-15	14-Jul-15	83	41	0%	
GFXX119	A6 (A1f) - Bored Piles	(1.80m dia. x 3 nos)		90	23-May-15	0%	90	08-Sep-15	15-Jul-15	30-Oct-15	42	0	0%	
Bridge A1														
Pier A7 (A1e)														
Foundation														
	A7 (A1e) - Pre-drilling	· · · ·		12	12-Feb-15 A	100%	0	25-Feb-15 A					100%	
GFXX113-2	A7 (A1e) - Confirm Ro	ckhead Levels		8	26-Feb-15 A	100%	0	06-Mar-15 A					100%	
GFXX114	A7 (A1e) - Bored Piles	(2.20m dia. x 2 nos)		90	26-Feb-15 A	22.22%	70	17-Jun-15	19-Sep-15	12-Dec-15	148	0	20%	Ē
GFXX115	A7 (A1e) - Sonic & Inte	rface Coring		12	18-Jun-15	0%	12	03-Jul-15	14-Dec-15	29-Dec-15	148	0	0%	
Pier A8 (A1d)														
Preliminary	Works for Land Piling													
GFXX281	A8 (A1d) - Mobilise & S	Set up grouting equipment		24	12-Mar-15 A	100%	0	13-Mar-15 A					100%	
GFXX281-1	A8 (A1d) - Pre-grouting	g Works		24	13-Mar-15 A	50%	12	08-Apr-15	17-Apr-18	30-Apr-18	908	0	50%	
PA080020	A8 (A1d) - Erect MTR	protective fence / Remove existing fence		12	26-Feb-15 A	100%	0	10-Mar-15 A					100%	
PA080050	A8 (A1d) - Complete C	ivil Preparation Works for piling to commence		0		0%	0	08-Apr-15		30-Apr-18	851	851	0%	
Socketted H	-Pile installation													
GFXX297-1	A8 (A1d) - Confirm Ro	ckhead Levels		8	21-Mar-15	0%	8	30-Mar-15	10-Jul-15	18-Jul-15	87	87	0%	
Pier A9 (A1c)	1						<u> </u>							
Preliminary	Works for Land Piling													
GFXX281-2	A9 (A1c) - Pre-grouting	g Works		24	21-Mar-15 A	0%	24	22-Apr-15	29-Mar-18	30-Apr-18	896	0	0%	
PA090030	A09 (A1c) - Erect MTR	protective fence		12	16-Mar-15 A	100%	0	19-Mar-15 A					100%	
PA090050	A9 (A1c) - Set up piling	platform		24	29-Jan-15 A	100%	0	04-Mar-15 A					100%	
PA090060		vil preparation works for piling to commence		0		0%	0	22-Apr-15		30-Apr-18	840	840	0%	
	-Pile installation													
.	A9 (A1c) - Install SH Pi	le (11 no.)		120	30-May-15	0%	120	22-Oct-15	15-Sep-15	12-Feb-16	90	0	0%	
Pier A10 (A1b	, , ,				ee may re	0,0			10 000 10			Ū	0,0	
· ·	Works for Land Piling													
	A10 (A1b) - Pregroutin	a Works		24	21-Feb-15 A	100%	0	21-Feb-15 A					100%	
PA100040	. , -	. Instru. & Baseline Monitoring		36	09-Feb-15 A	100%	0	21-Feb-15 A					100%	
PA100040 PA100050	A10 (A1b) - Install Geo A10 (A1b) - Set up pilir				09-Feb-15 A	100%	0	21-Feb-15 A			_		100%	
	· · · · · · · · · · · · · · · · · · ·			24	03-1-60-13 A		0			30 Apr 10	960	862		
	. , .	civil preparation works for piling to commence		0		0%	U	21-Mar-15		30-Apr-18	863	863	0%	
	-Pile installation A10 (A1b) - Confirm R	ockhead Levels		8	21-Mar-15	0%	8	30-Mar-15	21-Apr-18	30-Apr-18	912	912	0%	
Actual Work	!	Project ID: J3518DWPrE-M22	Tuen M	Mun - Cł	nek Lap Kok L	.ink - Sou	thern C	Connection	1	Date	Revis	ion C	hecked	Appr
Planned Bar		Layout: J3518-DWP-3MRP Submission - M22			ng Program				es)	09-Mar-15		DI		
Critical Bar		Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.			rogress as			-		31-Mar-15		W	Y	
Milestone				۲-	0			•						



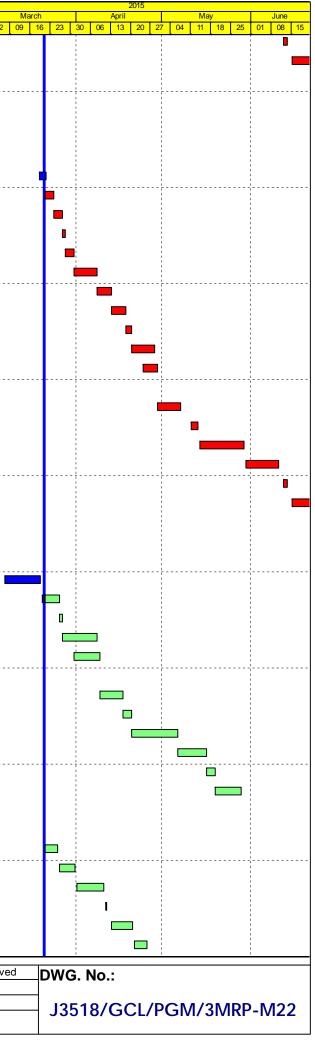
)	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
GFXX288	A10 (A1b) - Install SH Pile (8 no.)	120	11-Mar-15 A	15%	102	27-Jul-15	19-Jun-15	20-Oct-15	71	0	15%
	a) & Abutment A									<u> </u>	
	Works for Land Piling										
	A11 (A1a) - Pregrouting Works	24	22-Feb-15 A	100%	0	22-Feb-15 A					100%
PA110050	A11 (A1a) - Set up piling platform	24	09-Feb-15 A	100%	0	27-Feb-15 A					100%
PA110060	A11 (A1a) - Completion of civil preparation works for piling to commence	0		0%	0	21-Mar-15		28-Apr-15	27	0	0%
	-Pile installation			0,0	Ŭ	21		_0 / p: 10		, under the second seco	0,0
	A11 (A1a) - Confirm Rockhead Levels	8	21-Mar-15	0%	8	30-Mar-15	09-Jun-15	17-Jun-15	62	41	0%
GFXX287	A11 (A1a) - Install SH Pile (6 no.)	149	23-May-15	0%	149	19-Nov-15	18-Jun-15	14-Dec-15	21	0	0%
Viaduct B		140	20 May 10	070	140	10 100 10			21	Ű	070
Bridge B3											
Pier B2 (B3e)											
Pier Head Se	B2 (B3e) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	19-Feb-15 A	100%	0	20 Fab 15 A					100%
		6	19-Feb-15A	100%	0	28-Feb-15 A					100%
Pier B3 (B3d)											
Pier Head Se				4000/	0						40000
	B3 (B3d) - Pier Head Segment Lift & Fix (1 seg)	2	25-Feb-15 A	100%	0	25-Feb-15 A					100%
SB3D0374		13	09-Mar-15 A	100%	0	13-Mar-15 A					100%
SB3D0376		8	11-Mar-15 A	100%	0	13-Mar-15 A					100%
SB3D0378		2	13-Mar-15 A	100%	0	13-Mar-15 A					100%
SB3D0380		6	14-Mar-15 A	100%	0	20-Mar-15 A					100%
Pier B4 (B3c)											
Pier Works											
SB3C0340	B4 (B3c) - Type 4B Pier Head Curing/Striking of Forms/Remove Scaffolding	6	18-Feb-15 A	100%	0	02-Mar-15 A					100%
Pier Head Se											
SB3C0370		6	06-Mar-15 A	100%	0	10-Mar-15 A					100%
SB3C0372	B4 (B3c) - Pier Head Segment Lift & Fix (1 seg)	2	20-Mar-15 A	100%	0	20-Mar-15 A					100%
SB3C0374	B4 (B3c) - Pier Head Segment Diaphragm - Rebar	12	21-Mar-15	0%	12	08-Apr-15	02-Mar-15	16-Mar-15	-17	0	0%
SB3C0376	B4 (B3c) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	09-Apr-15	0%	8	18-Apr-15	16-Mar-15	25-Mar-15	-17	0	0%
SB3C0378	B4 (B3c) - Pier Head Segment Diaphragm - Concreting	2	20-Apr-15	0%	2	21-Apr-15	25-Mar-15	27-Mar-15	-17	0	0%
SB3C0380	B4 (B3c) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	22-Apr-15	0%	6	29-Apr-15	08-Apr-15	16-Apr-15	-11	0	0%
Pier B5 (B3b)											,
Pier Works											
SB3B0340	B5 (B3b) - Type 4B Pier Head Curing/Striking of Forms/Remove Scaffolding	6	13-Feb-15 A	100%	0	25-Feb-15 A					100%
Pier Head Se	egments								1		
SB3B0370	B5 (B3b) - Pier Head Segment - Temporary Platform	6	02-Mar-15 A	100%	0	09-Mar-15 A					100%
SB3B0372	B5 (B3b) - Pier Head Segment Lift & Fix (1 seg)	2	18-Mar-15 A	100%	0	18-Mar-15 A					100%
SB3B0374	B5 (B3b) - Pier Head Segment Diaphragm - Rebar	12	21-Mar-15	0%	12	08-Apr-15	23-Mar-15	10-Apr-15	2	0	0%
SB3B0376	B5 (B3b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	09-Apr-15	0%	8	18-Apr-15	10-Apr-15	21-Apr-15	2	0	0%
SB3B0378	B5 (B3b) - Pier Head Segment Diaphragm - Concreting	2	20-Apr-15	0%	2	21-Apr-15	21-Apr-15	24-Apr-15	2	0	0%
SB3B0380	B5 (B3b) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	22-Apr-15	0%	6	29-Apr-15	02-May-15	09-May-15	8	0	0%
Pier B6 (B3a)			· · ·								
Pier Works											
SB3A0310	B6 (B3a) - Type 4B-MJ Pier Head Rebarwork	5	23-Feb-15 A	100%	0	12-Mar-15 A					100%
SB3A0320	B6 (B3a) - Type 4B-MJ Pier Head Formwork & Prep for Concreting	5	13-Mar-15 A	50%	3		13-Feb-15	16-Feb-15	-28	0	70%
SB3A0330	B6 (B3a) - Type 4B-MJ Pier Head Concreting	1	24-Mar-15	0%	1		17-Feb-15	17-Feb-15	-28	0	0%
SB3A0340	B6 (B3a) - Type 4B-MJ Pier Head Curing/Striking of Forms/Remove Scaffolding	6	25-Mar-15	0%	6	01-Apr-15	18-Feb-15	27-Feb-15	-28	0	0%
SB3A0350	B6 (B3a) - Type 4B-Bearing Plinth	6	25-Mar-15	0%	6	01-Apr-15	18-Feb-15	27-Feb-15	-28	0	0%
						•	10 1 00 10				0.10
Actual Work	Project ID: J3518DWPrE-M22	Tuen Mun - C	-					Date	Revis		Checked
Planned Bar	Layout: J3518-DWP-3MRP Submission - M22_ Filter: TASK filters: 3-Month Lookahead, No CO	Month Rolli		•	-	-	es)	09-Mar-15 31-Mar-15			B VY
Critical Bar	Milestones, No Level of Effort.	/F	Progress as	of 21-M	lar_15	۱ ۱		51-IVIAI-15		V	V (



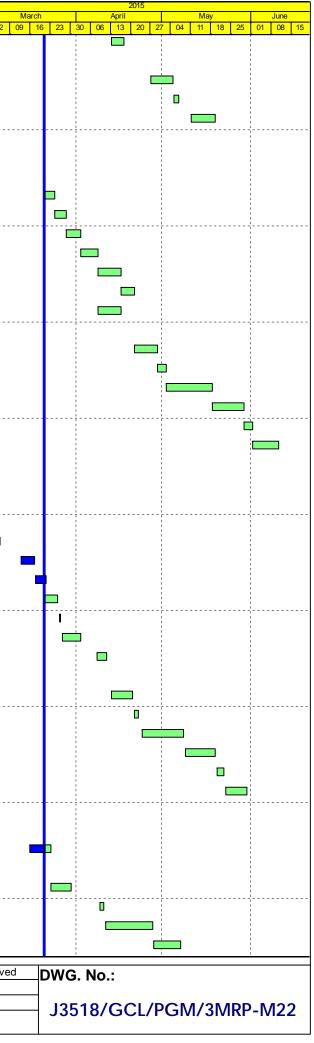
	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
Pier Head Se	egments										<u> </u>
SB3A0370	B6 (B3a) - Pier Head Segment - Temporary Platform	6	01-Apr-15	0%	6	13-Apr-15	28-Feb-15	06-Mar-15	-28	0	0%
SB3A0371	B6 (B3a) - Pier Head Segment bearings	2	13-Apr-15	0%	2	16-Apr-15	07-Mar-15	09-Mar-15	-28	0	0%
SB3A0372	B6 (B3a) - Pier Head Segment Lift & Temp Support (2 seg)	7	16-Apr-15	0%	7	25-Apr-15	10-Mar-15	17-Mar-15	-28	0	0%
ridge B2											
Pier B7 (B2f) Pier Works											
SB2F0242	B7 (B2f) - Type 4B Pier Curing & Striking of Forms ind. CJ prep (2nd Lift)	2	17-Feb-15 A	100%	0	25-Feb-15 A					100%
SB2F0300	B7 (B2f) - Type 4B Pier Head Scaffolding	4	26-Feb-15 A	100%	0	10-Mar-15 A					100%
SB2F0310	B7 (B2f) - Type 4B Pier Head Rebarwork	5	11-Mar-15 A	100%	0	18-Mar-15 A					100%
SB2F0320	B7 (B2f) - Type 4B Pier Head Formwork & Prep for Concreting	4	20-Mar-15 A	60%	2	23-Mar-15	02-Jan-15	03-Jan-15	-64	0	60%
SB2F0330	B7 (B2f) - Type 4B Pier Head Concreting		23-Mar-15A	0%	1	24-Mar-15	05-Jan-15	05-Jan-15	-64	0	0%
	B7 (B2f) - Type 4B Pier Head Curing/Striking of Forms/Remove Scaffolding	6	23-Mar-15	0%	6	31-Mar-15	06-Jan-15	12-Jan-15	-64	0	0%
Pier Head Se		0	24-IVIAI - 15	0%	0	31-IVIAI-15	00-Jan-15	12-Jan-15	-04	0	0%
SB2F0370	B7 (B2f) - Pier Head Segment - Temporary Platform	6	31-Mar-15	0%	6	11-Apr-15	13-Jan-15	19-Jan-15	-64	0	0%
SB2F0372	B7 (B2f) - Pier Head Segment Lift & Fix (1 seg)	2	11-Apr-15	0%	2	14-Apr-15	20-Jan-15	21-Jan-15	-64	0	0%
SB2F0374	B7 (B2f) - Pier Head Segment Diaphragm - Rebar	12	14-Apr-15	0%	12	30-Apr-15	22-Jan-15	04-Feb-15	-64	0	0%
SB2F0376	B7 (B2f) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	30-Apr-15	0%	8	11-May-15	05-Feb-15	13-Feb-15	-64	0	0%
SB2F0378	B7 (B2f) - Pier Head Segment Diaphragm - Concreting	2	11-May-15	0%	2	14-May-15	14-Feb-15	16-Feb-15	-64	0	0%
	B7 (B2f) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	14-May-15	0%	6	22-May-15	27-Feb-15	05-Mar-15	-58	0	0%
Pier B8 (B2e)	Br (B21) - Fiel Head Segment Diaphragin - Curing & Striking of Forms	0	14-Way-15	078	0	22-1viay-15	27-1-60-13	05-1011-15	-50	0	078
Pier Works											
SB2E0230	B8 (B2e) - Type 5B Pier Head Scaffolding	3	02-Mar-15 A	100%	0	06-Mar-15 A					100%
SB2E0240	B8 (B2e) - Type 5B Pier Head Rebarwork	4	07-Mar-15 A	100%	0	23-Mar-15 A					100%
SB2E0250	B8 (B2e) - Type 5B Pier Head Formwork & Prep for Concreting	4	17-Mar-15 A	0%	4	25-Mar-15	20-Jan-15	23-Jan-15	-49	0	0%
SB2E0260	B8 (B2e) - Type 5B Pier Head Concreting	1	26-Mar-15	0%	1	26-Mar-15	24-Jan-15	24-Jan-15	-49	0	0%
SB2E0270	B8 (B2e) - Type 5B Pier Head Curing & Striking of Forms & Remove Scaffolding	6	27-Mar-15	0%	6	02-Apr-15	26-Jan-15	31-Jan-15	-49	0	0%
SB2E0280	B8 (B2e) - Type 5B Pier Backfilling Works	4	31-Mar-15	0%	4	08-Apr-15	29-Jan-15	02-Feb-15	-49	0	0%
Pier Head Se						•					
SB2E0370	B8 (B2e) - Pier Head Segment - Temporary Platform	6	09-Apr-15	0%	6	16-Apr-15	03-Feb-15	09-Feb-15	-49	18	0%
SB2E0372	B8 (B2e) - Pier Head Segment Lift & Fix (1 seg)	2	11-May-15	0%	2	13-May-15	10-Feb-15	11-Feb-15	-67	0	0%
SB2E0374	B8 (B2e) - Pier Head Segment Diaphragm - Rebar	12	14-May-15	0%	12	29-May-15	12-Feb-15	28-Feb-15	-67	0	0%
SB2E0376	B8 (B2e) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	30-May-15	0%	8	10-Jun-15	02-Mar-15	10-Mar-15	-67	0	0%
SB2E0378	B8 (B2e) - Pier Head Segment Diaphragm - Concreting	2	12-Jun-15	0%	2	13-Jun-15	11-Mar-15	12-Mar-15	-67	0	0%
SB2E0370 SB2E0380	B8 (B2e) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	15-Jun-15	0%	6	24-Jun-15	19-Mar-15	26-Mar-15	-61	0	0%
Pier B9 (B2d)		0	13-3011-13	078	0	24-5011-15	19-10181-15	20-11101-13	-01	0	078
Pier Works											
SB2D0230	B9 (B2d) - Type 5B Pier Head Scaffolding	3	07-Mar-15 A	100%	0	21-Mar-15 A					100%
SB2D0240	B9 (B2d) - Type 5B Pier Head Rebarwork	4	21-Mar-15 A	0%	4	25-Mar-15	13-Feb-15	17-Feb-15	-28	0	0%
SB2D0250	B9 (B2d) - Type 5B Pier Head Formwork & Prep for Concreting	4	26-Mar-15	0%	4	30-Mar-15	18-Feb-15	25-Feb-15	-28	0	0%
SB2D0260	B9 (B2d) - Type 5B Pier Head Concreting	1	31-Mar-15	0%	1	31-Mar-15	26-Feb-15	26-Feb-15	-28	0	0%
SB2D0270	B9 (B2d) - Type 5B Pier Head Curing & Striking of Forms & Remove Scaffolding	6	01-Apr-15	0%	6	11-Apr-15	27-Feb-15	05-Mar-15	-28	0	0%
SB2D0280	B9 (B2d) - Type 5B Pier Backfilling Works	4	09-Apr-15	0%	4	13-Apr-15	03-Mar-15	06-Mar-15	-28	0	0%
Pier Head Se	egments	· · · · · ·	·	, 							
SB2D0370	B9 (B2d) - Pier Head Segment - Temporary Platform	6	14-Apr-15	0%	6	21-Apr-15	07-Mar-15	13-Mar-15	-28	14	0%
SB2D0372	B9 (B2d) - Pier Head Segment Lift & Fix (1 seg)	2	11-May-15	0%	2	13-May-15	14-Mar-15	16-Mar-15	-42	0	0%
SB2D0374	B9 (B2d) - Pier Head Segment Diaphragm - Rebar	12	14-May-15	0%	12	29-May-15	17-Mar-15	30-Mar-15	-42	0	0%
SB2D0376	B9 (B2d) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	30-May-15	0%	8	10-Jun-15	31-Mar-15	13-Apr-15	-42	0	0%
Actual Work	Project ID: J3518DWPrE-M22	Tuen Mun - Cl	hek Lap Kok I	_ink - Sou	thern (Connection		Date	Revis	sion	Checked
Planned Bar	Layout: J3518-DWP-3MRP Submission - M22_	3-Month Rollin	•				es)	09-Mar-15			DB
Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CO		Progress as	•	-	-	- /	31-Mar-15		IV.	VY



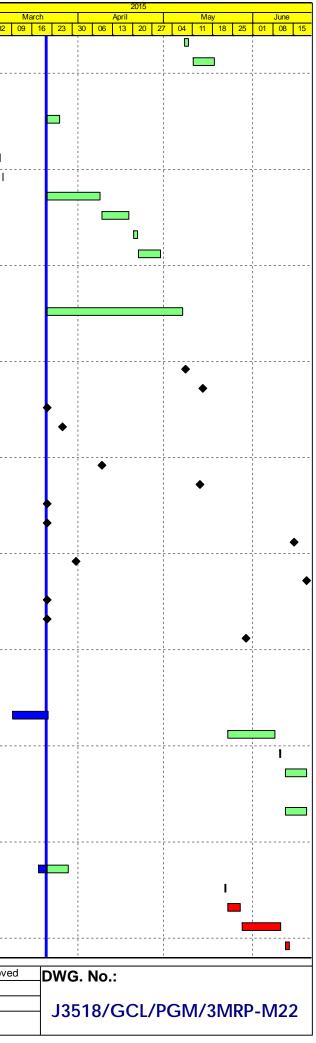
	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
SB2D0378	B9 (B2d) - Pier Head Segment Diaphragm - Concreting	2	12-Jun-15	0%	2	13-Jun-15	14-Apr-15	16-Apr-15	-42	0	0%
SB2D0380	B9 (B2d) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	15-Jun-15	0%	6	24-Jun-15	25-Apr-15	02-May-15	-36	0	0%
Pier B10 (B2	c)	I					JJ				
Pier Works											
SB2C0170	B10 (B2c) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	2	18-Feb-15 A	100%	0	25-Feb-15 A					100%
SB2C0180	B10 (B2c) - Type 5B Pier Concreting (1st Lift)	1	26-Feb-15 A	100%	0	26-Feb-15 A					100%
SB2C0182	B10 (B2c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	27-Feb-15 A	100%	0	27-Feb-15 A					100%
SB2C0190	B10 (B2c) - Type 5B Pier Scaffolding (2nd Lift)	2	19-Mar-15 A	100%	0	21-Mar-15 A					100%
SB2C0200	B10 (B2c) - Type 5B Pier Rebarwork (2nd Lift)	3	21-Mar-15 A	20%	2	24-Mar-15	04-Mar-15	06-Mar-15	-14	0	20%
SB2C0210	B10 (B2c) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift)	3	24-Mar-15	0%	3	27-Mar-15	07-Mar-15	10-Mar-15	-14	0	0%
SB2C0220	B10 (B2c) - Type 5B Pier Concreting (2nd Lift)	1	27-Mar-15	0%	1	28-Mar-15	11-Mar-15	11-Mar-15	-14	0	0%
SB2C0222	B10 (B2c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	28-Mar-15	0%	2	31-Mar-15	12-Mar-15	13-Mar-15	-14	0	0%
SB2C0230	B10 (B2c) - Type 5B Pier Head Scaffolding	3	31-Mar-15	0%	3	08-Apr-15	14-Mar-15	17-Mar-15	-14	0	0%
SB2C0240	B10 (B2c) - Type 5B Pier Head Rebarwork	4	08-Apr-15	0%	4	13-Apr-15	18-Mar-15	21-Mar-15	-14	0	0%
SB2C0250	B10 (B2c) - Type 5B Pier Head Formwork & Prep for Concreting	4	13-Apr-15	0%	4	18-Apr-15	23-Mar-15	26-Mar-15	-14	0	0%
SB2C0260	B10 (B2c) - Type 5B Pier Head Concreting	1	18-Apr-15	0%	1	20-Apr-15	27-Mar-15	27-Mar-15	-14	0	0%
SB2C0270	B10 (B2c) - Type 5B Pier Head Curing & Striking of Forms & Remove Scaffolding	6	20-Apr-15	0%	6	28-Apr-15	28-Mar-15	08-Apr-15	-14	0	0%
SB2C0280	B10 (B2c) - Type 5B Pier Backfilling Works	4	24-Apr-15	0%	4	29-Apr-15	01-Apr-15	09-Apr-15	-14	0	0%
Pier Head S					<u> </u>		· ·	·			
SB2C0370		6	29-Apr-15	0%	6	07-May-15	10-Apr-15	17-Apr-15	-14	3	0%
SB2C0372	B10 (B2c) - Pier Head Segment Lift & Fix (1 seg)	2	11-May-15	0%	2	13-May-15	18-Apr-15	20-Apr-15	-17	0	0%
SB2C0374	B10 (B2c) - Pier Head Segment Diaphragm - Rebar	12	14-May-15	0%	12	29-May-15	21-Apr-15	06-May-15	-17	0	0%
SB2C0376	B10 (B2c) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	30-May-15	0%	8	10-Jun-15	07-May-15	16-May-15	-17	0	0%
SB2C0378		2	12-Jun-15	0%	2	13-Jun-15	18-May-15	19-May-15	-17	0	0%
SB2C0380		6	15-Jun-15	0%	6	24-Jun-15	29-May-15	05-Jun-15	-11	0	0%
Pier B11 (B2	b)										
Pier Works											
SB2B0230	B11 (B2b) - Type 5B-B Pier Head Scaffolding	3	23-Feb-15 A	100%	0	25-Feb-15 A					100%
SB2B0240	B11 (B2b) - Type 5B-B Pier Head Rebarwork	4	07-Mar-15 A	100%	0	19-Mar-15 A					100%
SB2B0250			0		5	26-Mar-15					
	B11 (B2b) - Type 5B-B Pier Head Formwork & Prep for Concreting	5	20-Mar-15 A	10%			20-Apr-15	25-Apr-15	21	0	10%
	B11 (B2b) - Type 5B-B Pier Head Formwork & Prep for Concreting B11 (B2b) - Type 5B-B Pier Head Concreting	5	20-Mar-15 A	10% 0%			20-Apr-15 27-Apr-15	25-Apr-15	21 21	0	10%
SB2B0260	B11 (B2b) - Type 5B-B Pier Head Concreting	1	26-Mar-15	0%	1	27-Mar-15	27-Apr-15	27-Apr-15	21	0	0%
SB2B0260 SB2B0270	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding	1	26-Mar-15 27-Mar-15	0% 0%		27-Mar-15 08-Apr-15	27-Apr-15 28-Apr-15	27-Apr-15 05-May-15	21 21	0	0% 0%
SB2B0260 SB2B0270 SB2B0280	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works	1	26-Mar-15	0%	1	27-Mar-15	27-Apr-15	27-Apr-15	21	0	0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments	1 6 4	26-Mar-15 27-Mar-15 31-Mar-15	0% 0% 0%	1 6 4	27-Mar-15 08-Apr-15 09-Apr-15	27-Apr-15 28-Apr-15 02-May-15	27-Apr-15 05-May-15 06-May-15	21 21 21	0 0 0	0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform	1 6 4 6	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15	0% 0% 0%	1 6 4 6	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15	27-Apr-15 05-May-15 06-May-15 14-May-15	21 21 21 21 21	0 0 0	0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0372	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg)	1 6 4 6 2	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15	0% 0% 0% 0%	1 6 4 6 2	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15 15-May-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15	21 21 21 21 21 21 21	0 0 0 0	0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0372 SB2B0374	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar	1 6 4 6 2 12	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15	0% 0% 0% 0% 0%	1 6 4 6 2 12	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15 15-May-15 18-May-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15	21 21 21 21 21 21 21 21	0 0 0 0 0 0 0	0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0372 SB2B0374 SB2B0376	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	1 6 4 6 2 12 8	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15	0% 0% 0% 0% 0% 0%	1 6 4 6 2 12 8	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15 15-May-15 18-May-15 04-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15	21 21 21 21 21 21 21 21 21 21	0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0372 SB2B0374 SB2B0376 SB2B0378	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting	1 6 4 2 12 8 2	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15	0% 0% 0% 0% 0% 0%	1 6 4 2 12 8 2	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15 15-May-15 18-May-15 04-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15 18-Jun-15	21 21 21 21 21 21 21 21 21 21 21	0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0374 SB2B0376 SB2B0378 SB2B0380	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Curing & Striking of Forms	1 6 4 6 2 12 8	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15	0% 0% 0% 0% 0% 0%	1 6 4 6 2 12 8	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15 15-May-15 18-May-15 04-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15	21 21 21 21 21 21 21 21 21 21	0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0372 SB2B0374 SB2B0376 SB2B0378 SB2B0380 Pier B12 (B23	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Curing & Striking of Forms	1 6 4 2 12 8 2	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15	0% 0% 0% 0% 0% 0%	1 6 4 2 12 8 2	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15 15-May-15 18-May-15 04-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15 18-Jun-15	21 21 21 21 21 21 21 21 21 21 21	0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0374 SB2B0376 SB2B0378 SB2B0378 SB2B0380 Pier B12 (B23 Pier Works	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting	1 6 4 2 12 8 2 6	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15	0% 0% 0% 0% 0% 0% 0%	1 6 4 2 12 8 2	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 28-May-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15 15-May-15 18-May-15 04-Jun-15 30-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 02-Jun-15 15-Jun-15 07-Jul-15	21 21 21 21 21 21 21 21 21 21 27	0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0372 SB2B0374 SB2B0376 SB2B0378 SB2B0380 Pier B12 (B2 Pier Works SB2A0300	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Curing & Striking of Forms a) B12 (B2a) - Type 5B-MJ Pier Head Scaffolding (F/W from B6)	1 6 4 2 12 8 2 6 4	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15	0% 0% 0% 0% 0% 0% 0%	1 6 4 6 2 12 8 2 6	27-Mar-15 08-Apr-15 09-Apr-15 20-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 28-May-15 28-May-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15 15-May-15 18-May-15 04-Jun-15 30-Jun-15 30-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15 18-Jun-15 07-Jul-15	21 21 21 21 21 21 21 21 21 21 21 27	0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0372 SB2B0376 SB2B0376 SB2B0378 SB2B0380 Pier B12 (B2 SB2A0300 SB2A0310	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Curing & Striking of Forms a) B12 (B2a) - Type 5B-MJ Pier Head Scaffolding (F/W from B6) B12 (B2a) - Type 5B-MJ Pier Head Rebarwork	1 6 4 2 12 8 2 5	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 21-Mar-15 26-Mar-15	0% 0% 0% 0% 0% 0% 0% 0%	1 6 4 2 12 8 2 6 4 5	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 28-May-15 28-May-15 28-May-15 31-Mar-15	27-Apr-15 28-Apr-15 02-May-15 07-May-15 15-May-15 18-May-15 04-Jun-15 30-Jun-15 30-Jun-15 28-May-15 02-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15 18-Jun-15 07-Jul-15 07-Jul-15 08-Jun-15	21 21 21 21 21 21 21 21 21 21 21 27 48 48 48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0%
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SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0374 SB2B0376 SB2B0376 SB2B0378 SB2B0380 Pier B12 (B2 SB2A0300 SB2A0300 SB2A0310 SB2A0320 SB2A0330	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Curing & Striking of Forms a) B12 (B2a) - Type 5B-MJ Pier Head Scaffolding (F/W from B6) B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Concreting	1 6 4 2 12 8 2 6 4 5 5 1	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 21-Mar-15 26-Mar-15 01-Apr-15	0% 0% 0% 0% 0% 0% 0% 0%	1 6 4 2 12 8 2 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 28-May-15 28-May-15 31-Mar-15 10-Apr-15 11-Apr-15	27-Apr-15 28-Apr-15 02-May-15 15-May-15 15-May-15 18-May-15 04-Jun-15 30-Jun-15 30-Jun-15 28-May-15 02-Jun-15 10-Jun-15 18-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15 18-Jun-15 07-Jul-15 07-Jul-15 08-Jun-15 16-Jun-15 18-Jun-15	21 21 21 21 21 21 21 21 21 21 21 21 27 48 48 48 48 48 48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0374 SB2B0374 SB2B0376 SB2B0378 SB2B0380 Pier B12 (B23 Pier Works SB2A0300 SB2A0310 SB2A0320 SB2A0330 SB2A0330	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B12 (B2a) - Type 5B-MJ Pier Head Scaffolding (F/W from B6) B12 (B2a) - Type 5B-MJ Pier Head Rebarwork B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Curing/Striking of Forms/Remove Scaffolding	1 6 4 2 12 8 2 12 8 2 6 4 5 5 5 1 1 6	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 221-Mar-15 26-Mar-15 01-Apr-15 11-Apr-15	0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	1 6 4 2 12 8 2 6 4 5 5 1 1 6	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 28-May-15 28-May-15 28-Mar-15 31-Mar-15 10-Apr-15 20-Apr-15	27-Apr-15 28-Apr-15 02-May-15 107-May-15 15-May-15 18-May-15 04-Jun-15 16-Jun-15 30-Jun-15 02-Jun-15 10-Jun-15 18-Jun-15 19-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15 18-Jun-15 07-Jul-15 07-Jul-15 08-Jun-15 16-Jun-15 18-Jun-15 29-Jun-15	21 21 21 21 21 21 21 21 21 21 21 27 48 48 48 48 48 48 48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0372 SB2B0374 SB2B0376 SB2B0378 SB2B0380 Fier B12 (B2 SB2A0300 SB2A0300 SB2A0320 SB2A0330	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Curing & Striking of Forms a) B12 (B2a) - Type 5B-MJ Pier Head Scaffolding (F/W from B6) B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Concreting	1 6 4 2 12 8 2 6 4 5 5 1	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 26-Mar-15 26-Mar-15 01-Apr-15	0% 0% 0% 0% 0% 0% 0% 0%	1 6 4 2 12 8 2 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 28-May-15 28-May-15 31-Mar-15 10-Apr-15 11-Apr-15	27-Apr-15 28-Apr-15 02-May-15 15-May-15 15-May-15 18-May-15 04-Jun-15 30-Jun-15 30-Jun-15 28-May-15 02-Jun-15 10-Jun-15 18-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15 18-Jun-15 07-Jul-15 07-Jul-15 08-Jun-15 16-Jun-15 18-Jun-15	21 21 21 21 21 21 21 21 21 21 21 21 27 48 48 48 48 48 48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0374 SB2B0374 SB2B0376 SB2B0378 SB2B0380 ier B12 (B2 SB2A0300 SB2A0310 SB2A0310 SB2A0330 SB2A0330	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Curing & Striking of Forms a) B12 (B2a) - Type 5B-MJ Pier Head Rebarwork B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Formwork & Prep for Concreting B12 (B2a) - Type 5B-MJ Pier Head Curing/Striking of Forms/Remove Scaffolding B12 (B2a) - Type 5B-MJ Pier Head Curing/Striking of Forms/Remove Scaffolding B12 (B2a) - Type 5B-MJ Pier Backfilling Works	1 6 4 2 12 8 2 6 4 6 4 5 5 5 1 1 6 4	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 221-Mar-15 26-Mar-15 01-Apr-15 11-Apr-15	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	1 6 4 2 12 8 2 6 4 5 5 1 6 4	27-Mar-15 08-Apr-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 28-May-15 28-May-15 31-Mar-15 31-Mar-15 10-Apr-15 20-Apr-15 25-Apr-15	27-Apr-15 28-Apr-15 02-May-15 107-May-15 15-May-15 18-May-15 04-Jun-15 16-Jun-15 30-Jun-15 02-Jun-15 10-Jun-15 18-Jun-15 19-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15 18-Jun-15 07-Jul-15 07-Jul-15 08-Jun-15 16-Jun-15 18-Jun-15 29-Jun-15	21 21 21 21 21 21 21 21 21 21 21 27 48 48 48 48 48 48 48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
SB2B0260 SB2B0270 SB2B0280 Pier Head S SB2B0370 SB2B0372 SB2B0374 SB2B0376 SB2B0376 SB2B0378 SB2B0380 Pier Works SB2A0300 SB2A0300 SB2A0320 SB2A0340 SB2A0340	B11 (B2b) - Type 5B-B Pier Head Concreting B11 (B2b) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding B11 (B2b) - Type 5B-B Pier Backfilling Works egments B11 (B2b) - Pier Head Segment - Temporary Platform B11 (B2b) - Pier Head Segment Lift & Fix (1 seg) B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Rebar B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B11 (B2b) - Pier Head Segment Diaphragm - Concreting B12 (B2a) - Type 5B-MJ Pier Head Scaffolding (F/W from B6) B12 (B2a) - Type 5B-MJ Pier Head Rebarwork B12 (B2a) - Type 5B-MJ Pier Head Concreting B12 (B2a) - Type 5B-MJ Pier Head Curing/Striking of Forms/Remove Scaffolding B12 (B2a) - Type 5B-MJ Pier Backfilling Works	1 6 4 2 12 8 2 12 8 2 6 4 5 5 5 1 1 6 4 4 uen Mun - C	26-Mar-15 27-Mar-15 31-Mar-15 09-Apr-15 17-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 19-May-15 26-Mar-15 26-Mar-15 01-Apr-15 13-Apr-15 21-Apr-15	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	1 6 4 2 12 8 2 6 4 5 5 1 6 4 5 5 1 6 4 4	27-Mar-15 08-Apr-15 09-Apr-15 20-Apr-15 20-Apr-15 06-May-15 16-May-15 19-May-15 28-May-15 28-May-15 25-Mar-15 31-Mar-15 10-Apr-15 20-Apr-15 25-Apr-15	27-Apr-15 28-Apr-15 02-May-15 15-May-15 15-May-15 18-May-15 04-Jun-15 04-Jun-15 30-Jun-15 28-May-15 10-Jun-15 10-Jun-15 18-Jun-15 30-Jun-15	27-Apr-15 05-May-15 06-May-15 14-May-15 16-May-15 02-Jun-15 15-Jun-15 18-Jun-15 07-Jul-15 08-Jun-15 16-Jun-15 18-Jun-15 29-Jun-15 04-Jul-15	21 21 21 21 21 21 21 21 21 21 21 27 27 48 48 48 48 48 48 48 48 48 48 48 48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0



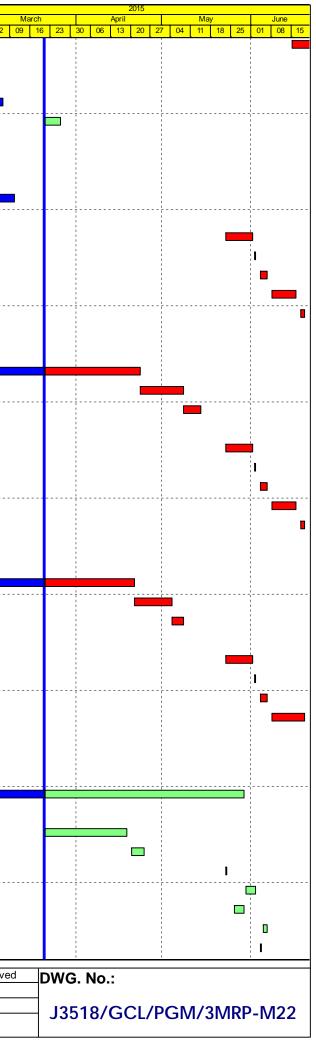
Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
SB2A0380 B12 (B2a) - Type 5B-Bearing Plinth	4	13-Apr-15	0%	4	17-Apr-15	24-Jun-15	29-Jun-15	50	2	0%
Pier Head Segments			,			,,				
SB2A0370 B12 (B2a) - Pier Head Segment - Temporary Platform	6	27-Apr-15	0%	6	04-May-15	06-Jul-15	11-Jul-15	48	0	0%
SB2A0371 B12 (B2a) - Pier Head Segment Bearings	2	05-May-15	0%	2	06-May-15	13-Jul-15	14-Jul-15	48	3	0%
SB2A0372 B12 (B2a) - Pier Head Segment Lift & Temp Support (2 seg)	7	11-May-15	0%	7	19-May-15	15-Jul-15	23-Jul-15	45	0	0%
ridge B1										
Pier B13 (B1g)										
Pier Works				_		,				
SB1G0230 B13 (B1g) - Type 5B-B Pier Head Scaffolding	3	21-Mar-15 A	5%	3	24-Mar-15	02-May-15	05-May-15	29	0	5%
SB1G0240 B13 (B1g) - Type 5B-B Pier Head Rebarwork	4	24-Mar-15	0%	4	28-Mar-15	06-May-15	09-May-15	29	0	0%
SB1G0250 B13 (B1g) - Type 5B-B Pier Head Formwork & Prep for Concreting	4	28-Mar-15	0%	4	02-Apr-15	11-May-15	15-May-15	29	0	0%
SB1G0260 B13 (B1g) - Type 5B-B Pier Head Concreting	1	02-Apr-15	0%	1	08-Apr-15	16-May-15	16-May-15	29	0	0%
SB1G0270 B13 (B1g) - Type 5B-B Pier Head Curing & Striking of Forms & Remove Scaffolding	6	08-Apr-15	0%	6	16-Apr-15	18-May-15	26-May-15	29	0	0%
SB1G0280 B13 (B1g) - Type 5B-B Pier Backfilling Works	4	16-Apr-15	0%	4	21-Apr-15	27-May-15	30-May-15	29	0	0%
SB1G0290 B13 (B1g) - Type 5B-B Bearing Plinth	6	08-Apr-15	0%	6	16-Apr-15	18-May-15	26-May-15	29	0	0%
Pier Head Segments						, ,				
SB1G0370 B13 (B1g) - Pier Head Segment - Temporary Platform	6	21-Apr-15	0%	6	29-Apr-15	01-Jun-15	08-Jun-15	29	0	0%
SB1G0372 B13 (B1g) - Pier Head Segment Lift & Fix (1 seg)	2	29-Apr-15	0%	2	02-May-15	10-Jun-15	12-Jun-15	29	0	0%
SB1G0374 B13 (B1g) - Pier Head Segment Diaphragm - Rebar	12	02-May-15	0%	12	18-May-15	13-Jun-15	02-Jul-15	29	0	0%
SB1G0376 B13 (B1g) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	18-May-15	0%	8	29-May-15	03-Jul-15	11-Jul-15	29	0	0%
SB1G0378 B13 (B1g) - Pier Head Segment Diaphragm - Concreting	2	29-May-15	0%	2	01-Jun-15	13-Jul-15	14-Jul-15	29	0	0%
SB1G0380 B13 (B1g) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	01-Jun-15	0%	6	10-Jun-15	23-Jul-15	30-Jul-15	35	0	0%
Pier B14 (B1f)										
Pier Works										
SB1F0210 B14 (B1f) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift)	3	27-Feb-15 A	100%	0	02-Mar-15 A					100%
SB1F0220 B14 (B1f) - Type 5B Pier Concreting (2nd Lift)	1	03-Mar-15 A	100%	0	03-Mar-15 A					100%
SB1F0222 B14 (B1f) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	05-Mar-15 A	100%	0	05-Mar-15 A					100%
SB1F0230 B14 (B1f) - Type 5B Pier Head Scaffolding	3	13-Mar-15 A	100%	0	17-Mar-15 A					100%
SB1F0240 B14 (B1f) - Type 5B Pier Head Rebarwork	4	18-Mar-15 A	100%	0	21-Mar-15 A					100%
SB1F0250 B14 (B1f) - Type 5B Pier Head Formwork & Prep for Concreting	4	21-Mar-15	0%	4	25-Mar-15	06-Jun-15	12-Jun-15	55	0	0%
SB1F0260 B14 (B1f) - Type 5B Pier Head Concreting	1	26-Mar-15	0%	1	26-Mar-15	13-Jun-15	13-Jun-15	55	0	0%
SB1F0270 B14 (B1f) - Type 5B Pier Head Curing & Striking of Forms & Remove Scaffolding	6	27-Mar-15	0%	6	02-Apr-15	15-Jun-15	24-Jun-15	55	0	0%
SB1F0280 B14 (B1f) - Type 5B Pier Backfilling Works	4	08-Apr-15	0%	4	11-Apr-15	26-Jun-15	30-Jun-15	55	0	0%
Pier Head Segments										
SB1F0370 B14 (B1f) - Pier Head Segment - Temporary Platform	6	13-Apr-15	0%	6	20-Apr-15	02-Jul-15	08-Jul-15	55	0	0%
SB1F0372 B14 (B1f) - Pier Head Segment Lift & Fix (1 seg)	2	21-Apr-15	0%	2	22-Apr-15	09-Jul-15	10-Jul-15	55	0	0%
SB1F0374 B14 (B1f) - Pier Head Segment Diaphragm - Rebar	12	24-Apr-15	0%	12	08-May-15	11-Jul-15	25-Jul-15	55	0	0%
SB1F0376 B14 (B1f) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting Option 2017 00000 Diaphragm - Pier Head Segment Diaphragm - Concreting	8	09-May-15	0%	8	19-May-15	27-Jul-15	05-Aug-15	55	0	0%
SB1F0378 B14 (B1f) - Pier Head Segment Diaphragm - Concreting CR4F0300 D14 (D14) Diaphrage Diaphragm - Concreting	2	20-May-15	0%	2	22-May-15	06-Aug-15	07-Aug-15	55	0	0%
SB1F0380 B14 (B1f) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	23-May-15	0%	6	30-May-15	17-Aug-15	24-Aug-15	61	0	0%
Pier B15 (B1e)										
Pier Works	4		0001	0	00 Mar 45	00 bil 45	04 6445	0.4	0	0004
SB1E0280 B15 (B1e) - Type 5B Pier Backfilling Works	4	16-Mar-15 A	60%	2	23-Mar-15	20-Jul-15	21-Jul-15	84	0	60%
Pier Head Segments	<u>^</u>	22 Mar 15	00/	6	20 Mar 15	22 145	20 1.145	0.4	4	00/
SB1E0370 B15 (B1e) - Pier Head Segment - Temporary Platform SB1E0372 B15 (B1e) - Dier Head Segment Lift & Fire (1 corr)	6	23-Mar-15	0%	6	30-Mar-15	22-Jul-15	28-Jul-15	84	4	0%
SB1E0372 B15 (B1e) - Pier Head Segment Lift & Fix (1 seg) SB1E0374 B15 (B1e) - Pier Head Segment Displacement Displa	2	09-Apr-15	0%	2	10-Apr-15	30-Jul-15	31-Jul-15	80	0	0%
SB1E0374 B15 (B1e) - Pier Head Segment Diaphragm - Rebar SB1E0376 B15 (B1a) Diar Head Segment Diaphragm Formwork & Brop for Congreting	12	11-Apr-15	0%	12	27-Apr-15	01-Aug-15	15-Aug-15	80	0	0%
SB1E0376 B15 (B1e) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	8	28-Apr-15	0%	8	07-May-15	17-Aug-15	26-Aug-15	80	0	0%
Actual Work Project ID: J3518DWPrE-M22 Tu	ien Mun - Cl	hek Lap Kok I	.ink - Sou	thern (Connection		Date	Revis		Checked
		ng Program	•	-	_	jes)	09-Mar-15		D W	
Critical Bar Milestones, No Level of Effort.	(P	rogress as	of 21-N	lar-15)		31-Mar-15		14/	1



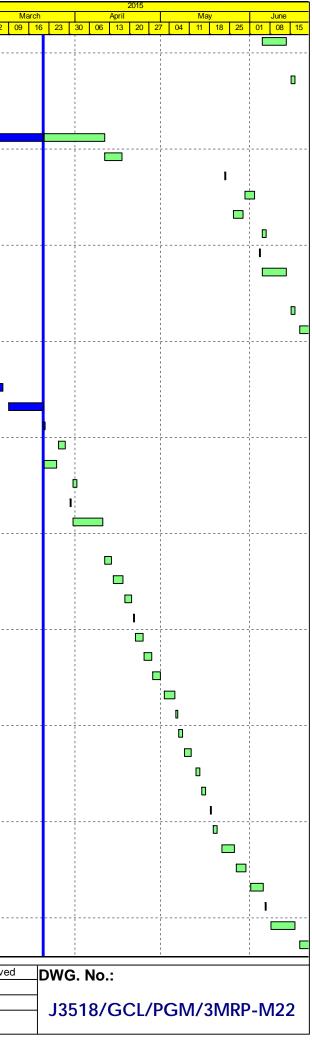
iivity ID	Activity Name			Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	23 02
SB1E037	78 B15 (B1e) - Pier Head	Segment Diaphragm - Concreting		2	08-May-15	0%	2	09-May-15	27-Aug-15	28-Aug-15	80	0	0%	
SB1E038	B15 (B1e) - Pier Head	Segment Diaphragm - Curing & Striking of Forms	S	6	11-May-15	0%	6	18-May-15	04-Sep-15	12-Sep-15	86	0	0%	
SB1E037 SB1E038 Pier B16 (E Pier B16 (E Pier Work SB1D038 Pier Head SB1D037 SB10037 SB10038 Pier B18 (E Prelimina PB18003 GFXX207-1 GFXX207-1 GFXX212-1 Milestones	31d)		I											
Pier Work	(S													
SB1D028	B16 (B1d) - Type 5B P	ier Backfilling Works		4	21-Mar-15	0%	4	25-Mar-15	01-Mar-17	04-Mar-17	539	24	0%	
Pier Head	l Segments								J					
SB1D037	70 B16 (B1d) - Pier Head	Segment - Temporary Platform		6	28-Feb-15 A	100%	0	05-Mar-15 A					100%	
SB1D037	72 B16 (B1d) - Pier Head	Segment Lift & Fix (1 seg)		2	06-Mar-15 A	100%	0	06-Mar-15 A					100%	<u> </u>
SB1D037		Segment Diaphragm - Rebar		12	21-Mar-15	0%	12	08-Apr-15	19-Jan-17	07-Feb-17	509	0	0%	
SB1D037	76 B16 (B1d) - Pier Head	Segment Diaphragm - Formwork & Prep for Con	creting	8	09-Apr-15	0%	8	18-Apr-15	08-Feb-17	16-Feb-17	509	0	0%	
SB1D037	78 B16 (B1d) - Pier Head	Segment Diaphragm - Concreting		2	20-Apr-15	0%	2	21-Apr-15	17-Feb-17	18-Feb-17	509	0	0%	
SB1D038	. ,	Segment Diaphragm - Curing & Striking of Forms	6	6	22-Apr-15	0%	6	29-Apr-15	27-Feb-17	04-Mar-17	515	0	0%	
Pier B18 (E	31b) & Abutment B				· ·									
· ·	ry Works for Land Piling													
PB18003	-	. Instru. & Baseline Monitoring		36	21-Mar-15	0%	36	07-May-15	18-Nov-15	31-Dec-15	196	227	0%	
Viaduct C														
	s - Marine Foundation													
GFXX197-1		of piling works		0		0%	0	08-May-15		21-Apr-15	-14	19	0%	[
GFXX202-1		• •		0		0%	0	14-May-15		18-Mar-15	-44	15	0%	
GFXX207-1				0		0%	0	21-Mar-15		23-Mar-15	2	56	0%	
GFXX212-1	, , , ,			0		0%	0	26-Mar-15		17-Jul-15	89	99	0%	
	s - Land Foundation			0		078	0	20-10141-13		17-501-15	09	33	078	
ZC00050	C17 (C2a) - Start date	a for piling		0	09-Apr-15	0%	0	1	10-Nov-15		176	52	0%	
ZC00050 ZC00060	C16 (C2b) - Start date			0	13-May-15	0%	0		03-Nov-15		142	52	0%	
	X ,				13-1viay-13		0	Of Mar 15	03-1107-13	07 lon 16				
ZC00071	C15 (C2c) - Completic			0		0%		21-Mar-15		07-Jan-16	237	160	0%	
ZC00081	C14 (C2d) - Completion			0		0%	0	21-Mar-15		22-Dec-15	226	83	0%	
ZC00091-1	, , , , , , , , , , , , , , , , , , ,			0		0%	0	15-Jun-15		04-Dec-15	144	45	0%	¦¦
ZC00092-1	C11 (C3a) - Completic			0		0%	0	31-Mar-15		10-Sep-15	133	85	0%	
ZC00093-1	. , .	1 0		0		0%	0	19-Jun-15		18-Aug-15	49	0	0%	
ZC00095-1	C8 (C3d) - Completion	1.0		0		0%	0	21-Mar-15		30-Apr-18	920	920	0%	
ZC00096	C7 (C3e) - Start date			0	21-Mar-15	0%	0		30-Apr-18		920	920	0%	
ZC00096-1	, , , , , , , , , , , , , , , , , , ,	n of piling works		0		0%	0	29-May-15		30-Apr-18	866	866	0%	
Bridge C4														
Pier C1 (C4														
Pile Cap V														
	20 C1 (C4e) - Marine Pile	•		12	09-Mar-15 A	100%	0	21-Mar-15 A					100%	
SC4E013	. ,	Cap M2 - Rebar fixing, inst.inserts etc		12	23-May-15	0%	12	08-Jun-15	29-Aug-15	15-Sep-15	73	0	0%	
SC4E014	. ,	1 0		1	10-Jun-15	0%	1	10-Jun-15	16-Sep-15	16-Sep-15	73	0	0%	
SC4E016	, ,	Cap M2 - Curing incl. CJ preparation		6	12-Jun-15	0%	6	19-Jun-15	18-Sep-15	24-Sep-15	73	0	0%	
Pier Work														
SC4E017	70 C1 (C4e) - Type 4B-M	J Pier Temp. Support Platform		6	12-Jun-15	0%	6	19-Jun-15	18-Sep-15	24-Sep-15	73	0	0%	
Pier C2 (C4	4d)													
Pile Cap V	Works													
SC4D007	70 C2 (C4d) - Marine Pile	Cap M2b - Inst. Floating Seal & Casing Head Stee	elwork	7	18-Mar-15 A	0%	7	28-Mar-15	30-Apr-15	08-May-15	28	37	10%	
SC4D008	80 C2 (C4d) - Marine Pile	Cap M2b - Install precast shell in position		1	22-May-15	0%	1	22-May-15	09-May-15	09-May-15	-9	0	0%	
SC4D009	90 C2 (C4d) - Marine Pile	Cap M2b - Inst.Access & make Watertight		3	23-May-15	0%	3	27-May-15	11-May-15	14-May-15	-9	0	0%	
SC4D010	00 C2 (C4d) - Marine Pile	Cap M2b - Weld Fin plates/Plug Rebar & Concre	ete	10	28-May-15	0%	10	10-Jun-15	15-May-15	28-May-15	-9	0	0%	
SC4D012	20 C2 (C4d) - Marine Pile	Cap M2b - Dewater precast shell / Remove Liftin	g Frame	2	12-Jun-15	0%	2	13-Jun-15	29-May-15	30-May-15	-9	0	0%	
		Project ID: J3518DWPrE-M22	Tuon		nek Lap Kok I	ink - Sou	thorn (Connection	, <u> </u>	Date	Revis	sion I (Checked	Appro
Actual Worl		Layout: J3518-DWP-3MRP Submission - M22_	3-Month		ng Program				1es)	09-Mar-15	NOVR		B	, 'hhi 0
Critical Bar		Filter: TASK filters: 3-Month Lookahead, No CC	J-WOULLI		rogress as	•	-	-	1001	31-Mar-15			/Y	
Milestone		Milestones, No Level of Effort.		(12	1091033 03		iai - I J)						
		1	1							1				



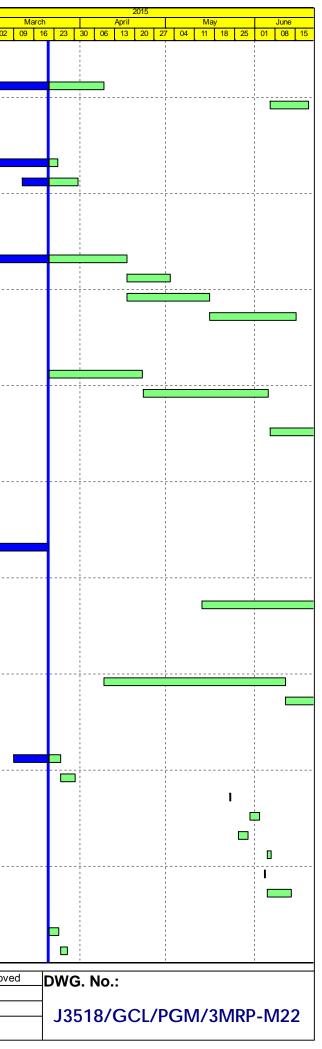
ctivity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
SC4D0130	C2 (C4d) - Marine Pile Cap M2b - Pile cut down	8	15-Jun-15	0%	8	27-Jun-15	01-Jun-15	12-Jun-15	-9	0	0%	23 02
SC4D0130 Pier C3 (C4c) Foundation GFXX211 GFXX212 Pier C4 (C4b) Foundation GFXX206 GFXX207 Pile Cap Wor SC4B0070 SC4B0080 SC4B0100 SC4B0120 Pier C5 (C4a) Foundation GFXX201 GFXX203 GFXX204 SC4B0120 Pier C5 (C4a) GFXX201 GFXX202 Pile Cap Wor SC4A0070 SC4A0070 SC4A0070 SC4A0070 SC4A0070 SC4A0070 SC4A0070 SC4A0070 SC4A0120 Pier C6 (C3f) Foundation GFXX195												
Foundation	Works											
GFXX211	C3 (C4c) - Sonic & Interface Coring	12	18-Feb-15 A	100%	0	06-Mar-15 A					100%	
GFXX212	C3 (C4c) - Dismantle removable panels of temp. platform	5	21-Mar-15	0%	5	26-Mar-15	03-Jul-15	08-Jul-15	81	0	0%	
Pier C4 (C4b)			<u> </u>	<u> </u>								
Foundation	Works											
GFXX206	C4 (C4b) - Sonic & Interface Coring	12	09-Feb-15 A	100%	0	25-Feb-15 A					100%	
GFXX207	C4 (C4b) - Dismantle removable panels of temp. platform	5	05-Mar-15 A	100%	0	10-Mar-15 A					100%	
Pile Cap Wor	rks		J				1					
SC4B0070	C4 (C4b) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	23-May-15	0%	7	01-Jun-15	16-Mar-15	23-Mar-15	-50	0	0%	
SC4B0080	C4 (C4b) - Marine Pile Cap M2b - Install precast shell in position	1	02-Jun-15	0%	1	02-Jun-15	24-Mar-15	24-Mar-15	-50	0	0%	
SC4B0090	C4 (C4b) - Marine Pile Cap M2b - Inst.Access & make Watertight	3	04-Jun-15	0%	3	06-Jun-15	25-Mar-15	27-Mar-15	-50	0	0%	
SC4B0100	C4 (C4b) - Marine Pile Cap M2b - Weld Fin plates/Plug Rebar & Concrete	6	08-Jun-15	0%	6	16-Jun-15	28-Mar-15	08-Apr-15	-50	0	0%	
SC4B0120	C4 (C4b) - Marine Pile Cap M2b - Dewater precast shell / Remove Lifting Frame	2	18-Jun-15	0%	2	19-Jun-15	09-Apr-15	10-Apr-15	-50	0	0%	
Pier C5 (C4a)		,	,	1		1						
Foundation	Works											
GFXX200	C5 (C4a) - Bored Piles (2.35m dia. x 2 nos)	84	05-Dec-14 A	71%	24	23-Apr-15	16-Jan-15	14-Feb-15	-51	0	75%	
GFXX201	C5 (C4a) - Sonic & Interface Coring	12	23-Apr-15	0%	12	08-May-15	14-Feb-15	04-Mar-15	-51	0	0%	
GFXX202	C5 (C4a) - Dismantle removable panels of temp. platform	5	08-May-15	0%	5	14-May-15	04-Mar-15	10-Mar-15	-51	0	0%	
Pile Cap Wor	rks	,				1	, , , ,					
SC4A0070	C5 (C4a) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	23-May-15	0%	7	01-Jun-15	10-Mar-15	18-Mar-15	-55	0	0%	
SC4A0080	C5 (C4a) - Marine Pile Cap M2b - Install precast shell in position	1	02-Jun-15	0%	1	02-Jun-15	18-Mar-15	19-Mar-15	-55	0	0%	
SC4A0090	C5 (C4a) - Marine Pile Cap M2b - Inst.Access & make Watertight	3	04-Jun-15	0%	3	06-Jun-15	19-Mar-15	23-Mar-15	-55	0	0%	
SC4A0100	C5 (C4a) - Marine Pile Cap M2b - Weld Fin plates/Plug Rebar & Concrete	6	08-Jun-15	0%	6	16-Jun-15	23-Mar-15	30-Mar-15	-55	0	0%	
SC4A0120	C5 (C4a) - Marine Pile Cap M2b - Dewater precast shell / Remove Lifting Frame	2	18-Jun-15	0%	2	19-Jun-15	30-Mar-15	01-Apr-15	-55	0	0%	
Pier C6 (C3f)												
Foundation	Works											
	C6 (C3f) - Bored Piles (2.00m dia. x 3 nos)	60	10-Feb-15 A	62%	23	21-Apr-15	24-Feb-15	21-Mar-15	-22	0	80%	
GFXX196	C6 (C3f) - Sonic & Interface Coring	10	21-Apr-15	0%	10	04-May-15	23-Mar-15	02-Apr-15	-22	0	0%	
GFXX197	C6 (C3f) - Dismantle removable panels of temp. platform	4	04-May-15	0%	4	08-May-15	08-Apr-15	11-Apr-15	-22	0	0%	
Pile Cap Wor	ks											
SC3F0070	C6 (C3f) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	23-May-15	0%	7	01-Jun-15	13-Apr-15	21-Apr-15	-30	0	0%	
SC3F0080	C6 (C3f) - Marine Pile Cap M2b - Install precast shell in position	1	02-Jun-15	0%	1	02-Jun-15	22-Apr-15	22-Apr-15	-30	0	0%	
SC3F0090	C6 (C3f) - Marine Pile Cap M2b - Inst.Access & make Watertight	3	04-Jun-15	0%	3	06-Jun-15	24-Apr-15	27-Apr-15	-30	0	0%	
SC3F0100	C6 (C3f) - Marine Pile Cap M2b - Weld Fin plates/Plug Rebar & Concrete	8	08-Jun-15	0%	8	19-Jun-15	28-Apr-15	07-May-15	-30	0	0%	
Bridge C3												
Pier C7 (C3e)												
Socketted H	-Pile Installation											
GFXX398	C7 (C3e) - Install SH Pile (16 no.)	120	27-Jan-15 A	55%	54	29-May-15	14-Jul-15	15-Sep-15	90	0	55%	
Pile Cap Wor					_							
SC3E0090	C7 (C3e) - Pile cap Excavation / ELS	20	21-Mar-15	0%	20	18-Apr-15	08-Aug-15	02-Sep-15	100	0	0%	
SC3E0092	C7 (C3e) - Pile cap Pile breakdown to cut-off etc.	4	20-Apr-15	0%	4	24-Apr-15	03-Sep-15	07-Sep-15	100	21	0%	
	C7 (C3e) - Pile cap Blinding	1	23-May-15	0%	1	23-May-15	08-Sep-15	08-Sep-15	79	0	0%	
SC3E0110	C7 (C3e) - Pile cap Formwork	3	30-May-15	0%	3	02-Jun-15	15-Sep-15	18-Sep-15	79	0	0%	
SC3E0120	C7 (C3e) - Pile cap Rebarwork	4	26-May-15	0%	4	29-May-15	10-Sep-15	14-Sep-15	79	0	0%	
SC3E0122	C7 (C3e) - Pile cap Kicker Formwork	2	05-Jun-15	0%	2	06-Jun-15	25-Sep-15	26-Sep-15	83	4	0%	
SC3E0130	C7 (C3e) - Pile cap Concreting	1	04-Jun-15	0%	1	04-Jun-15	19-Sep-15	19-Sep-15	79	0	0%	1
Actual Work	Project ID: J3518DWPrE-M22	Tuen Mun - C	hek Lap Kok I	_ink - Sou	thern C	Connection		Date	Revis	sion	Checked	Approve
Planned Bar	Layout: J3518-DWP-3MRP Submission - M22_ Filter: TASK filters: 3-Month Lookahead, No CQ	3-Month Rollin	•				jes)	09-Mar-15			B	
Critical Bar	Milestones, No Level of Effort.		Progress as	•	-	-	-	31-Mar-15		V	/Y	
								1				



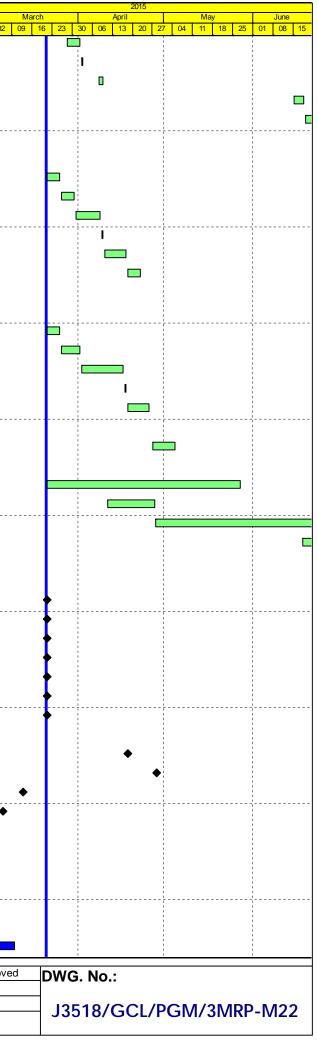
	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical 9 Complet	% ete 23
SC3E0140	C7 (C3e) - Pile cap Curing & Striking of Forms incl. CJ prep	6	05-Jun-15	0%	6	13-Jun-15	21-Sep-15	26-Sep-15	79	0	0%	
Pier Works				1		1	<u> </u>					
SC3E0150	C7 (C3e) - Type 5B Pier Scaffolding (1st Lift)	2	15-Jun-15	0%	2	16-Jun-15	29-Sep-15	30-Sep-15	79	7	0%	%
Pier C8 (C3d)				1		1						
Pile Cap Wor	ks											
SC3D0090	C8 (C3d) - Pile cap Excavation / ELS (incl. sheet piling)	36	08-Feb-15 A	60%	14	11-Apr-15	18-Sep-15	07-Oct-15	132	0	60%	%
SC3D0092	C8 (C3d) - Pile cap Pile breakdown to cut-off etc.	4	11-Apr-15	0%	4	17-Apr-15	08-Oct-15	12-Oct-15	132	27	0%	%
SC3D0100	C8 (C3d) - Pile cap Blinding	1	23-May-15	0%	1	23-May-15	13-Oct-15	13-Oct-15	105	0	0%	%
SC3D0110	C8 (C3d) - Pile cap Formwork	3	30-May-15	0%	3	02-Jun-15	20-Oct-15	23-Oct-15	105	0	0%	%
SC3D0120	C8 (C3d) - Pile cap Rebarwork	4	26-May-15	0%	4	29-May-15	15-Oct-15	19-Oct-15	105	0	0%	%
SC3D0122	C8 (C3d) - Pile cap Kicker Formwork	2	05-Jun-15	0%	2	06-Jun-15	31-Oct-15	02-Nov-15	109	4	0%	%
SC3D0130	C8 (C3d) - Pile cap Concreting	1	04-Jun-15	0%	1	04-Jun-15	24-Oct-15	24-Oct-15	105	0	0%	%
SC3D0140	C8 (C3d) - Pile cap Curing & Striking of Forms incl. CJ prep	6	05-Jun-15	0%	6	13-Jun-15	26-Oct-15	02-Nov-15	105	0	0%	%
Pier Works]]					
SC3D0150	C8 (C3d) - Type 5B Pier Scaffolding (1st Lift)	2	15-Jun-15	0%	2	16-Jun-15	03-Nov-15	04-Nov-15	105	0	0%	%
	C8 (C3d) - Type 5B Pier Rebarwork (1st Lift)	3	18-Jun-15	0%	3	22-Jun-15	05-Nov-15	07-Nov-15	105	0	0%	%
Pier C9 (C3c)				I								- +
Pile Cap Wor	ks											
· · ·	C9 (C3c) - Pile cap Excavation / ELS (incl. sheet piling)	18	28-Feb-15 A	100%	0	07-Mar-15 A					100%	%
	C9 (C3c) - Pile cap Pile breakdown to cut-off etc.	4	09-Mar-15 A	100%	0	21-Mar-15 A					100%	
	C9 (C3c) - Pile cap Blinding	1	21-Mar-15 A	100%	0	21-Mar-15 A					100%	_
	C9 (C3c) - Pile cap Formwork	3	26-Mar-15	0%	3	28-Mar-15	18-Nov-15	20-Nov-15	174	0	0%	
	C9 (C3c) - Pile cap Rebarwork	4	21-Mar-15	0%	4	25-Mar-15	13-Nov-15	17-Nov-15	174	0	0%	
	C9 (C3c) - Pile cap Kicker Formwork	2	31-Mar-15	0%	2	01-Apr-15	27-Nov-15	28-Nov-15	178	4	0%	
	C9 (C3c) - Pile cap Concreting	1	30-Mar-15	0%	1	30-Mar-15	21-Nov-15	21-Nov-15	174	0	0%	
	C9 (C3c) - Pile cap Curing & Striking of Forms incl. CJ prep	6	31-Mar-15	0%	6	10-Apr-15	23-Nov-15	21-Nov-15	174	0	0%	
Pier Works	C3 (C3C) - File Cap Curing & Striking of Forms incl. C3 prep	0	31-Ivial-15	0 78	0	10-Api-15	25-1100-15	20-1100-13	174	0	07	°
	C9 (C3c) - Type 5B Pier Scaffolding (1st Lift)	2	11-Apr-15	0%	2	13-Apr-15	30-Nov-15	01-Dec-15	174	0	0%	27
		3	·			•						
	C9 (C3c) - Type 5B Pier Rebarwork (1st Lift)	-	14-Apr-15	0%	3	17-Apr-15	02-Dec-15	04-Dec-15	174	0	0%	
	C9 (C3c) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	2	18-Apr-15	0%	2	20-Apr-15	05-Dec-15	07-Dec-15	174	0	0%	
	C9 (C3c) - Type 5B Pier Concreting (1st Lift)	1	21-Apr-15	0%	1	21-Apr-15	08-Dec-15	08-Dec-15	174	0	0%	
	C9 (C3c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	22-Apr-15	0%	2	24-Apr-15	09-Dec-15	12-Dec-15	176	0	0%	
	C9 (C3c) - Type 5B Pier Scaffolding (2nd Lift)	2	25-Apr-15	0%	2	27-Apr-15	14-Dec-15	15-Dec-15	176	0	0%	
	C9 (C3c) - Type 5B Pier Rebarwork (2nd Lift)	3	28-Apr-15	0%	3	30-Apr-15	16-Dec-15	18-Dec-15	176	0	0%	
	C9 (C3c) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift)	3	02-May-15	0%	3	05-May-15	19-Dec-15	22-Dec-15	176	0	0%	
	C9 (C3c) - Type 5B Pier Concreting (2nd Lift)	1	06-May-15	0%	1	06-May-15	23-Dec-15	23-Dec-15	176	0	0%	
	C9 (C3c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	07-May-15	0%	2	08-May-15	24-Dec-15	29-Dec-15	177	0	0%	
	C9 (C3c) - Type 5B Pier Scaffolding (3rd Lift)	2	09-May-15	0%	2	11-May-15	30-Dec-15	31-Dec-15	177	0	0%	
	C9 (C3c) - Type 5B Pier Rebarwork (3rd Lift)	2	13-May-15	0%	2	14-May-15	02-Jan-16	04-Jan-16	177	0	0%	
	C9 (C3c) - Type 5B Pier Formwork & Prep for Concreting (3rd Lift)	2	15-May-15	0%	2	16-May-15	05-Jan-16	06-Jan-16	177	0	0%	
	C9 (C3c) - Type 5B Pier Concreting (3rd Lift)	1	18-May-15	0%	1	18-May-15	07-Jan-16	07-Jan-16	177	0	0%	
	C9 (C3c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (3rd Lift)	2	19-May-15	0%	2	20-May-15	08-Jan-16	09-Jan-16	177	0	0%	
	C9 (C3c) - Type 5B Pier Head Scaffolding	3	22-May-15	0%	3	26-May-15	11-Jan-16	13-Jan-16	177	0	0%	
	C9 (C3c) - Type 5B Pier Head Rebarwork	4	27-May-15	0%	4	30-May-15	14-Jan-16	18-Jan-16	177	0	0%	
	C9 (C3c) - Type 5B Pier Head Formwork & Prep for Concreting	4	01-Jun-15	0%	4	05-Jun-15	19-Jan-16	22-Jan-16	177	0	0%	
	C9 (C3c) - Type 5B Pier Head Concreting	1	06-Jun-15	0%	1	06-Jun-15	23-Jan-16	23-Jan-16	177	0	0%	6
SC3C0310	C9 (C3c) - Type 5B Pier Head Curing/Striking of Forms/Remove Scaffoldin	g 6	08-Jun-15	0%	6	16-Jun-15	25-Jan-16	30-Jan-16	177	0	0%	6
SC3C0320	C9 (C3c) - Type 5B Pier Backfilling Works	4	18-Jun-15	0%	4	24-Jun-15	01-Feb-16	04-Feb-16	177	0	0%	6
Actual W	Project ID: J3518DWPrE-M22	Tuen Mun - Cl	nek I an Kok I	ink - Sou	thern (Connection		Date	Revis	sion	Checked	
Actual Work Planned Bar	Layout: J3518-DWP-3MRP Submission - M22_ Filter: TASK filters: 3-Month Lookahead, No CO	3-Month Rollin	-				(20)	09-Mar-15			DB	
Fianineu Dai												



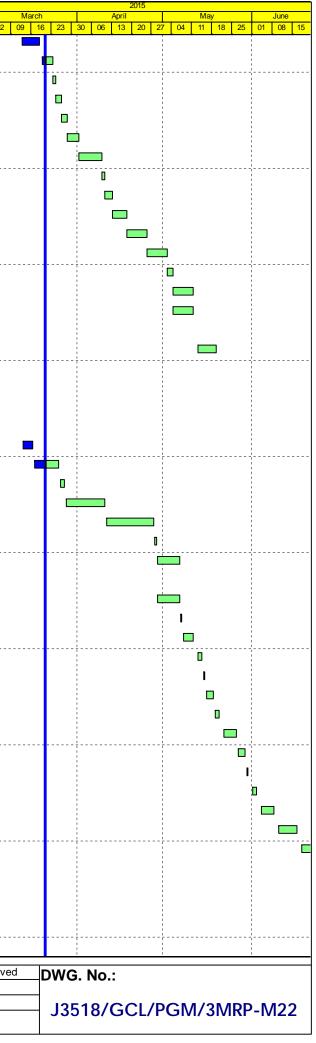
Per CH (CA) GTAXUES (CM) (CA): Dard SH (CA) (CA) (CA) 10 10 Junr 15 Å 10 00 Junr 15 Å 10 1	Activity Name		Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
Formation Norma Formation	Pier C10 (C3b)												23 (
GP SN242Dir													
Fine Cit Cia) Fine Addition Fine Add	GFXX418 C10 (C3b) - Bored Pile	(2.20m dia. x 2 nos)	51	19-Jan-15 A	75%	13	09-Apr-15	29-Jun-15	14-Jul-15	78	0	75%	
Foundation Works Subserved	GFXX421-2 C10 (C3b) - Sonic & In	erface Coring Tests	12	06-Jun-15	0%	12	19-Jun-15	05-Aug-15	18-Aug-15	49	0	0%	
GF7X411Cf1 (Ch). Parce Pin (2 Dhr din x 2 ran)44044.94.94.94.94.94.94.GF7X421.3Cf1 (Ch). Same Pin (2 Dhr din x 2 ran)Cf212 Mar. 16A94094.94.94.94.GF7X421.2Cf2 (Ch). Pance Pin (2 Dhr din x 2 ran)Cf021 Mar. 16A91.17.4mr. 114.5mr. 1510.5mr. 15	Pier C11 (C3a)				1								
GFX2047-1 OH Charge Car OH-Sep C O	Foundation Works												
Bridge C Mark C 12 (C2) Mark C 12 (C	GFXX416 C11 (C3a) - Bored Pile	(2.00m dia. x 2 nos)	45	24-Jan-15 A	95%	2	24-Mar-15	30-Mar-17	01-Apr-17	602	91	95%	
Pier Cal Cal : Vier Series Se	GFXX421-3 C11 (C3a) - Sonic & Int	erface Coring Tests	12	12-Mar-15 A	30%	8	31-Mar-15	01-Sep-15	10-Sep-15	133	0	30%	
Function Vorke Service	Bridge C2												
GFXx412 C12 (C21) - Bonel Ainstance Camping Tests 12 C17 Apen-15 14 19 17 Apen-15 14 10 17 Apen-15 00-Konv-15 14 0 07 Min GFXX413 C12 (C21) - Booken Ainstance Camping For ThDogh Coung 24 17 Apen-15 0% 12 00-Kay-15 0.4 10 0.0 0	Pier C12 (C2f)												
GPXX413 C12 (C21) - Souck & Interface Caring Tests 12 17 Apr.15 0% 24 GPXX424 C12 (C21) - Souck interface Caring & Testing 24 17 Apr.15 0% 24 16 Abay-15 0.84 06 Abov-15 144 0 0% GPXX428 C12 (C21) - Souch interface Caring & Testing 244 16 Abay-15 0.84 16 Abay-15 0.84 16 Abay-15 0.84 06 Abov-15 06 Abov-15 18 4 0 0% GPXX428 C13 (C20) - Loading Test for pre-bored H-pile 24 21 Abar-15 0% 24 22 Apr.15 22 Apr.15 18 App.15 124 0 0% GPXX389 C13 (C20) - Loading Test for pre-bored H-pile 24 21 Abar-15 0% 18 04-Jabr.15 04 Nov-15 124 0 0% GPXX389 C13 (C20) - Loading Test for pre-bored H-pile 24 21 Abar-15 0% 18 04-Jabr.15 04 Nov-15 124 0 0% 0% 18 04-Jabr.15 04 Nov-15 124 0 0% 0% 16 04 Nov-15 124 10 0% 0% 0% 16 04	Foundation Works												
GPXX424 C12 (C2) - Selection of bore plu ber Full Depth Coring X Texing 24 17-Apr. 15 0% 24 16-May- 16 0%-02-15 04-Mon-15 144 0 0% GPXX422+ C12 (C2) - Selection Full Depth Coring X Texing 24 18-May-16 0% 24 15-May-15 04-Dan-15 144 0 0% GPXX422+ C12 (C2) - Selection Full Depth Coring X Texing 24 21-May-15 0% 24 22-Apr. 15 22-Apr. 15 22-Apr. 15 0.8-Apr. 15 0.8 0 0% 0 0 0% 0 0 0% 0 0 0 0 0% 0 0 0 0% 0	GFXX412 C12 (C2f) - Bored Pile	(2.00m dia. x 2 nos)	66	21-Jan-15 A	71%	19	17-Apr-15	14-Sep-15	08-Oct-15	144	0	71%	
GFXX422 C12 (22): Berder Pile Full Depth Coring & Tassing 24 16 May 15 0% 24 15 Jahr 15 07 Nov.15 04 De 15 14 0 0% FBr C13 (C28) Dertal Salaward Markan 24 21-Mar 15 0% 24 22-Mar 15 24-Mar 15 0% 0.0 05-San 15 10% 0.0 05-San 15 0.0 0.	GFXX413 C12 (C2f) - Sonic & Inte	erface Coring Tests	12	17-Apr-15	0%	12	02-May-15	24-Oct-15	06-Nov-15	156	12	0%	
Per C13 (C2a) Portal Per C13 (GFXX422-4 C12 (C2f) - Selection of	f bored pile for Full Depth Coring	24	17-Apr-15	0%	24	16-May-15	09-Oct-15	06-Nov-15	144	0	0%	
Sockated H=InstallationGFX20394 (51 (C2e) - Socktion of pile for bradning Test for pre-borred H-pile2421-Mart 50%2422-Apr 1618-Sep 1612400%GFX20394 (51 (C2e) - Loading Test for pre-borred H-pile3623-Apr 150%1806-Jun 1618-Sep 1618-Sep 1612400%Pile Cap Work538 (C2e Andring Test for pre-borred H-pile3606-Jun 150%1804-Jul 1504-Nov 1524-Nov 1514000Pile Cap More538 (C2e Andring Test for pre-borred H-pile7002-Feb 160002-Nov 151000<	GFXX422-8 C12 (C2f) - Bored Pile	Full Depth Coring & Testing	24	16-May-15	0%	24	15-Jun-15	07-Nov-15	04-Dec-15	144	0	0%	
GPXX389-4 C13 (C2e) - Selction of pile for Loading Test 24 21-Mar-15 0% 24 22-Apr-15 22-Apr-15 19-Sep-15 0.18-Sep-15 0.14 0.0 0% GPXX389-5 C13 (C2e) - Loading Test for probed H-pile 36 23-Apr-15 0% 36 0.5-Abur-15 19-Sep-15 0.5-Nov-15 124 0.0 0% BPIC 2D C13 (C2e) - Loading Test for probed H-pile 18 06-Jun-15 16% 0.4 0.4 0.4-Jul-15 0.4-Nov-15 2.4-Nov-15 1.4 0.0 0% BPIC 2D C14 (C2d) - Install SH Pile (12 nr) 600 07-Jan-16.A 100% 0 2.8-Fab-15.A 1.0 1.0 0.0 1.00% GPXX381-2 C14 (C2d) - Install SH Pile (12 nr) 600 07-Jan-16.A 100% 0 2.1-Mar-15 1.0 1.0 1.00% GPXX381-2 C14 (C2d) - Install SH Pile (13 nr) 600 19-Jan-15 100% 0 2.1-Mar-15 1.0 1.0 1.00% 1.0 1.1-Mar-15 1.0 1.0 1.00% 1.0 1.1-Mar-15 1.0 1.0 1.0 1.00% 1.0	Pier C13 (C2e) Portal												
GRX339-8C13 (C2a) - Loading Test for pre-bored H-pile3823 -Apr.159%3605 -Apr.1598 -Apr.1599 -Apr.1510 -Apr.1599 -Apr.1510 -Apr.1599 -Apr.1510 -Apr.1510 -Apr.1510 -Apr	Socketted H-Pile Installation												
Pie Cap WorksFile Cap Parale cap Excavation / ELSNo. <td>GFXX399-4 C13 (C2e) - Selction of</td> <td>pile for Loading Test</td> <td>24</td> <td>21-Mar-15</td> <td>0%</td> <td>24</td> <td>22-Apr-15</td> <td>22-Aug-15</td> <td>18-Sep-15</td> <td>124</td> <td>0</td> <td>0%</td> <td></td>	GFXX399-4 C13 (C2e) - Selction of	pile for Loading Test	24	21-Mar-15	0%	24	22-Apr-15	22-Aug-15	18-Sep-15	124	0	0%	
S2ER090 C13B (22e-R) - Pie cap Excavation / ELS 18 06-Jun-15 0% 18 04-Jul-15 04-Nov-15 24-Nov-15 111 0 0% Fire C14 (224) Seckettal + File issail Stall	GFXX399-6 C13 (C2e) - Loading Te	est for pre-bored H-pile	36	23-Apr-15	0%	36	05-Jun-15	19-Sep-15	03-Nov-15	124	0	0%	
Pier C14 (C22) Socketted H-Pile Installation Socke	Pile Cap Works												
Socketted Hie InstallationGFX261-2C14 (C2g) - Instal SH Pile (12 nr)6006067-Jan-15A100%028-Fab-15AIIII100%Pior C13 (C2g) - Instal SH Pile (12 nr)60019-Jan-15A100%011-Ian-15AIII	SC2ER090 C13B (C2e-R) - Pile ca	p Excavation / ELS	18	06-Jun-15	0%	18	04-Jul-15	04-Nov-15	24-Nov-15	111	0	0%	
GPXX81-2C14 (C2d) - Instail SH Pile (12 m)6007-Jan-15A100%0028-Feb-1AIII <th< td=""><td>Pier C14 (C2d)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Pier C14 (C2d)												
Pier C15 (C2) Socketted H-Pie Installation Socket	Socketted H-Pile Installation												
Societted H-Pile InstallationGFXX381-3C15 (C2;) Install SH Pile (13 nr)6019-Jan-15A100%021-Mar-15AIII100%Fire C15 (C2;FoundationFire C16 (C2;State C10, State C10	GFXX381-2 C14 (C2d) - Install SH	Pile (12 nr)	60	07-Jan-15 A	100%	0	28-Feb-15 A					100%	
GFXX381-3 C15 (C2c) - Install SH Pile (13 nr) 60 19-Jan-15A 100% 0 21-Mar-15A . . . 100% 100% Pier C15 (C2b) France Second . Second . Second . Second .	Pier C15 (C2c)												
Pier C16 (C2.5) Foundation Works GFXX408 C16 (C2.5) - Bored Pile (2.00m dia. x 2 nos) 52 13-May-15 0% 52 16 (C2.5) - Bored Pile (2.00m dia. x 2 nos) 52 13-May-15 0% 52 16 (C2.5) - Bored Pile (2.00m dia. x 2 nos) 52 13-May-15 0% 52 16 (C2.5) - Bored Pile (2.00m dia. x 2 nos) 52 11-Jun-15 15. Vol GFXX409 C17 (C2.a) - Bored Pile (2.00m dia. x 2 nos) 52 09-Apr-15 0% 52 11-Jun-15 15. Vol GFXX409 C17 (C2.a) - Sonic & Interface Coring Tests C17 C2.a) - Sonic & Interface Coring Tests C17 C2.a) - Sonic & Interface Coring Tests C17 C17 C2.a) - Sonic & Interface Coring Tests C17 C2.a) - Sonic & Interface Coring Tests C17	Socketted H-Pile Installation												
Foundation Voltage Second Pile (2.00m dia. x 2 nos) Second Pile (2.00m d	GFXX381-3 C15 (C2c) - Install SH F	Pile (13 nr)	60	19-Jan-15 A	100%	0	21-Mar-15 A					100%	
GFXX408 C16 (C2b) - Bored Pile (2,00m dia, x 2 nos) 52 13 - May-15 0 17 - Aug-15 17 - Aug-15 </td <td>Pier C16 (C2b)</td> <td></td>	Pier C16 (C2b)												
Bridge C1 Vert No.	Foundation Works												
Pier C17 (C2a) Foundation GFXX406 C17 (C2a) - Bored Pile (2.00m dia. x 2 nos) S 09-Apr-15 0% 52 11-Jun-15 15-Jul-15 12-Sep-15 78 0% GFXX409 C17 (C2a) - Sonic & Interface Coring Tests 12 11-Jun-15 0% 52 11-Jun-15 15-Jul-15 12-Sep-15 78 0 GFXX409 C17 (C2a) - Sonic & Interface Coring Tests 11-Jun-15 0% 52 12-Sun-15 10-Nov-15 23-Nov-15 12 01-Nov-15 23-Nov-15 12 01-Nov-15 23-Nov-15 12 01-Nov-15 23-Nov-15 12 01-Nov-15 23-Nov-15 01 02-Nov-15 04 01 04-Nov-15 04-Nov-15 04-Nov-16	· · · · ·	(2.00m dia. x 2 nos)	52	13-May-15	0%	52	16-Jul-15	17-Aug-15	17-Oct-15	78	0	0%	
Foundation Vers GFXX406 C17 (C2a) - Bored Pile (2.00m dia. x 2 nos) 52 09-Apr-15 0% 52 11-Jun-15 15-Jul-15 12-Sep-15 78 0 0% GFXX409-2 C17 (C2a) - Sonic & Interface Coring Tests 12 11-Jun-15 0% 12 26-Jun-15 10-Nov-15 23-Nov-15 124 0 0% Pier C18 (C3-Verst Verst													
GFXX406C17 (C2a) + Bored Pile (2.00m dia. x 2 nos)5209-Apr-150%5211-Jun-1515-Jul-1512-Sep-157800%GFXX4092C17 (C2a) - Sonic & Interface Coring TestsC1211-Jun-150%1226-Jun-1510-Nov-1523-Nov-157800%Pile C2B USE													
GFXX409-2C17 (C2a) - Sonic & Interface Coring Tests121211-Jun-150%1226-Jun-1510-Nov-1523-Nov-1512400%Pite C3B (C3 - VortaPite Cap WorksSC1ER090C18B (C1e-R) - Pile cap Excavation / ELS1809-Mar-15A80%425-Mar-1504-May-1609-May-16310080%SC1ER092C18B (C1e-R) - Pile cap Excavation / ELS1809-Mar-15A0%430-Mar-1509-May-1613-May-16310300%SC1ER092C18B (C1e-R) - Pile cap Blinding1123-May-150%1423-May-1509-May-1613-May-163103100%SC1ER100C18B (C1e-R) - Pile cap FormworkC18B (C1e-R) - Pile cap Formwork1426-May-150%1423-May-1513-May-1616-May-1627200%SC1ER100C18B (C1e-R) - Pile cap Rebarwork426-May-150%1429-May-1516-May-1621-May-1627200%SC1ER120C18B (C1e-R) - Pile cap Rebarwork426-May-150%429-May-1516-May-1621-May-1627200%SC1ER120C18B (C1e-R) - Pile cap Kicker Formwork200%140%1404-Jun-150%1404-Jun-1606-Jun-1627200%SC1ER120C18B (C1e-R) - Pile cap Kicker Formwork200%20%1404-Jun-150%14									-				
Pier C18 (C3) Portal Pier C18 (C18 Pier A Pile cap Exavation / ELS SC1ER090 C18B (C1e-R) - Pile cap Exavation / ELS 18 09-Mar-15 A 80% 4 25-Mar-15 04-May-16 09-May-16 310 0 80% SC1ER092 C18B (C1e-R) - Pile cap Exavation / ELS 4 25-Mar-15 0% 4 30-Mar-15 09-May-16 310 0 80% SC1ER092 C18B (C1e-R) - Pile cap Pile breakdown to cut-off etc 4 25-Mar-15 0% 4 30-Mar-15 09-May-16 310 07 0% SC1ER100 C18B (C1e-R) - Pile cap Pile breakdown to cut-off etc 1 23-May-15 0% 1 23-May-15 13-May-16 16-May-16 272 0 0% SC1ER100 C18B (C1e-R) - Pile cap Rebarwork 3 30-May-15 0% 4 29-May-15 16-May-16 272 0 0% SC1ER120 C18B (C1e-R) - Pile cap Rebarwork 4 26-May-15 0% 4 29-May-15 16-May-16 272 0 0%	. ,								•				- 1
Pile Cap Works SC1ER090 C18B (C1e-R) - Pile cap Excavation / ELS 18 09-Mar-15A 80% 4 25-Mar-15 04-May-16 09-May-16 310 0 80% SC1ER090 C18B (C1e-R) - Pile cap Pile breakdown to cut-off etc 4 25-Mar-15 0% 4 30-Mar-15 09-May-16 09-May-16 310 0 80% SC1ER092 C18B (C1e-R) - Pile cap Pile breakdown to cut-off etc 4 25-Mar-15 0% 4 30-Mar-15 09-May-16 13-May-16 310 0 80% SC1ER100 C18B (C1e-R) - Pile cap Bilnding 11 23-May-15 0% 1 23-May-15 13-May-16 272 0 0% SC1ER100 C18B (C1e-R) - Pile cap Rebarwork 3 30-May-15 0% 3 02-Jun-15 21-May-16 272 0 0% SC1ER102 C18B (C1e-R) - Pile cap Rebarwork 4 26-May-15 0% 4 29-May-15 16-May-16 21-May-16 272 0 0% SC1ER122 C18B (C1e-R) - Pile cap Kicker For	. ,	erface Coring Tests	12	11-Jun-15	0%	12	26-Jun-15	10-Nov-15	23-Nov-15	124	0	0%	
SC1ER090 C18B (C1e-R) - Pile cap Excavation / ELS 18 09-Mar-15A 80% 4 25-Mar-15 04-May-16 09-May-16 310 0 80% SC1ER092 C18B (C1e-R) - Pile cap Pile breakdown to cut-off etc 4 25-Mar-15 0% 4 30-Mar-15 09-May-16 13-May-16 310 07 90% SC1ER092 C18B (C1e-R) - Pile cap Pile breakdown to cut-off etc 4 25-Mar-15 0% 4 30-Mar-15 09-May-16 13-May-16 310 07 90% SC1ER100 C18B (C1e-R) - Pile cap Blinding 11 23-May-15 0% 1 23-May-15 13-May-16 16-May-16 272 0 0% SC1ER100 C18B (C1e-R) - Pile cap Formwork 33 30-May-15 0% 3 02-Jun-15 21-May-16 25-May-16 272 0 0% SC1ER120 C18B (C1e-R) - Pile cap Rebarwork 4 26-May-15 0% 4 29-May-15 16-May-16 21-May-16 272 0 0% SC1ER120 C18B (C1e-R) - Pile cap Kicker Formwork 2 05-Jun-15 0% 2 06-Jun-16													
SC1ER092 C18B (C1e-R)- Pile cap Pile breakdown to cut-off etc 4 25-Mar-15 0% 4 30-Mar-15 09-May-16 13-May-16 310 37 0% SC1ER100 C18B (C1e-R)- Pile cap Blinding 1 23-May-15 0% 1 23-May-15 13-May-16 16-May-16 272 0 0% SC1ER100 C18B (C1e-R)- Pile cap Formwork 3 30-May-15 0% 3 02-Jun-15 21-May-16 272 0 0% SC1ER100 C18B (C1e-R)- Pile cap Rebarwork 3 30-May-15 0% 3 02-Jun-15 21-May-16 272 0 0% SC1ER100 C18B (C1e-R)- Pile cap Rebarwork 4 26-May-15 0% 4 29-May-15 16-May-16 272 0 0% SC1ER120 C18B (C1e-R)- Pile cap Rebarwork 4 26-May-15 0% 4 29-May-15 16-May-16 272 0 0% SC1ER120 C18B (C1e-R)- Pile cap Kicker Formwork 2 05-Jun-15 0% 2 06-Jun-16 06-Jun-16 277 4 0% 0% SC1ER120				00.14	0.001		05.14	04.14	00.11	0.1.5	2		
SC1ER100 C18B (C1e-R)- Pile cap Blinding 1 23-May-15 0% 1 23-May-15 13-May-16 16-May-16 272 0 0% SC1ER100 C18B (C1e-R)- Pile cap Blinding 3 30-May-15 0% 3 02-Jun-15 21-May-16 272 0 0% SC1ER100 C18B (C1e-R)- Pile cap Formwork 3 30-May-15 0% 3 02-Jun-15 21-May-16 272 0 0% SC1ER120 C18B (C1e-R)- Pile cap Rebarwork 4 26-May-15 0% 4 29-May-15 16-May-16 272 0 0% SC1ER122 C18B (C1e-R)- Pile cap Kicker Formwork 2 05-Jun-15 0% 4 29-May-15 16-May-16 277 4 0% SC1ER122 C18B (C1e-R)- Pile cap Concreting 1 04-Jun-15 0% 1 04-Jun-15 25-May-16 272 0 0% SC1ER130 C18B (C1e-R)- Pile cap Concreting 1 04-Jun-15 0% 1 04-Jun-15 25-May-16 272 0 0%	. ,								-				
SC1ER10 C18B (C1e-R)- Pile cap Formwork 3 30-May-15 0% 3 02-Jun-15 21-May-16 272 0 0% SC1ER120 C18B (C1e-R)- Pile cap Rebarwork 4 26-May-15 0% 4 29-May-15 16-May-16 272 0 0% SC1ER120 C18B (C1e-R)- Pile cap Rebarwork 4 26-May-15 0% 4 29-May-15 16-May-16 272 0 0% SC1ER122 C18B (C1e-R)- Pile cap Kicker Formwork 2 05-Jun-15 0% 2 06-Jun-16 277 4 0% SC1ER130 C18B (C1e-R)- Pile cap Concreting 1 04-Jun-15 0% 1 04-Jun-15 25-May-16 272 0 0%	, , .												
SC1ER120 C18B (C1e-R)- Pile cap Rebarwork 4 26-May-15 0% 4 29-May-15 16-May-16 21-May-16 272 0 0% SC1ER122 C18B (C1e-R)- Pile cap Kicker Fornwork 2 05-Jun-15 0% 2 06-Jun-15 01-Jun-16 06-Jun-16 277 4 0% SC1ER130 C18B (C1e-R)- Pile cap Concreting 1 04-Jun-15 0% 1 04-Jun-15 25-May-16 272 0 0%	. , .	•		-		· ·							
SC1ER122 C18B (C1e-R)- Pile cap Kicker Formwork 2 05-Jun-15 0% 2 06-Jun-15 01-Jun-16 277 4 0% SC1ER130 C18B (C1e-R)- Pile cap Concreting 1 04-Jun-15 0% 1 04-Jun-15 25-May-16 277 4 0%	, , ,								-				- E
SC1ER130 C18B (C1e-R)- Pile cap Concreting 1 04-Jun-15 0% 1 04-Jun-15 25-May-16 272 0 0%	, , , , , , , , , , , , , , , , , , ,												
	. , .					2							
	· · · · ·					1							-
SC1ER140 C18B (C1e-R) - Pile cap Curing & Striking of Forms incl. CJ prep 6 05-Jun-15 0% 6 13-Jun-15 27-May-16 06-Jun-16 273 0 0%		p Curing & Striking of Forms incl. CJ prep	6	05-Jun-15	0%	6	13-Jun-15	27-May-16	06-Jun-16	273	U	0%	
				04.14	001	2	04.14	04.14	00 1 10	0.00	6		
	,					-						0%	
SC1EL160 C18A (C1e-L) - Pier Rebarwork (1st Lift) 3 25-Mar-15 0% 3 27-Mar-15 04-Jun-16 08-Jun-16 329 0 0%	SCIEL160 C18A (C1e-L) - Pier Re	ebarwork (1st Lift)	3	25-Mar-15	0%	3	27-Mar-15	04-Jun-16	08-Jun-16	329	0	0%	
Actual Work Project ID: J3518DWPrE-M22 Tuen Mun - Chek Lap Kok Link - Southern Connection Date Revision Checked			Tuen Mun - C	hek Lap Kok I	_ink - Sou	thern C	Connection			Revis			Appro
Planned Bar Layout: J3518-DWP-3MRP Submission - M22_ 3-Month Rolling Programme (Page 20 of 41 Pages) 09-Mar-15 DB Critical Bar Filter: TASK filters: 3-Month Lookahead, No CQ 3-Month Rolling Programme (Page 20 of 41 Pages) 09-Mar-15 DB			3-Month Rollin	ng Program	nme (Pa	ge 20	of 41 Pag	es)					
Critical Bar Milestone Critical Bar Milestones, No Level of Effort. (Progress as of 21-Mar-15) 31-Mar-15 WY	Childai Bai		(F	Progress as	of 21-N	lar-15)		31-Mar-15		IW	Υ	



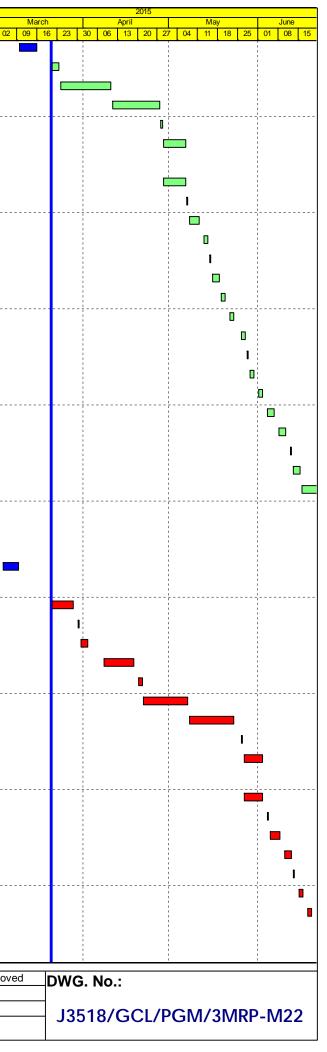
)	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
SC1EL170	C18A (C1e-L) - Pier Formwork & Prep for Concreting (1st Lift)	4	28-Mar-15	0%	4	01-Apr-15	10-Jun-16	14-Jun-16	329	0	0%
	C18A (C1e-L) - Pier Concreting (1st Lift)	1	02-Apr-15	0%	1	02-Apr-15	16-Jun-16	16-Jun-16	329	0	0%
	C18A (C1e-L) - Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	08-Apr-15	0%	2	09-Apr-15	25-Jun-16	27-Jun-16	334	60	0%
	C18B (C1e-R) - Pier Scaffolding (1st Lift)	3	15-Jun-15	0%	3	18-Jun-15	06-Jun-16	11-Jun-16	273	0	0%
	C18B (C1e-R) - Pier Rebarwork (1st Lift)	3	19-Jun-15	0%	3	24-Jun-15	11-Jun-16	16-Jun-16	274	0	0%
Pier C19 (C1c		Ū		070	Ű				27.1	Ū	0,0
Pier Works											
SC1D0150	C19 (C1d) - Type 5B-B Pier/Pier Head Scaffolding	4	21-Mar-15	0%	4	25-Mar-15	07-Nov-16	10-Nov-16	447	0	0%
SC1D0160	C19 (C1d) - Type 5B-B Pier/Pier Head Head Rebarwork	4	26-Mar-15	0%	4	30-Mar-15	11-Nov-16	15-Nov-16	447	0	0%
	C19 (C1d) - Type 5B-B Pier/Pier Head Formwork & Prep for Concreting	4	31-Mar-15	0%	4	08-Apr-15	16-Nov-16	19-Nov-16	447	0	0%
	C19 (C1d) - Type 5B-B Pier/Pier Head Concreting	1	09-Apr-15	0%	1	09-Apr-15	21-Nov-16	21-Nov-16	447	0	0%
	C19 (C1d) - Type 5B-B Pier/Pier Head Curing/Striking of Forms/Remove Scaffolding	6	10-Apr-15	0%	6	17-Apr-15	22-Nov-16	28-Nov-16	447	0	0%
	C19 (C1d) - Type 5B-B Pier/Pier Head Backfilling Works	4	18-Apr-15	0%	4	22-Apr-15	29-Nov-16	02-Dec-16	447	152	0%
		4	16-Api-15	0 /8	4	22-Apr-15	29-1100-10	02-Dec-10	447	152	078
Pier C20 (C10) & Abutment C										
	C20 (C1c) - Pier/Pier Head Scaffolding	4	21-Mar-15	0%	4	25-Mar-15	14-Oct-16	19-Oct-16	429	0	0%
	C20 (C1c) - Pier/Pier Head Scanolding C20 (C1c) - Pier/Pier Head Rebarwork	6	21-Mar-15 26-Mar-15	0%	6		14-Oct-16	28-Oct-16	429	0	0%
						01-Apr-15					
	C20 (C1c) - Pier/Pier Head Formwork	8	02-Apr-15	0%	8	16-Apr-15	28-Oct-16	08-Nov-16	431	0	0%
	C20 (C1c) - Pier/Pier Head Concreting	1	17-Apr-15	0%	1	17-Apr-15	09-Nov-16	09-Nov-16	431	0	0%
	C20 (C1c) - Pier/Pier Head Curing & Striking of Forms incl. CJ prep	6	18-Apr-15	0%	6	25-Apr-15	10-Nov-16	16-Nov-16	431	0	0%
Pier Head Se											
	C20 (C1c) - Pier Head Segment - Temporary Platform	6	27-Apr-15	0%	6	04-May-15	17-Nov-16	23-Nov-16	431	137	0%
-	Approach Ramp C		1				1 1		-11		
SC1C0200	Abutment C - Walls & Staircase	48	21-Mar-15	0%	48	27-May-15	15-Jul-15	14-Sep-15	81	14	0%
SC1C0250	AR-C - RE Walls - Erect fencing, Excavation/formation/ drainage filter & bottom layer to grd l	12	11-Apr-15	0%	12	27-Apr-15	15-Jul-15	30-Jul-15	67	0	0%
SC1C0251	AR-C - RE Walls - Upper layers with backfill in stages	48	28-Apr-15	0%	48	06-Jul-15	31-Jul-15	30-Sep-15	67	0	0%
SC1C0252	AR-C - RE Walls - Base Slabs of top RC Walls	48	18-Jun-15	0%	48	21-Aug-15	15-Sep-15	18-Nov-15	69	0	0%
/iaduct D											
	Marine Foundation										
GFXX228	Viaduct D - ARUP issuses Pile Spacing & Diameter for Temporary Platform Design	0		0%	0	21-Mar-15		30-Apr-18	920	920	0%
GFXX233-1	Pier D7 (D3e) - Completion of Piling Works	0		0%	0	21-Mar-15		01-Apr-17	604	180	0%
GFXX238-2	Pier D6 (D4a) - Completion of Piling Works	0		0%	0	21-Mar-15		28-Apr-15	29	54	0%
GFXX243-3	Pier D5 (D4b) - Completion of Piling Works	0		0%	0	21-Mar-15		18-Feb-15	-23	0	0%
GFXX248-1	Pier D4 (D4c) - Completion of Piling Works	0		0%	0	21-Mar-15		30-Jan-15	-39	0	0%
GFXX253-1	Pier D3 (D4d) - Completion of Piling Works	0		0%	0	21-Mar-15		01-Apr-17	604	180	0%
GFXX258-2	Pier D2 (D4e) - Completion of Piling Works	0		0%	0	21-Mar-15		01-Apr-17	604	180	0%
Milestones -	Land Foundation										
GFXX446B1	D15 (D2b) - Completion of piling works	0		0%	0	18-Apr-15		19-May-15	25	0	0%
GFXX454A1	D13 (D2d) - Completion of piling works	0		0%	0	28-Apr-15		17-Aug-15	92	0	0%
GFXX461C	D12 (D2e) - Start date for piling	0	13-Mar-15 A	100%	0						100%
GFXX466-2	D9 (D3c) - Completion of piling works	0		100%	0	06-Mar-15 A					100%
Bridge D3											
Pier D1 (D4f)											
Pile Cap Wo	rks										
SD4F0164	D1 (D4f) - Marine Pile Cap M2 - Curing incl. CJ preparation	6	18-Feb-15 A	100%	0	27-Feb-15 A					100%
Pier Works											
SD4F0170	D1 (D4f) - Type 4B-MJ Pier Temp. Support Platform	6	22-Feb-15 A	100%	0	28-Feb-15 A					100%
SD4F0172	D1 (D4f) - Type 4B-MJ Pier Scaffolding (1st Lift)	1	03-Mar-15 A	100%	0	10-Mar-15 A					100%
						<u> </u>			<u> </u>		
Actual Work	Laurante 12540 DIVID OMDD Outerstanting MOO		hek Lap Kok L				·)	Date 09-Mar-15	Revis	sion (D	Checked
Planned Bar Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CO		ng Program	•	-	-	jes)	31-Mar-15			
Critical Bar Milestone	Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.		Progress as	•	-	-	,,	31-Mar-15		W	Y



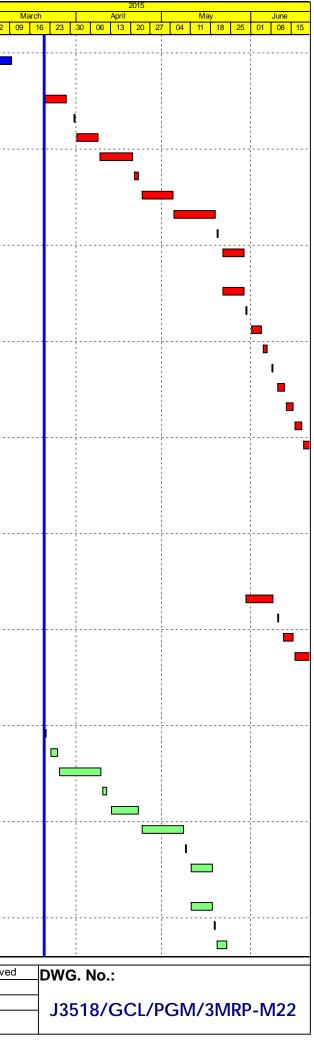
Activity ID)	Activity Name			Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
	SD4F0180		Pier Rebarwork (1st Lift)		3	13-Mar-15 A	100%	0	19-Mar-15 A					100%	23 02
					2			2		01-Jun-15	02 hup 15	51	0	100%	
		D1 (D4f) - Type 4B-MJ	Pier Formwork & Prep for Concreting (1st Lift)		2	20-Mar-15 A 23-Mar-15	10% 0%	2	23-Mar-15 24-Mar-15	01-Jun-15 02-Jun-15	02-Jun-15 04-Jun-15	51	0	0%	
	SD4F0200 SD4F0202	, , , ,	Pier Curing & Striking of Forms incl. CJ prep (1st	1 ;f+)	2	23-Mar-15 24-Mar-15	0%	2	24-Mar-15 26-Mar-15	02-Jun-15 04-Jun-15	04-Jun-15	51	0	0%	
	SD4F0202 SD4F0210	. , ,	Pier Scaffolding (2nd Lift)		2	24-Mar-15 26-Mar-15	0%	2	28-Mar-15	04-Jun-15	10-Jun-15	51	0	0%	
	SD4F0210 SD4F0220	, , , ,	Pier Rebarwork (2nd Lift)		3	28-Mar-15	0%	2	01-Apr-15	10-Jun-15	15-Jun-15	51	0	0%	
	SD4F0220	. , ,	Pier Formwork & Prep for Concreting (2nd Lift)		3	01-Apr-15	0%	3	01-Apr-15 09-Apr-15	15-Jun-15	19-Jun-15	51	0	0%	
	SD4F0230	, , , ,	Pier Concreting (2nd Lift)		1	01-Apr-15 09-Apr-15	0%	1	10-Apr-15	19-Jun-15	22-Jun-15	51	0	0%	
	SD4F0240	. , ,	Pier Curing & Striking of Forms incl. CJ prep (2nd	1 1 :f+\	2		0%	2		22-Jun-15	22-Jun-15	51	0	0%	
		D1 (D4f) - Type 4B-MJ			4	10-Apr-15 13-Apr-15	0%	4	13-Apr-15 18-Apr-15	22-Jun-15 26-Jun-15	02-Jul-15	51	0	0%	
	SD4F0300	D1 (D4f) - Type 4B-MJ			5	18-Apr-15	0%	5	25-Apr-15	02-Jul-15	02-Jul-15	52	0	0%	
		, , , ,	Pier Head Formwork & Prep for Concreting		5	25-Apr-15	0%	5	02-May-15	10-Jul-15	15-Jul-15	52	0	0%	
		D1 (D4f) - Type 4B-MJ			1	02-May-15	0%	5 1	02-May-15 04-May-15	17-Jul-15	17-Jul-15	52	0	0%	
		. , ,		ffolding		· ·									
	SD4F0340	, , , ,	Pier Head Curing/Striking of Forms/Remove Sca	anoiding	6	04-May-15	0%	6	11-May-15	18-Jul-15	24-Jul-15	52	0	0%	
		D1 (D4f) - Type 4B-Bea	aring Plinth		6	04-May-15	0%	6	11-May-15	18-Jul-15	24-Jul-15	52	0	0%	
	Pier Head Se	-			6	40 May 45	00/	0	40 May 45		04 Aug 45	50	00	00/	
		D1 (D4t) - Pier Head Se	egment - Temporary Platform		6	13-May-15	0%	6	19-May-15	25-Jul-15	01-Aug-15	52	88	0%	
	Pier D2 (D4e)														
	Pile Cap Wo		Con M2h Inst Floating Soul & Cooing Lload Stor	huosk	7	26 Eab 15 A	100%	0	02 Mar 15 A					100%	
		. ,	Cap M2b - Inst. Floating Seal & Casing Head Stee	PIWOIK	7	26-Feb-15 A	100%	0	03-Mar-15 A					100%	
	SD4E0080	. ,	Cap M2b - Install precast shell in position		1	04-Mar-15 A	100%		04-Mar-15 A						
	SD4E0090	. ,	Cap M2b - Inst.Access & make Watertight		3	13-Mar-15 A	100%	0	16-Mar-15 A	40 Nov 45	00 Nov 45	470	0	100%	
	SD4E0100	. ,	Cap M2b - Weld Fin plates/Plug Rebar & Concrei		9	17-Mar-15 A	55.56%	4	25-Mar-15	19-Nov-15	23-Nov-15	179	0	50%	
	SD4E0120	. ,	Cap M2b - Dewater precast shell / Remove Lifting	g Frame	2	26-Mar-15	0%	2	27-Mar-15	24-Nov-15	25-Nov-15	179	0	0%	
	SD4E0130	. ,	Cap M2b - Pile cut down		8	28-Mar-15	0%	8	10-Apr-15	26-Nov-15	04-Dec-15	179	0	0%	
	SD4E0140	. ,	Cap M2b - Rebar fixing, inst.inserts etc		12	11-Apr-15	0%	12	27-Apr-15	05-Dec-15	18-Dec-15	179	0	0%	
	SD4E0150	D2 (D4e) - Marine Pile			1	28-Apr-15	0%	1	28-Apr-15	19-Dec-15	19-Dec-15	179	0	0%	
		D2 (D4e) - Marine Pile	Cap M2b - Curing incl. CJ Preparation		6	29-Apr-15	0%	6	06-May-15	21-Dec-15	29-Dec-15	179	0	0%	
	Pier Works	$D^{2}(D^{4}a)$ Time 4D Dia	r Town Support Distform		C	20 Apr 15	09/	C	OG Mov 15	21 Dec 15	20 Dec 15	170	0	00/	
		. , ,	r Temp. Support Platform		6	29-Apr-15	0%	6	06-May-15		29-Dec-15	179	0	0%	
		D2 (D4e) - Type 4B Pie			1	07-May-15	0%	1	07-May-15		30-Dec-15	179	0	0%	
	SD4E0180	D2 (D4e) - Type 4B Pie	. ,		3	08-May-15	0%	3	11-May-15	31-Dec-15	04-Jan-16	179	0	0%	
	SD4E0190	. ,	r Formwork & Prep for Concreting (1st Lift)		2	13-May-15	0%	2	14-May-15	05-Jan-16	06-Jan-16	179	0	0%	
	SD4E0200	D2 (D4e) - Type 4B Pie		<u>\</u>	1	15-May-15	0%	1	15-May-15	07-Jan-16	07-Jan-16	179	0	0%	
		. ,	r Curing & Striking of Forms incl. CJ prep (1st Lift)	2	16-May-15	0%	2	18-May-15	08-Jan-16	09-Jan-16	179	0	0%	
	SD4E0210	D2 (D4e) - Type 4B Pie			2	19-May-15	0%	2	20-May-15	11-Jan-16	12-Jan-16	179	0	0%	
	SD4E0220	D2 (D4e) - Type 4B Pie	· · · ·		3	22-May-15	0%	3	26-May-15	13-Jan-16	15-Jan-16	179	0	0%	
	SD4E0230	. , .	r Formwork & Prep for Concreting (2nd Lift)		3	27-May-15	0%	3	29-May-15	16-Jan-16	19-Jan-16	179	0	0%	
	SD4E0240	D2 (D4e) - Type 4B Pie			1	30-May-15	0%	1	30-May-15	20-Jan-16	20-Jan-16	179	0	0%	
		. , .	r Curing & Striking of Forms incl. CJ prep (2nd Lif	τ)	2	01-Jun-15	0%	2	02-Jun-15	21-Jan-16	22-Jan-16	179	0	0%	
	SD4E0300	D2 (D4e) - Type 4B Pie			4	04-Jun-15	0%	4	08-Jun-15	23-Jan-16	27-Jan-16	179	0	0%	
		D2 (D4e) - Type 4B Pie			5	10-Jun-15	0%	5	16-Jun-15	28-Jan-16	03-Feb-16	180	0	0%	
		() ,	r Head Formwork & Prep for Concreting		5	18-Jun-15	0%	5	26-Jun-15	04-Feb-16	12-Feb-16	180	0	0%	
	Pier D3 (D4d)														
	Pile Cap Wo			huark	7	07 1 45 4	1000/							4000/	L
		. ,	Cap M2b - Inst.Floating Seal & Casing Head Stee	PIWOFK	7	27-Jan-15 A	100%	0	23-Feb-15 A					100%	.
		· ,	Cap M2b - Install precast shell in position		1	24-Feb-15 A	100%	0	24-Feb-15 A					100%	• •
	SD4D0090	D3 (D4d) - Marine Pile	Cap M2b - Inst.Access & make Watertight		3	25-Feb-15 A	100%	0	27-Feb-15 A					100%	
	Actual Work		Project ID: J3518DWPrE-M22	Tuen	Mun - C	hek Lap Kok I	ink - Sou	thern C	Connection		Date	Revis		Checked	Approv
	Planned Bar		Layout: J3518-DWP-3MRP Submission - M22_ Filter: TASK filters: 3-Month Lookahead, No CC	3-Mont	h Rollii	ng Program	nme (Pag	ge 22	of 41 Pag	es)	09-Mar-15				
•	Critical Bar Milestone 		Milestones, No Level of Effort.		(P	Progress as	of 21-M	lar-15))		31-Mar-15		W	T	
•	▼														



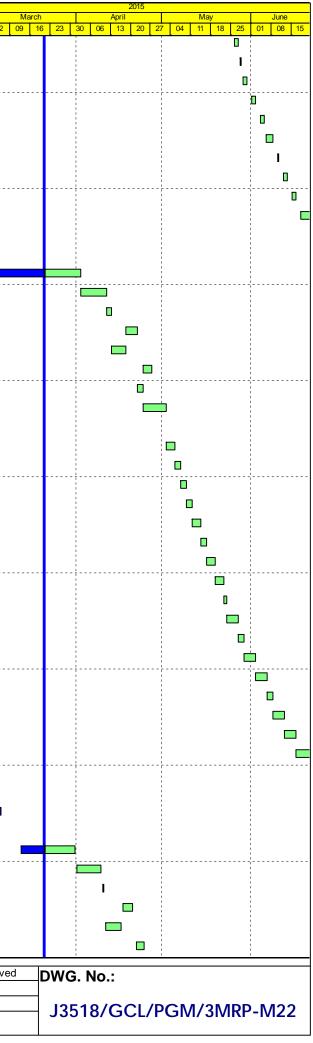
ctivity ID	Activity Name		Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
				Start	Complete	Dum.							23 02
SD4D0100 SD4D0120 SD4D0130 SD4D0130 SD4D0140 SD4D0150 SD4D0160 Pier Works SD4D0170 SD4D0200 SD4D0250 SD4D0280 SD4D0280 SD4D0300 Pier D4 (D4c) GFXX247 GFXX248 Pile Cap Works	D3 (D4d) - Marine Pile	Cap M2b - Weld Fin plates/Plug Rebar & Concrete	9	10-Mar-15 A	100%	0	16-Mar-15 A					100%	-
SD4D0120	. ,	Cap M2b - Dewater precast shell / Remove Lifting	Frame 2	21-Mar-15	0%	2	23-Mar-15	06-May-15	07-May-15	32	0	0%	-
SD4D0130	. ,	Cap M2b - Pile cut down	12	24-Mar-15	0%	12	10-Apr-15	08-May-15	23-May-15	32	0	0%	_
SD4D0140	. ,	Cap M2b - Rebar fixing, inst.inserts etc	12	11-Apr-15	0%	12	27-Apr-15	26-May-15	10-Jun-15	32	0	0%	
SD4D0150	D3 (D4d) - Marine Pile	, ,	1	28-Apr-15	0%	1	28-Apr-15	12-Jun-15	12-Jun-15	32	0	0%	_
SD4D0160	D3 (D4d) - Marine Pile	Cap M2b - Curing incl. CJ Preparation	6	29-Apr-15	0%	6	06-May-15	13-Jun-15	22-Jun-15	32	0	0%	
Pier Works				00 1 15	00/	0	00 14- 45	00 No. 45	00 No. 45	455	0		
SD4D0170		er Temp. Support Platform	6	29-Apr-15	0%	6	06-May-15	23-Nov-15	30-Nov-15	155	0	0%	_
SD4D0172	D3 (D4d) - Type 4B Pie		1	07-May-15	0%	1	07-May-15	30-Nov-15	01-Dec-15	155	0	0%	
SD4D0180	D3 (D4d) - Type 4B Pie	· · · ·	3	08-May-15	0%	3	11-May-15		04-Dec-15	155	0	0%	
SD4D0190	, , <u>,</u>	er Formwork & Prep for Concreting (1st Lift)	2	13-May-15	0%	2	14-May-15	04-Dec-15	07-Dec-15	155	0	0%	-
SD4D0200	D3 (D4d) - Type 4B Pie		1	15-May-15	0%	1	15-May-15	07-Dec-15	08-Dec-15	155	0	0% 0%	_
SD4D0202	. , ,	er Curing & Striking of Forms incl. CJ prep (1st Lift)	2	16-May-15	0%	2	18-May-15	08-Dec-15	10-Dec-15	155	0		_
SD4D0210	D3 (D4d) - Type 4B Pie		2	19-May-15	0%	2	20-May-15	10-Dec-15	12-Dec-15	155	0	0%	
SD4D0220	D3 (D4d) - Type 4B Pie	· · · · ·	2	22-May-15	0%	2	23-May-15	12-Dec-15	15-Dec-15	155	0	0%	
SD4D0230	, , , , , , , , , , , , , , , , , , ,	er Formwork & Prep for Concreting (2nd Lift)	2	26-May-15	0%	2	27-May-15	15-Dec-15	17-Dec-15	155	0	0% 0%	-
SD4D0240	D3 (D4d) - Type 4B Pie		1	28-May-15	0%	1	28-May-15	17-Dec-15	18-Dec-15	155	0		_
SD4D0242	. ,	er Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	29-May-15	0%	2	30-May-15	18-Dec-15	22-Dec-15	156	0	0%	_
SD4D0250	())		2	01-Jun-15	0%	2	02-Jun-15	22-Dec-15	24-Dec-15	156	0	0%	
SD4D0260	D3 (D4d) - Type 4B Pie	· · · · · · · · · · · · · · · · · · ·	3	04-Jun-15	0%	3	06-Jun-15	24-Dec-15	30-Dec-15	156	0	0%	_
SD4D0270	. , ,	er Formwork & Prep for Concreting (3rd Lift)	2	08-Jun-15	0%	2	10-Jun-15	30-Dec-15	02-Jan-16	156	0	0% 0%	-
SD4D0280	D3 (D4d) - Type 4B Pie	3. ,		12-Jun-15	0%	1	12-Jun-15	02-Jan-16	04-Jan-16	156			
SD4D0282	D3 (D4d) - Type 4B Pie D3 (D4d) - Type 4B Pie	er Curing & Striking of Forms incl. CJ prep (3rd Lift)	2	13-Jun-15	0%	2	15-Jun-15 22-Jun-15	04-Jan-16 06-Jan-16	06-Jan-16	156 156	0	0% 0%	_
Pier D4 (D4c)	())		4	16-Jun-15	0 78	4	22-Jun-15	00-3411-10	11-Jan-16	150	0	078	
Foundation													
GEXX247	D4 (D4c) - Sonic & Inte	erface Coring	12	04-Feb-15 A	100%	0	28-Feb-15 A					100%	
GFXX248	. ,	emovable panels of temp. platform	5	04-Mar-15 A	100%	0	09-Mar-15 A					100%	-
Pile Cap Wo			Ŭ	of Mar Torr	10070	Ŭ						10070	
		Cap M2b - Inst.Floating Seal & Casing Head Steelw	ork 7	21-Mar-15	0%	7	28-Mar-15	31-Jan-15	07-Feb-15	-39	0	0%	
SD4C0080	. ,	Cap M2b - Install precast shell in position	1	30-Mar-15	0%	1	30-Mar-15	09-Feb-15	09-Feb-15	-39	0	0%	-
SD4C0090	. ,	Cap M2b - Inst.Access & make Watertight	3	31-Mar-15	0%	3	02-Apr-15	10-Feb-15	12-Feb-15	-39	0	0%	
SD4C0100	, ,	Cap M2b - Weld Fin plates/Plug Rebar & Concrete	9	08-Apr-15	0%	9	18-Apr-15	13-Feb-15	26-Feb-15	-39	0	0%	_
SD4C0120	, ,	Cap M2b - Dewater precast shell / Remove Lifting F		20-Apr-15	0%	2	21-Apr-15	27-Feb-15	28-Feb-15	-39	0	0%	_
SD4C0130	. ,	Cap M2b - Pile cut down	12 12	22-Apr-15	0%	12	07-May-15	02-Mar-15	14-Mar-15	-39	0	0%	
SD4C0140	, ,	Cap M2b - Rebar fixing, inst.inserts etc	12	08-May-15	0%	12	23-May-15	16-Mar-15	28-Mar-15	-39	0	0%	-
SD4C0150	D4 (D4c) - Marine Pile	1 0,	1	26-May-15	0%	1	26-May-15	30-Mar-15	30-Mar-15	-39	0	0%	
SD4C0160	. ,	Cap M2b - Curing incl. CJ Preparation	6	27-May-15	0%	6	02-Jun-15		10-Apr-15	-39	0	0%	-
Pier Works					0,0	ý						0,0	
SD4C0170	D4 (D4c) - Type 4B Pie	er Temp. Support Platform	6	27-May-15	0%	6	02-Jun-15	31-Mar-15	10-Apr-15	-39	0	0%	
SD4C0172	D4 (D4c) - Type 4B Pie		1	04-Jun-15	0%	1	02-Jun-15	11-Apr-15	11-Apr-15	-39	0	0%	-
SD4C0180	D4 (D4c) - Type 4B Pie		3	05-Jun-15	0%	3	08-Jun-15	13-Apr-15	16-Apr-15	-39	0	0%	_
	· · · ·	er Formwork & Prep for Concreting (1st Lift)	2	10-Jun-15	0%	2	12-Jun-15	17-Apr-15	18-Apr-15	-39	0	0%	_
SD4C0200	D4 (D4c) - Type 4B Pie		1	13-Jun-15	0%	1	13-Jun-15	20-Apr-15	20-Apr-15	-39	0	0%	_
SD4C0202	. ,	er Curing & Striking of Forms incl. CJ prep (1st Lift)	2	15-Jun-15	0%	2	16-Jun-15	21-Apr-15	22-Apr-15	-39	0	0%	
SD4C0210	D4 (D4c) - Type 4B Pie		2	18-Jun-15	0%	2	19-Jun-15	24-Apr-15	25-Apr-15	-39	0	0%	
Pier D5 (D4b)	. , .							· T· ·•			-	0,0	
Foundation													
						4	0		Det		vian I c		<u> </u>
Actual Work		Project ID: J3518DWPrE-M22 Layout: J3518-DWP-3MRP Submission - M22	Tuen Mun - C	•				(aa)	Date 09-Mar-15	Revis	sion (Checked B	Approv
Critical Bar		Filter: TASK filters: 3-Month Lookahead, No CC	3-Month Rolli		•	-	-	192)	31-Mar-15			IY	
Milestone		Milestones, No Level of Effort.	(F	Progress as		iar-15	"				•		



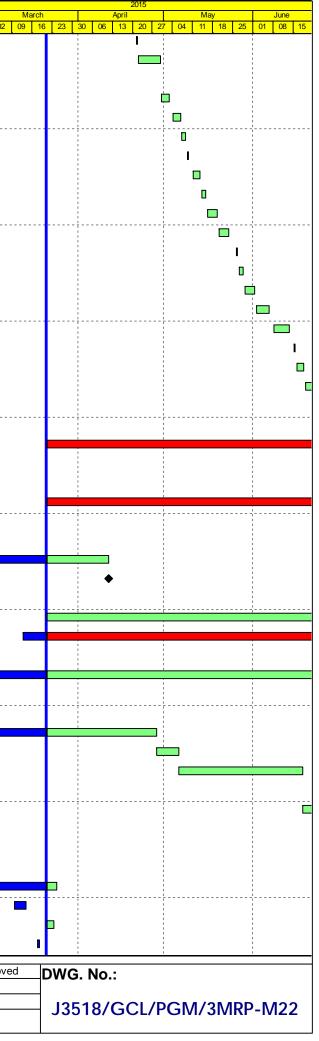
tivity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complet	
GFXX24	42 D5 (D4b) - Sonic & Interface Coring	12	17-Feb-15 A	100%	0	28-Feb-15 A					100%	23 02
GFXX24		5	04-Mar-15 A	100%	0	09-Mar-15 A					100%	
Pile Cap		3	04 Mai 13 A	10070	U	00-10141-1074					1007	
SD4B00		elwork 7	21-Mar-15	0%	7	28-Mar-15	23-Feb-15	02-Mar-15	-23	1	0%	6
SD4B00		1	31-Mar-15	0%	1	31-Mar-15	03-Mar-15	03-Mar-15	-24	0	0%	_
SD4B00		3	01-Apr-15	0%	3	08-Apr-15	04-Mar-15	06-Mar-15	-24	0	0%	_
SD4B01			09-Apr-15	0%	9	20-Apr-15	07-Mar-15	17-Mar-15	-24	0	0%	
SD4B01			21-Apr-15	0%	2	22-Apr-15	18-Mar-15	19-Mar-15	-24	0	0%	_
SD4B01		8	24-Apr-15	0%	8	04-May-15	20-Mar-15	28-Mar-15	-24	0	0%	_
SD4B01		12	05-May-15	0%	12	19-May-15	30-Mar-15	17-Apr-15	-24	0	0%	_
SD4B01		1	20-May-15	0%	1	20-May-15	18-Apr-15	18-Apr-15	-24	0	0%	_
SD4B01		6	20-May-15 22-May-15	0%	6	20-May-15	20-Apr-15	27-Apr-15	-24	0	0%	
Pier Wor		0	22-10ldy-13	078	0	23-101dy-13	20-Api-13	21-Api-15	-24	0	07	B
SD4B01		6	22-May-15	0%	6	29-May-15	20-Apr-15	27-Apr-15	-24	0	0%	
	172 D5 (D4b) - Type 4B Pier Scaffolding (1st Lift)	1	30-May-15	0%	1	30-May-15	20-Apr-15 28-Apr-15	28-Apr-15	-24	0	0%	_
					1 2		· · ·	•			0%	
SD4B01		3	01-Jun-15	0%	3	04-Jun-15	29-Apr-15	02-May-15	-24	0		
SD4B01		2	05-Jun-15	0%	2	06-Jun-15	04-May-15	05-May-15	-24	0	0%	_
SD4B02		1	08-Jun-15	0%	1	08-Jun-15	06-May-15	06-May-15	-24	0	0%	_
SD4B02		,	10-Jun-15	0%	2	12-Jun-15	07-May-15	08-May-15	-24	0	0%	_
	210 D5 (D4b) - Type 4B Pier Scaffolding (2nd Lift)	2	13-Jun-15	0%	2	15-Jun-15	09-May-15	11-May-15	-24	0	0%	_
SD4B02		2	16-Jun-15	0%	2	18-Jun-15	13-May-15	14-May-15	-24	0	0%	
SD4B02		2	19-Jun-15	0%	2	22-Jun-15	15-May-15	16-May-15	-24	0	0%	0
Pier D6 (D	•											
	tion Works											
GFXX23		12	30-Jan-15 A	100%	0	26-Feb-15 A					100%	
	37-1 D6 (D4a) - Selection of bored pile for Full Depth Coring	6	26-Feb-15 A	100%	0	26-Feb-15 A					100%	
GFXX23	37-2 D6 (D4a) - Bored Pile Full Depth Coring & Testing	24	26-Feb-15 A	100%	0	26-Feb-15 A					100%	_
GFXX23		5	26-Feb-15 A	100%	0	03-Mar-15 A					100%	6
Pile Cap												
SD4A00	D70 D6 (D4a) - Marine Pile Cap M2 - Inst. Floating Seal & Casing Head Steel	work 7	30-May-15	0%	7	08-Jun-15	29-Apr-15	07-May-15	-23	0	0%	6
SD4A00	D80 D6 (D4a) - Marine Pile Cap M2 - Install precast shell in position	1	10-Jun-15	0%	1	10-Jun-15	08-May-15	08-May-15	-23	0	0%	
SD4A00	D90 D6 (D4a) - Marine Pile Cap M2 - Inst.Access & make Watertight	3	12-Jun-15	0%	3	15-Jun-15	09-May-15	13-May-15	-23	0	0%	6
SD4A01	100 D6 (D4a) - Marine Pile Cap M2 - Weld Fin plates/Plug Rebar & Concrete	e 9	16-Jun-15	0%	9	30-Jun-15	14-May-15	26-May-15	-23	0	0%	6
Bridge D2	2											
Pier D7 (D)3e)											
Pile Cap	Works											
SD3E00	D80 D7 (D3e) - Marine Pile Cap M2b - Install precast shell in position	1	21-Mar-15	0%	1	21-Mar-15	25-Mar-15	25-Mar-15	3	0	0%	6
SD3E00	D90 D7 (D3e) - Marine Pile Cap M2b - Inst.Access & make Watertight	3	23-Mar-15	0%	3	25-Mar-15	26-Mar-15	28-Mar-15	3	0	0%	6
SD3E01	100 D7 (D3e) - Marine Pile Cap M2b - Weld Fin plates/Plug Rebar & Concre	ete 9	26-Mar-15	0%	9	09-Apr-15	30-Mar-15	13-Apr-15	3	0	0%	6
SD3E01	120 D7 (D3e) - Marine Pile Cap M2b - Dewater precast shell / Remove Liftin	g Frame 2	10-Apr-15	0%	2	11-Apr-15	14-Apr-15	16-Apr-15	3	0	0%	6
SD3E01	130 D7 (D3e) - Marine Pile Cap M2b - Pile cut down	8	13-Apr-15	0%	8	22-Apr-15	17-Apr-15	27-Apr-15	3	0	0%	6
SD3E01	140 D7 (D3e) - Marine Pile Cap M2b - Rebar fixing, inst.inserts etc	12	24-Apr-15	0%	12	08-May-15	28-Apr-15	13-May-15	3	0	0%	6
SD3E01	150 D7 (D3e) - Marine Pile Cap M2b - Concreting	1	09-May-15	0%	1	09-May-15	14-May-15	14-May-15	3	0	0%	6
SD3E01	160 D7 (D3e) - Marine Pile Cap M2b - Curing incl. CJ Preparation	6	11-May-15	0%	6	18-May-15	15-May-15	22-May-15	3	0	0%	6
Pier Wor	ks	· · · · · · · · · · · · · · · · · · ·										
SD3E01	170 D7 (D3e) - Type 4B Pier Temp. Support Platform	6	11-May-15	0%	6	18-May-15	15-May-15	22-May-15	3	0	0%	6
SD3E01	172 D7 (D3e) - Type 4B Pier Scaffolding (1st Lift)	1	19-May-15	0%	1	19-May-15	23-May-15	23-May-15	3	0	0%	6
SD3E01	180 D7 (D3e) - Type 4B Pier Rebarwork (1st Lift)	3	20-May-15	0%	3	23-May-15	26-May-15	28-May-15	3	0	0%	6
 		,				1.		-	1		<u> </u>	
	Project ID: 13518D\//DrE_M22		hok I an Kak I	ink Com	thorn 4	Connoction			Rovic	sion L	Checked	
Actual Wo	Lavout: 12518 DW/P 2MPP Submission M22	Tuen Mun - Ch 3-Month Rollin	•				(20L	Date 09-Mar-15	Revis		Checked DB	Approv
	Layout: J3518-DWP-3MRP Submission - M22_	3-Month Rollin	•	me (Pa	ge 24	of 41 Pag	jes)		Revis	C		Approve



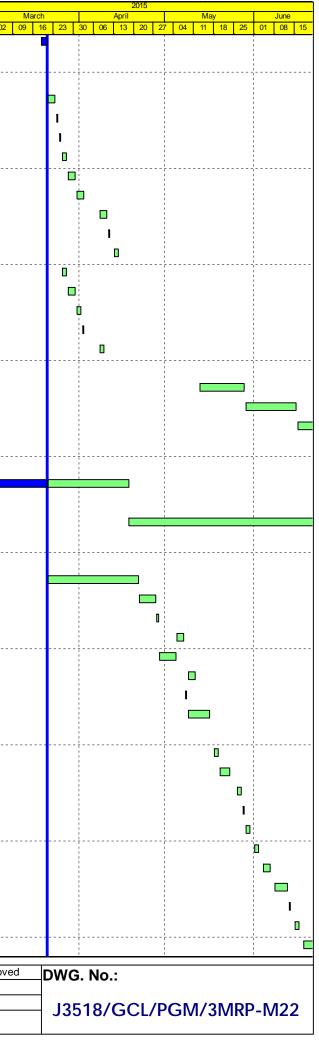
Activi	ty ID Activity Name	Orig. Durn.	Act. Start / FC Early	Duration %	Rem.	Act. Finish / FC	Late Start	Late Finish	Total Float	Free Float	Physical %	
			Start	Complete	Durn.	Early Finish					Complete	23 02
	SD3E0190 D7 (D3e) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	26-May-15	0%	2	27-May-15	29-May-15	30-May-15	3	0	0%	
	SD3E0200 D7 (D3e) - Type 4B Pier Concreting (1st Lift)	1	28-May-15	0%	1	28-May-15	01-Jun-15	01-Jun-15	3	0	0%	
	SD3E0202 D7 (D3e) - Type 4B Pier Curing & Striking of Forms ind. CJ prep (1st Lift)	2	29-May-15	0%	2	30-May-15	02-Jun-15	05-Jun-15	4	0	0%	
	SD3E0210 D7 (D3e) - Type 4B Pier Scaffolding (2nd Lift)	2	01-Jun-15	0%	2	02-Jun-15	06-Jun-15	08-Jun-15	4	0	0%	
	SD3E0220 D7 (D3e) - Type 4B Pier Rebarwork (2nd Lift)	2	04-Jun-15	0%	2	05-Jun-15	10-Jun-15	12-Jun-15	4	0	0%	
	SD3E0230 D7 (D3e) - Type 4B Pier Formwork & Prep for Concreting (2nd Lift)	2	06-Jun-15	0%	2	08-Jun-15	13-Jun-15	15-Jun-15	4	0	0%	
	SD3E0240 D7 (D3e) - Type 4B Pier Concreting (2nd Lift)	1	10-Jun-15	0%	1	10-Jun-15	16-Jun-15	16-Jun-15	4	0	0%	
	SD3E0242 D7 (D3e) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	12-Jun-15	0%	2	13-Jun-15	18-Jun-15	19-Jun-15	4	0	0%	
	SD3E0250 D7 (D3e) - Type 4B Pier Scaffolding (3rd Lift)	2	15-Jun-15	0%	2	16-Jun-15	22-Jun-15	24-Jun-15	4	0	0%	
	SD3E0260 D7 (D3e) - Type 4B Pier Rebarwork (3rd Lift)	3	18-Jun-15	0%	3	22-Jun-15	26-Jun-15	29-Jun-15	4	0	0%	
	Pier D8 (D3d)											
	Pile Cap Works											
	SD3D0090 D8 (D3d) - Pile cap Excavation / ELS	36	05-Mar-15 A	70%	11	02-Apr-15	28-Apr-15	13-May-15	26	0	70%	
	SD3D0092 D8 (D3d) - Pile cap Pile breakdown to cut-off etc.	4	02-Apr-15	0%	4	11-Apr-15	13-May-15	18-May-15	26	0	0%	
	SD3D0100 D8 (D3d) - Pile cap Blinding	1	11-Apr-15	0%	1	13-Apr-15	18-May-15	19-May-15	26	0	0%	
	SD3D0110 D8 (D3d) - Pile cap Formwork	3	18-Apr-15	0%	3	22-Apr-15	26-May-15	29-May-15	26	0	0%	
	SD3D0120 D8 (D3d) - Pile cap Rebarwork	4	13-Apr-15	0%	4	18-Apr-15	19-May-15	26-May-15	26	0	0%	
	SD3D0122 D8 (D3d) - Pile cap Kicker Formwork	2	24-Apr-15	0%	2	27-Apr-15	06-Jun-15	08-Jun-15	31	4	0%	
	SD3D0130 D8 (D3d) - Pile cap Concreting	1	22-Apr-15	0%	1	24-Apr-15	29-May-15	30-May-15	26	0	0%	
	SD3D0140 D8 (D3d) - Pile cap Curing & Striking of Forms incl. CJ prep	6	24-Apr-15	0%	6	02-May-15	30-May-15	08-Jun-15	27	0	0%	
	Pier Works											
	SD3D0150 D8 (D3d) - Type 5B Pier Scaffolding (1st Lift)	2	02-May-15	0%	2	05-May-15	10-Jun-15	12-Jun-15	27	0	0%	
	SD3D0160 D8 (D3d) - Type 5B Pier Rebarwork (1st Lift)	2	05-May-15	0%	2	07-May-15	13-Jun-15	15-Jun-15	27	0	0%	
	SD3D0170 D8 (D3d) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	2	07-May-15	0%	2	09-May-15	16-Jun-15	18-Jun-15	27	0	0%	
	SD3D0180 D8 (D3d) - Type 5B Pier Concreting (1st Lift)	1	09-May-15	0%	1	11-May-15	19-Jun-15	19-Jun-15	27	0	0%	
	SD3D0182 D8 (D3d) - Type 5B Pier Curing & Striking of Forms ind. CJ prep (1st Lift)	2	11-May-15	0%	2	14-May-15	22-Jun-15	24-Jun-15	27	0	0%	
	SD3D0190 D8 (D3d) - Type 5B Pier Scaffolding (2nd Lift)	2	14-May-15	0%	2	16-May-15	26-Jun-15	27-Jun-15	27	0	0%	
	SD3D0200 D8 (D3d) - Type 5B Pier Rebarwork (2nd Lift)	2	16-May-15	0%	2	19-May-15	29-Jun-15	30-Jun-15	27	0	0%	
	SD3D0210 D8 (D3d) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift)	2	19-May-15	0%	2	22-May-15	02-Jul-15	03-Jul-15	27	0	0%	
	SD3D0220 D8 (D3d) - Type 5B Pier Concreting (2nd Lift)	1	22-May-15	0%	1	23-May-15	04-Jul-15	04-Jul-15	27	0	0%	
	SD3D0222 D8 (D3d) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	23-May-15	0%	2	27-May-15	06-Jul-15	07-Jul-15	27	0	0%	
	SD3D0230 D8 (D3d) - Type 5B Pier Scaffolding (3rd Lift)	2	27-May-15	0%	2	29-May-15	08-Jul-15	09-Jul-15	27	0	0%	
	SD3D0240 D8 (D3d) - Type 5B Pier Rebarwork (3rd Lift)	3	29-May-15	0%	3	02-Jun-15	10-Jul-15	13-Jul-15	27	0	0%	
	SD3D0250 D8 (D3d) - Type 5B Pier Formwork & Prep for Concreting (3rd Lift)	3	02-Jun-15	0%	3	06-Jun-15	14-Jul-15	17-Jul-15	27	0	0%	
	SD3D0260 D8 (D3d) - Type 5B Pier Concreting (3rd Lift)	1	06-Jun-15	0%	1	08-Jun-15	18-Jul-15	18-Jul-15	27	0	0%	
	SD3D0262 D8 (D3d) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (3rd Lift)	2	08-Jun-15	0%	2	12-Jun-15	20-Jul-15	21-Jul-15	27	0	0%	
	SD3D0270 D8 (D3d) - Type 5B Pier Head Scaffolding	3	12-Jun-15	0%	3	16-Jun-15	22-Jul-15	24-Jul-15	27	0	0%	
	SD3D0280 D8 (D3d) - Type 5B Pier Head Rebarwork	4	16-Jun-15	0%	4	24-Jun-15	25-Jul-15	30-Jul-15	27	0	0%	
	Pier D9 (D3c)											
	Socketted H-Pile Installation											
	GFXX466 D9 (D3c) - Installation of SH Pile (16 nr)	80	20-Nov-14 A	100%	0	06-Mar-15 A					100%	
	Pile Cap Works											
	SD3C0090 D9 (D3c) - Pile cap Excavation / ELS (incl. sheet piling)	45	13-Mar-15 A	80%	9	31-Mar-15	18-Jun-15	02-Jul-15	62	0	0%	
	SD3C0092 D9 (D3c) - Pile cap Pile breakdown to cut-off etc.	4	01-Apr-15	0%	4	09-Apr-15	03-Jul-15	07-Jul-15	62	0	0%	
	SD3C0100 D9 (D3c) - Pile cap Blinding	1	10-Apr-15	0%	1	10-Apr-15	08-Jul-15	08-Jul-15	62	0	0%	
	SD3C0110 D9 (D3c) - Pile cap Formwork	3	17-Apr-15	0%	3	20-Apr-15	14-Jul-15	17-Jul-15	62	0	0%	
	SD3C0120 D9 (D3c) - Pile cap Rebarwork	4	11-Apr-15	0%	4	16-Apr-15	09-Jul-15	13-Jul-15	62	0	0%	
	SD3C0122 D9 (D3c) - Pile cap Kicker Formwork	2	22-Apr-15	0%	2	24-Apr-15	24-Jul-15	25-Jul-15	66	4	0%	
	Actual Work Project ID: J3518DWPrE-M22	Tuen Mun - C	hek Lap Kok I	.ink - Sou	thern C	Connection		Date	Revis	sion (Checked	Approved
	Planned Bar Layout: J3518-DWP-3MRP Submission - M22_ 3-	Month Rollin	-				es)	09-Mar-15		D	В	
	Critical Bar Filter: TASK Inters: 3-Wohth Lookanead, No CC Milestones: No Level of Effort		Progress as	•	-	-		31-Mar-15		N	Y	
•	♦ Milestone	•	-			-						



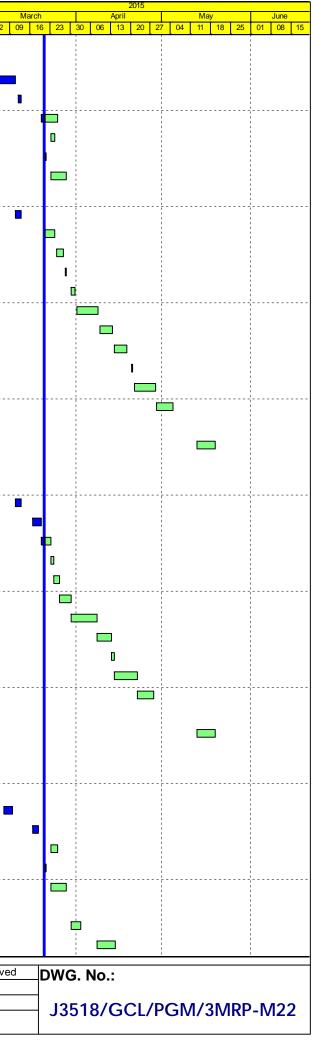
Activ	rity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
	SD2C0120	D9 (D3c) - Pile cap Concreting	1	21 Apr 15	00/	1	21 Apr 15	18-Jul-15	18-Jul-15	62			02
		D9 (D3c) - Pile cap Curing & Striking of Forms incl. CJ prep	<u> </u>	21-Apr-15 22-Apr-15	0%	6	21-Apr-15 29-Apr-15	20-Jul-15	25-Jul-15	62 62	0	0% 0%	
	Pier Works		0	22-Api-13	0 78	U	29-Api-15	20-Jul-15	23-Jui-13	02	0	0 %	
		D9 (D3c) - Type 5B Pier Scaffolding (1st Lift)	2	30-Apr-15	0%	2	02-May-15	27-Jul-15	28-Jul-15	62	0	0%	
		D9 (D3c) - Type 5B Pier Rebarwork (1st Lift)	3	04-May-15	0%	3	06-May-15	30-Jul-15	01-Aug-15	62	0	0%	
		D9 (D3c) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	2	07-May-15	0%	2	08-May-15	03-Aug-15	04-Aug-15	62	0	0%	
		D9 (D3c) - Type 5B Pier Concreting (1st Lift)	1	09-May-15	0%	1	09-May-15	05-Aug-15	05-Aug-15	62	0	0%	
		D9 (D3c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	11-May-15	0%	2	13-May-15	06-Aug-15	07-Aug-15	62	0	0%	
	SD3C0190	D9 (D3c) - Type 5B Pier Scaffolding (2nd Lift)	2	14-May-15	0%	2	15-May-15	08-Aug-15	10-Aug-15	62	0	0%	
	SD3C0200	D9 (D3c) - Type 5B Pier Rebarwork (2nd Lift)	3	16-May-15	0%	3	19-May-15	12-Aug-15	14-Aug-15	62	0	0%	
	SD3C0210	D9 (D3c) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift)	3	20-May-15	0%	3	23-May-15	15-Aug-15	18-Aug-15	62	0	0%	
	SD3C0220	D9 (D3c) - Type 5B Pier Concreting (2nd Lift)	1	26-May-15	0%	1	26-May-15	19-Aug-15	19-Aug-15	62	0	0%	
	SD3C0222	D9 (D3c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	27-May-15	0%	2	28-May-15	21-Aug-15	22-Aug-15	62	0	0%	
	SD3C0230	D9 (D3c) - Type 5B Pier head Scaffolding	3	29-May-15	0%	3	01-Jun-15	24-Aug-15	26-Aug-15	62	0	0%	
	SD3C0240	D9 (D3c) - Type 5B Pier Head Rebarwork	4	02-Jun-15	0%	4	06-Jun-15	27-Aug-15	31-Aug-15	62	0	0%	
	SD3C0250	D9 (D3c) - Type 5B Pier Head Formwork & Prep for Concreting	4	08-Jun-15	0%	4	13-Jun-15	01-Sep-15	04-Sep-15	62	0	0%	
	SD3C0260	D9 (D3c) - Type 5B Pier Head Concreting	1	15-Jun-15	0%	1	15-Jun-15	05-Sep-15	05-Sep-15	62	0	0%	
	SD3C0262	D9 (D3c) - Type 5B Pier Head Curing & Striking of Forms incl. CJ prep	2	16-Jun-15	0%	2	18-Jun-15	07-Sep-15	08-Sep-15	62	0	0%	
	SD3C0320	D9 (D3c) - Type 5B Pier Backfilling Works	4	19-Jun-15	0%	4	26-Jun-15	10-Sep-15	14-Sep-15	62	0	0%	
	Pier D10 (D3b			,									
	Socketted H	Pile Installation D10											
	GFXX461-5	D10B (D3b) - Installation of SH Pile (6 nr) - Resources Refer to D10A	80	21-Mar-15 A	0%	80	30-Jun-15	27-Feb-15	06-Jun-15	-19	0	0%	
	Pier D11 (D3a)												
	Socketted H	Pile Installation - D11 (D3a)											
	GFXX461-7	D11B (D3a) - Installation of SH Pile (7 nr) - Resources Refer to D11A	90	21-Mar-15	0%	90	13-Jul-15	07-Mar-15	29-Jun-15	-12	0	0%	
	Pier D12 (D2e												
	Preliminary V	Vorks for Land Piling											
	PD120020	D12 (D2e) - Set up piling platform	30	03-Nov-14 A	50%	15	11-Apr-15	11-Apr-18	30-Apr-18	848	0	50%	-
	PD120030	D12 (D2e) - Complete Civil Preparation Works for piling to commence	0		0%	0	11-Apr-15		30-Apr-18	848	848	0%	
		Pile Installation - D12 (D2e)											
		D12A (D2e) - Installation of SH Pile (8 nr)	104	21-Mar-15	0%	104	29-Jul-15	30-Apr-15	02-Sep-15	30	0	0%	
		D12B (D2e) - Installation of SH Pile (8 nr)	104	13-Mar-15 A	5%	99	23-Jul-15	20-Mar-15	22-Jul-15	-1	0	0%	
	Pile Cap Wor								_				
		D12A (D2e-L) - Pile cap Excavation / ELS	34	03-Nov-14 A	0%	103	12-Aug-15	16-Apr-15	02-Sep-15	17	0	0%	
	Pier D13 (D2d												
		Pile Installation - D13 (D2d)	101		700/		00 4 45		47 4 45			700/	
		D13 (D2d) - Installation of SH Pile (16 nos)	104	09-Feb-15 A	73%	28	28-Apr-15	15-Jul-15	17-Aug-15	92	0	73%	
		D13 (D2d) - Selection of pile for Loading Test	6	28-Apr-15	0%	6	06-May-15	18-Aug-15	24-Aug-15	92	0	0%	
		D13 (D2d) - Loading Test for pre-bored H-pile	36	06-May-15	0%	36	18-Jun-15	25-Aug-15	07-Oct-15	92	0	0%	
	Pile Cap Wor		20	40 hus 45	00/	20	00 kil 45	00 0+45	44 Nov 45	0.4	0	00/	
		D13 (D2d) - Pile cap Excavation / ELS (incl. sheet piling)	30	18-Jun-15	0%	30	30-Jul-15	08-Oct-15	14-Nov-15	84	0	0%	
	Bridge D1												
	Pier D14 (D2c Pile Cap Wor												
		D14B (D2c-R) - Pile cap Formwork	3	13-Feb-15 A	0%	3	24-Mar-15	27-Apr-18	30-Apr-18	860	860	0%	
		D14B (D2c-R) - Pile cap Formwork D14B (D2c-R) - Pile cap Rebarwork	4	10-Mar-15 A	100%	0	24-Mar-15 14-Mar-15 A	21-Mp1-10	30-Api-10	000	000	100%	
		D14B (D2c-R) - Pile cap Rebai work D14B (D2c-R) - Pile cap Kicker Formwork	2	21-Mar-15	0%	2	23-Mar-15	15-Oct-15	16-Oct-15	151	2	0%	
		D14B (D2c-R) - Pile cap Concreting	1	18-Mar-15 A	100%	0	18-Mar-15 A		10-000-10		-	100%	
	00201(100											L	
	Actual Work	Project ID: J3518DWPrE-M22 Layout: J3518-DWP-3MRP Submission - M22_	Tuen Mun - C	-					Date	Revis			prove
	Planned Bar Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CC	3-Month Rolli		•	-	-	es)	09-Mar-15 31-Mar-15		D W		
•	 Milestone 	Milestones, No Level of Effort.	(F	Progress as	s of 21-N	lar-15)						I	



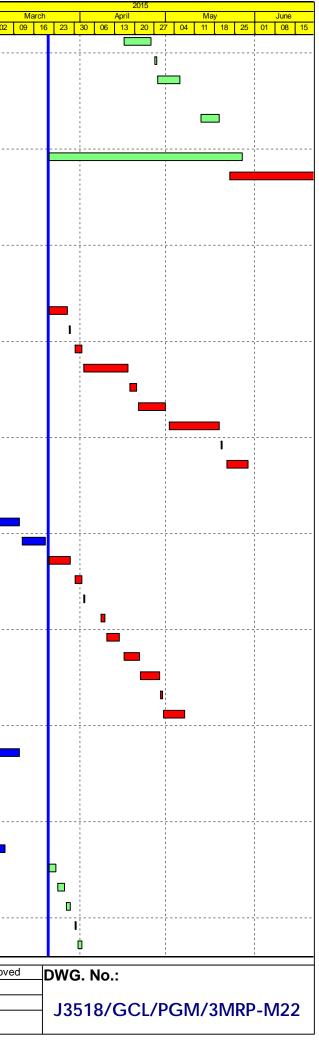
Solution	ty ID Activity Name		Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish/FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical Comple	ete
Statute Unit (Dist.) Per National (14 Lin) 1 2 set (14) UNIT	SD2CR140 D14B (D2c-R) - Pile cap (Curing & Striking of Forms incl. CJ prep	6	19-Mar-15 A	100%	0	21-Mar-15 A					100°	
Stoch Discurport J. Per Hannons (10 LT) 2 2 Pather 16 00								<u> </u>]		
1 3 - 444-13 0% 1	SD2CL150 D14A (D2c-L) - Pier Scaff	olding (1st Lift)	1	23-Feb-15 A	100%	0	23-Feb-15 A					100º	%
Since Since <th< td=""><td>SD2CL160 D14A (D2c-L) - Pier Reba</td><td>arwork (1st Lift)</td><td>2</td><td>21-Mar-15 A</td><td>0%</td><td>2</td><td>23-Mar-15</td><td>07-Oct-15</td><td>08-Oct-15</td><td>145</td><td>0</td><td>O^c</td><td>6</td></th<>	SD2CL160 D14A (D2c-L) - Pier Reba	arwork (1st Lift)	2	21-Mar-15 A	0%	2	23-Mar-15	07-Oct-15	08-Oct-15	145	0	O ^c	6
Specify 20 Disk (2) PMAR/E Obs. 2 PMAR/E Obs. 2 PMAR/E Obs. 4 0 956 Specify On Info 2 PMAR/E 00. 2 PMAR/E 00. 4 0 956 Specify On Info 3 PMAR/E 00. 3 PMAR/E 00. 3 PMAR/E 00. 4 0 <	SD2CL170 D14A (D2c-L) - Pier Form	work & Prep for Concreting (1st Lift)	1	24-Mar-15	0%	1	24-Mar-15	09-Oct-15	09-Oct-15	145	0	0°.	6
Specifie Div Div< Div Div Div Div< Div< Div< Div< Div< Div< Div< Div Div Div Div Div Div Div Div Div <thdiv< th=""> <thdiv< th=""> Div <thdiv< th=""></thdiv<></thdiv<></thdiv<>	SD2CL180 D14A (D2c-L) - Pier Cond	creting (1st Lift)	1	25-Mar-15	0%	1	25-Mar-15	10-Oct-15	10-Oct-15	145	0	0°.	6
Signal State Signal State <t< td=""><td>SD2CL182 D14A (D2c-L) - Pier Curir</td><td>ng & Striking of Forms incl. CJ prep (1st Lift)</td><td>2</td><td>26-Mar-15</td><td>0%</td><td>2</td><td>27-Mar-15</td><td>12-Oct-15</td><td>13-Oct-15</td><td>145</td><td>0</td><td>0°</td><td>6</td></t<>	SD2CL182 D14A (D2c-L) - Pier Curir	ng & Striking of Forms incl. CJ prep (1st Lift)	2	26-Mar-15	0%	2	27-Mar-15	12-Oct-15	13-Oct-15	145	0	0°	6
Space 10 0144/102-1-10 0140/102-1-00	SD2CL190 D14A (D2c-L) - Pier Scaff	olding (2nd Lift)	2	28-Mar-15	0%	2	30-Mar-15	15-Oct-15	16-Oct-15	145	0	0°	6
EDUCATION 1 <th< td=""><td>SD2CL200 D14A (D2c-L) - Pier Reba</td><td>arwork (2nd Lift)</td><td>3</td><td>31-Mar-15</td><td>0%</td><td>3</td><td>02-Apr-15</td><td>17-Oct-15</td><td>20-Oct-15</td><td>145</td><td>0</td><td>0°</td><td>6</td></th<>	SD2CL200 D14A (D2c-L) - Pier Reba	arwork (2nd Lift)	3	31-Mar-15	0%	3	02-Apr-15	17-Oct-15	20-Oct-15	145	0	0°	6
1 2012/2012 Dirk All 202-11, Per Caring A Siming of Form and LD prop (incl. Fr) 2 1 And Visit 000-16 400 control 400 contro 400 contro 400 contro 400 contro 400 control 400 contro 400 contro <t< td=""><td>SD2CL210 D14A (D2c-L) - Pier Form</td><td>nwork & Prep for Concreting (2nd Lift)</td><td>3</td><td>08-Apr-15</td><td>0%</td><td>3</td><td>10-Apr-15</td><td>22-Oct-15</td><td>24-Oct-15</td><td>145</td><td>0</td><td>0%</td><td>6</td></t<>	SD2CL210 D14A (D2c-L) - Pier Form	nwork & Prep for Concreting (2nd Lift)	3	08-Apr-15	0%	3	10-Apr-15	22-Oct-15	24-Oct-15	145	0	0%	6
Bit Section Desk Section Sect	SD2CL220 D14A (D2c-L) - Pier Cond	creting (2nd Lift)	1	11-Apr-15	0%	1	11-Apr-15	26-Oct-15	26-Oct-15	145	0	0%	6
Space Has Disk (D20-His) Plate House His (L1) 2 23-March 5 6% 2 Conduct 5 22-Doub 5 49 0 0% Space Has Disk (D20-R) Plate (D20-R) <td>SD2CL222 D14A (D2c-L) - Pier Curir</td> <td>ng & Striking of Forms incl. CJ prep (2nd Lift)</td> <td>2</td> <td>13-Apr-15</td> <td>0%</td> <td>2</td> <td>14-Apr-15</td> <td>27-Oct-15</td> <td>28-Oct-15</td> <td>145</td> <td>20</td> <td>0%</td> <td>6</td>	SD2CL222 D14A (D2c-L) - Pier Curir	ng & Striking of Forms incl. CJ prep (2nd Lift)	2	13-Apr-15	0%	2	14-Apr-15	27-Oct-15	28-Oct-15	145	20	0%	6
SD2CR170 D144(102-8) Per for memorik & Per for conversing (1st Lift) 1 0 20-40-15 0% 2 01 Heyr 15 28-00-15 28-00-15 28-00-15 28-00-15 28-00-15 10 0 0 SD2CR182 D148 (02-81) - Per Conversing (1st Lift) 1 0 20-40-15 0% 2 0 Hours 28-00-15 10 0 <td>SD2CR150 D14B (D2c-R) - Pier Scat</td> <td>folding (1st Lift)</td> <td>2</td> <td>26-Mar-15</td> <td>0%</td> <td>2</td> <td>27-Mar-15</td> <td>17-Oct-15</td> <td>19-Oct-15</td> <td>149</td> <td>0</td> <td>0%</td> <td>6</td>	SD2CR150 D14B (D2c-R) - Pier Scat	folding (1st Lift)	2	26-Mar-15	0%	2	27-Mar-15	17-Oct-15	19-Oct-15	149	0	0%	6
Bit GD201400 Didd (Doc R) Parc Concentrag (Strut.P) 1 0 2 April 15 0% 1 0 Abort 15 20 Abort 5 140 0 000 SD2CR192 D14 (Doc R) Partal Concentrag Schroding 10 00 April 5 0% 12 00 April 5 20 Abort 5 28 Abort 5 140 0 0% SD2CR202 D14 (Doc R) Partal Concentrag Schroding 12 28 Abort 5 0% 12 28 Abort 5 20 Abort 5 125 0 0% SD2CR202 D14 (Doc R) Partal Been Schroding 12 23 Abort 5 0% 12 28 Abort 5 27 Abort 5 25 Abort 5 136 0 0% SD2CR202 D14 (Doc R) Tradition of 5H Fit (13 m) 0 20 Jam 15 A 77% 21 18 Abort 5 0% Abort 5 25 Abort 5 23 Jam 15 23 0 000 SD2CR202 D16 (Col 2) Fit cag Work E E E E E E E E E E E E E E E E E E E <td>SD2CR160 D14B (D2c-R) - Pier Reb</td> <td>arwork (1st Lift)</td> <td>2</td> <td>28-Mar-15</td> <td>0%</td> <td>2</td> <td>30-Mar-15</td> <td>20-Oct-15</td> <td>22-Oct-15</td> <td>149</td> <td>0</td> <td>0%</td> <td>6</td>	SD2CR160 D14B (D2c-R) - Pier Reb	arwork (1st Lift)	2	28-Mar-15	0%	2	30-Mar-15	20-Oct-15	22-Oct-15	149	0	0%	6
Sp202182 Dr4B (122-B) - Per Quing & Sinking of Forma Ind. C.I prep. (1% L.R) 2 06 Apr 15 0% 2 0.6 Apr 15 070.0 12 0.8 Apr 15 12.8 Apr 15 0.8 Apr 15 0.8 Apr 15 12.8 Apr 15 0.8 Apr 15 12.8 Apr 15 12.8 Apr 15 0.8 Apr 15 12.8 Apr 15 </td <td>SD2CR170 D14B (D2c-R) - Pier Forr</td> <td>nwork & Prep for Concreting (1st Lift)</td> <td>2</td> <td>31-Mar-15</td> <td>0%</td> <td>2</td> <td>01-Apr-15</td> <td>23-Oct-15</td> <td>24-Oct-15</td> <td>149</td> <td>0</td> <td>0%</td> <td>6</td>	SD2CR170 D14B (D2c-R) - Pier Forr	nwork & Prep for Concreting (1st Lift)	2	31-Mar-15	0%	2	01-Apr-15	23-Oct-15	24-Oct-15	149	0	0%	6
Process	SD2CR180 D14B (D2c-R) - Pier Con	creting (1st Lift)	1	02-Apr-15	0%	1	02-Apr-15	26-Oct-15	26-Oct-15	149	0	0%	6
SD2CR280 D14 (D2c) - Portal Seam Solit Formmork 12 15 May-16 0% 12 28 May-15 30-Oct-15 124 Nov-15 125 0 0% SD2CR280 D14 (D2c) - Pusit alleam Solit Formmork 10 16 Jac-15 0% 10 0%-15 128 0 0% SD2CR280 D14 (D2c) - Pusit alleam Solit Formmork 10 16 Jac-15 0% 0% 12 15 May-15 28 May-15 20 May-15 20 May<15	SD2CR182 D14B (D2c-R) - Pier Curi	ng & Striking of Forms incl. CJ prep (1st Lift)	2	08-Apr-15	0%	2	09-Apr-15	27-Oct-15	28-Oct-15	149	24	0%	6
SD2CR220 D14 (D23) - Portal Baem Soft Formwork 12 2.9 Alley 16 0% 12 1.9 June 16 2.9 Alley 16 2.9 Alley 16 1.9 Bound 15 2.9 Alley 16 1.9 Bound 15 1.9 Boun	Portal												
SD2CR300 D14 (D20). Portal Beam Rebarwork & Inserts 16 10-Jun 15 0% 16 09-Jul 15 27 Nov-15 125 0 0% Per D10 (D2) Socketed H=File Installation Socketed H=File Installation G FXX4420_ (D15 (D2))- Installation of SIP (P13 m) 90 20-Jam 15A 77% 21 19-Apr-15 24-Apr-15 23-Apr15 23 0 0% Pile Cap Works SO200000 D15 (D2)<- Pile cap Exavation / ELS (nd. sheet pling) 45 18-Apr-15 0% 45 22-Jun 15 24-Apr-15 23-Apr-15 28 0 0% Pile Cap Works S0200000 D16 (D2a)- Pile cap Exavation / ELS (nd. sheet pling) 22 21-Amr-15 0% 42 24-Apr-15 28-Apr-15 28-Apr-15 28-Apr-15 28-Apr-15 0.0 0% S0200100 D16 (D2a)- Pile cap Exavation / ELS (nd. sheet pling) 21 24-Apr-15 0% 1 28-Apr-15 0% 1 28-Apr-15 0% 0 0% 0% 0% 0% 0% 0% <th< td=""><td>SD2CR280 D14 (D2c) - Portal Beam</td><td>Scaffolding</td><td>12</td><td>13-May-15</td><td>0%</td><td>12</td><td>28-May-15</td><td>30-Oct-15</td><td>12-Nov-15</td><td>125</td><td>0</td><td>0%</td><td>6</td></th<>	SD2CR280 D14 (D2c) - Portal Beam	Scaffolding	12	13-May-15	0%	12	28-May-15	30-Oct-15	12-Nov-15	125	0	0%	6
Per D15 (D2b) Societted H-Hile Installation Societted H-Hile Installation (3H File (13 nr) Societe (3H File (13 nr)<	SD2CR290 D14 (D2c) - Portal Beam	Soffit Formwork	12	29-May-15	0%	12	15-Jun-15	13-Nov-15	26-Nov-15	125	0	0%	6
Socketted H-File Installation GF XXX44-2 18-Apr-15 24-Apr-15 19-Apr-15 19-Apr-15 25 0 Bio 20-Apr-15 27-Apr-15 24-Apr-15 19-Apr-15 23-Apr-15 24-Apr-15 24-Apr-15 24-Apr-15 24-Apr-15 24-Apr-15 23-Apr-15 23-Apr-15 23-Apr-15 23-Apr-15 23-Apr-15 24-Apr-15 <td>SD2CR300 D14 (D2c) - Portal Beam</td> <td>Rebarwork & Inserts</td> <td>16</td> <td>16-Jun-15</td> <td>0%</td> <td>16</td> <td>09-Jul-15</td> <td>27-Nov-15</td> <td>15-Dec-15</td> <td>125</td> <td>0</td> <td>0%</td> <td>6</td>	SD2CR300 D14 (D2c) - Portal Beam	Rebarwork & Inserts	16	16-Jun-15	0%	16	09-Jul-15	27-Nov-15	15-Dec-15	125	0	0%	6
GFXX46-2 D15 (D2b) - Installation of SH FNe (13 m) 90 20-Jan 15A 77% 21 18-Apr-15 24-Apr-15 19-May-15 25 0 30% FILE Cap Works 50280000 D15 (D2b) - Pile cap Exacutation / ELS (ind. sheet piling) 45 19-Apr-15 0% 45 22-Juin 15 24-Apr-15	Pier D15 (D2b)												
Pile Cap Works Pile Cap Kazvation / ELS (md. sheet pring) 45 18 Apr-15 0% 45 22-Jun-15 23-Jun-15 23-Jun-1	Socketted H-Pile Installation												
SD2B0090 D15 (D2b) - Pile cap Exavation / ELS (ind. sheet piling) 45 18 Apr-15 0% 45 22-Jun-15 23-Jul-15 23 0 0% Pile Cap Works Pile Cap Works SD2A0090 D16 (D2a) - Pile cap Exavation / ELS (ind. sheet piling) 22 21-Apr-15 0% 42 27-Apr-15 28-May-15 04-Jul-15 24-Jul-15 28 0 0% SD2A0090 D16 (D2a) - Pile cap Exavation / ELS (ind. sheet piling) 22 21-Apr-15 0% 4 27-Apr-15 28-May-15 02-Jul-15 03-Jul-15 04 04-Jul-15 02-Jul-15 03-Jul-15 04 04-Jul-15 02-Jul-15 03-Jul-15 04 04-Jul-15 02-Jul-15 03-Jul-15 04 04-Jul-15 04-Jul-15 04 04-Jul-15 04-Jul-15 04 04-Jul-15 04-Jul-15 04-Jul-15 04-Jul-15 04-Jul-15 04-Jul-15 04-Jul-15 04-Jul-15 04-Jul-15 04-Ju	GFXX446-2 D15 (D2b) - Installation of	f SH Pile (13 nr)	90	20-Jan-15 A	77%	21	18-Apr-15	24-Apr-15	19-May-15	25	0	30%	6
Pier D18 (D2a) D16 (D2a) - Pie cap Excavation / ELS (ind. sheet pling) 22 21 - Apr-15 0% 4 27 - Apr-15 28 - Apr-15 0% 4 27 - Apr-15 28 - Apr-15 0% 4 27 - Apr-15 0% 4 04 - May-15 0% 20 - Apr-15 0% 4 04 - May-15 0% 1 04 - May-15 0% 1 04 - May-15 0% 1 04 - May-15 0% 0 0 0 0 0 0	Pile Cap Works												
Pile Cap Works Standard State Stat	SD2B0090 D15 (D2b) - Pile cap Exca	avation / ELS (incl. sheet piling)	45	18-Apr-15	0%	45	22-Jun-15	20-May-15	23-Jul-15	23	0	0%	6
SD2A0090 D16 (D2a) - Pile cap Excavation / ELS (ind: sheet piling) 22 21-Mar-15 0% 22 21-Mar-15 28-Apr-15 28-Apr-15 28-Mar-15 0% 4 27-Apr-15 0% 4 27-Apr-15 0% 4 07-Apr-15 0% 4 07-Apr-15 28-Mar-15 0% 0% 1 28-Apr-15 0% 4 07-Apr-15 28-Mar-15 0% 0% 1 08-Apr-15 0% 4 07-Apr-15 28-Mar-15 0% 0% 1 08-Apr-15 0% 0% 1 08-Apr-15 0% 1 08-Apr-15 0% 1 08-Apr-15 08	Pier D16 (D2a)												
SD2A0092 D16 (D2a) - Pile cap Pile breakdown to cut-off etc. 4 22-Apr-15 0% 4 27-Apr-15 28-May-15 01-Jun-15 26 0 0% SD2A0100 D16 (D2a) - Pile cap Formwork 3 05-May-15 0% 1 28-May-15 02-Jun-15 02-Jun-15 02-Jun-15 02 0 0% SD2A0100 D16 (D2a) - Pile cap Formwork 4 29-Apr-15 0% 4 04-May-15 04-Jun-15 04-Jun-15 04 0 0% SD2A0102 D16 (D2a) - Pile cap Roberwork 2 09-May-15 0% 2 11-May-15 24-Jun-15 30 4 0% SD2A0102 D16 (D2a) - Pile cap Kicker Formwork 2 09-May-15 0% 1 08-May-15 15-Jun-15 26 0 0% 0 0% 1 08-Jun-15 26-Jun-15 26 0 0% 0 0% 1 08-Jun-15 28-Jun-15 28-Jun	Pile Cap Works												
SD2A0100 D16 (D2a) - Pile cap Biending 1 28-Apr-15 0% 1 28-Apr-15 02-Jun-15 02-Jun-15 26 0 0% SD2A0110 D16 (D2a) - Pile cap Rebarwork 3 05-May-15 0% 3 07-May-15 10-Jun-15 13-Jun-15 26 0 0% SD2A0120 D16 (D2a) - Pile cap Rebarwork 2 29-May-15 0% 4 04-May-15 04-May-15 08-Jun-15 26 0 0% SD2A0120 D16 (D2a) - Pile cap Concreting 1 08-May-15 0% 1 08-May-15 15-Jun-15 26 0 0% SD2A0140 D16 (D2a) - Pile cap Concreting 1 08-May-15 0% 6 16-May-15 15-Jun-15 26 0 0% SD2A0150 D16 (D2a) - Type 5B Pier Scaffolding (1st Lift) 2 28-May-15 0% 3 23-May-15 03-Jun-15 26 0 0% SD2A0160 D16 (D2a) - Type 5B Pier Formwork & Prep for Concreting (1st Lift) 2 28-May-15 0% 3 23-May-15 03-Jun-15 26 0 0% SD2	SD2A0090 D16 (D2a) - Pile cap Exca	avation / ELS (incl. sheet piling)	22	21-Mar-15	0%	22	21-Apr-15	28-Apr-15	27-May-15	26	0	0%	6
SD2A0110 D16 (D2a) - Pile cap Rebarwork 3 05-May-15 0% 3 07-May-15 10-Jun-15 12-Jun-15 26 0 0% SD2A0120 D16 (D2a) - Pile cap Rebarwork 4 29-Apr-15 0% 4 04-May-15 04-Jun-15 04-Jun-15 26 0 0% SD2A0120 D16 (D2a) - Pile cap Rebarwork 2 09-May-15 0% 1 08-May-15 15-Jun-15 26 0 0% SD2A0130 D16 (D2a) - Pile cap Concreting 1 08-May-15 0% 1 08-May-15 15-Jun-15 26 0 0% SD2A0140 D16 (D2a) - Type 58 Piler cap Concreting 10 08-May-15 0% 1 08-May-15 15-Jun-15 26 0 0% SD2A0160 D16 (D2a) - Type 58 Piler cap Concreting (1st Lift) 2 18-May-15 0% 3 23-May-15 03-Jun-15 26 0 0% SD2A0170 D16 (D2a) - Type 58 Piler Formwork & Prep for Concreting (1st Lift) 2 26-May-15 0% 1 28-May-15 07-Jul-15 26 0 0% 0 0%	SD2A0092 D16 (D2a) - Pile cap Pile	breakdown to cut-off etc.	4	22-Apr-15	0%	4	27-Apr-15	28-May-15	01-Jun-15	26	0	0%	6
SD2A0120 D16 (D2a) - Pile cap Rebarwork 4 29-Apr-15 0% 4 04-May-15 04-Jun-15 08-Jun-15 26 0 0% SD2A0122 D16 (D2a) - Pile cap Kicker Formwork 2 09-May-15 0% 1 08-Jun-15 26-Jun-15 30 4 0% SD2A0130 D16 (D2a) - Pile cap Kicker Formwork 2 09-May-15 0% 1 08-May-15 15-Jun-15 26-Jun-15 26 0 0% SD2A0140 D16 (D2a) - Pile cap Concreting Striking of Forms ind. CJ prep 6 09-May-15 0% 1 08-May-15 16-Jun-15 26-Jun-15 26 0 0% SD2A0150 D16 (D2a) - Type 5B Pier Kearwork (1st Lift) 2 18-May-15 0% 3 23-May-15 04-Jun-15 06-Jun-15 26 0 0% SD2A0170 D16 (D2a) - Type 5B Pier Kearwork (1st Lift) 2 28-May-15 0% 2 37-May-15 04-Ju1-15 06-Ju1-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 2 29-May-15 0% 2 37-May-15 0	SD2A0100 D16 (D2a) - Pile cap Blind	ding	1	28-Apr-15	0%	1	28-Apr-15	02-Jun-15	02-Jun-15	26	0	0%	6
SD2A0122 D16 (D2a) - Pile cap Kicker Forrmwork 2 09-May-15 0% 2 11-May-15 24-Jun-15 26-Jun-15 30 4 0% SD2A0130 D16 (D2a) - Pile cap Concreting 1 08-May-15 0% 1 08-May-15 15-Jun-15 15-Jun-15 26 0 0% SD2A0140 D16 (D2a) - Pile cap Concreting 6 09-May-15 0% 6 16-May-15 16-Jun-15 26-Jun-15 26 0 0% VEXAULTS 0% 6 16-May-15 0% 2 19-May-15 27-Jun-15 26 0 0% SD2A0150 D16 (D2a) - Type 58 Pier Scatfolding (1st Lift) 2 26-May-15 0% 3 23-May-15 30-Jun-15 26 0 0% SD2A0160 D16 (D2a) - Type 58 Pier Scatfolding (1st Lift) 2 26-May-15 0% 1 28-May-15 0%-Jun-15 04-Jul-15 06-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 58 Pier Concreting (1st Lift) 2 29-May-15 0% 1 28-May-15 0%-Jul-15 0%-Jul-15 <td< td=""><td>SD2A0110 D16 (D2a) - Pile cap Forr</td><td>nwork</td><td>3</td><td>05-May-15</td><td>0%</td><td>3</td><td>07-May-15</td><td>10-Jun-15</td><td>13-Jun-15</td><td>26</td><td>0</td><td>0%</td><td>6</td></td<>	SD2A0110 D16 (D2a) - Pile cap Forr	nwork	3	05-May-15	0%	3	07-May-15	10-Jun-15	13-Jun-15	26	0	0%	6
SD2A0130 D16 (D2a) - Pile cap Concreting 1 08-May-15 0% 1 08-May-15 15-Jun-15 26 0 0% SD2A0140 D16 (D2a) - Pile cap Curing & Striking of Forms incl. CJ prep 6 09-May-15 0% 6 16-May-15 15-Jun-15 26 0 0% Pier Works U U 2 18-May-15 0% 2 19-May-15 27-Jun-15 26 0 0% SD2A0150 D16 (D2a) - Type 5B Pier Rebarwork (1st Lift) 2 18-May-15 0% 2 19-May-15 03-Jun-15 26 0 0% SD2A0160 D16 (D2a) - Type 5B Pier Rebarwork (1st Lift) 2 26-May-15 0% 2 27-May-15 04-Jul-15 06-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 2 28-May-15 0% 1 28-May-15 07-Jul-15 08-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift) 2 29-May-15 0% 2 03-Jul-15 07-Jul-15 08-Jul-15 26 <	SD2A0120 D16 (D2a) - Pile cap Reb	arwork	4	29-Apr-15	0%	4	04-May-15	04-Jun-15	08-Jun-15	26	0	0%	6
SD2A0140 D16 (D2a) - Pile cap Curing & Striking of Forms incl. CJ prep 6 09-May-15 0% 6 16-May-15 16-Jun-15 26-Jun-15 26 0 0% Pier Works SD2A0150 D16 (D2a) - Type 5B Pier Scaffolding (1st Lift) 2 18-May-15 0% 2 19-May-15 27-Jun-15 26-Jun-15 27-Jun-15 27-Jun-15 <th< td=""><td>SD2A0122 D16 (D2a) - Pile cap Kick</td><td>er Formwork</td><td>2</td><td>09-May-15</td><td>0%</td><td>2</td><td>11-May-15</td><td>24-Jun-15</td><td>26-Jun-15</td><td>30</td><td>4</td><td>0%</td><td>6</td></th<>	SD2A0122 D16 (D2a) - Pile cap Kick	er Formwork	2	09-May-15	0%	2	11-May-15	24-Jun-15	26-Jun-15	30	4	0%	6
Pier Works SD2A0150 D16 (D2a) - Type 5B Pier Scaffolding (1st Lift) 2 18-May-15 0% 2 19-May-15 27-Jun-15 29-Jun-15 26 0 0% SD2A0160 D16 (D2a) - Type 5B Pier Rebarwork (1st Lift) 3 20-May-15 0% 3 23-May-15 30-Jun-15 03-Jul-15 26 0 0% SD2A0170 D16 (D2a) - Type 5B Pier Rebarwork (1st Lift) 2 26-May-15 0% 2 27-May-15 04-Jul-15 06-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 1 28-May-15 0% 1 28-May-15 07-Jul-15 07-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 2 29-May-15 0% 2 30-May-15 08-Jul-15 08-Jul-15 26 0 0% SD2A0190 D16 (D2a) - Type 5B Pier Scaffolding (2nd Lift) 2 01-Jul-15 0% 3 06-Jul-15 13-Jul-15 26 0 0% 0% <t< td=""><td>SD2A0130 D16 (D2a) - Pile cap Con</td><td>creting</td><td>1</td><td>08-May-15</td><td>0%</td><td>1</td><td>08-May-15</td><td>15-Jun-15</td><td>15-Jun-15</td><td>26</td><td>0</td><td>0%</td><td>6</td></t<>	SD2A0130 D16 (D2a) - Pile cap Con	creting	1	08-May-15	0%	1	08-May-15	15-Jun-15	15-Jun-15	26	0	0%	6
SD2A0150 D16 (D2a) - Type 5B Pier Scaffolding (1st Lift) 2 18-May-15 0% 2 19-May-15 27-Jun-15 26 0 0% SD2A0160 D16 (D2a) - Type 5B Pier Rebarwork (1st Lift) 3 20-May-15 0% 3 23-May-15 30-Jun-15 26 0 0% SD2A0170 D16 (D2a) - Type 5B Pier Rebarwork (1st Lift) 2 26-May-15 0% 1 28-May-15 04-Jul-15 06-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 1 28-May-15 0% 1 28-May-15 07-Jul-15 26 0 0% SD2A0190 D16 (D2a) - Type 5B Pier Couring & Striking of Forms incl. CJ prep (1st Lift) 2 29-May-15 0% 2 30-May-15 08-Jul-15 26 0 0% SD2A0190 D16 (D2a) - Type 5B Pier Scaffolding (2nd Lift) 2 01-Jun-15 0% 2 30-Jul-15 10-Jul-15 11-Jul-15 26 0 0% SD2A0200 D16 (D2a) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift) 3 04-Jun-15 0% 3 12-Jul-15 26 <	SD2A0140 D16 (D2a) - Pile cap Curi	ng & Striking of Forms incl. CJ prep	6	09-May-15	0%	6	16-May-15	16-Jun-15	26-Jun-15	26	0	0%	6
SD2A0160 D16 (D2a) - Type 5B Pier Rebarwork (1st Lift) 3 20-May-15 0% 3 23-May-15 03-Jul-15 26 0 0% SD2A0170 D16 (D2a) - Type 5B Pier Rebarwork (1st Lift) 2 26-May-15 0% 1 28-May-15 04-Jul-15 06-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 1 28-May-15 0% 1 28-May-15 07-Jul-15 06-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 2 29-May-15 0% 1 28-May-15 09-Jul-15 09-Jul-15 26 0 0% SD2A0182 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift) 2 01-Jun-15 0% 2 02-Jun-15 10-Jul-15 26 0 0%	Pier Works												
SD2A0170 D16 (D2a) - Type 5B Pier Formwork & Prep for Concreting (1st Lift) 2 26-May-15 0% 2 27-May-15 04-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 1 28-May-15 0% 1 28-May-15 07-Jul-15 26 0 0% SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 2 29-May-15 0% 2 30-May-15 08-Jul-15 06-Jul-15 26 0 0% SD2A0190 D16 (D2a) - Type 5B Pier Scaffolding (2nd Lift) 2 01-Jun-15 0% 3 06-Jul-15 11-Jul-15 26 0 0% SD2A0200 D16 (D2a) - Type 5B Pier Rebarwork (2nd Lift) 3 04-Jun-15 0% 3 06-Jul-15 13-Jul-15 26 0 0% SD2A0200 D16 (D2a) - Type 5B Pier Rebarwork (2nd Lift) 3 08-Jun-15 0% 3 12-Jun-15 17-Jul-15 26 0 0% 0% 3 12-Jul-15 17-Jul-15 20-Jul-15 26 0 0% 0% 3 12-Jul-15 21-Jul-15 24-Jul-15 24-Jul-	SD2A0150 D16 (D2a) - Type 5B Pier	Scaffolding (1st Lift)	2	18-May-15	0%	2	19-May-15	27-Jun-15	29-Jun-15	26	0	0%	6
SD2A0180 D16 (D2a) - Type 5B Pier Concreting (1st Lift) 1 28-May-15 0% 1 28-May-15 07-Jul-15 26 0 0% SD2A0182 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift) 2 29-May-15 0% 2 30-May-15 08-Jul-15 09-Jul-15 26 0 0% SD2A0190 D16 (D2a) - Type 5B Pier Scaffolding (2nd Lift) 2 01-Jun-15 0% 2 02-Jun-15 10-Jul-15 11-Jul-15 26 0 0% SD2A0200 D16 (D2a) - Type 5B Pier Rebarwork (2nd Lift) 3 04-Jun-15 0% 3 06-Jun-15 13-Jul-15 15-Jul-15 26 0 0% SD2A0200 D16 (D2a) - Type 5B Pier Rebarwork (2nd Lift) 3 08-Jun-15 0% 3 12-Jun-15 17-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Concreting (2nd Lift) 1 13-Jun-15 0% 1 13-Jun-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift) 2 15-Jun-15 0% 2 16-Jun-15 22-Jul-1	SD2A0160 D16 (D2a) - Type 5B Pier	Rebarwork (1st Lift)	3	20-May-15	0%	3	23-May-15	30-Jun-15	03-Jul-15	26	0	0%	6
SD2A0182 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift) 2 29-May-15 0% 2 30-May-15 08-Jul-15 09-Jul-15 26 0 0% SD2A0190 D16 (D2a) - Type 5B Pier Scaffolding (2nd Lift) 2 01-Jun-15 0% 2 02-Jun-15 10-Jul-15 11-Jul-15 26 0 0% SD2A0200 D16 (D2a) - Type 5B Pier Scaffolding (2nd Lift) 3 04-Jun-15 0% 3 06-Jun-15 13-Jul-15 15-Jul-15 26 0 0% SD2A0210 D16 (D2a) - Type 5B Pier Rebarwork (2nd Lift) 3 08-Jun-15 0% 3 12-Jun-15 17-Jul-15 20-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Concreting (2nd Lift) 1 13-Jun-15 0% 1 13-Jun-15 21-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Concreting (2nd Lift) 1 13-Jun-15 0% 1 13-Jun-15 21-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift) 2 15-Jun-15 0% <t< td=""><td>SD2A0170 D16 (D2a) - Type 5B Pier</td><td>Formwork & Prep for Concreting (1st Lift)</td><td>2</td><td>26-May-15</td><td>0%</td><td>2</td><td>27-May-15</td><td>04-Jul-15</td><td>06-Jul-15</td><td>26</td><td>0</td><td>0%</td><td>6</td></t<>	SD2A0170 D16 (D2a) - Type 5B Pier	Formwork & Prep for Concreting (1st Lift)	2	26-May-15	0%	2	27-May-15	04-Jul-15	06-Jul-15	26	0	0%	6
SD2A0190 D16 (D2a) - Type 5B Pier Scaffolding (2nd Lift) 2 01-Jun-15 0% 2 02-Jun-15 10-Jul-15 11-Jul-15 26 0 0% SD2A0200 D16 (D2a) - Type 5B Pier Rebarwork (2nd Lift) 3 04-Jun-15 0% 3 06-Jun-15 13-Jul-15 15-Jul-15 26 0 0% SD2A0210 D16 (D2a) - Type 5B Pier Rebarwork (2nd Lift) 3 08-Jun-15 0% 3 12-Jun-15 17-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift) 1 13-Jun-15 0% 3 12-Jun-15 17-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Concreting (2nd Lift) 1 13-Jun-15 0% 1 13-Jun-15 21-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift) 2 15-Jun-15 0% 3 22-Jul-15 23-Jul-15 26 0 0% SD2A0230 D16 (D2a) - Type 5B Pier Head Scaffolding 3 18-Jun-15 0% 3 22-Jul-15 24-Jul-15 <t< td=""><td>SD2A0180 D16 (D2a) - Type 5B Pier</td><td>Concreting (1st Lift)</td><td>1</td><td>28-May-15</td><td>0%</td><td>1</td><td>28-May-15</td><td>07-Jul-15</td><td>07-Jul-15</td><td>26</td><td>0</td><td>0%</td><td>6</td></t<>	SD2A0180 D16 (D2a) - Type 5B Pier	Concreting (1st Lift)	1	28-May-15	0%	1	28-May-15	07-Jul-15	07-Jul-15	26	0	0%	6
SD2A0200 D16 (D2a) - Type 5B Pier Rebarwork (2nd Lift) 3 04-Jun-15 0% 3 06-Jun-15 13-Jul-15 15-Jul-15 26 0 0% SD2A0210 D16 (D2a) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift) 3 08-Jun-15 0% 3 12-Jun-15 17-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Concreting (2nd Lift) 1 13-Jun-15 0% 1 13-Jun-15 21-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Concreting (2nd Lift) 1 13-Jun-15 0% 1 13-Jun-15 21-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift) 2 15-Jun-15 0% 2 16-Jun-15 22-Jul-15 23-Jul-15 26 0 0% SD2A0230 D16 (D2a) - Type 5B Pier Head Scaffolding 3 18-Jun-15 0% 3 22-Jun-15 24-Jul-15 26 0 0% SD2A0230 D16 (D2a) - Type 5B Pier Head Scaffolding 3 18-Jun-15 0% 3 22-Jun-15 24-Jul-15 26<	SD2A0182 D16 (D2a) - Type 5B Pier	Curing & Striking of Forms incl. CJ prep (1st Lift)	2	29-May-15	0%	2	30-May-15	08-Jul-15	09-Jul-15	26	0	0%	6
SD2A0210 D16 (D2a) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift) 3 08-Jun-15 0% 3 12-Jun-15 17-Jul-15 20-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Concreting (2nd Lift) 1 13-Jun-15 0% 1 13-Jun-15 21-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Concreting (2nd Lift) 1 13-Jun-15 0% 1 13-Jun-15 21-Jul-15 26 0 0% SD2A0222 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift) 2 15-Jun-15 0% 2 16-Jun-15 22-Jul-15 23-Jul-15 26 0 0% SD2A0230 D16 (D2a) - Type 5B Pier Head Scaffolding 3 18-Jun-15 0% 3 22-Jul-15 24-Jul-15 26 0 0% SD2A0230 D16 (D2a) - Type 5B Pier Head Scaffolding 3 18-Jun-15 0% 3 22-Jun-15 24-Jul-15 26 0 0% Actual Work Project ID: J3518DWPrE-M22 Image: Tage to the tage to	SD2A0190 D16 (D2a) - Type 5B Pier	Scaffolding (2nd Lift)	2	01-Jun-15	0%	2	02-Jun-15	10-Jul-15	11-Jul-15	26	0	0%	6
SD2A0220 D16 (D2a) - Type 5B Pier Concreting (2nd Lift) 1 13-Jun-15 0% 1 13-Jun-15 21-Jul-15 26 0 0% SD2A0222 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift) 2 15-Jun-15 0% 2 16-Jun-15 22-Jul-15 23-Jul-15 26 0 0% SD2A0220 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift) 2 15-Jun-15 0% 3 22-Jul-15 23-Jul-15 26 0 0% SD2A0230 D16 (D2a) - Type 5B Pier Head Scaffolding 3 18-Jun-15 0% 3 22-Jun-15 24-Jul-15 26 0 0% Actual Work Project ID: J3518DWPrE-M22 Layout: J3518-DWP-3MRP Submission - M22_Filter: TASK filters: 3-Month Lookahead, No CQ Wilestones No Level of Effort Tuen Mun - Chek Lap Kok Link - Southern Connection (Progress as of 21-Mar-15) Date Revision Checked Approve 09-Mar-15	SD2A0200 D16 (D2a) - Type 5B Pier	Rebarwork (2nd Lift)	3	04-Jun-15	0%	3	06-Jun-15	13-Jul-15	15-Jul-15	26	0	0%	6
SD2A0222 D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift) 2 15-Jun-15 0% 2 16-Jun-15 23-Jul-15 26 0 0% SD2A0230 D16 (D2a) - Type 5B Pier Head Scaffolding 3 18-Jun-15 0% 3 22-Jun-15 24-Jul-15 26 0 0% Actual Work Project ID: J3518DWPrE-M22 Tuen Mun - Chek Lap Kok Link - Southern Connection Date Revision Checked Approve Planned Bar Critical Bar Filter: TASK filters: 3-Month Lookahead, No CC GProgress as of 21-Mar-15) DB 1-Mar-15 WY	, , , , , , , , , , , , , , , , , , ,		3	08-Jun-15		3	12-Jun-15		20-Jul-15	26	0		
SD2A0230 D16 (D2a) - Type 5B Pier Head Scaffolding 3 18-Jun-15 0% 3 22-Jun-15 24-Jul-15 27-Jul-15 26 0 0% Actual Work Project ID: J3518DWPrE-M22 Layout: J3518-DWP-3MRP Submission - M22_ Tuen Mun - Chek Lap Kok Link - Southern Connection Date Revision Checked Approve Planned Bar Filter: TASK filters: 3-Month Lookahead, No CC Group of Effort Group of Effort DB 09-Mar-15 DB 09-Mar-15 09-Mar-15 09-Mar-15 00	, , , , , , , , , , , , , , , , , , ,		1	13-Jun-15	0%	1			21-Jul-15	26	0		
Actual Work Project ID: J3518DWPrE-M22 Tuen Mun - Chek Lap Kok Link - Southern Connection Date Revision Checked Approve Planned Bar Filter: TASK filters: 3-Month Lookahead, No CC Filter: TASK filters: 3-Month Lookahead, No CC Grogress as of 21-Mar-15 DB DB Critical Bar WY Milestones No Level of Effort WY DB	SD2A0222 D16 (D2a) - Type 5B Pier	Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	15-Jun-15	0%	2	16-Jun-15		23-Jul-15	26	0		
Planned Bar Silter: TASK filters: 3-Month Lookahead, No CC Office State Office State Office State Office State Office State Office State Critical Bar Milestones No Level of Effort Milestones No Level of Effort Office State <	SD2A0230 D16 (D2a) - Type 5B Pier	Head Scaffolding	3	18-Jun-15	0%	3	22-Jun-15	24-Jul-15	27-Jul-15	26	0	0%	6
Planned Bar Silter: TASK filters: 3-Month Lookahead, No CC Critical Bar Milestones, No Level of Effort	Actual Work	roject ID: J3518DWPrE-M22	Tuen Mun - Cl	hek Lap Kok I	ink - Sou	thern (Connection		Date	Revi	sion	Checked	Approve
Critical Bar (Progress as of 21-Mar-15)	Planned Bar	-		-				es)					
	Chucai Bai				•	-	-		31-Mar-15		۷	٧Y	
	Milestone		Υ.				-						



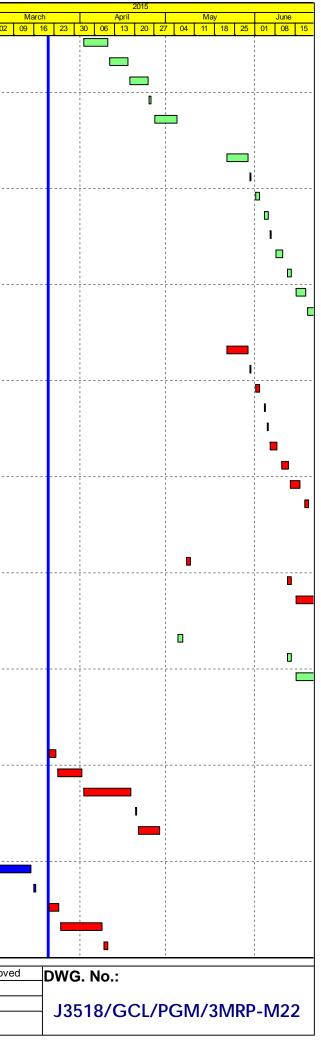
	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
Pier D17 (D1d)		1		I	1					
Pile Cap Wo	rks										
SD1D0092	D17 (D1d) - Pile cap Pile breakdown to cut-off etc.	4	14-Feb-15 A	100%	0	11-Mar-15 A					100%
SD1D0110	D17 (D1d) - Pile cap Formwork	3	12-Mar-15 A	100%	0	13-Mar-15 A					100%
SD1D0120	D17 (D1d) - Pile cap Rebarwork	4	20-Mar-15 A	0%	4	25-Mar-15	25-Apr-18	30-Apr-18	859	859	0%
SD1D0122	D17 (D1d) - Pile cap Kicker Formwork	2	23-Mar-15	0%	2	24-Mar-15	31-Mar-17	01-Apr-17	564	130	0%
SD1D0130	D17 (D1d) - Pile cap Concreting	1	21-Mar-15	0%	1	21-Mar-15	11-Mar-17	11-Mar-17	548	0	0%
SD1D0140	D17 (D1d) - Pile cap Curing & Striking of Forms incl. CJ prep	6	23-Mar-15	0%	6	28-Mar-15	23-Apr-18	30-Apr-18	856	856	0%
Pier Works											
SD1D0150	D17 (D1d) - Type 5B-B Pier Scaffolding (1st Lift)	2	11-Mar-15 A	100%	0	13-Mar-15 A					100%
SD1D0160	D17 (D1d) - Type 5B-B Pier Rebarwork (1st Lift)	3	21-Mar-15	0%	3	24-Mar-15	13-Aug-15	15-Aug-15	103	0	0%
SD1D0170	D17 (D1d) - Type 5B-B Pier Formwork & Prep for Concreting (1st Lift)	3	25-Mar-15	0%	3	27-Mar-15	17-Aug-15	19-Aug-15	103	0	0%
SD1D0180	D17 (D1d) - Type 5B-B Pier Concreting (1st Lift)	1	28-Mar-15	0%	1	28-Mar-15	21-Aug-15	21-Aug-15	103	0	0%
SD1D0182	D17 (D1d) - Type 5B-B Pier Curing & Striking of Forms incl. CJ prep (*	1st Lift) 2	30-Mar-15	0%	2	31-Mar-15	22-Aug-15	24-Aug-15	103	0	0%
SD1D0190	D17 (D1d) - Type 5B-B Pier Head Scaffolding	3	01-Apr-15	0%	3	08-Apr-15	25-Aug-15	27-Aug-15	103	0	0%
SD1D0200	D17 (D1d) - Type 5B-B Pier Head Rebarwork	4	09-Apr-15	0%	4	13-Apr-15	28-Aug-15	01-Sep-15	103	0	0%
SD1D0210	D17 (D1d) - Type 5B-B Pier Head Formwork & Prep for Concreting	4	14-Apr-15	0%	4	18-Apr-15	02-Sep-15	05-Sep-15	103	0	0%
SD1D0220	D17 (D1d) - Type 5B-B Pier Head Concreting	1	20-Apr-15	0%	1	20-Apr-15	07-Sep-15	07-Sep-15	103	0	0%
SD1D0310	D17 (D1d) - Type 5B-B Pier Head Curing/Striking of Forms/Remove S	Scaffolding 6	21-Apr-15	0%	6	28-Apr-15	08-Sep-15	15-Sep-15	103	0	0%
SD1D0320	D17 (D1d) - Type 5B-B Pier Backfilling Works	4	29-Apr-15	0%	4	04-May-15	16-Sep-15	21-Sep-15	103	6	0%
Pier Head Se	gments										
SD1D0370	D17 (D1d) - Pier Head Segment - Temporary Platform	6	13-May-15	0%	6	19-May-15	22-Sep-15	29-Sep-15	97	88	0%
Pier D18 (D1c)										
Pier Works											
SD1C0150	D18 (D1c) - Type 5B-B Pier Scaffolding (1st Lift)	2	11-Mar-15 A	100%	0	13-Mar-15 A					100%
SD1C0160	D18 (D1c) - Type 5B-B Pier Rebarwork (1st Lift)	3	17-Mar-15 A	100%	0	20-Mar-15 A					100%
SD1C0170	D18 (D1c) - Type 5B-B Pier Formwork & Prep for Concreting (1st Lift)	3	20-Mar-15 A	65%	1	23-Mar-15	14-Sep-15	15-Sep-15	129	0	0%
SD1C0180	D18 (D1c) - Type 5B-B Pier Concreting (1st Lift)	1	23-Mar-15	0%	1	24-Mar-15	16-Sep-15	16-Sep-15	129	0	0%
SD1C0182	D18 (D1c) - Type 5B-B Pier Curing & Striking of Forms incl. CJ prep (1	1 st Lift) 2	24-Mar-15	0%	2	26-Mar-15	18-Sep-15	19-Sep-15	129	0	0%
SD1C0190	D18 (D1c) - Type 5B-B Pier Head Scaffolding	3	26-Mar-15	0%	3	30-Mar-15	21-Sep-15	23-Sep-15	129	0	0%
SD1C0200	D18 (D1c) - Type 5B-B Pier Head Rebarwork	4	30-Mar-15	0%	4	08-Apr-15	24-Sep-15	29-Sep-15	129	0	0%
SD1C0210	D18 (D1c) - Type 5B-B Pier Head Formwork & Prep for Concreting	4	08-Apr-15	0%	4	13-Apr-15	30-Sep-15	05-Oct-15	129	0	0%
SD1C0220	D18 (D1c) - Type 5B-B Pier Head Concreting	1	13-Apr-15	0%	1	14-Apr-15	06-Oct-15	06-Oct-15	129	0	0%
SD1C0310	D18 (D1c) - Type 5B-B Pier Head Curing/Striking of Forms/Remove S	caffolding 6	14-Apr-15	0%	6	22-Apr-15	07-Oct-15	13-Oct-15	129	0	0%
SD1C0320	D18 (D1c) - Type 5B-B Pier Backfilling Works	4	22-Apr-15	0%	4	28-Apr-15	15-Oct-15	19-Oct-15	129	11	0%
Pier Head Se	gments		I <u></u>	1		1					
SD1C0370	D18 (D1c) - Pier Head Segment - Temporary Platform	6	13-May-15	0%	6	19-May-15	20-Oct-15	27-Oct-15	118	88	0%
Pier D19 (D1b) & Abutment D						<u> </u>				
Pile Cap Wo	rks										
SD1B0092	D19 (D1b) - Pile Breakdown to cut-off etc.	7	02-Mar-15 A	100%	0	05-Mar-15 A					100%
SD1B0110	D19 (D1b) - Pile cap Formwork	3	07-Mar-15 A	100%	0	10-Mar-15 A					100%
SD1B0120	D19 (D1b) - Pile cap Rebarwork	7	17-Mar-15 A	100%	0	19-Mar-15 A					100%
	D19 (D1b) - Pile cap Kicker Formwork	3	23-Mar-15	0%	3	25-Mar-15	19-Dec-15	22-Dec-15	204	3	0%
	D19 (D1b) - Pile cap Concreting	1	21-Mar-15	0%	1	21-Mar-15	15-Dec-15	15-Dec-15	201	0	0%
	D19 (D1b) - Pile cap Curing & Striking of Forms incl. CJ prep	6	23-Mar-15	0%	6	28-Mar-15	16-Dec-15	22-Dec-15	201	0	0%
Pier Works											
	D19 (D1b) - Pier/Pier Head Scaffolding	4	30-Mar-15	0%	4	02-Apr-15	23-Dec-15	29-Dec-15	201	0	0%
	D19 (D1b) - Pier/Pier Head Rebarwork	6	08-Apr-15	0%	6	14-Apr-15		06-Jan-16	201	0	0%
			•		_	•		•			
Actual Work	Project ID: J3518DWPrE-M22 Layout: J3518-DWP-3MRP Submission - M22	Tuen Mun - C	-					Date	Revis		Checked
Planned Bar Critical Bar	Filter: TASK filters: 3-Month Lookahead, No C			•	-	-	es)	09-Mar-15 31-Mar-15			B /Y
	Milestones, No Level of Effort.	(F	Progress as	of 21-N	lar-15)					•



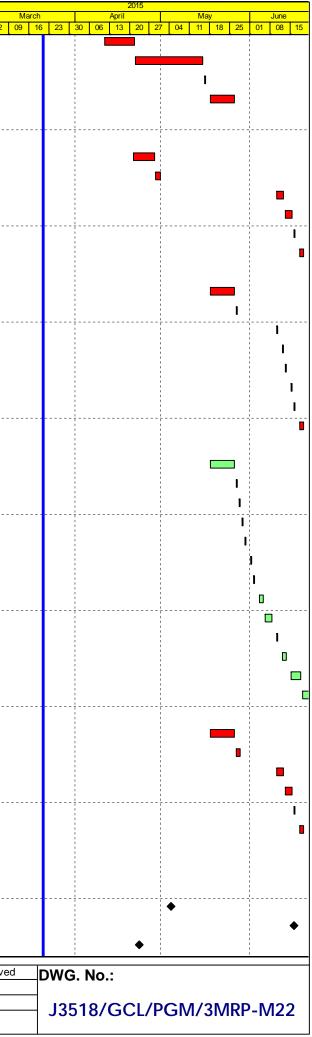
Activity ID	Activity Name		Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
00450470		lood Formwork		40 4 45				07 1 10	4E lan 40	001			23 02
	D19 (D1b) - Pier/Pier H		8	16-Apr-15	0%	8	25-Apr-15	07-Jan-16	15-Jan-16	201	0	0%	
	D19 (D1b) - Pier/Pier H		1	27-Apr-15	0%	1	27-Apr-15	16-Jan-16	16-Jan-16	201	0	0%	
	. ,	Head Curing & Striking of Forms incl. CJ prep	6	28-Apr-15	0%	6	05-May-15	18-Jan-16	23-Jan-16	201	0	0%	
Pier Head Se	<u> </u>	Comment Terrescon Distance	0	40 May 45	00/	6	40 May 45	05 lan 40	20. Jan 40	100	00	00/	
	. ,	Segment - Temporary Platform	6	13-May-15	0%	6	19-May-15	25-Jan-16	30-Jan-16	196	88	0%	
	Approach Ramp D Abutment D - Walls &	Steirease	40	01 Mor 15	00/	40	07 May 15	17 Apr 15	04 km 45	10	4E	00/	
			48	21-Mar-15	0%	48	27-May-15	17-Apr-15	24-Jun-15	18	45	0% 0%	
	AR-D - RE Walls - Ere	ct MTR boundary fence, Excavation/formation/drainage filter & botto	om 24	23-May-15	0%	24	29-Jun-15	17-Apr-15	18-May-15	-27	0	0%	
Viaduct E													
Viaduct E1	ling & Substructure												
	ling & Substructure												
	C & E1D (E1a1-2-3-4)	F1D											
	orks - E1A, E1B, E1C &												
	orks - E1C/D (E1a2/E1		6	21 Mor 15	09/	6	27 Mar 15	05-Jan-15	12 lon 15	62	0	0%	
	, ,	Marine Pile Cap M1 - Inst.Floating Seal & Casing Head Steelwork	6	21-Mar-15	0%	-	27-Mar-15		12-Jan-15	-62	0	0%	
	, , , , , , , , , , , , , , , , , , ,	Marine Pile Cap M1 - Install precast shell in position	1	28-Mar-15	0%	1	28-Mar-15	12-Jan-15	13-Jan-15	-62	0	0%	
	, , , , , , , , , , , , , , , , , , ,	Marine Pile Cap M1 - Inst. Access & make Watertight	3	30-Mar-15	0%	3	01-Apr-15	13-Jan-15	16-Jan-15	-62	0	0%	
	, , , , , , , , , , , , , , , , , , ,	Varine Pile Cap M1 - Weld Fin Plates/Plug Rebar & Concrete	9	02-Apr-15	0%	9	17-Apr-15	16-Jan-15	27-Jan-15	-62	0	0%	
	, , , , , , , , , , , , , , , , , , ,	Marine Pile Cap M1 - Dewater precast shell / Remove Lifting Frame		18-Apr-15	0%	2	20-Apr-15	27-Jan-15	29-Jan-15	-62	0	0%	
	, , , , , , , , , , , , , , , , , , ,	Marine Pile Cap M1 - Pile cut down	8	21-Apr-15	0%	8	30-Apr-15	29-Jan-15	07-Feb-15	-62	0	0%	
	, , , , , , , , , , , , , , , , , , ,	Marine Pile Cap M1 - Rebar fixing, inst.inserts etc	14	02-May-15	0%	14	19-May-15	07-Feb-15	27-Feb-15	-62	0	0%	
	, , , , , , , , , , , , , , , , , , ,	Marine Pile Cap M1 - Concreting	1	20-May-15	0%	1	20-May-15	27-Feb-15	28-Feb-15	-62	0	0%	
	, ,	Marine Pile Cap M1 - Curing incl. CJ Preparation	6	22-May-15	0%	6	29-May-15	28-Feb-15	07-Mar-15	-62	0	0%	
	E1A, E1B, E1C & E1D												
	- E1A (E1a4)			00 14 45 4	40.00/			i				1000(_
	. , ,,	Pier Temp. Support Platform	6	03-Mar-15 A	100%	0	11-Mar-15 A					100%	· · · · · · · · · · · · · · · · · · ·
		Pier Scaffolding (1st Lift)	1	12-Mar-15 A	100%	0	20-Mar-15 A					100%	
	. , ,	Pier Rebarwork (1st Lift)	3	21-Mar-15 A	0%	7	28-Mar-15	17-Jan-15	26-Jan-15	-51	0	60%	
	. , ,	Pier Formwork & Prep for Concreting (1st Lift)	3	30-Mar-15	0%	3	01-Apr-15	26-Jan-15	29-Jan-15	-51	0	0%	
	. , ,,	Pier Concreting (1st Lift)	1	02-Apr-15	0%	1	02-Apr-15	29-Jan-15	30-Jan-15	-51	0	0%	
	. , , ,,	Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	08-Apr-15	0%	2	09-Apr-15	30-Jan-15	02-Feb-15	-51	0	0%	·
	E1A (E1a4) - Type 4B		4	10-Apr-15	0%	4	14-Apr-15	02-Feb-15	06-Feb-15	-51	0	0%	
	E1A (E1a4) - Type 4B		5	16-Apr-15	0%	5	21-Apr-15	06-Feb-15	12-Feb-15	-51	0	0%	
	. ,	Pier Head Formwork & Prep for Concreting	5	22-Apr-15	0%	5	28-Apr-15	12-Feb-15	18-Feb-15	-51	0	0%	
	E1A (E1a4) - Type 4B	.	1	29-Apr-15	0%	1	29-Apr-15	18-Feb-15	23-Feb-15	-51	0	0%	
	. ,	Pier Head Curing/Striking of Forms/Remove Scaffolding	6	30-Apr-15	0%	6	07-May-15	23-Feb-15	02-Mar-15	-51	0	0%	
	- E1B (E1a3)		0	00 14-1 45 4	4000/	0	44 14-1 45 4	í í				4000/	_
	. ,	Pier Temp. Support Platform	6	03-Mar-15 A	100%	0	11-Mar-15 A					100%	_
	. , ,	Pier Scaffolding (1st Lift)	1	22-Feb-15 A	100%	0	23-Feb-15 A					100%	•
	. , ,	Pier Rebarwork (1st Lift)	2	25-Feb-15 A	100%	0	26-Feb-15 A					100%	•
	. , , ,	Pier Formwork & Prep for Concreting (1st Lift)	2	27-Feb-15 A	100%	0	28-Feb-15 A					100%	
	. , ,,	Pier Concreting (1st Lift)	1	28-Feb-15 A	100%	0	28-Feb-15 A					100%	Ľ
	, , , ,	Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	02-Mar-15 A	100%	0	06-Mar-15 A					100%	
	. ,	Pier Scaffolding (2nd Lift)	2	21-Mar-15	0%	2	23-Mar-15	29-Apr-15	02-May-15	27	0	0%	
		Pier Rebarwork (2nd Lift)	3	24-Mar-15	0%	3	26-Mar-15	02-May-15	06-May-15	27	0	0%	
	. , ,,	Pier Formwork & Prep for Concreting (2nd Lift)	2	27-Mar-15	0%	2	28-Mar-15	06-May-15	08-May-15	27	0	0%	
	. ,	Pier Concreting (2nd Lift)	1	30-Mar-15	0%	1	30-Mar-15	08-May-15	09-May-15	27	0	0%	
SE1A3242	E1B (E1a3) - Type 4B	Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	31-Mar-15	0%	2	01-Apr-15	09-May-15	13-May-15	27	0	0%	1
Actual Work			uen Mun - C	hek Lap Kok l	_ink - Sou	thern (Connection		Date	Revis	sion 0	Checked	Approve
Planned Bar		Layout: J3518-DWP-3MRP Submission - M22_ 3-M		ing Program				es)	09-Mar-15		D		
Critical Bar		Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.		Progress as	•	-	-	-	31-Mar-15		W	Y	
Milestone			•										



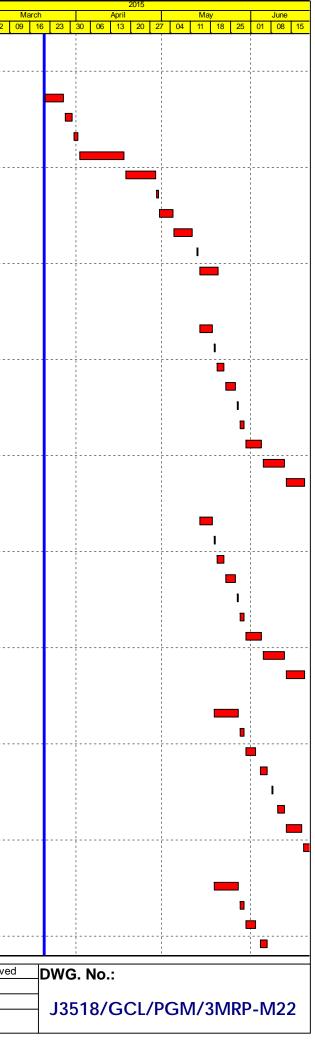
ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
	SE1A3300 E1B (E1a3) - Type 4B Pier Head Scaffolding	4	02-Apr-15	0%	4	10-Apr-15	13-May-15	18-May-15	27	0	0%
	SE1A3310 E1B (E1a3) - Type 4B Pier Head Rebarwork	5	11-Apr-15	0%	5	17-Apr-15	18-May-15	26-May-15	27	0	0%
	SE1A3320 E1B (E1a3) - Type 4B Pier Head Formwork & Prep for Concreting	5	18-Apr-15	0%	5	24-Apr-15	26-May-15	01-Jun-15	27	0	0%
	SE1A3330 E1B (E1a3) - Type 4B Pier Head Concreting	1	25-Apr-15	0%	1	25-Apr-15	01-Jun-15	02-Jun-15	27	0	0%
	SE1A3340 E1B (E1a3) - Type 4B Pier Head Curing/Striking of Forms/Remove Scaffolding	6	27-Apr-15	0%	6	04-May-15	02-Jun-15	12-Jun-15	27	0	0%
	Pier Works - E1C (E1a2)										
	SE1A2170 E1C (E1a2) - Type 4B Pier Temp. Support Platform	6	22-May-15	0%	6	29-May-15	07-Aug-15	15-Aug-15	55	0	0%
	SE1A2172 E1C (E1a2) - Type 4B Pier Scaffolding (1st Lift)	1	30-May-15	0%	1	30-May-15	15-Aug-15	17-Aug-15	55	0	0%
	SE1A2180 E1C (E1a2) - Type 4B Pier Rebarwork (1st Lift)	2	01-Jun-15	0%	2	02-Jun-15	17-Aug-15	19-Aug-15	55	0	0%
	SE1A2190 E1C (E1a2) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	04-Jun-15	0%	2	05-Jun-15	19-Aug-15	22-Aug-15	55	0	0%
	SE1A2200 E1C (E1a2) - Type 4B Pier Concreting (1st Lift)	1	06-Jun-15	0%	1	06-Jun-15	22-Aug-15	24-Aug-15	55	0	0%
	SE1A2202 E1C (E1a2) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	08-Jun-15	0%	2	10-Jun-15	24-Aug-15	28-Aug-15	57	0	0%
	SE1A2210 E1C (E1a2) - Type 4B Pier Scaffolding (2nd Lift)	2	12-Jun-15	0%	2	13-Jun-15	28-Aug-15	31-Aug-15	57	0	0%
	SE1A2220 E1C (E1a2) - Type 4B Pier Rebarwork (2nd Lift)	3	15-Jun-15	0%	3	18-Jun-15	31-Aug-15	03-Sep-15	57	0	
	SE1A2230 E1C (E1a2) - Type 4B Pier Formwork & Prep for Concreting (2nd Lift)	2	19-Jun-15	0%	2	22-Jun-15	03-Sep-15	05-Sep-15	57	0	0%
	Pier Works - E1D (E1a1)										
	SE1A1170 E1D (E1a1) - Type 4B Pier Temp. Support Platform	6	22-May-15	0%	6	29-May-15	28-Feb-15	07-Mar-15	-62	0	0%
	SE1A1172 E1D (E1a1) - Type 4B Pier Scaffolding (1st Lift)	1	30-May-15	0%	1	30-May-15	07-Mar-15	09-Mar-15	-62	0	0%
	SE1A1180 E1D (E1a1) - Type 4B Pier Rebarwork (1st Lift)	2	01-Jun-15	0%	2	02-Jun-15	09-Mar-15	11-Mar-15	-62	0	- 0%
	SE1A1190 E1D (E1a1) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	1	04-Jun-15	0%	1	04-Jun-15	11-Mar-15	12-Mar-15	-62	0	0%
	SE1A1200 E1D (E1a1) - Type 4B Pier Concreting (1st Lift)	1	05-Jun-15	0%	1	05-Jun-15	12-Mar-15	13-Mar-15	-62	0	0%
	SE1A1202 E1D (E1a1) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	06-Jun-15	0%	2	08-Jun-15	13-Mar-15	16-Mar-15	-62	0	0%
	SE1A1210 E1D (E1a1) - Type 4B Pier Scaffolding (2nd Lift)	2	10-Jun-15	0%	2	12-Jun-15	16-Mar-15	18-Mar-15	-62	0	0%
	SE1A1220 E1D (E1a1) - Type 4B Pier Rebarwork (2nd Lift)	3	13-Jun-15	0%	3	16-Jun-15	18-Mar-15	21-Mar-15	-62	0	0%
	SE1A1230 E1D (E1a1) - Type 4B Pier Formwork & Prep for Concreting (2nd Lift)	2	18-Jun-15	0%	2	19-Jun-15	21-Mar-15	24-Mar-15	-62	0	0%
-	Pier Head Segments - E1A, E1B, E1C & E1D			0,0	_			21.11.0.10		Ū	0,0
	Pier Head Segments - E1A (E1a4)										
	SE1A4370 E1A (E1a4) - Pier Head Segment - Temporary Platform	2	08-May-15	0%	2	09-Mav-15	02-Mar-15	04-Mar-15	-51	22	0%
	SE1A4372 E1A (E1a4) - Pier Head Segment Lift & Fix (1 seg)	2	12-Jun-15	0%	2	,	04-Mar-15	06-Mar-15	-73	0	
	SE1A4374 E1A (E1a4) - Pier Head Segment Diaphragm - Rebar	12	15-Jun-15	0%	12	03-Jul-15	06-Mar-15	20-Mar-15	-72	0	0%
	Pier Head Segments - E1B (E1a3)			070	12			20 Mai 10		Ŭ	070
	SE1A3370 E1B (E1a3) - Pier Head Segment - Temporary Platform	2	05-May-15	0%	2	06-May-15	12- lun-15	15-Jun-15	27	25	0%
	SE1A3372 E1B (E1a3) - Pier Head Segment Lift & Fix (1 seg)	2	12-Jun-15	0%	2	13-Jun-15	15-Jun-15	18-Jun-15	2	0	0%
	SE1A3374 E1B (E1a3) - Pier Head Segment Diaphragm - Rebar	12	15-Jun-15	0%	12	03-Jul-15	18-Jun-15	07-Jul-15	2	0	
F	E2A, E2B, E2C & E2D (E1b1-2-3-4)			070					-	Ŭ	070
	Pile Cap Works - E2A, E2B, E2C & E2D										
	Pile Cap Works - E2A (E1b4)										
	SE1B4120 E2A (E1b4) - Marine Pile Cap M1 - Dewater precast shell / Remove Lifting Frame	2	21-Mar-15	0%	2	23-Mar-15	07-Jan-15	08-Jan-15	-60	0	0%
	SE1B4130 E2A (E1b4) - Marine Pile Cap M1 - Pile cut down	8	24-Mar-15	0%	8	01-Apr-15	09-Jan-15	17-Jan-15	-60	0	0%
	SE1B4140 E2A (E1b4) - Marine Pile Cap M1 - Rebar fixing, inst.inserts etc	10	02-Apr-15	0%	10	18-Apr-15	19-Jan-15	29-Jan-15	-60	0	0%
	SE1B4150 E2A (E1b4) - Marine Pile Cap M1 - Concreting	10	20-Apr-15	0%	1	20-Apr-15	30-Jan-15	30-Jan-15	-60	0	0%
-	SE1B4160 E2A (E1b4) - Marine Pile Cap M1 - Curing incl. CJ Preparation	6	21-Apr-15	0%	6	28-Apr-15	31-Jan-15	06-Feb-15	-60	0	0%
	Pile Cap Works - E2B (E1b3)	0	21-Apr-13	070	0	20-Api-13	51-5an-15	00-1 60-10	-00	U	078
	SE1B3070 E2B (E1b3) - Marine Pile Cap M1 - Inst.Floating Seal & Casing Head Steelwork	6	03-Mar-15 A	100%	0	15-Mar-15 A	i			ĺ	100%
	SE1B3070 E2B (E1b3) - Marine Pile Cap M1 - Install precast shell in position	0	16-Mar-15 A	100%	0	16-Mar-15 A					100%
	SE1B3080 E2B (E1b3) - Marine Pile Cap M1 - Install precast shell in position SE1B3090 E2B (E1b3) - Marine Pile Cap M1 - Inst.Access & make Watertight	3	21-Mar-15 A	0%	3		29-Dec-14	31-Dec-14	-67	0	0%
										-	
	SE1B3100 E2B (E1b3) - Marine Pile Cap M1 - Weld Fin Plates/Plug Rebar & Concrete	9	25-Mar-15	0%	9	08-Apr-15	02-Jan-15	12-Jan-15	-67	0	0%
	SE1B3120 E2B (E1b3) - Marine Pile Cap M1 - Dewater precast shell / Remove Lifting Frame	2	09-Apr-15	0%	2	10-Apr-15	13-Jan-15	14-Jan-15	-67	0	0%
	Actual Work Project ID: J3518DWPrE-M22	Tuen Mun - C	hek Lap Kok I	Link - Sou	thern (Connection		Date	Revis		Checked
	Planned Bar Layout: J3518-DWP-3MRP Submission - M22_ 3	-Month Rolli	ng Program	me (Pa	ae 30	of 41 Pag	les)	09-Mar-15		D	В
	Critical Bar Filter: TASK filters: 3-Month Lookahead, No CC				90.00	U TI Ug	,00)	31-Mar-15		W	



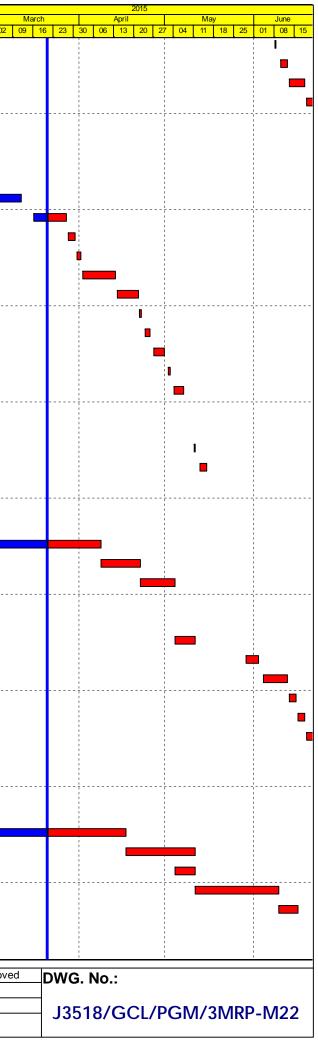
	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complet	ete
	SE1B3130 E2B (E1b3) - Marine Pile Cap M1 - Pile cut down	8	 11-Apr-15	0%	8	21-Apr-15	15-Jan-15	23-Jan-15	-67	0	0%	2 %
	SE1B3140 E2B (E1b3) - Marine Pile Cap M1 - Rebar fixing, inst.inserts etc	18	22-Apr-15	0%	18	15-May-15	24-Jan-15	13-Feb-15	-67	0	0%	
	SE1B3150 E2B (E1b3) - Marine Pile Cap M1 - Concreting	1	16-May-15	0%	1	16-May-15		14-Feb-15	-67	0	0%	
	SE1B3160 E2B (E1b3) - Marine Pile Cap M1 - Curing incl. CJ Preparation	6	18-May-15	0%	6	26-May-15		25-Feb-15	-67	0	0%	
	ier Works - E2A, E2B, E2C & E2D	0		070	U	20 May 10	101 00 10	2010010	01		07	
	Pier Works - E2A (E1b4)											
	SE1B4170 E2A (E1b4) - Type 4B Pier Temp. Support Platform	6	21-Apr-15	0%	6	28-Apr-15	31-Jan-15	06-Feb-15	-60	0	0%	%
	SE1B4172 E2A (E1b4) - Type 4B Pier Scaffolding (1st Lift)	2	29-Apr-15	0%	2	30-Apr-15	07-Feb-15	09-Feb-15	-60	28	0%	
	SE1B4180 E2A (E1b4) - Type 4B Pier Rebarwork (1st Lift)	2	10-Jun-15	0%	2	12-Jun-15	10-Feb-15	11-Feb-15	-88	0	0%	
	SE1B4190 E2A (E1b4) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	13-Jun-15	0%	2	15-Jun-15	12-Feb-15	13-Feb-15	-88	0	0%	
	SE1B4200 E2A (E1b4) - Type 4B Pier Concreting (1st Lift)	1	16-Jun-15	0%	1	16-Jun-15	14-Feb-15	14-Feb-15	-88	0	0%	
	SE1B4202 E2A (E1b4) - Type 4B Pier Curing & Striking of Forms ind. CJ prep (1st Lift)	2	18-Jun-15	0%	2	19-Jun-15	16-Feb-15	17-Feb-15	-88	0	0%	
	Pier Works - E2B (E1b3)	2	10-Juli-15	0 %	2	19-Juli-15	10-Feb-13	17-Feb-15	-00	0	07	/0
	SE1B3170 E2B (E1b3) - Type 4B Pier Temp. Support Platform	6	18-May-15	0%	6	26-May-15	20-Mar-15	27-Mar-15	42	0	0%	0/.
		1			0				-42			
	SE1B3172 E2B (E1b3) - Type 4B Pier Scaffolding (1st Lift)		27-May-15	0%		27-May-15		28-Mar-15	-42	9	0%	
	SE1B3180 E2B (E1b3) - Type 4B Pier Rebarwork (1st Lift)	1	10-Jun-15	0%	1	10-Jun-15	28-Mar-15	30-Mar-15	-51	0	0%	
	SE1B3190 E2B (E1b3) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	1	12-Jun-15	0%	1	12-Jun-15	30-Mar-15	31-Mar-15	-51	0	0%	
	SE1B3200 E2B (E1b3) - Type 4B Pier Concreting (1st Lift)	1	13-Jun-15	0%	1	13-Jun-15	31-Mar-15	01-Apr-15	-51	0	0%	
	SE1B3202 E2B (E1b3) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	1	15-Jun-15	0%	1	15-Jun-15	01-Apr-15	02-Apr-15	-51	0	0%	
	SE1B3210 E2B (E1b3) - Type 4B Pier Scaffolding (2nd Lift)	1	16-Jun-15	0%	1	16-Jun-15	02-Apr-15	08-Apr-15	-51	0	0%	
	SE1B3220 E2B (E1b3) - Type 4B Pier Rebarwork (2nd Lift)	2	18-Jun-15	0%	2	19-Jun-15	08-Apr-15	10-Apr-15	-51	0	0%	%
P	Pier Works - E2C (E1b1)	1										
	SE1B1170 E2C (E1b1) - Type 4B Pier Temp. Support Platform	6	18-May-15	0%	6	26-May-15	22-Jul-15	31-Jul-15	47	0	0%	%
:	SE1B1172 E2C (E1b1) - Type 4B Pier Scaffolding (1st Lift)	1	27-May-15	0%	1	27-May-15	01-Aug-15	01-Aug-15	47	0	0%	%
:	SE1B1180 E2C (E1b1) - Type 4B Pier Rebarwork (1st Lift)	1	28-May-15	0%	1	28-May-15	03-Aug-15	03-Aug-15	47	0	0%	%
:	SE1B1190 E2C (E1b1) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	1	29-May-15	0%	1	29-May-15	04-Aug-15	04-Aug-15	47	0	0%	%
:	SE1B1200 E2C (E1b1) - Type 4B Pier Concreting (1st Lift)	1	30-May-15	0%	1	30-May-15	05-Aug-15	05-Aug-15	47	0	0%	%
	SE1B1202 E2C (E1b1) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	1	01-Jun-15	0%	1	01-Jun-15	06-Aug-15	06-Aug-15	47	0	0%	%
:	SE1B1212 E2C (E1b1) - Type 4B Pier Scaffolding (2nd Lift)	1	02-Jun-15	0%	1	02-Jun-15	07-Aug-15	07-Aug-15	47	0	0%	%
:	SE1B1220 E2C (E1b1) - Type 4B Pier Rebarwork (2nd Lift)	2	04-Jun-15	0%	2	05-Jun-15	08-Aug-15	10-Aug-15	47	0	0%	%
	SE1B1230 E2C (E1b1) - Type 4B Pier Formwork & Prep for Concreting (2nd Lift)	2	06-Jun-15	0%	2	08-Jun-15	12-Aug-15	13-Aug-15	47	0	0%	%
:	SE1B1240 E2C (E1b1) - Type 4B Pier Concreting (2nd Lift)	1	10-Jun-15	0%	1	10-Jun-15	14-Aug-15	14-Aug-15	47	0	0%	%
:	SE1B1242 E2C (E1b1) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	12-Jun-15	0%	2	13-Jun-15	15-Aug-15	17-Aug-15	47	0	0%	%
	SE1B1300 E2C (E1b1) - Type 4B Pier Head Scaffolding	3	15-Jun-15	0%	3	18-Jun-15	18-Aug-15	21-Aug-15	47	0	0%	%
	SE1B1310 E2C (E1b1) - Type 4B Pier Head Rebarwork	5	19-Jun-15	0%	5	27-Jun-15	22-Aug-15	27-Aug-15	47	0	0%	%
P	Pier Works - E2D (E1b2)											
	SE1B2170 E2D (E1b2) - Type 4B Pier Temp. Support Platform	6	18-May-15	0%	6	26-May-15	16-Feb-15	25-Feb-15	-67	0	0%	%
:	SE1B2172 E2D (E1b2) - Type 4B Pier Scaffolding (1st Lift)	2	27-May-15	0%	2	28-May-15	26-Feb-15	27-Feb-15	-67	8	0%	%
:	SE1B2180 E2D (E1b2) - Type 4B Pier Rebarwork (1st Lift)	2	10-Jun-15	0%	2	12-Jun-15	28-Feb-15	02-Mar-15	-75	0	0%	%
	SE1B2190 E2D (E1b2) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	13-Jun-15	0%	2	15-Jun-15	03-Mar-15	04-Mar-15	-75	0	0%	%
	SE1B2200 E2D (E1b2) - Type 4B Pier Concreting (1st Lift)	1	16-Jun-15	0%	1	16-Jun-15	05-Mar-15	05-Mar-15	-75	0	0%	%
	SE1B2202 E2D (E1b2) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	18-Jun-15	0%	2	19-Jun-15	06-Mar-15	07-Mar-15	-75	0	0%	
	Juct E2											
	dge E2 - Piling & Substructure											
	lestones											
	FXX077-1 E5 (E2c) - Completion of piling works	0		0%	0	04-May-15		28-Mar-15	-26	0	0%	
	FXX077-2 E6 (E2d) - Completion of piling works	0		0%	0	16-Jun-15		15-Jun-15	-1	41	0%	
	FXX077-4 E8 (E2f) - Completion of piling works	0		0%	0	23-Apr-15		12-Jun-15	41	109	0%	
					_	•				103		
A	Levent 12540 DW/D 2MDD Outeringing M00	Tuen Mun - Cl	•					Date	Revis		Checked	1
	Planned Bar Layout: J3518-DWP-3MRP Submission - M22_ 3-	Month Rollin	na Proaran	nme (Pa	ae 31	of 41 Pag	ies)	09-Mar-15		D		
P	Critical Bar Filter: TASK filters: 3-Month Lookahead, No CC		rogress as	• •	-	-		31-Mar-15	1	IW		



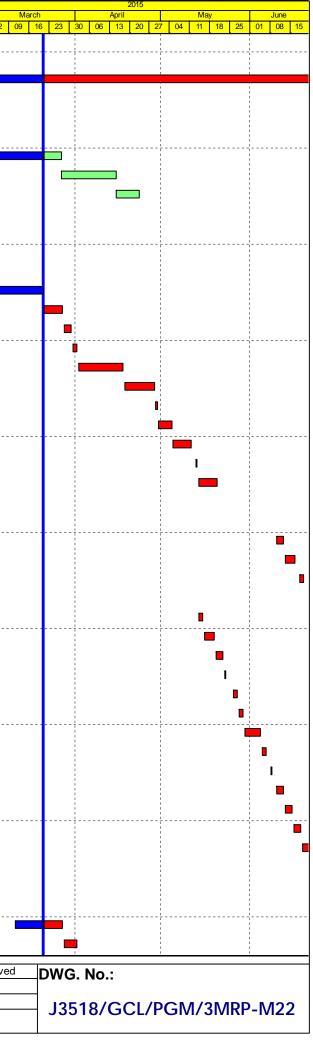
34 E2P	3, E3C & E3D (E2a - 1/2/3/4)										
	p Works - E3A,E3B, E3C & E3D										
	ap Works										
_	1090 E3 (E2a1/2/3/4)- Marine Pile Cap - Inst.Access & make Watertight	6	21-Mar-15	0%	6	27-Mar-15	16-Dec-14	22-Dec-14	-76	0	0
	1100 E3 (E2a1/2/3/4) - Marine Pile Cap - Weld Fin Plates / Plug Rebar & Concrete	2	28-Mar-15	0%	2	30-Mar-15		22-Dec-14 24-Dec-14	-76	0	0
	1110 E3 (E2a1/2/3/4)- Marine Pile Cap - Dewater precast shell / Remove Lifting Frame	2	31-Mar-15	0%	2	01-Apr-15		29-Dec-14	-76	0	0
	1120 E3 (E2a1/2/3/4)- Marine Pile Cap - Pile cut down 6nr	9	02-Apr-15	0%	9	17-Apr-15	30-Dec-14	09-Jan-15	-76	0	C
	1130 E3 (E2a1/2/3/4)- Marine Pile Cap - Pile Cat down on 1130 E3 (E2a1/2/3/4)- Marine Pile Cap - Rebar fixing (1st pour)	8	18-Apr-15	0%	8	28-Apr-15	10-Jan-15	19-Jan-15	-76	0	0
	1140 E3 (E2a1/2/3/4)- Marine Pile Cap - Concreting (First pour)	1	29-Apr-15	0%	1	29-Apr-15	20-Jan-15	20-Jan-15	-76	0	0
		3	30-Apr-15	0%	3	04-May-15	20-Jan-15 21-Jan-15	20-Jan-15 23-Jan-15	-76	0	0
	1150 E3 (E2a1/2/3/4)- Marine Pile Cap - CJ preparation		· · ·		6					0	0
	1160 E3 (E2a1/2/3/4)- Marine Pile Cap - Rebar fixing (Final pour)	6	05-May-15	0%	0 1	11-May-15	24-Jan-15	30-Jan-15	-76	0	
	1162 E3 (E2a1/2/3/4)- Marine Pile Cap - Concreting (Final pour)	1	13-May-15	0%	-	13-May-15	31-Jan-15	31-Jan-15	-76		
	1164 E3 (E2a1/2/3/4)- Marine Pile Cap - Curing incl. CJ preparation	6	14-May-15	0%	6	20-May-15	02-Feb-15	07-Feb-15	-76	0	C
	orks - E3A,E3B, E3C & E3D										
	orks - E3A (E2a4)										
	4170 E3A (E2a4) - Type 4B Pier Temp. Support Platform	4	14-May-15	0%	4	18-May-15		07-Feb-15	-74	0	C
	4172 E3A (E2a4) - Type 4B Pier Scaffolding (1st Lift)	1	19-May-15	0%	1	19-May-15		09-Feb-15	-74	0	C
	4180 E3A (E2a4) - Type 4B Pier Rebarwork (1st Lift)	2	20-May-15	0%	2	22-May-15		11-Feb-15	-74	0	C
	4190 E3A (E2a4) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	23-May-15	0%	2	26-May-15	12-Feb-15	14-Feb-15	-73	0	0
	4200 E3A (E2a4) - Type 4B Pier Concreting (1st Lift)	1	27-May-15	0%	1	27-May-15	16-Feb-15	16-Feb-15	-73	0	0
	4202 E3A (E2a4) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	28-May-15	0%	2	29-May-15	17-Feb-15	18-Feb-15	-73	0	C
	4300 E3A (E2a4) - Type 4B Pier Head Scaffolding	4	30-May-15	0%	4	04-Jun-15	23-Feb-15	26-Feb-15	-73	0	C
SE2A4	4310 E3A (E2a4) - Type 4B Pier Head Rebarwork	5	05-Jun-15	0%	5	12-Jun-15	27-Feb-15	04-Mar-15	-73	0	0
SE2A4	4320 E3A (E2a4) - Type 4B Pier Head Formwork & Prep for Concreting	5	13-Jun-15	0%	5	19-Jun-15	05-Mar-15	10-Mar-15	-73	0	0
Pier Wo	orks - E3B (E2a3)	,	,					,		,	
SE2A3	3170 E3B (E2a3) - Type 4B Pier Temp. Support Platform	4	14-May-15	0%	4	18-May-15	16-Feb-15	25-Feb-15	-62	0	C
SE2A3	3172 E3B (E2a3) - Type 4B Pier Scaffolding (1st Lift)	1	19-May-15	0%	1	19-May-15	26-Feb-15	26-Feb-15	-62	0	C
SE2A3	3180 E3B (E2a3) - Type 4B Pier Rebarwork (1st Lift)	2	20-May-15	0%	2	22-May-15	27-Feb-15	28-Feb-15	-62	0	C
SE2A3	3190 E3B (E2a3) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	23-May-15	0%	2	26-May-15	02-Mar-15	04-Mar-15	-61	0	C
SE2A3	3200 E3B (E2a3) - Type 4B Pier Concreting (1st Lift)	1	27-May-15	0%	1	27-May-15	05-Mar-15	05-Mar-15	-61	0	C
SE2A3	3202 E3B (E2a3) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	28-May-15	0%	2	29-May-15	06-Mar-15	07-Mar-15	-61	0	C
SE2A3	3300 E3B (E2a3) - Type 4B Pier Head Scaffolding	4	30-May-15	0%	4	04-Jun-15	09-Mar-15	12-Mar-15	-61	0	C
SE2A3	3310 E3B (E2a3) - Type 4B Pier Head Rebarwork	5	05-Jun-15	0%	5	12-Jun-15	13-Mar-15	19-Mar-15	-60	0	C
SE2A3	3320 E3B (E2a3) - Type 4B Pier Head Formwork & Prep for Concreting	5	13-Jun-15	0%	5	19-Jun-15	20-Mar-15	25-Mar-15	-60	0	C
Pier W	orks - E3C (E2a2)	1	,	,					,		
SE2A2	2170 E3C (E2a2) - Type 4B Pier Temp. Support Platform	6	19-May-15	0%	6	27-May-15	27-Feb-15	10-Mar-15	-57	0	(
SE2A2	2172 E3C (E2a2) - Type 4B Pier Scaffolding (1st Lift)	2	28-May-15	0%	2	29-May-15	11-Mar-15	12-Mar-15	-57	0	0
SE2A2	2180 E3C (E2a2) - Type 4B Pier Rebarwork (1st Lift)	3	30-May-15	0%	3	02-Jun-15	13-Mar-15	16-Mar-15	-57	0	C
SE2A2	2190 E3C (E2a2) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	3	04-Jun-15	0%	3	06-Jun-15	17-Mar-15	19-Mar-15	-57	0	C
SE2A2	2200 E3C (E2a2) - Type 4B Pier Concreting (1st Lift)	1	08-Jun-15	0%	1	08-Jun-15	20-Mar-15	20-Mar-15	-57	0	C
SE2A2	2202 E3C (E2a2) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	10-Jun-15	0%	2	12-Jun-15	21-Mar-15	23-Mar-15	-57	0	C
SE2A2	2300 E3C (E2a2) - Type 4B Pier Head Scaffolding	4	13-Jun-15	0%	4	18-Jun-15	24-Mar-15	27-Mar-15	-57	0	C
SE2A2	2310 E3C (E2a2) - Type 4B Pier Head Rebarwork	5	19-Jun-15	0%	5	27-Jun-15	28-Mar-15	02-Apr-15	-57	0	C
Pier We	orks - E3D (E2a1)										
SE2A	1170 E3D (E2a1) - Type 4B Pier Temp. Support Platform	6	19-May-15	0%	6	27-May-15	18-Mar-15	26-Mar-15	-43	0	C
SE2A	1172 E3D (E2a1) - Type 4B Pier Scaffolding (1st Lift)	2	28-May-15	0%	2	29-May-15	27-Mar-15	28-Mar-15	-43	0	C
	1180 E3D (E2a1) - Type 4B Pier Rebarwork (1st Lift)	3	30-May-15	0%	3	02-Jun-15	30-Mar-15	01-Apr-15	-43	0	C
	1190 E3D (E2a1) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	3	04-Jun-15	0%	3	06-Jun-15	02-Apr-15	09-Apr-15	-43	0	C
							· ·				
Actual Wo	Lawards 12540 DWD 2MBB Culturing M02	Tuen Mun - C	•)	Date 09-Mar-15	Revis	sion (D	Checked
Planned B	ar Filter: TASK filters: 3-Month Lookahead, No CO	Month Rolli	ng Program	nme (Pag	ge 32	of 41 Pag	jes)	09-Mar-15 31-Mar-15			VY VY



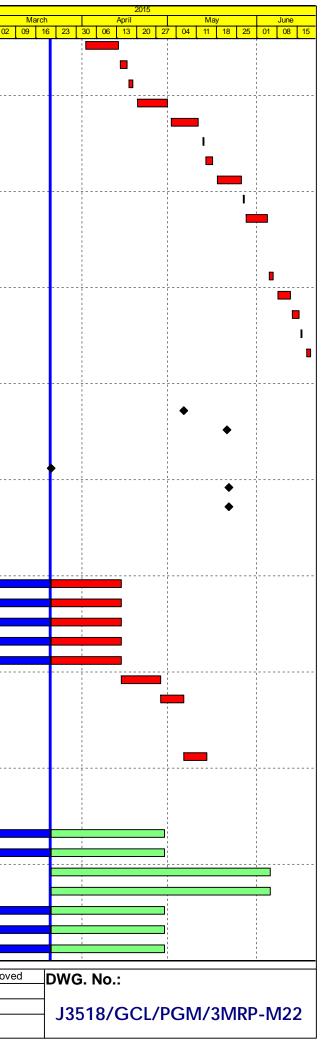
Activity ID		Activity Name		Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
					Start	Complete	Dum.							23 02
S	SE2A1200	E3D (E2a1) - Type 4B	Pier Concreting (1st Lift)	1	08-Jun-15	0%	1	08-Jun-15	10-Apr-15	10-Apr-15	-43	0	0%	
S	SE2A1202	E3D (E2a1) - Type 4B	Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	10-Jun-15	0%	2	12-Jun-15	11-Apr-15	13-Apr-15	-43	0	0%	
S	SE2A1300	E3D (E2a1) - Type 4B	Pier Head Scaffolding	4	13-Jun-15	0%	4	18-Jun-15	14-Apr-15	18-Apr-15	-43	0	0%	
S	SE2A1310	E3D (E2a1) - Type 4B	Pier Head Rebarwork	5	19-Jun-15	0%	5	27-Jun-15	20-Apr-15	25-Apr-15	-43	0	0%	
	& E4B (E	,												
Pile	e Cap Wo	rks - E4A & E4B												
	ile Cap Wo				,	,	,	,						
			Pile Cap - Inst.Floating Seal & Casing Head Steelwork	6	06-Feb-15 A	100%	0	27-Feb-15 A					100%	
		. ,	Pile Cap - Install precast shell in position (3 units)	4	28-Feb-15 A	100%	0	12-Mar-15 A					100%	
		. ,	Pile Cap - Inst.Access & make Watertight	6	16-Mar-15 A	0%	6	27-Mar-15	20-Dec-14	30-Dec-14	-72	0	50%	
		. ,	Pile Cap - Weld Fin Plates / Plug Rebar & Concrete	2	28-Mar-15	0%	2	30-Mar-15	30-Dec-14	02-Jan-15	-72	0	0%	
		. ,	Pile Cap - Dewater precast shell / Remove Lifting Frame	2	31-Mar-15	0%	2	01-Apr-15	02-Jan-15	05-Jan-15	-72	0	0%	
		. ,	Pile Cap - Pile cut down 4nr	6	02-Apr-15	0%	6	13-Apr-15	05-Jan-15	12-Jan-15	-72	0	0%	
		. ,	Pile Cap - Rebar fixing (1st pour)	6	14-Apr-15	0%	6	21-Apr-15	12-Jan-15	19-Jan-15	-72	0	0%	
		. ,	Pile Cap - Concreting (First pour)	1	22-Apr-15	0%	1	22-Apr-15	19-Jan-15	20-Jan-15	-72	0	0%	
		. ,	Pile Cap - CJ preparation	2	24-Apr-15	0%	2	25-Apr-15	20-Jan-15	22-Jan-15	-72	0	0%	
		. ,	Pile Cap - Rebar fixing (Final pour)	4	27-Apr-15	0%	4	30-Apr-15	22-Jan-15	27-Jan-15	-72	0	0%	
		. ,	Pile Cap - Concreting (Final pour)	1	02-May-15	0%	1	02-May-15	27-Jan-15	28-Jan-15	-72	0	0%	
S	SE2B0164	E4 (E2b1/2) - Marine I	Pile Cap - Curing incl. CJ preparation	4	04-May-15	0%	4	07-May-15	28-Jan-15	02-Feb-15	-72	2	0%	
Pie	er Works -	E4A & E4B												
		- E4A (E2b2)			,	,	,	÷	,		÷			
		. , ,	Pier Falsework & Scaffolding (1st wall pour)	1	11-May-15	0%	1	11-May-15	02-Feb-15	03-Feb-15	-74	0	0%	
S	SE2B2030	E4A (E2b2) - Seagull P	Pier Rebar Fixing (1st wall pour)	3	13-May-15	0%	3	15-May-15	03-Feb-15	06-Feb-15	-74	30	0%	
E5A	& E5B (E	2c - 1/2)												
		Works - E5A & E5B												
	oundation					,								
		E5 (E2c) - Bored Piles	· · · ·	74	02-Feb-15 A	84%	12	· ·	14-Feb-15	04-Mar-15	-26	0	84%	
		E5 (E2c) - Sonic & Inte		12	08-Apr-15	0%	12	22-Apr-15	04-Mar-15	18-Mar-15	-26	0	0%	
		. ,	emporary Removable Piling Platform	9	22-Apr-15	0%	9	04-May-15	18-Mar-15	28-Mar-15	-26	0	0%	
		rks - E5A & E5B												
	ile Cap Wo					·	·							
		. ,	Pile Cap - Inst.Floating Seal & Casing Head Steelwork	6	04-May-15	0%	6		28-Mar-15	09-Apr-15	-24	12	0%	
		. ,	Pile Cap - Install precast shell in position (3 units)	4	29-May-15	0%	4	02-Jun-15	09-Apr-15	14-Apr-15	-37	0	0%	
		. ,	Pile Cap - Inst.Access & make Watertight	6	04-Jun-15	0%	6	12-Jun-15	14-Apr-15	22-Apr-15	-37	0	0%	
		. ,	Pile Cap - Weld Fin Plates / Plug Rebar & Concrete	2	13-Jun-15	0%	2	15-Jun-15	22-Apr-15	25-Apr-15	-37	0	0%	
		. ,	Pile Cap - Dewater precast shell / Remove Lifting Frame	2	16-Jun-15	0%	2	18-Jun-15	25-Apr-15	28-Apr-15	-37	0	0%	
		, ,	Pile Cap - Pile cut down 4nr	9	19-Jun-15	0%	9	03-Jul-15	28-Apr-15	09-May-15	-37	0	0%	
	& E6B (E	,												
		Works - E6A & E6B												
	oundation					;			,,					
		E6 (E2d) - Confirm Ro		8	14-Feb-15 A	100%	0	24-Feb-15 A					100%	
		E6 (E2d) - Bored Piles		72	24-Feb-15 A	73%	19	· ·	20-Mar-15	16-Apr-15	-1	0	73%	
		E6 (E2d) - Sonic & Inte	-	19	17-Apr-15	0%	19	11-May-15	16-Apr-15	09-May-15	-1	0	0%	
			bored pile for Full Depth Coring	6	04-May-15	0%	6	11-May-15	02-May-15	09-May-15	-1	0	0%	
		. ,	Full Depth Coring & Testing	24	11-May-15	0%	24	09-Jun-15	09-May-15	08-Jun-15	-1	0	0%	
		. ,	emporary Removable Piling Platform	6	09-Jun-15	0%	6	16-Jun-15	08-Jun-15	15-Jun-15	-1	0	0%	
	& E7B (E													
Fo	undation	Works - E7A & E7B												
Act	tual Work		Project ID: J3518DWPrE-M22	Tuen Mun - C	hek Lap Kok	_ink - Sou	thern (Connection		Date	Revi	sion (Checked	Approv
	anned Bar		Layout: J3518-DWP-3MRP Submission - M22_	3-Month Rollin	-				es)	09-Mar-15		D		
	ritical Bar		Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.		Progress as	• •	-	-	-	31-Mar-15		M	Υ	
	ilestone			•	-					1				



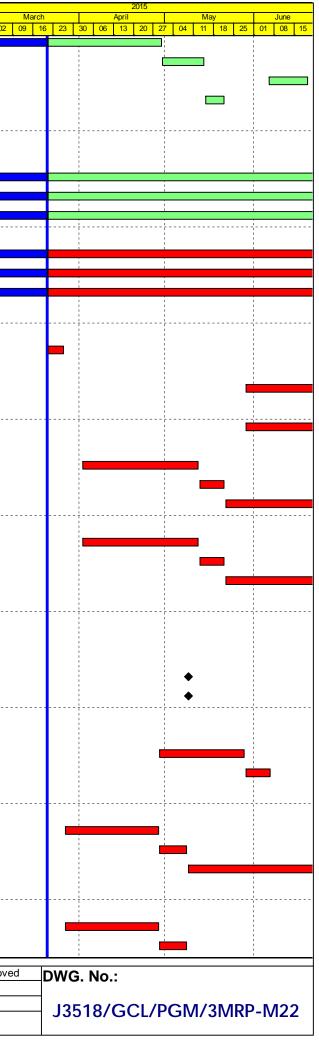
	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
Foundatio	on Works										
GFXX05	E7 (E2e) - Relocation & Install, Temporary Removable Platform from E11	to E7 6	18-Feb-15 A	100%	0	27-Feb-15 A					100%
GFXX057	E7 (E2e) - Bored Piles (2.50m dia. x 4 nr)	78	10-Feb-15 A	5%	74	24-Jun-15	29-Nov-14	03-Mar-15	-90	0	0%
E8A & E8B ((E2f - 1/2)					1					
Foundation	n Works - E8A & E8B										
Foundatio	on Works										
GFXX062	E8 (E2f) - Bored Piles (2.50m dia. x 4 nr)	102	24-Dec-14 A	95%	5	27-Mar-15	14-May-15	20-May-15	41	0	40%
GFXX063	B E8 (E2f) - Sonic & Interface Coring	12	27-Mar-15	0%	12	15-Apr-15	20-May-15	04-Jun-15	41	0	0%
GFXX064	E8 (E2f) - Dismantle Temporary Removable Piling Platform	7	15-Apr-15	0%	7	23-Apr-15	04-Jun-15	12-Jun-15	41	0	0%
E9A & E9B ((E2g - 1/2)		,			1					
Pile Cap Wo	orks - E9A & E9B										
Pile Cap W	Vorks										
SE2G00	E9 (E2g1/2) - Marine Pile Cap - Inst.Floating Seal & Casing Head Steelwo	ork 6	12-Feb-15 A	100%	0	02-Mar-15 A					100%
SE2G008	E9 (E2g1/2) - Marine Pile Cap - Install precast shell in position (3 units)	4	03-Mar-15 A	100%	0	21-Mar-15 A					100%
SE2G00	E9 (E2g1/2) - Marine Pile Cap - Inst.Access & make Watertight	6	21-Mar-15	0%	6	27-Mar-15	19-Dec-14	29-Dec-14	-72	0	0%
SE2G01(E9 (E2g1/2) - Marine Pile Cap - Weld Fin Plates / Plug Rebar & Concrete	2	28-Mar-15	0%	2	30-Mar-15	29-Dec-14	31-Dec-14	-72	0	0%
SE2G011	E9 (E2g1/2) - Marine Pile Cap - Dewater precast shell / Remove Lifting Fi	rame 2	31-Mar-15	0%	2	01-Apr-15	31-Dec-14	03-Jan-15	-72	0	0%
SE2G012	E9 (E2g1/2) - Marine Pile Cap - Pile cut down 6nr	9	02-Apr-15	0%	9	17-Apr-15	03-Jan-15	14-Jan-15	-72	0	0%
SE2G01:	E9 (E2g1/2) - Marine Pile Cap - Rebar fixing (1st pour)	8	18-Apr-15	0%	8	28-Apr-15	14-Jan-15	23-Jan-15	-72	0	0%
SE2G014	E9 (E2g1/2) - Marine Pile Cap - Concreting (First pour)	1	29-Apr-15	0%	1	29-Apr-15	23-Jan-15	24-Jan-15	-72	0	0%
SE2G01	E9 (E2g1/2) - Marine Pile Cap - CJ preparation	3	30-Apr-15	0%	3	04-May-15	24-Jan-15	28-Jan-15	-72	0	0%
SE2G01(E9 (E2g1/2) - Marine Pile Cap - Rebar fixing (Final pour)	6	05-May-15	0%	6	11-May-15	28-Jan-15	04-Feb-15	-72	0	0%
SE2G01(E9 (E2g1/2) - Marine Pile Cap - Concreting (Final pour)	1	13-May-15	0%	1	13-May-15	04-Feb-15	05-Feb-15	-72	0	0%
SE2G01(E9 (E2g1/2) - Marine Pile Cap - Curing incl. CJ preparation	6	14-May-15	0%	6	20-May-15	05-Feb-15	12-Feb-15	-72	0	0%
Pier Works	- E9A & E9B		,	1	1	1			-		
Pier Works	s - E9A (E2g2)										
SE2G202	E9A (E2g2) - Seagull Pier Falsework & Scaffolding (1st wall pour)	2	10-Jun-15	0%	2	12-Jun-15	11-May-15	14-May-15	-20	0	0%
SE2G20(E9A (E2g2) - Seagull Pier Rebar Fixing (1st wall pour)	3	13-Jun-15	0%	3	16-Jun-15	14-May-15	18-May-15	-20	0	0%
SE2G204	E9A (E2g2) - Seagull Pier Formwork & Prep. for concreting (1st wall pour)) 2	18-Jun-15	0%	2	19-Jun-15	18-May-15	20-May-15	-20	0	0%
Pier Works	s - E9B (E2g1)				1						
SE2G102	E9B (E2g1) - Seagull Pier Falsework & Scaffolding (1st wall pour)	2	14-May-15	0%	2	15-May-15	05-Feb-15	07-Feb-15	-72	0	0%
SE2G10(E9B (E2g1) - Seagull Pier Rebar Fixing (1st wall pour)	3	16-May-15	0%	3	19-May-15	07-Feb-15	11-Feb-15	-72	0	0%
SE2G104	E9B (E2g1) - Seagull Pier Formwork & Prep. for concreting (1st wall pour) 2	20-May-15	0%	2	22-May-15	11-Feb-15	13-Feb-15	-72	0	0%
SE2G10(E9B (E2g1) - Seagull Pier Concreting (1st wall pour)	1	23-May-15	0%	1	23-May-15	13-Feb-15	14-Feb-15	-72	0	0%
SE2G106	E9B (E2g1) - Seagull Pier Curing & Striking of Forms incl. CJ Prep. (1st w	vall pour) 2	26-May-15	0%	2	27-May-15	14-Feb-15	17-Feb-15	-72	0	0%
SE2G10	E9B (E2g1) - Seagull Pier Falsework & Scaffolding (2nd wall pour)	2	28-May-15	0%	2	29-May-15	17-Feb-15	23-Feb-15	-72	0	0%
SE2G108	E9B (E2g1) - Seagull Pier Rebar Fixing (2nd wall pour)	4	30-May-15	0%	4	04-Jun-15	23-Feb-15	27-Feb-15	-72	0	0%
SE2G10	E9B (E2g1) - Seagull Pier Formwork & Prep. for concreting (2nd wall pou	r) 2	05-Jun-15	0%	2	06-Jun-15	27-Feb-15	02-Mar-15	-72	0	0%
SE2G11(E9B (E2g1) - Seagull Pier Concreting (2nd wall pour)	1	08-Jun-15	0%	1	08-Jun-15	02-Mar-15	03-Mar-15	-72	0	0%
SE2G111	E9B (E2g1) - Seagull Pier Curing & Striking of Forms incl. CJ Prep. (2nd v	wall pour) 2	10-Jun-15	0%	2	12-Jun-15	03-Mar-15	05-Mar-15	-72	0	0%
SE2G112	E9B (E2g1) - Seagull Pier Falsework & Scaffolding (diaphragm slab, 3rd p	oour) 2	13-Jun-15	0%	2	15-Jun-15	05-Mar-15	07-Mar-15	-72	0	0%
SE2G11:	E9B (E2g1) - Seagull Pier Soffit Formwork (diaphragm slab, 3rd pour)	2	16-Jun-15	0%	2	18-Jun-15	07-Mar-15	10-Mar-15	-72	0	0%
SE2G114	E9B (E2g1) - Seagull Pier Rebar Fixing (diaphragm slab, 3rd pour)	3	19-Jun-15	0%	3	24-Jun-15	10-Mar-15	13-Mar-15	-72	0	0%
E10A & E10E	B (E2h - 1/2)										
-	orks - E10A & E10B										
Pile Cap W SE2H007	Vorks E10 (E2h1/2) - Marine Pile Cap - Inst.Floating Seal & Casing Head Steelw	vork 6	11-Mar-15 A	0%	6	27-Mar-15	14-Mar-15	21-Mar-15	-6	0	0%
	E10 (E2h1/2) - Marine Pile Cap - Install precast shell in position (3 units)	4	28-Mar-15	0%	4		21-Mar-15	26-Mar-15	-6	0	0%
A 1101	Project ID: J3518DWPrE-M22	Tuen Mun - Cl	hok I an Kok I	ink - Sour	thern C	onnaction		Date	Revis	sion (Checked
Actual Work	Layout: J3518-DWP-3MRP Submission - M22_	3-Month Rollin	-				ies)	09-Mar-15	1.000		
Planned Bar	Filter: TASK filters: 3-Month Lookahead, No CC										



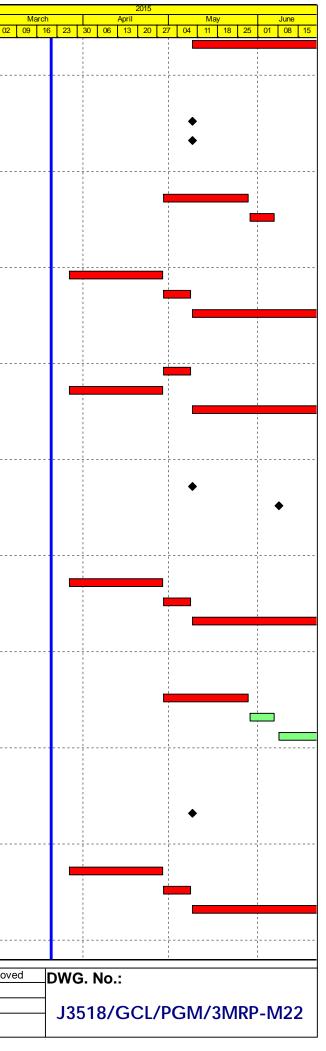
	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	е
SEDHOOL	E10 (E2h1/2) - Marine Pile Cap - Inst.Access & make Watertight	6	02-Apr-15	0%	6	13-Apr-15	26-Mar-15	02-Apr-15	-6	0	0%	
			14-Apr-15	0%	2		02-Apr-15	02-Apr-15	-0 -6	0	0%	
SE2H01(E10 (E2h1/2) - Marine Pile Cap - Weid Fill Plates / Pilg Rebar & Cond E10 (E2h1/2) - Marine Pile Cap - Dewater precast shell / Remove Liftin		· ·	0%	2	16-Apr-15	02-Apr-15	11-Apr-15	-0	0	0%	_
SE2H011 SE2H012		9	17-Apr-15 20-Apr-15	0%	9	18-Apr-15 30-Apr-15	11-Apr-15	24-Apr-15	-0	0	0%	· .
SE2H012		8	· ·	0%	8	•	24-Apr-15	•	-6	0	0%	_
SE2H012		0 1	02-May-15 13-May-15	0%	0	11-May-15 13-May-15	05-May-15	05-May-15 06-May-15	-0	0	0%	_
SE2H012		3	14-May-15	0%	3	16-May-15	05-May-15	09-May-15	-6	0	0%	_
	E10 (E2h1/2) - Marine Pile Cap - C3 preparation E10 (E2h1/2) - Marine Pile Cap - Rebar fixing (Final pour)	6	14-May-15	0%	6	26-May-15	09-May-15	18-May-15	-0	0	0%	_
	E10 (E2h1/2) - Marine Pile Cap - Rebar Haing (Final pour)	-	,		1					-	0%	
		1	27-May-15	0%		27-May-15	18-May-15	19-May-15	-6	0		_
	E10 (E2h1/2) - Marine Pile Cap - Curing incl. CJ preparation	6	28-May-15	0%	6	04-Jun-15	19-May-15	28-May-15	-6	0	0%	ر
	- E10A & E10B s - E10A (E2h2)											
	E10A (E2h2) - Seagull Pier Falsework & Scaffolding (1st wall pour)	2	05-Jun-15	0%	2	06-Jun-15	28-May-15	30-May-15	-6	0	0%	, o
SE2H203		3	08-Jun-15	0%	3	12-Jun-15	30-May-15	04-Jun-15	-6	0	0%	ó
SE2H204			13-Jun-15	0%	2	15-Jun-15	04-Jun-15	06-Jun-15	-6	0	0%	_
SE2H205		1	16-Jun-15	0%	1	16-Jun-15	06-Jun-15	08-Jun-15	-6	0	0%	_
	E10A (E2h2) - Seagull Pier Curing & Striking of Forms incl. CJ Prep. (1s	st wall pour) 2	18-Jun-15	0%	2	19-Jun-15	08-Jun-15	12-Jun-15	-6	0	0%	_
iaduct E5, E				0,0								
	Marine Foundation											
GFXX105	Piling Works Completion of E5E6a/E7E8a in Bridge E5 - E8	0		0%	0	06-May-15	1	15-Jan-15	-87	0	0%	, D
GFXX106	Piling Works Completion of E5b/E6b, E7b/E8b, Dolphin E5b & E8b in Br	ridge E5 - E8 0		0%	0	21-May-15		08-Jun-15	14	33	0%	b
Vilestones -	Land Foundation				l	-						
GFXX012	Land Access to BCF (Available in Month 17)	0	21-Mar-15	0%	0		01-Nov-14		-139	0	0%	, 0
GFXX546-1	E14D (E5d) - Start date for piling	0	22-May-15	0%	0		02-May-15		-16	102	0%	, o
GFXX547-1	E14C (E6d) - Start date for piling	0	22-May-15	0%	0		13-Aug-15		68	93	0%	ó
	(E5E6a/E7E8a)		,				- U					
	Works - E11A & E11B											
Foundation	n Works											
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.5m dia. x 10 nr)	130	10-Jul-14 A	87%	17	14-Apr-15	02-Dec-14	22-Dec-14	-87	0	80%	5
GFXX084		130	10-Jul-14 A	87%	17	14-Apr-15	02-Dec-14	22-Dec-14	-87	0	80%	5
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.5m dia. x 10 nr) 25% in total	130	10-Jul-14 A	87%	17	14-Apr-15	02-Dec-14	22-Dec-14	-87	0	80%	, 0
GFXX084		130	10-Jul-14 A	87%	17	14-Apr-15	02-Dec-14	22-Dec-14	-87	0	80%	_
GFXX084		130	10-Jul-14 A	87%	17	14-Apr-15	02-Dec-14	22-Dec-14	-87	0	80%	_
GFXX085		12	14-Apr-15	0%	12	28-Apr-15	22-Dec-14	08-Jan-15	-87	0	0%	_
	E11 (E5E6a/E7E8a) - Dismantle Temporary Removable Piling Platform		28-Apr-15	0%	6	06-May-15		15-Jan-15	-87	0	0%	_
	rks - E11A & E11B											-
Pile Cap Wo												
	E11 (E5E6/E7E8a) - Marine Pile Cap - Inst.Floating Seal & Casing Hear	d Steelwork 6	06-May-15	0%	6	14-Mav-15	15-Jan-15	22-Jan-15	-85	41	0%	ó
	E12C & E12D (E8b/E7b/E6b/E5b)											
	Works - E12											
Foundation	n Works											
GFXX089	E12 (E5b/E6b/E7b/E8b) - Bored Piles (2.5m dia. x 14 nr)	151	09-Jul-14 A	80.13%	30	29-Apr-15	10-Apr-15	16-May-15	14	0	90%	b
GFXX089	E12A & E12D (E5b, E8b) - Dolphins - Bored Piles (2.20m dia x 6 nr)	60	01-Nov-14 A	50%	30	29-Apr-15	25-Nov-16	31-Dec-16	499	30	60%	, D
GFXX089	E12A & E12D (E5b, E8b) - Dolphins - Bored Piles (2.20m dia x 6 nr) 50		21-Mar-15	0%	60	05-Jun-15	25-Nov-16	08-Feb-17	499	0	0%	, D
GFXX089			21-Mar-15	0%	60	05-Jun-15	25-Nov-16	08-Feb-17	499	0	0%	Ď
GFXX089	E12 (E5b/E6b/E7b/E8b) - Bored Piles (2.5m dia. x 14 nr) 25% in total	151	09-Jul-14 A	80.13%	30	29-Apr-15	10-Apr-15	16-May-15	14	0	90%	_
GFXX089		151	09-Jul-14 A	80.13%	30	29-Apr-15	10-Apr-15	16-May-15	14	0	90%	_
GFXX089		151	09-Jul-14 A	80.13%	30	29-Apr-15	10-Apr-15	16-May-15	14	0	90%	_
_			hak Lan Kat		4h c ==	•					booked	_
Actual Work	Project ID: J3518DWPrE-M22 Layout: J3518-DWP-3MRP Submission - M22		hek Lap Kok					Date 09-Mar-15	Revis	sion C	Checked	
-				nma / n -	NA 75		1001					
Planned Bar Critical Bar	Filter: TASK filters: 3-Month Lookahead, No Co Milestones, No Level of Effort.	d 3-Wohth Kohi	ing Progran Progress as	•	-	-	jes)	31-Mar-15		W		



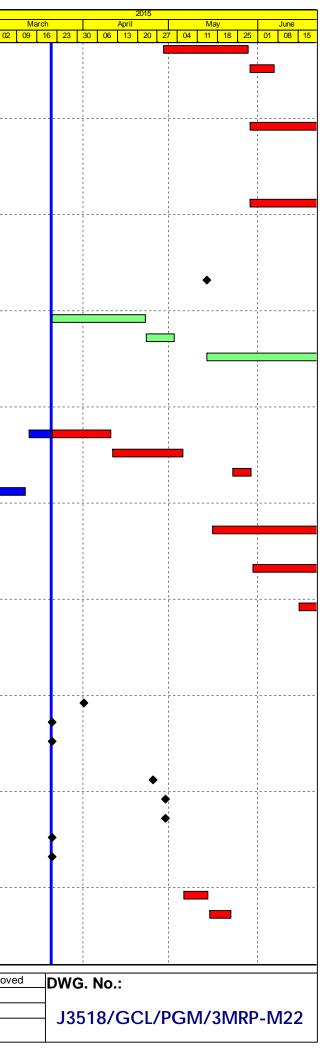
tivity ID Activity Name		Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical %
GFXX089 E12 (E5b/E6b/E7b/E8b) - Bored Piles (2.5m dia. x 14 nr) 25% in total	151	09-Jul-14 A	80.13%	30	29-Apr-15	10-Apr-15	16-May-15	14	0	90%
GFXX091 E12 (E5b/E6b/E7b/E8b	, , , , , , , , , , , , , , , , , , ,	12	30-Apr-15	0%	12	14-May-15	16-May-15	01-Jun-15	14	0	0%
``````````````````````````````````````	Dolphins only) - Sonic & Interface Coring	12	06-Jun-15	0%	12	19-Jun-15	09-Feb-17	22-Feb-17	499	0	0%
``````````````````````````````````````	) - Dismantle Removable Piling Platform in Pier E12	6	15-May-15	0%	6	21-May-15	01-Jun-15	08-Jun-15	14	0	0%
E13A, E13B, E13C & E13D (E8c/E7c/	, 3					, -					
Foundation Works - E13											
Foundation Works - E13A (E8c) &	E13B (E7c)										
GFXX101 E13A/B (E8c/E7c) - Bo	()	172	27-Dec-14 A	27.91%	124	21-Aug-15	16-Jun-15	13-Nov-15	69	0	20%
	red Piles (2.5m dia. x 10 nr) 50% in total	172	27-Dec-14 A	27.91%	124	21-Aug-15	16-Jun-15	13-Nov-15	69	0	20%
	red Piles (2.5m dia. x 10 nr) 50% in total	172	27-Dec-14 A	27.91%	124	21-Aug-15	16-Jun-15	13-Nov-15	69	0	20%
Foundation Works - E13C (E6c) &	· · · · · · · · · · · · · · · · · · ·					- 3 -					
GFXX095 E13C/D (E6c/E5c) - Bo		128	23-Aug-14 A	39.06%	78	27-Jun-15	24-Dec-14	01-Apr-15	-68	0	40%
, , , , , , , , , , , , , , , , , , ,	pred Piles (2.50m dia. x 10 nr) 50% in total	128	23-Aug-14 A	39.06%	78	27-Jun-15	24-Dec-14	01-Apr-15	-68	0	40%
	ored Piles (2.50m dia. x 10 nr) 50% in total	128	23-Aug-14 A	39.06%	78	27-Jun-15		01-Apr-15	-68	0	40%
E14A, E14B, E14C & E14D (E8d/E7d				0010070			21 200 11	017.p. 10		•	
Foundation Works - E14											
	ng Bored Pile Plant & Equipment for Viaducts in HKBCF	5	21-Mar-15	0%	5	26-Mar-15	01-Nov-14	07-Nov-14	-113	0	0%
Foundation Works - E14A (E8d)				070	Ű	20 Mai 10			110		0,0
GFXX544 E14A (E8d) - Pre-drillin	a for Piles (4 nos)	24	29-May-15	0%	24	26-Jun-15	02-Apr-15	05-May-15	-43	0	0%
Foundation Works - E14B (E7d)			20 May 10	070	27	20 0011 10	02 / 10		-10	Ū	0,0
GFXX544 E14B (E7d) - Pre-drillin	ng for Piles (3 nos)	24	29-May-15	0%	24	26-Jun-15	19-Mar-15	20-Apr-15	-55	0	0%
Foundation Works - E14C (E6d)		27	23-Way-13	070	27	20-0011-10	10-10101-10	20-Api-13	-00	0	070
GFXX544 E14C (E6d) - Pre-drillir	pa for Piles (3 nos)	30	02-Apr-15	0%	30	12-May-15	17-Nov-14	20-Dec-14	-111	0	0%
GFXX544 E14C (E6d) - Confirm		8	13-May-15	0%	8	21-May-15		02-Jan-15	-111	0	0%
GFXX547 E14C (E6d) - Bored Pil		93	22-May-15	0%	93	10-Sep-15		29-Apr-15	-111	0	0%
Foundation Works - E14D (E5d)		95	22-1viay-15	0 78	93	10-Sep-15	03-Jan-15	29-Api-15	- 111	0	078
GFXX544 E14D (E5d) - Pre-drillir	pa for Pilos (4 pos)	30	02-Apr-15	0%	30	12-May-15	07 Nov 14	12-Dec-14	-118	0	0%
GFXX544 E14D (E5d) - Confirm		8	13-May-15	0%	8	21-May-15	12-Dec-14	22-Dec-14	-118	0	0%
GFXX546 E14D (E5d) - Bored Pi		102	22-May-15	0%	102	21-May-15 21-Sep-15		02-Mav-15	-118	0	0%
Viaduct F	es (2.2011 uld. X 4 1105)	102	22-1viay-15	0 78	102	21-3ep-13	22-Dec-14	02-1May-15	-110	0	078
Viaduct F1											
General F1							<u>.</u>		<u></u>		
Milestones											
GFXX553-8 F2 (F1c) - Start date fo		0	09-May-15	0%	0		17-Apr-15		-18	72	0%
GFXX553-9 F3 (F1d) - Start date fo	· •	0	09-May-15	0%	0		12-Sep-15		105	84	0%
F1 (F1b)		0	09-Way-15	078	U		12-3ep-13		105	04	078
Foundation Works											
GFXX553-1 F1 (F1b) - Pre-drilling	for Pilos (2 pos)	24	29-Apr-15	0%	24	28-May-15	16-Feb-15	18-Mar-15	-55	0	0%
GFXX553-4 F1 (F1b) - Confirm Ro	. ,	8	29-Apr-15 29-May-15	0%	8	06-Jun-15		04-May-15	-28	60	0%
		0	29-1viay-15	0%	0	06-Jun-15	24-Apt-15	04-1May-15	-20	60	0%
F2 (F1c)											
Foundation Works	or Piles (2 noc)	24	27 Mar 15	00/	24	28. Apr 15	05-Dec 14	05 lop 15	00	0	00/
GFXX553-2 F2 (F1c) - Pre-drilling f		24	27-Mar-15	0%	24	28-Apr-15	05-Dec-14	05-Jan-15	-90	0	0%
GFXX553-5 F2 (F1c) - Confirm Roo		8	29-Apr-15	0%	8	08-May-15	06-Jan-15	14-Jan-15	-90	0	0%
GFXX556 F2 (F1c) - Bored Piles	(2.2011 UIA. X 2 1105)	72	09-May-15	0%	72	04-Aug-15	15-Jan-15	16-Apr-15	-90	0	0%
F3 (F1d)											
Foundation Works		04	07 Mar 45	00/	0.4	20 Apr 15	08 Dec 11	07 100 15	00	0	00/
GFXX553-3 F3 (F1d) - Pre-drilling f		24	27-Mar-15	0%	24	28-Apr-15	08-Dec-14	07-Jan-15	-88	0	0%
GFXX553-6 F3 (F1d) - Confirm Ro		8	29-Apr-15	0%	8	08-May-15	08-Jan-15	16-Jan-15	-88	0	0%
Actual Work	Project ID: J3518DWPrE-M22	Tuen Mun - Cl	hek Lap Kok I	Link - Sou	thern C	onnection		Date	Revis		Checked Appro
Planned Bar	Layout: J3518-DWP-3MRP Submission - M22_ Filter: TASK filters: 3-Month Lookahead, No CO	3-Month Rollin	ng Progran	nme (Pag	ge 36	of 41 Pag	es)	09-Mar-15		D	
Critical Bar Milestone	Milestones, No Level of Effort.		Progress as					31-Mar-15		W	Y
		-									



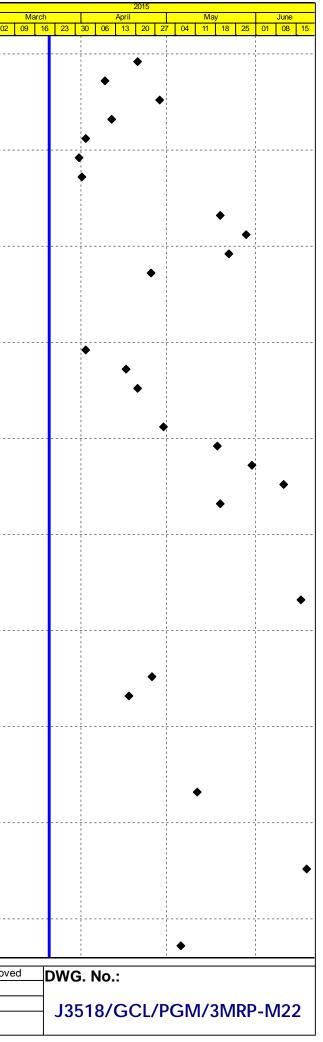
Activity Name		Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete
GFXX557 F3 (F1d) - Bored P	les (2.20m dia. x 2 nos)	84	09-May-15	0%	84	18-Aug-15	17-Jan-15	04-May-15	-88	0	0%
iaduct F2					1						
General F2											
Milestones											
GFXX561- F6 (F2d) - Start dat	e for piling	0	09-May-15	0%	0		04-Jul-15		45	72	0%
GFXX561-9 F5 (F2c) - Start dat	e for piling	0	09-May-15	0%	0		08-Jul-15		48	72	0%
F4 (F2b)											
Foundation Works											
GFXX561-1 F4 (F2b) - Pre-drilli	ng for piles (2 nos)	24	29-Apr-15	0%	24	28-May-15	02-Mar-15	28-Mar-15	-46	0	0%
GFXX561-6 F4 (F2b) - Confirm	Rockhead Levels	8	29-May-15	0%	8	06-Jun-15	30-Mar-15	11-Apr-15	-46	48	0%
F5 (F2c)											
Foundation Works											
GFXX561-2 F5 (F2c) - Pre-drilli	ig for Piles (2 nos)	24	27-Mar-15	0%	24	28-Apr-15	01-Dec-14	30-Dec-14	-94	0	0%
GFXX561-8 F5 (F2c) - Confirm	Rockhead Levels	8	29-Apr-15	0%	8	08-May-15	31-Dec-14	09-Jan-15	-94	0	0%
GFXX564 F5 (F2c) - Bored Pi	es (2.20m dia. x 2 nos)	72	09-May-15	0%	72	04-Aug-15	10-Jan-15	11-Apr-15	-94	0	0%
F6 (F2d)		· · · · · · · · · · · · · · · · · · ·	,		1						
Foundation Works											
GFXX561- F6 (F2d) - Confirm	Rockhead Levels	8	29-Apr-15	0%	8	08-May-15	02-Feb-15	10-Feb-15	-67	0	0%
GFXX561-3 F6 (F2d) - Pre-drilli	ng for Piles (2 nos)	24	27-Mar-15	0%	24	28-Apr-15	05-Jan-15	31-Jan-15	-67	0	0%
GFXX565 F6 (F2d) - Bored P	les (2.20m dia. x 2 nos)	72	09-May-15	0%	72	04-Aug-15	11-Feb-15	14-May-15	-67	0	0%
iaduct F3			1								1
General F3											
Milestones											
GFXX571-6 F9 (F3d) - Start dat	e for piling	0	09-May-15	0%	0		14-Jul-15		53	84	0%
GFXX571-8 F10 (F3c) - Start da	te for piling	0	08-Jun-15	0%	0		15-Sep-15		83	72	0%
F9 (F3d-1/F3d-2)			1								1
Foundation Works - F9 (F3d-1/	-3d-2)										
Foundation Works											
GFXX571 F9 (F3d) - Pre-drilli	ng for Piles (4 nos)	24	27-Mar-15	0%	24	28-Apr-15	14-Jan-15	11-Feb-15	-59	0	0%
GFXX571 F9 (F3d) - Confirm	Rockhead Levels	8	29-Apr-15	0%	8	08-May-15	11-Feb-15	24-Feb-15	-59	0	0%
GFXX575 F9 (F3d) - Bored P	les (2.20m dia. x 4 nos)	84	09-May-15	0%	84	18-Aug-15	24-Feb-15	09-Jun-15	-59	0	0%
F10 (F3c-1/F3c-2)			,	1							
Foundation Works - Pier F10											
Foundation Works											
GFXX571 F10 (F3c) - Pre-dril	ing for Piles (4 nos)	24	29-Apr-15	0%	24	28-May-15	05-Mar-15	01-Apr-15	-43	0	0%
GFXX571 F10 (F3c) - Confirm	Rockhead Levels	8	29-May-15	0%	8	06-Jun-15	11-Jun-15	19-Jun-15	11	0	0%
GFXX574 F10 (F3c) - Bored	Piles (2.20m dia. x 4 nos)	72	08-Jun-15	0%	72	01-Sep-15	22-Jun-15	14-Sep-15	11	0	0%
iaduct F5									1		
General F5											
Milestones											
GFXX586-5 F13 (F5d) - Start da	ite for piling	0	09-May-15	0%	0		08-Dec-15		176	84	0%
F13 (F5d)			,	1		1	.//				
Foundation Works											
GFXX586-1 F13 (F5d) - Pre-dri	ing for Piles (3 nos)	24	27-Mar-15	0%	24	28-Apr-15	16-Jan-15	12-Feb-15	-57	0	0%
GFXX586-4 F13 (F5d) - Confirm	Rockhead Levels	8	29-Apr-15	0%	8	08-May-15	13-Feb-15	25-Feb-15	-57	0	0%
GFXX589 F13 (F5d) - Bored I	Piles (2.20m dia. x 3 nos)	84	09-May-15	0%	84	18-Aug-15	26-Feb-15	10-Jun-15	-57	0	0%
F14 (F5c)						I	·				
Foundation Works											
Actual Work	Project ID: J3518DWPrE-M22	Tuen Mun - Cl	-					Date	Revis		Checked
Planned Bar	Layout: J3518-DWP-3MRP Submission - M22		na Proaran	nme (Pa	ae 37	of 41 Pag	ies)	09-Mar-15		0	ЪВ
Critical Bar	Filter: TASK filters: 3-Month Lookahead, No C	0			3	•••••••••••••••••••••••••••••••••••••••	,,	31-Mar-15			NY



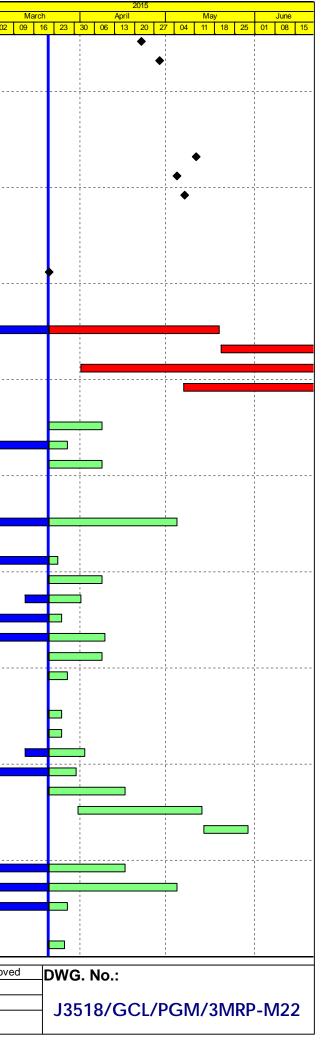
Activity ID)	Activity Name		Orig. Durn.	Act. Start / FC Early	Duration %	Rem.	Act. Finish / FC	Late Start	Late Finish	Total Float	Free Float	Physical %	1
					Start	Complete	Durn.	Early Finish					Complete	23 02
	GFXX586-2	F14 (F5c) - Pre-drilling	for Piles (2 nos)	24	29-Apr-15	0%	24	28-May-15	31-Mar-15	02-May-15	-21	0	0%	
	GFXX586-6	F14 (F5c) - Confirm Ro	ockhead Levels	8	29-May-15	0%	8	06-Jun-15	06-May-15	14-May-15	-19	48	0%	
	F15 (F5b)									•				
	Foundation	Works												
	GFXX586-3	F15 (F5b) - Pre-drilling	for Piles (2 nos)	24	29-May-15	0%	24	26-Jun-15	30-Apr-15	30-May-15	-23	0	0%	4
	Viaduct F4	- (· · ·)			, -									
	F16 (F4a/F5a))				<u>.</u>			<u>.</u>		<u></u>			
	Foundation	·												
		F16 (F4a/F5a) - Pre-dr	illing for Piles (4 nos)	24	29-May-15	0%	24	26-Jun-15	04-May-15	01-Jun-15	-21	0	0%	4
	Approach Ra			27	23-Way-13	070	27	20-5011-15	04 Iviay 10	01-5011-15	-21	0	070	
		mp F												
	Milestones													
		AD E Stort data for pi	ling	0	14 May 15	00/	0		10 Jul 15		50	47	00/	4
		AR-F - Start date for pi	ing	0	14-May-15	0%	0		12-Jul-15		59	47	0%	
		amp F Piling			04 NA 45	00/	0.4	00.4.45	44.4.45	10.14 15	10		001	·
		AR-F - Pre-drilling for F	. ,	24	21-Mar-15	0%	24	22-Apr-15	14-Apr-15	12-May-15	16	0	0%	_
	GFXX594	AR-F - Confirm Rockhe		8	23-Apr-15	0%	8	02-May-15	13-May-15	21-May-15	16	9	0%	_
	GFXX595	AR-F - Bored Piles (28	nos.)	218	14-May-15	0%	218	02-Feb-16	22-May-15	13-Feb-16	7	0	0%	
S	SUPERSTRU	CTURE												
	Assembling,	relocation and dis	mantle of lifting equipment											
	Launching Ga	antry 1												
	NS11170	Assembly of Launching	Gantry LG1 onto Pier B1/B2 (incl.Load Test)	19	13-Mar-15 A	26.32%	14	10-Apr-15	15-Dec-14	03-Jan-15	-77	0	0%	
	NS11180	Viaduct B3 - Learning C	Curve Gantry LG1	20	11-Apr-15	0%	20	05-May-15	03-Jan-15	27-Jan-15	-77	0	0%	
	NS11210	Viaduct B3 - Launching	LG1 Over Piers to B07 (B2f) - LG1	5	23-May-15	0%	5	29-May-15	11-Feb-15	17-Feb-15	-79	0	0%	
	PR20130	Assembly of Launching	Gantry LG1 on Temp.Loading Platform	36	15-Sep-14 A	100%	0	12-Mar-15 A					100%	
	Launching Ga	antry 2				1			<u>, </u>					
	FR000099	Assembly of Launching	Gantry LG2 on Temp.Loading Platform	30	16-May-15	0%	30	22-Jun-15	20-Jan-15	26-Feb-15	-92	1	0%	
	Adjustable Li	fting Frame 1&2												
	NS10140	Viaduct B3 - Pier B4 - A	ssemble / Load Test Lifting Frame ALF 1/2	25	30-May-15	0%	25	29-Jun-15	17-Feb-15	21-Mar-15	-79	0	0%	1
	Wide Lifting F	Frame 3&4	-											
	NS10520		Assemble / Load Test Lifting Frame WLF 3/4	25	15-Jun-15*	0%	25	15-Jul-15	31-Mar-15	05-May-15	-59	0	0%	4
. .	Viaduct B Su	Iperstructure	Ŭ			<u> </u>				,				
	Bridge B3 Su	·												
	Milestones													
		Ready for PH Segment	Frection											
			Viaduct B3 PH segment erection	0		0%	0	01-Apr-15		27-Feb-15	-28	0	0%	•
	B300020-1	(, , , , , , , , , , , , , , , , , , ,	Viaduct B3 PH segment erection	0		0%	0	21-Mar-15		18-May-15	42	109	0%	_
	B300020-1	. , ,	Viaduct B3 PH segment erection	0		0%	0	21-Mar-15		30-Apr-18	863	863	0%	_
		. , , ,	-	0		0%	0	21-IVIAI-15		30-Api-10	003	003	076	
		Ready for Deck Segme		0		00/	0	05 Are 45		47 May 45	00	<u> </u>	00/	4
	B300010	, , ,	Viaduct B3 deck segment erection	0		0%	0	25-Apr-15		17-Mar-15	-28	62	0%	
	B300020	, , ,	Viaduct B3 deck segment erection	0		0%	0	29-Apr-15		09-May-15	8	48	0%	_
	B300030		Viaduct B3 deck segment erection	0		0%	0	29-Apr-15		16-Apr-15	-11	48	0%	_
	B300040	, , , , , , , , , , , , , , , , , , ,	Viaduct B3 deck segment erection	0		0%	0	21-Mar-15		28-Apr-15	27	76	0%	-
	B300050	. , ,	Viaduct B3 deck segment erection	0		0%	0	21-Mar-15		27-Jan-15	-43	32	0%	
	Deck installa	1												
	NS11190	Viaduct B3 - Cantilever	at Pier B2 (B3e) (14 seg) - LG1	7	06-May-15	0%	7	14-May-15		04-Feb-15	-75	0	0%	
	NS11200	Viaduct B3 - End Span	at Pier B1 (B3f) (up) (7 seg) - LG1	6	15-May-15	0%	6	22-May-15	04-Feb-15	11-Feb-15	-75	0	0%	
	Bridge B2 Su	iperstructure												
	Milestones													
			Project ID: J3518DWPrE-M22	Tuon Mun O	hek Lap Kok I	ink Sou	thern (Connection		Date	Revis	sion 1	Checked	Approv
	Actual Work Planned Bar		Layout: J3518-DWP-3MRP Submission - M22_	3-Month Rolli	-				(عمر	09-Mar-15	I CON)B	, vbhov
	Critical Bar		Filter: TASK filters: 3-Month Lookahead, No CC		Progress as	•	-	-	1631	31-Mar-15			VY	
•	Milestone		Milestones, No Level of Effort.	(r	1091035 05		iai - 1 J)						
										1				



vity 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	Physical % Complete	
													23 02
	Ready for PH Segment												
		or Viaduct B2 PH segment erection	0		0%	0	20-Apr-15		04-Jul-15	52	4	0%	
B200020-1	. , , ,	or Viaduct B2 PH segment erection	0		0%	0	09-Apr-15		06-May-15	21	0	0%	
B200030-1		or Viaduct B2 PH segment erection	0		0%	0	28-Apr-15		09-Apr-15	-13	1	0%	
B200040-1	. , ,	Viaduct B2 PH segment erection	0		0%	0	11-Apr-15		06-Mar-15	-27	1	0%	
B200050-1	, , ,	Viaduct B2 PH segment erection	0		0%	0	02-Apr-15		02-Feb-15	-48	1	0%	
B200060-1	, , ,	Viaduct B2 PH segment erection	0		0%	0	31-Mar-15		12-Jan-15	-64	0	0%	
B200070-1	. , ,	Viaduct B2 PH segment erection	0		0%	0	01-Apr-15		27-Feb-15	-28	0	0%	
	Ready for Deck Segme		0		00/	0	40 May 45		00 14 45	45	404	00(
B200010		or Viaduct B2 deck segment erection	0		0%	0	19-May-15		23-Jul-15	45	134	0%	
B200020	· · · · ·	or Viaduct B2 deck segment erection	0		0%	0	28-May-15		07-Jul-15	27	116	0%	
B200060		Viaduct B2 deck segment erection	0		0%	0	22-May-15		05-Mar-15 17-Mar-15	-58	31	0% 0%	
B200070		Viaduct B2 deck segment erection	0		0%	0	25-Apr-15		17-Mar-15	-28	62	0%	
Milestones	uperstructure												
	Ready for PH Segment	Eraction											
		r Viaduct B1 PH segment erection	0	1	0%	0	02-Apr-15		24-Jun-15	55	0	0%	
.	. , ,	or Viaduct B1 PH segment erection	0		0%	0	· · ·		24-301-15 26-May-15	29	0	0%	
		or Viaduct B1 PH segment erection	0		0%	0	16-Apr-15 20-Apr-15		20-101ay-15 29-Jun-15	48	0	0%	
	Ready for Deck Segme		0		078	0	20-Api-13		29-3011-13	40	0	078	
B100030		or Viaduct B1 deck segment erection	0		0%	0	29-Apr-15		04-Mar-17	515	449	0%	
B100040	, , ,	or Viaduct B1 deck segment erection	0		0%	0	18-May-15		12-Sep-15	86	175	0%	
B100040		r Viaduct B1 deck segment erection	0		0%	0	30-May-15		24-Aug-15	61	175	0%	
B100050	· · · ·	or Viaduct B1 deck segment erection	0		0%	0	10-Jun-15		30-Jul-15	35	124	0%	
B100070		or Viaduct B1 deck segment erection	0		0%	0	19-May-15		15-Aug-15	63	152	0%	
	uperstructure				070	Ū	10 May 10		10 / 10	00	102	070	
	uperstructure												
Milestones													
	Ready for PH Segment	Erection											
	, , ,	r Viaduct C3 PH segment erection	0		0%	0	16-Jun-15		30-Jan-16	177	0	0%	
	uperstructure				0,0	, C					Ū	0,10	
Milestones													•
	Ready for PH Segment	Erection											
		or Viaduct C1 PH segment erection	0		0%	0	25-Apr-15		16-Nov-16	431	0	0%	
	· · · · · ·	or Viaduct C1 PH segment erection	0		0%	0	17-Apr-15		28-Nov-16	447	0	0%	
	uperstructure	5											
	uperstructure												
Milestones													
Milestones	Ready for PH Segment	Erection											
		Viaduct D3 PH segment erection	0		0%	0	11-May-15		24-Jul-15	52	0	0%	
	uperstructure						ý						
Milestones													
Milestones	Ready for PH Segment	Erection											
		r Viaduct D2 PH segment erection	0		0%	0	18-Jun-15		08-Sep-15	62	0	0%	
Bridge D1 St	uperstructure			1									
Milestones													
Milestones	Ready for PH Segment	Erection											
		or Viaduct D1 PH segment erection	0		0%	0	05-May-15		23-Jan-16	201	5	0%	
		-		 		4 h. c	. · · · ·		Data				Ann=-
Actual Work		Project ID: J3518DWPrE-M22 Layout: J3518-DWP-3MRP Submission - M22_	Tuen Mun - C	-				ac)	Date 09-Mar-15	Revis	sion (Approv
Critical Bar		Filter: TASK filters: 3-Month Lookahead, No CC	3-Month Rollin		•	-	-	62)	31-Mar-15		N		
Milestone		Milestones, No Level of Effort.	(F	rogress as		iar-15)				•		

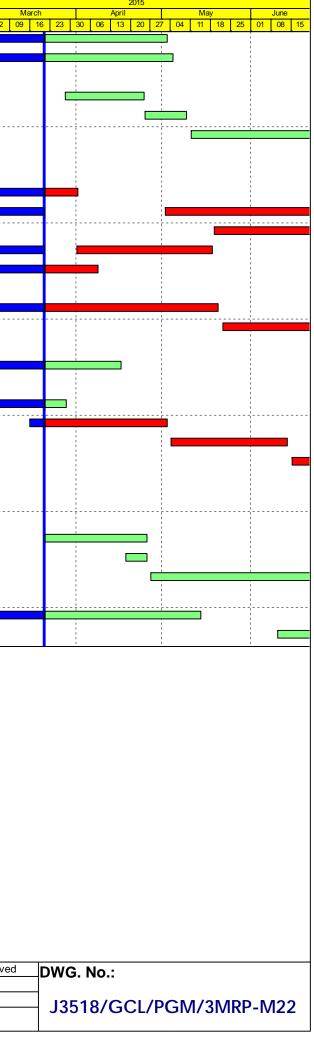


Activ	vity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	
				Otart	Complete	Dum.	Larry Thisin					Complete	23 02
	D100020-1	Pier D18 (D1c) ready for Viaduct D1 PH segment erection	0		0%	0	22-Apr-15		19-Oct-15	133	15	0%	
	D100030-1	Pier D17 (D1d) ready for Viaduct D1 PH segment erection	0		0%	0	28-Apr-15		15-Sep-15	103	0	0%	
	Viaduct E												
	Bridge E1 Su	perstructure											
	Milestones							· · · · · · · · · · · · · · · · · · ·					
	Milestones F	Ready for PH Segment Erection											
	E100030-1	Pier D1 (D4f) ready for Viaduct E1 PH segment erection	0		0%	0	11-May-15		24-Jul-15	52	0	0%	
	E100070-1	Pier E1B (E1a3) ready for Viaduct E1 PH segment erection	0		0%	0	04-May-15		12-Jun-15	27	0	0%	-
	E100080-1	Pier E1A (E1a4) ready for Viaduct E1 PH segment erection	0		0%	0	07-May-15		02-Mar-15	-51	0	0%	,
	Bridge E2 Su	perstructure						JJ					
	Milestones												
	Milestones R	Ready for Deck Segment Erection											
	E507060-1	Viaduct E5 - Complete segment erection for interface span E13D(E5c) to E14D(E5d) with HI	0		0%	0	21-Mar-15		18-Jun-16	341	441	0%	,
	At-Grade Road	dworks and Other Works along Cheung Tung Road											
		t of Cheung Tung Road adjacent to Viaduct B											
	RP00020	Construct new ESS adjacent to Viaduct B	60	15-Sep-14 A	28.33%	43	19-May-15	14-Feb-15	13-Apr-15	-27	0	28%	
	RP00030	Inst. new equip. & testing / commissioning of new ESS	60	20-May-15	0%	60	12-Aug-15	14-Apr-15	08-Jul-15	-27	0	0%	
	RW50020	CTR Re-alignment adj. to Via.B - Diversion of watermains	140	01-Apr-15	0%	140	10-Oct-15	24-Feb-15	31-Aug-15	-31	0	0%	-
	RW50090	CTR Re-alignment adj. to Via.B - Diversion of Drainage	120	07-May-15	0%	120	16-Oct-15	24-Mar-15	04-Sep-15	-31	0	0%	
	Box Culvert E												
	BCE0110	Construct staircases & backfill to required elevation	12	21-Mar-15	0%	12	08-Apr-15	22-Aug-15	04-Sep-15	110	0	0%	
	BCE0120	Construct step irons at 300c/c staggerd & new railings	6	05-Jan-15 A	0%	6	27-Mar-15	29-Aug-15	04-Sep-15	116	6	50%	
	BCE0130	Construct all proposed connecting U-Channels	12	21-Mar-15	0%	12	08-Apr-15	22-Aug-15	04-Sep-15	110	141	0%	-
	Viaduct B Slo			21 1100 10	0,0		007.p. 10	/ ag 10	01.000 10			0,0	
	Slope 9SE-B/	•											
		Rockfall Fence Construction	57	20-Jan-15 A	45.61%	31	04-May-15	25-Eeb-17	01-Apr-17	536	527	70%	
	Zone A & B		01	20 0011 1071	40.0170	01	04 May 10	2010011	0170017	000	021	1070	
		9SE-B/C9 Zone A1 - Raking Drain 15 nr @ +8.5	5	19-Jan-15 A	50%	3	24-Mar-15	27-Apr-18	30-Apr-18	861	861	50%	
		9SE-B/C9 Zone A1 - Form 375UC @ +5.5	12	21-Mar-15 A	0%	12	08-Apr-15	14-Apr-18	30-Apr-18	851	851	5%	
		9SE-B/C9 Zone A2 & B - Inst. 300UC @ +15.0	12	13-Mar-15 A	5%	10	01-Apr-15	18-Apr-18	30-Apr-18	854	854	5%	_
		9SE-B/C9 Zone A2 & B - Raking Drain 13 nr @ +10.5	4	02-Feb-15 A	0%	10	25-Mar-15	25-Apr-18	30-Apr-18	859	859	50%	_
		9SE-B/C9 Zone A2 & B - Raking Drain 13 III @ +10.5 9SE-B/C9 Zone A2 & B - Soil nail 34 nr @ +9.00 Row A	13	19-Jan-15 A	0%	4 13	09-Apr-15	23-Apr-18 13-Apr-18	30-Apr-18	850	850	90%	_
		9SE-B/C9 Zone A2 & B - Form 375UC @ +5.5		21-Mar-15 A	0%	-	09-Apr-15 08-Apr-15	13-Apr-18	30-Apr-18	851		5%	
			12			12	· ·	· ·	•		851		
		9SE-B/C9 Zone A & B - Hydroseeding	6	21-Mar-15 A	0%	6	27-Mar-15	25-Aug-15	31-Aug-15	112	72	5%	
	Zone C & D			04 Mar 45 A	00/	4	05 14-45	05 4	00 1	050	050	50/	
		9SE-B/C9 Zone C & D - Raking Drain 12 nr @ +19.0	4	21-Mar-15 A	0%	4	25-Mar-15	25-Apr-18	30-Apr-18	859	859	5%	_
	.	9SE-B/C9 Zone C & D - Raking Drain 14 nr @ +17.0	4	21-Mar-15 A	0%	4	25-Mar-15	30-Oct-15	03-Nov-15	162	4	5%	- :
		9SE-B/C9 Zone C & D - Form 375UC @ approx +16.0	18	13-Mar-15 A	40%	11	02-Apr-15	16-Apr-18	30-Apr-18	852	852	20%	
	.	9SE-B/C9 Zone C & D - Raking Drain 9 nr @ +8.0 in rock	8	17-Feb-15 A	0%	8	30-Mar-15	24-Oct-15	03-Nov-15	158	0	50%	-
		9SE-B/C9 Zone C & D - Form 375UC @ +5.5	18	21-Mar-15 A	0%	18	16-Apr-15	18-Nov-15	08-Dec-15	178	20	5%	_
	· · · · · · · · · · · · · · · · · · ·	9SE-B/C9 Zone C & D - Install Geo. Instru. & Baseline Monitoring	30	31-Mar-15	0%	30	13-May-15	04-Nov-15	08-Dec-15	158	0	0%	
		9SE-B/C9 Zone C & D - Hydroseeding	12	14-May-15	0%	12	29-May-15	09-Dec-15	22-Dec-15	158	28	0%	_
	Slope 9SE-B/		1	1	1	1	1						.
	.	9SE-B/C8 - Install Geo. Instru. & Baseline Monitoring	30	08-Jan-15 A	40%	18	16-Apr-15	07-Apr-18	30-Apr-18	845	845	30%	_
		Rockfall Fence Construction	57	20-Jan-15 A	45.61%	31		25-Feb-17	01-Apr-17	536	527	70%	_
		9SE-B/C8 -Hydroseeding	6	12-Feb-15 A	0%	6	27-Mar-15	24-Jul-15	31-Jul-15	88	0	80%	
	Slope 9SE-B/I	F9											
	SWVB3070	9SE-B/F9 - Raking Drain 17 nr	5	21-Mar-15 A	0%	5	26-Mar-15	24-Apr-18	30-Apr-18	858	858	5%	
	Actual Work	Project ID: J3518DWPrE-M22	Mun - C	hek Lap Kok I	ink - Sou	thern (Connection		Date	Revi	sion (Checked	Approve
	Planned Bar	Layout: J3518-DWP-3MRP Submission - M22		ng Progran				es)	09-Mar-15		D		
	Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.		Progress as	• •	-	-		31-Mar-15		M	/Y	
•	Milestone		· ·	- 3 5 - 4 -			,						



iivity 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	Physical % Complete
SWVB3110	9SE-B/F9 - Install Geo. Instru. & Baseline Monitoring	30	22-Jan-15 A	0%	30	02-May-15	20-Mar-18	30-Apr-18	833	833	50%
SWVB3120	A Rockfall Fence Construction	57	20-Jan-15 A	45.61%	31	04-May-15	25-Feb-17	01-Apr-17	536	527	70%
Slope 9SE-B	/F85								_		
SWVB4020	9SE-B/F85 - Filling & forming slope	18	28-Mar-15	0%	18	24-Apr-15	01-Aug-15	24-Aug-15	88	0	0%
SWVB4030	9SE-B/F85 - Form UC	12	25-Apr-15	0%	12	09-May-15	19-Oct-15	03-Nov-15	130	0	0%
SWVB4035	9SE-B/F85 - Install Geo. Instru. & Baseline Monitoring	30	11-May-15	0%	30	24-Jun-15	04-Nov-15	08-Dec-15	130	0	0%
Re-alignme	nt of Cheung Tung Road adjacent to Viaduct C	,					·			· /	
West Portion	1										
RW61000	Realign CTR (West of Abut. C) - Site Clearance	42	03-Sep-14 A	76.19%	10	01-Apr-15	15-Jan-15	26-Jan-15	-53	32	75%
RW61010	Realign CTR (West of Abut. C) - Road drainage works	60	15-Jan-15 A	38.33%	37	24-Jun-15	09-Mar-15	27-Apr-15	-40	18	40%
RW61020	Realign CTR (West of Abut. C) - Utilily diversion	90	19-May-15	0%	90	18-Sep-15	09-Mar-15	11-Jul-15	-53	0	0%
RW61082	Realign CTR (West of Abut. C) - Road formation	48	20-Nov-14 A	31.25%	33	18-May-15	16-Dec-14	26-Jan-15	-85	0	30%
RW61084	Realign CTR (West of Abut. C) - Retaining Wall C1	48	13-Oct-14 A	75%	12	08-Apr-15	05-Dec-14	18-Dec-14	-85	0	75%
East Portion											
RW60000	Realign CTR (East of Abut. C) - Site Clearance	54	01-Dec-14 A	18.52%	44	20-May-15	03-Dec-14	26-Jan-15	-87	0	18%
RW60005	Realign CTR (East of Abut. C) - Road formation	66	22-May-15	0%	66	21-Aug-15	27-Jan-15	22-Apr-15	-87	0	0%
Emergency	Gates G6 & G7										
RP10070	Construct Expressway Fence /Beam Barriers betw new Gates G6 & G7	24	30-Oct-14 A	25%	18	16-Apr-15	07-Apr-18	30-Apr-18	845	845	25%
ESS Sub-Sta	tion										
RP10020	Construct new ESS-C Sub.Stn. adjacent to Viaduct C	48	30-Jun-14 A	85.42%	7	28-Mar-15	21-Apr-18	30-Apr-18	856	856	85%
RP10030	Inst.Eqpt. & Testing / commissioning of new ESS	60	16-Mar-15 A	50%	30	02-May-15	27-Jan-15	05-Mar-15	-43	0	0%
RP10040	Removal of equipment in existing ESS	30	04-May-15	0%	30	13-Jun-15	06-Mar-15	14-Apr-15	-43	0	0%
RP10050	Demolish the existing ESS	6	15-Jun-15	0%	6	24-Jun-15	16-Apr-15	22-Apr-15	-43	44	0%
Natural Terr	ain Hazard Mitigation Works										
NTHM Work	s - West Portion										
Check Dam	no. 1 (CD1)										
GFXX497	Predrilling Works for Check Dams	25	21-Mar-15	0%	25	25-Apr-15	04-May-15	05-Jun-15	30	0	0%
GFXX499	CD1 - Mobilization of rig for MiniPile	6	18-Apr-15	0%	6	25-Apr-15	29-May-15	05-Jun-15	30	0	0%
GFXX500	CD1 - Installation of MiniPile (13nos.)	52	27-Apr-15	0%	52	09-Jul-15	06-Jun-15	17-Aug-15	30	0	0%
	& All Assoc Works from Tung Chung to Southern Landfall										
WM00030	Trial trench works for watermains along existing CTR	157	26-May-14 A	75.16%	39	14-May-15	14-Mar-16	05-May-16	272	66	75%
WM00120	Lay DN450 Fresh Water Main along re-aligned CTR (app. 500 m at 12m/day)	48	10-Jun-15	0%	48	14-Aug-15	18-Jun-15	21-Aug-15	5	0	0%

Actual Work	Project ID: J3518DWPrE-M22	Tuen Mun - Chek Lap Kok Link - Southern Connection	Date	Revision	Checked	Approve
Planned Bar	Layout: J3518-DWP-3MRP Submission - M22_	5-Wonth Rolling Programme (Page 41 of 41 Pages)	09-Mar-15		DB	
Critical Bar	Filter: TASK filters: 3-Month Lookahead, No CC	(Progress as of 21-Mar-15)	31-Mar-15		WY	
♦ Milestone	Milestones, No Level of Effort.	(FIOGLESS as 01 21-Mai-15)				



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-Chep 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	Agent	Implementation Agent	Relevant Standard or Requirement	-	lement Stages		Status	
	Reference					D	C	0	
AIR QUALIT	Y		•						•
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		Ŷ		✓
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		Ŷ		✓
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		Ŷ		✓
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		Ŷ		✓

Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement		ement Stages		Status
	Reference					D	С	0	
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		Ŷ		•
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		Ŷ		✓
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		Ŷ		✓
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	÷	Ŷ		•
Noise	i					. .	i		
5.11	Section 4	Noise monitoring	All existing representative sensitive receivers / during North Lantau Viaduct construction	Contractor	EM&A Manual		Ŷ		✓
WATER QUA	LITY					.i	.1		L
General Ma	rine Works								
6.10	-	Bored piling to be undertaken within a metal casing.	Marine viaducts of TM- CLKL and HKLR/ bored piling	Contractor	TM-EIAO		Ŷ		•
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	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	-	ement Stages		Status
	Reference					D	С	0	
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.		Ŷ		✓
5.10	-	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		✓
5.10	-	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.		Ŷ		<>
5.10	-	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		✓
5.10	-	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		✓
5.10	-	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		✓
Cemporary S	Staging work		.		•	•			
	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	Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	-	lement Stages		Status
	Reference					D	С	0	
		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						
Land Works									
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		Υ		✓
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		Υ		•
6.10	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		4
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	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement		lementa Stages		Status
	Reference					D	С	0	
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		Ŷ		<>
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		Υ		✓
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		1
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		Υ		<>
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		Ŷ		✓
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		Ŷ		4

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	lement Stage		Status
	Reference					D	С	0	
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		Υ	•
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		•
Water Quali	ity Monitoring	3							
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		Υ	Y	•
Ecology									
8.14	6.3	Specification for and implement pre, during and post construction dolphin abundance monitoring.	All Areas/Detailed Design/ during construction works/post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y	*
8.14	6.3	Specification for bored piling monitoring	Detailed Design	Design Consultant	TMEIA	Y			n/a
8.14	6.3	Implement any recommendations of the bored piling monitoring	Southern marine viaduct/Throughout	Contractor	TMEIA		Y		4

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	lemen Stage		Status
	Reference					D	C	0	
			construction during bored piling	5					¢
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		✓
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	Ŷ		•
8.15	6.3, 6.5	Specification and deployment of an artificial reef of an area of 3,600 m ² in an area where fishing activities are prohibited.	Area of prohibited fishing activities/Detailed Design/towards end of construction period	TM-CLKL/ HKBCF Design Consultant/ TM-CLKL/ HKBCF Contractor	TMEIA	Y		Y	n/a To be enforced by AFCD.
8.14	6.3, 6.5	Specification and implementation of marine vessel control specifications	All areas/Detailed Design/during construction works	Design Consultant/ Contractor	TMEIA	Y	Y		•
8.14	6.3, 6.5	Design and implementation of acoustic decoupling methods for marine bored piling and the whole lifespan of temporary staging works.	All areas/ Detailed Design/during marine bored piling and temporary staging works	Design Consultant/ Contractor	TMEIA	Y	Y		•
8.15	6.3, 6.4	Pre-construction phase survey and coral translocation	Tai Ho Wan (donar site) and Yam Tsui Wan (receptor site) /Detailed Design/Prior to construction	Design Consultant/ Contractor	TMEIA	Y	Υ		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
	Reference					D	С	0	
			season/construction phase						¢
7.13	6.5	The loss of habitat shall be supplemented by enhancement planting in accordance with the landscape mitigation schedule.	All areas / As soon as accessible	Contractor	TMEIA		Y		n/a. To be approved by AFCD/LCSD
7.13	6.5	Spoil heaps shall be covered at all times.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Avoid damage and disturbance to the remaining and surrounding natural habitat	All areas / Throughout construction period	Contractor	TMEIA	•	Y		✓
7.13	6.5	Placement of equipment in designated areas within the existing disturbed land	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Disturbed areas to be reinstated immediately after completion of the works.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Construction activities should be restricted to the proposed works boundary	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
LANDSCAPE	AND VISUAL								
10.9	7.6	Round angle, patterned finishes, and oval shaped pier were considered in the viaduct design, and further details will be developed under ACABAS submission (DM3)	All areas/detailed design	Design Consultant	TMEIA	Y			n/a
10.9	7.6	Details of the street furniture will be developed in the detailed design stage (DM4)	All areas/detailed design	Design Consultant	TMEIA	Y			n/a
10.9	7.6	Aesthetic design of the viaduct, retaining wall and other structures will be developed under ACABAS submission (DM5)	All areas/detailed design	Design Consultant	TMEIA	Ŷ			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	Ŷ	Y		✓

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	lement Stages	entation Statu ges	
	Reference					D	С	0	
		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	Υ		✓ Implemented as the Contract Specification
10.9	7.6	Hillside and roadside screen planting to proposed roads, associated structures and slope works (CM3).	All areas/detailed design/during construction/post construction	Design Consultant/	TMEIA	Y	Y		•
10.9	7.6	Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material (in earth tone) (CM4)	All areas/detailed design/during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		•
10.9	7.6	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works (CM5)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		•
10.9	7.6	Control night-time lighting and glare by hooding all lights (CM6)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		•
10.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		•
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		•
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 Poforonco	Environmental Protection Measures		Relevant Standard or Requirement	Imp	lemen Stage		Status	
	Reference					D	C	0	
		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	Υ		n/a
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	Υ	Υ	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	Υ	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	Environmental Protection Measures	Location/Timing	Implementation Agent	Relevant Standard or Requirement	Imp	ement Stages		Status
	Reference	finishes	construction / during	Contractor		D	C	0	implemented
			operation						by HyD
WASTE									
12.6		The Contractor shall identify a coordinator for the management of waste.	Contract mobilisation	Contractor	TMEIA		Y		✓
12.6		The Contractor shall prepare and implement a Waste Management Plan which specifies procedures such as a ticketing system, to facilitate tracking of loads and to ensure that illegal disposal of wastes does not occur, and protocols for the maintenance of records of the quantities of wastes generated, recycled and disposed. A recording system for the amount of waste generated, recycled and disposed (locations) should be established.	Contract mobilisation	Contractor	TMEIA, Works Branch Technical Circular No. 5/99 for the Trip-ticket System for Disposal of Construction and Demolition Material		Υ		•
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	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	lement Stage		Status
	Reference					D	С	0	
12.6	8.1	Rock armour from the existing seawall should be reused on the new sloping seawall as far as possible	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	No waste shall be burnt on site.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Provisions to be made in contract documents to allow and promote the use of recycled aggregates where appropriate.	Detailed Design	Design Consultant	TMEIA	Y			n/a
12.6	8.1	The Contractor shall be prohibited from disposing of C&D materials at any sensitive locations. The Contractor should propose the final disposal sites in the EMP and WMP for approval before implementation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Stockpiled material shall be covered by tarpaulin and /or watered as appropriate to prevent windblown dust/ surface run off.	All areas / throughout construction period	Contractor	TMEIA		Y		<>
12.6	8.1	Excavated material in trucks shall be covered by tarpaulins to reduce the potential for spillage and dust generation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Standard formwork or pre-fabrication should be used as far as practicable so as to minimise the C&D materials arising. The use of more durable formwork/plastic facing for construction works should be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction 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	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	-	lement Stages		Status
	Reference					D	C	0	
		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: suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; Having a capacity of <450L unless the specifications have been approved by the EPD; and Displaying a label in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations. Clearly labelled and used solely for the storage of chemical wastes; Enclosed with at least 3 sides; Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest; Adequate ventilation; 	All areas / throughout construction period	Contractor	TMEIA		Υ		

EIA Reference	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	lement Stage		Status
	Reference					D	C	0	
		 (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.		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 Referen		Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Imp	lement Stages		Status
	Reference					D	С	0	
		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		Υ		✓
CULTURA	AL HERITAGE								
11.8	Section 9	EM&A in the form of audit of the mitigation measures	All areas / throughout construction period	Highways Department	EIAO-TM		Y		n/a
U	0	struction, O=Operation mitigation measures will be the Highways Department of th	ne Hong Kong SAR Gover	nment					
1	Compliance of Mi	tigation Measures							
<>	Compliance of Mi	tigation but need improvement							
x	Non-compliance of	of Mitigation Measures							
	Non-compliance of	of Mitigation Measures but rectified by Contractor							
Δ	Deficiency of Miti	gation Measures but rectified by Contractor							
n/a	Not Applicable in	Reporting Period							

Appendix D

Summary of Action and Limit Levels

Table D1Action and Limit Levels for 1-hour and 24-hour TSP

Parameters	Action	Limit
24 Hour TSP Level in $\mu g/m^3$	ASR9A/ASR8A = 178 ASR9C/ASR8/ASR9 = 178	260
1 Hour TSP Level in $\mu g / m^3$	ASR9A/ASR8A = 394 ASR9C/ASR8/ASR9 = 393	500

Table D2Action 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 D3Action and Limit Levels for Water Quality

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

Notes:

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

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

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

Table D4Action and Limit Levels for Impact Dolphin Monitoring

	North Lantau Social Cluster				
	NEL	NWL			
Action Level	STG < 70% of baseline &	STG < 70% of baseline &			
	ANI < 70% of baseline	ANI < 70% of baseline			
Limit Level	[STG < 40% of baseline & ANI < 40% of baseline]				
	and				
	STG < 40% of baselin	ne & ANI < 40% of baseline			
Notes:					
1. STG means quar	terly encounter rate of number of dolp	ohin sightings, which is 6.00 i			

- NEL and 9.85 in NWL during the baseline monitoring period
 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
- 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 D5Derived 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	4 & ANI <8.9]			
	a	and			
	[STG < 3.9 & ANI <17.9]				

Appendix E

EM&A Monitoring Schedules

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Mar	02-Mar				06-Mar	07-M
			Noise Impact Monitoring			
08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-M
		Noise Impact				
		Monitoring				
15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-M
	Noise Impact			Noise Impact	20 1101	2
	Monitoring			Monitoring		
22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-N
			Noise Impact Monitoring			
29-Mar	30-Mar	31-Mar				
		Noise Impact				
		Monitoring				

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

07-Mar

14-Mar

21-Mar

28-Mar

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance Sunday Wednesday Thursday Friday Saturday Monday Tuesday 01-Mar 02-Mar 03-Mar 04-Mar 05-Mar 06-Mar 1-hr TSP Monitoring 24-hr TSP Monitoring 08-Mar 09-Mar 10-Mar 11-Mar 12-Mar 13-Mar 1-hr TSP Monitoring 24-hr TSP Monitoring 15-Mar 17-Mar 19-Mar 20-Mar 16-Mar 18-Mar 1-hr TSP Monitoring 1-hr TSP Monitoring 24-hr TSP Monitoring 24-hr TSP Monitoring 25-Mar 22-Mar 23-Mar 24-Mar 26-Mar 27-Mar 1-hr TSP Monitoring 24-hr TSP Monitoring

29	9-Mar	30-Mar	31-Mar		
			1-hr TSP Monitoring 24-hr TSP Monitoring		

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section Impact Noise Monitoring Schedule (1 to 30 April 2015)

Sunday	Monday		Tuesday		Wednesday	Thursda	ıy	Friday	Saturday
					01-Apr		02-Apr	03-Apr	04-7
05-Apr		<mark>)6-Apr</mark>	07-4	٩pr			09-Apr	10-Apr	11-/
	Noise Impact Monitoring					Noise Impact Monitoring			
12-Apr	1	3-Apr	14-/				16-Apr	17-Apr	18-/
					Noise Impact Monitoring				
19-Apr	2	20-Apr	21-/	٩pr	22-Apr		23-Apr	24-Apr	25-/
·			Noise Impact Monitoring	•			·		
26-Apr	2	27-Apr	28-/	٩pr	29-Apr		30-Apr		
	Noise Impact Monitoring					Noise Impact Monitoring			

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section Impact Air Quality Monitoring Schedule (1 to 30 April 2015)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Mar	02-Mar	03-Mar	01-Apr	02-Apr	03-Apr	04-Ap
05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Api
	1-hr TSP Monitoring			1-hr TSP Monitoring		
	24-hr TSP Monitoring			24-hr TSP Monitoring		
10.1			45.4		17.0.1	
12-Apr	13-Apr	14-Apr		16-Apr	17-Apr	18-Apr
			1-hr TSP Monitoring 24-hr TSP Monitoring			
19-Apr	20-Apr		22-Apr	23-Apr	24-Apr	25-Apr
		1-hr TSP Monitoring 24-hr TSP Monitoring				

26-Apr	27-Apr	28-Apr	29-Apr	30-Apr	
	1-hr TSP Monitoring 24-hr TSP Monitoring			1-hr TSP Monitoring 24-hr TSP Monitoring	

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

Sunday	Monday		Monday Tuesday		Wednesday	Wednesday Thursday		Saturday
							P. Holiday 01-May	02-Ma
03-May		04-May		05-May		07-May	08-May	09-M
					Noise Impact Monitoring			
10-May		11-May		12-May	13-May	14-May	15-May	16-M
			Noise Impact Monitoring					
17-May		18-May		19-May			22-May	23-M
	Noise Impact Monitoring					Noise Impact Monitoring		
24-May	P. Holiday	25-May		26-May		28-May	29-May	30-N
					Noise Impact Monitoring			
31-May								

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					P. Holiday 01-May	02-May
03-May	v 04-May	05-May	06-May 1-hr TSP Monitoring 24-hr TSP Monitoring	07-May	08-May	<u>09-Ma</u>
10-May	<mark>′ 11-M</mark> ay	12-May 1-hr TSP Monitoring 24-hr TSP Monitoring	13-May	14-May	15-May	16-Ma
17-May	1-hr TSP Monitoring	19-May		1-hr TSP Monitoring	22-May	23-Ma
24 May	24-hr TSP Monitoring	26-May		24-hr TSP Monitoring 28-May	29-May	30-Ma
24-1viay	P. Holiday 23-Iviay	20-iviay	1-hr TSP Monitoring 24-hr TSP Monitoring	20-1VIAY	29-Way	30-1418
31-May						

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
01-Mar	02-Mar	03-Mai	r 04-Mar	05-Ma			07-Mar
		WQM		WQM		WQM	
		Mid-Ebb		Mid-Ebb		Mid-Flood	
		12:12		13:02		8:08	
		(10:27 - 13:57) Mid Flood		(11:17 - 14:47) Mid Flood		(06:23 - 09:53)	
		Mid-Flood 17:39		Mid-Flood 18:53		Mid-Ebb 13:56	
		(15:54 - 19:24)		(17:08 - 20:38)		(12:11 - 15:41)	
08-Mar	09-Mar	(15.54 - 19.24) 10-Mai	r 11-Mar	(17.08 - 20.38) 12-Ma	13-Mar	(12.11 - 15.41)	14-Mar
	00 111	WQM		WQM		WQM	i + iviai
		Mid-Flood		Mid-Flood		Mid-Flood	
		9:21		10:21		11:56	
		(07:36 - 11:06)		(08:36 - 12:06)		(10:11 - 13:41)	
		Mid-Ebb		Mid-Ebb		Mid-Ebb	
		15:35		17:05		19:27	
		(13:50 - 17:20)		(15:20 - 18:50)		(17:42 - 21:12)	
15-Mar	16-Mar	17-Mai	r 18-Mar	19-Ma			21-Mar
		WQM		WQM		WQM	
		Mid-Ebb		Mid-Ebb		Mid-Flood	
		11:04		12:27		7:40	
		(09:19 - 12:49)		(10:42 - 14:12)		(05:55 - 09:25)	
		Mid-Flood		Mid-Flood		Mid-Ebb 13:45	
		16:16		18:08			
22-Mar	23-Mar	(14:31 - 18:01) 24-Mai	r 25-Mar	(16:23 - 19:53) 26-Ma	27-Mar	(12:00 - 15:30)	28-Mar
	23-11/1	WQM	23-10181	WQM		WQM	20-11/101
		Mid-Flood		Mid-Flood		Mid-Flood	
		9:17		10:27		7:36	
		(07:32 - 11:02)		(08:42 - 12:12)		(05:51 - 09:21)	
		Mid-Ebb		Mid-Ebb		Mid-Ebb	
		15:53		17:35		20:18	
		(14:08 - 17:38)		(15:50 - 19:20)		(18:33 - 22:03)	
29-Mar	30-Mar	31-Mai	r				
		WQM					
		Mid-Ebb					
		11:21					
		(09:36 - 13:06)					
		Mid-Flood					
		16:46					
		(15:01 - 18:31)					

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

Sunday	Monday	Tuesday	Wednesday	Thursday		Friday	Saturday	
			01-Apr		02-Apr	03-Apr		04-Apr
				WQM			WQM	
				Mid-Ebb			Mid-Ebb	
				12:11			13:04	
				(10:26 - 13:56) Mid-Flood			(11:19 - 14:49) Mid-Flood	
				18:08			19:21	
				(16:23 - 19:53)			(17:36 - 21:06)	
05-Apr	06-Apr	07-Apr	08-Apr	(10.23 - 19.55)	09-Apr	10-Apr	(17.30 - 21.00)	11-Apr
05-Api	00-Api	WQM	00-Api	WQM	J3-Abi	ιυ-Αρι	WQM	п-дрі
		Mid-Flood		Mid-Flood			Mid-Flood	
		8:15		9:14			10:29	
		(06:30 - 10:00)		(07:29 - 10:59)			(08:44 - 12:14)	
		Mid-Ebb		Mid-Ebb			Mid-Ebb	
		14:36		15:53			17:40	
		(12:51 - 16:21)		(14:08 - 17:38)			(15:55 - 19:25)	
12-Apr	13-Apr		15-Apr	1	16-Apr	17-Apr		18-Apr
		WQM		WQM			WQM	
		Mid-Ebb		Mid-Ebb			Mid-Ebb	
		9:53		11:25			12:43	
		(08:08 - 11:38)		(09:40 - 13:10)			(10:58 - 14:28)	
		Mid-Flood		Mid-Flood			Mid-Flood	
		14:57		17:08			18:57	
10 4		(13:12 - 16:42)		(15:23 - 18:53)		04 4	(17:12 - 20:42)	
19-Apr	20-Apr	21-Apr WQM	22-Apr	Z WQM	23-Apr	24-Apr	WQM	25-Apr
		Mid-Flood		Mid-Flood			Mid-Flood	
		8:08		9:16			10:33	
		(06:23 - 09:53)		(07:31 - 11:01)			(08:48 - 12:18)	
		Mid-Ebb		Mid-Ebb			Mid-Ebb	
		14:48		16:16			17:57	
		(13:03 - 16:33)		(14:27 - 17:57)			(16:12 - 19:42)	
26-Apr	27-Apr	28-Apr			30-Apr		()	
		WQM		WQM				
		Mid-Ebb		Mid-Ebb				
		10:07		11:14				
		(08:22 - 11:52)		(09:29 - 12:59)				
		Mid-Flood		Mid-Flood				
		15:25		17:11				
		(13:40 - 17:10)		(15:26 - 18:56)				

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturda	
			01-Apr	02-Ap	or 01-May		02-May
						WQM	
						Mid-Ebb	
						12:11	
						(10:26 - 13:56)	
						Mid-Flood	
						18:33	
						(16:48 - 20:18)	
03-May	04-May	05-May	06-May		y 08-May		09-May
		WQM		WQM		WQM	
		Mid-Ebb		Mid-Flood		Mid-Flood	
		13:44		8:15		9:32	
		(11:59 - 15:29)		(06:30 - 10:00)		(07:47 - 11:17)	
		Mid-Flood		Mid-Ebb		Mid-Ebb	
		20:33		14:57		16:28	
		(18:48 - 22:18)		(13:12 - 16:42)		(14:43 - 18:13)	
10-May	11-May	12-May	13-May		y 15-May		16-May
		WQM		WQM		WQM	
		Mid-Ebb		Mid-Ebb		Mid-Ebb	
		8:22		10:18		11:44	
		(06:37 - 10:07)		(08:33 - 12:03)		(09:59 - 13:29)	
		Mid-Flood		Mid-Flood		Mid-Flood	
		13:17		15:58		18:00	
		(11:32 - 15:02)		(14:13 - 17:43)		(16:15 - 19:45)	
17-May	18-May	19-May	20-May		y 22-May		23-May
		WQM		WQM		WQM	
		Mid-Ebb		Mid-Flood		Mid-Flood	
		13:48		8:14		9:27	
		(12:03 - 15:33)		(06:29 - 09:59)		(07:42 - 11:12)	
		Mid-Flood		Mid-Ebb		Mid-Ebb	
		20:45		15:12		16:35	
		(19:00 - 22:30)		(13:27 - 16:57)		(14:50 - 18:20)	
24-May	25-May	26-May	27-May		y 29-May		30-May
		WQM		WQM		WQM	
		Mid-Flood		Mid-Ebb		Mid-Ebb	
		12:39		10:00		11:11	
		(10:54 - 14:24)		(08:15 - 11:45)		(09:26 - 12:56)	
		Mid-Ebb		Mid-Flood		Mid-Flood	
		19:16		15:51		17:35	
		(17:31 - 21:01)		(14:06 - 17:36)		(15:50 - 19:20)	

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section Impact Dolphin Monitoring Survey Schedule (1 to 31 March 2015)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Mar	02-Mar			05-Mar	06-Mar	07-Mar
			Impact Dolphin			
			Monitoring			
08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar
			Impact Dolphin			
			Monitoring			
15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar
		Impact Dolphin				
		Monitoring				
22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar
22 1101	20 110	21 110		Impact Dolphin	21 1101	20 1101
				Monitoring		
00.14	00 M	04.14				
29-Mar	30-Mar	31-Mar				

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section Impact Dolphin Monitoring Survey Schedule (1 to 30 April 2015)

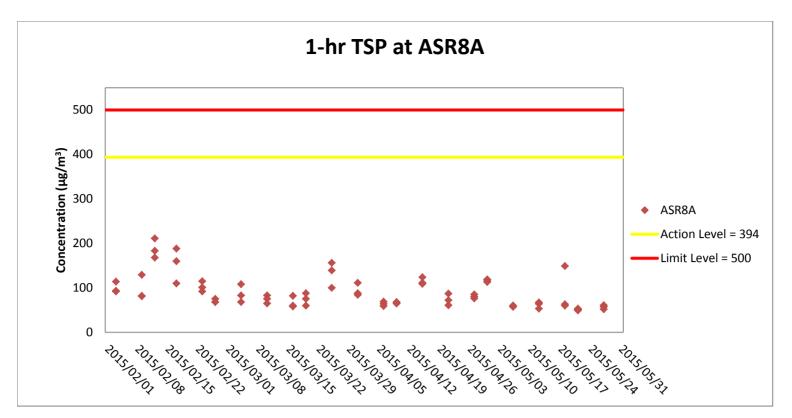
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Apr	02-Apr	03-Apr	04-Apr
05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
· · · ·	•	· · · · ·	Impact Dolphin		Impact Dolphin	•
			Monitoring		Monitoring	
12-Apr	13-Apr	14 Apr	15-Apr	16-Apr	17 Apr	18-Apr
12-Арі	тэ-Арг	14-Apr	тэ-Арг	то-Арг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

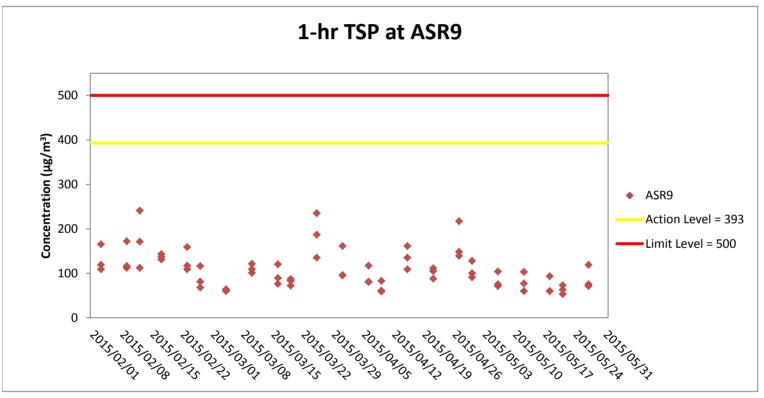
HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section Impact Dolphin Monitoring Survey Schedule (1 to 31 May 2015)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01-May	02-May
03-May	04-May	05-May	06-May	07-May	08-May	09-May
00 1114	Impact Dolphin	00 May			Impact Dolphin	
	Monitoring				Monitoring	
10-May	11-May	12-May			15-May	16-May
				Impact Dolphin		
				Monitoring		
47 Ман	10 Mar	40 Mar		04 Ман	00 Ман	02 Ман
17-May	18-May Impact Dolphin	19-May	20-May	21-May	22-May	23-May
	Monitoring					
	J J					
24-May	25-May	26-May	27-May	28-May	29-May	30-May
31-May						

Appendix F

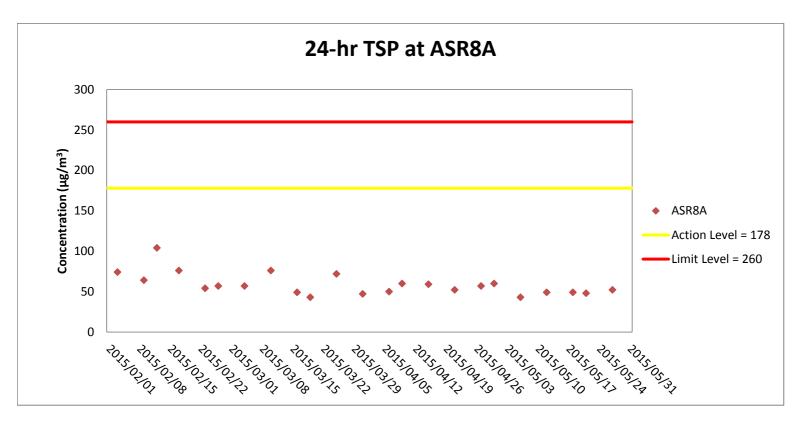
Impact Air Quality Monitoring Graphical Presentation

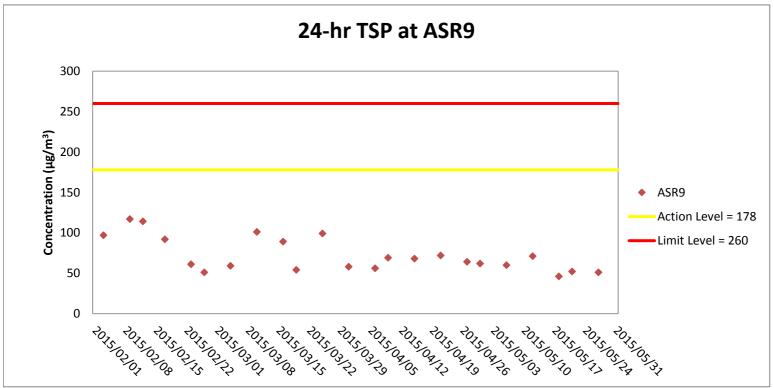




Weather condition within the reporting period varied between sunny to rainy.

Major construction works undertaken within the reporting period include Construction and installation of pile caps; Pier construction; Drainage works; Re-alignment of Cheung Tung Road; Land piling; Pre-drilling works; Installation of pier head segment; Additional land GI, trial pits & lab testing; Tree survey, felling and transplanting; Relocation of MTRC fence; 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; Marine piling platform installation & uninstallation; Pier Construction; Installation of launching gantry; Installation of pier head segments; Marine Piling at Viaducts; and Additional marine ground investigation (GI) and laboratory testing.



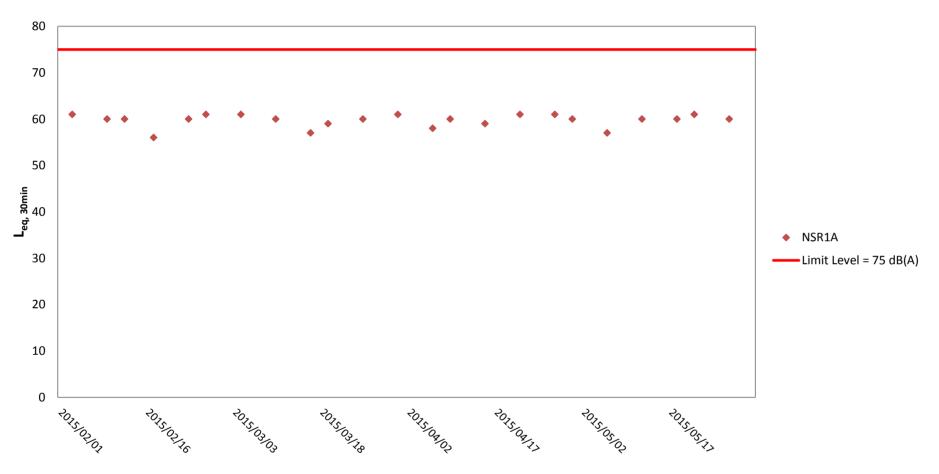


Weather condition within the reporting period varied between sunny to rainy.

Major construction works undertaken within the reporting period include Construction and installation of pile caps; Pier construction; Drainage works; Re-alignment of Cheung Tung Road; Land piling; Pre-drilling works; Installation of pier head segment; Additional land GI, trial pits & lab testing; Tree survey, felling and transplanting; Relocation of MTRC fence; 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; Marine piling platform installation & uninstallation; Pier Construction; Installation of launching gantry; Installation of pier head segments; Marine Piling at Viaducts; and Additional marine ground investigation (GI) and laboratory testing.

Appendix G

Impact Noise Monitoring Graphical Presentation



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

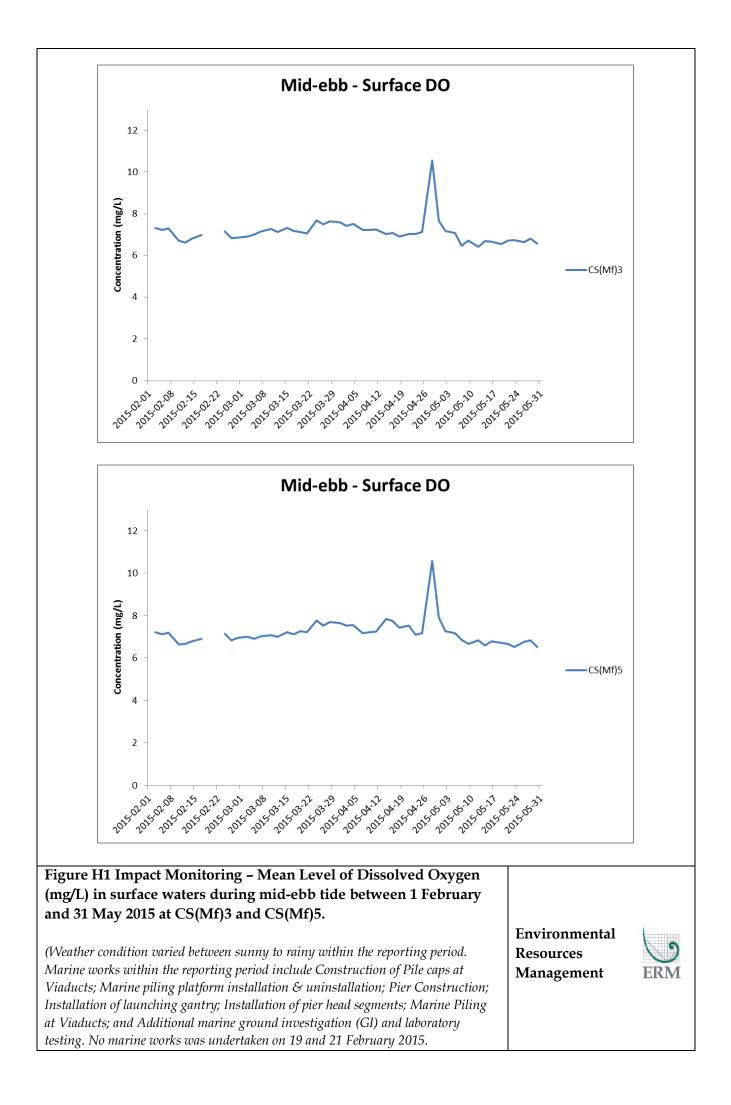
Weather condition within the reporting period varied between sunny to rainy.

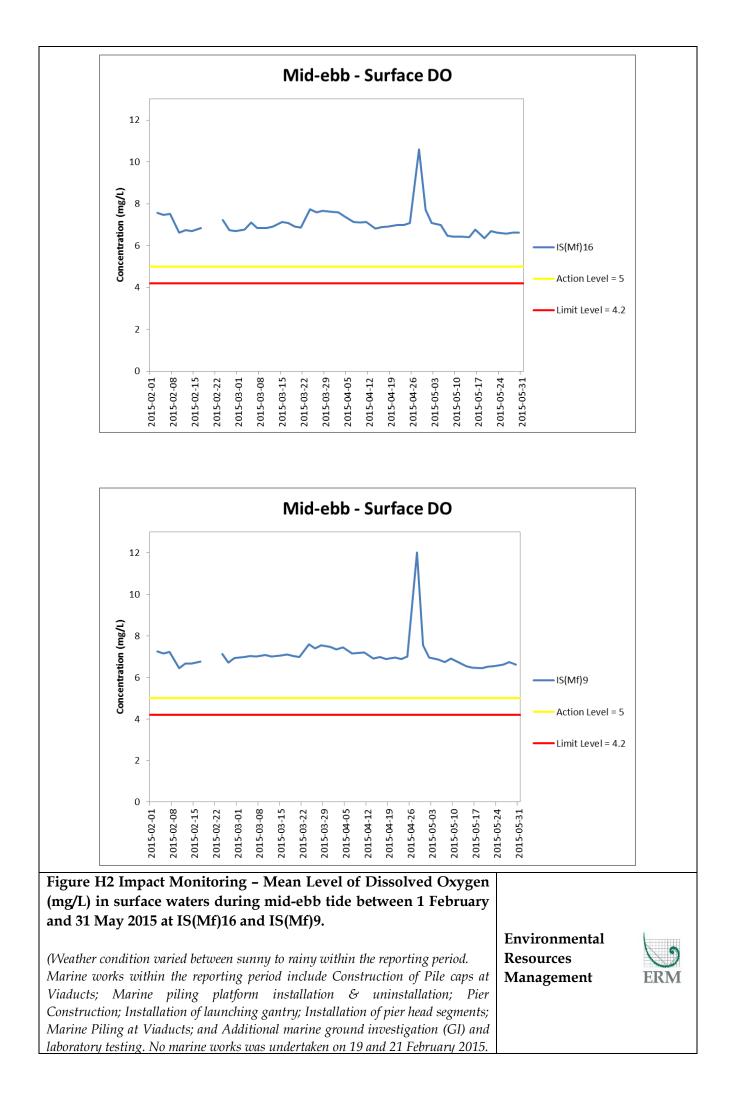
Major construction works undertaken within the reporting period include Construction and installation of pile caps; Pier construction; Drainage works; Realignment of Cheung Tung Road; Land piling; Pre-drilling works; Installation of pier head segment; Additional land GI, trial pits & lab testing; Tree survey, felling and transplanting; Relocation of MTRC fence; and Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

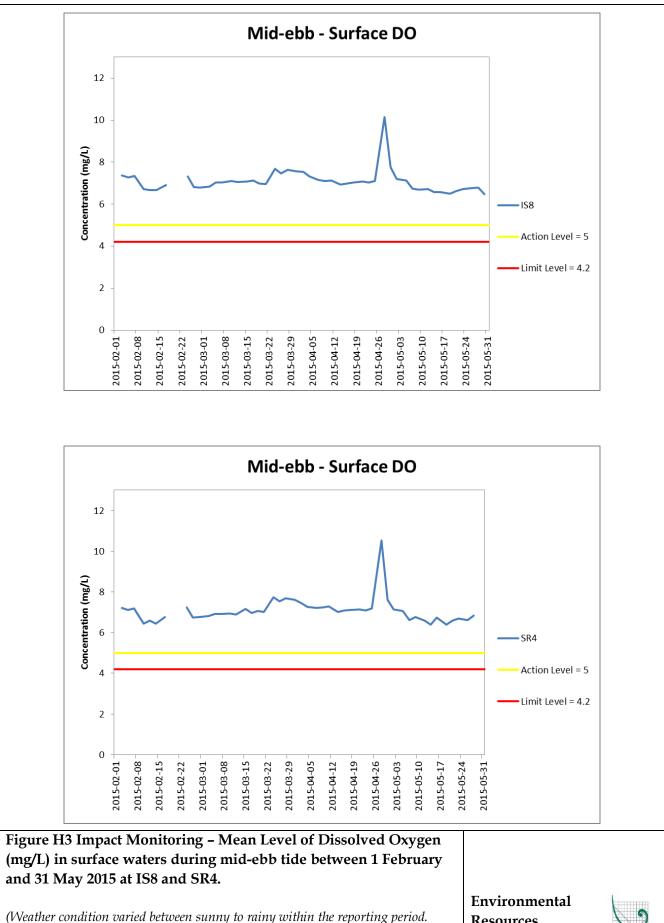
Marine works within the reporting period include Construction of Pile caps at Viaducts; Marine piling platform installation & uninstallation; Pier Construction; Installation of launching gantry; Installation of pier head segments; Marine Piling at Viaducts; and Additional marine ground investigation (GI) and laboratory testing.

Appendix H

Impact Water Quality Monitoring Graphical Presentation



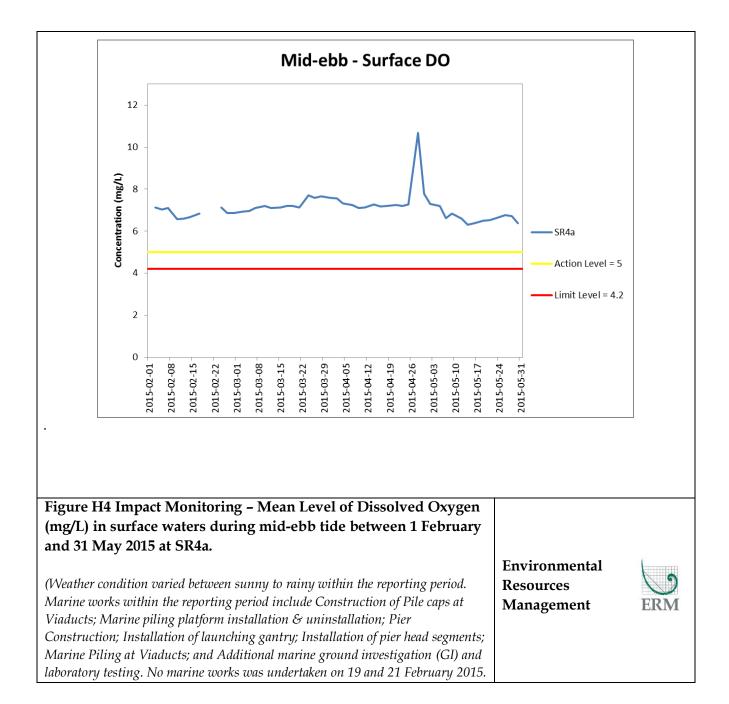


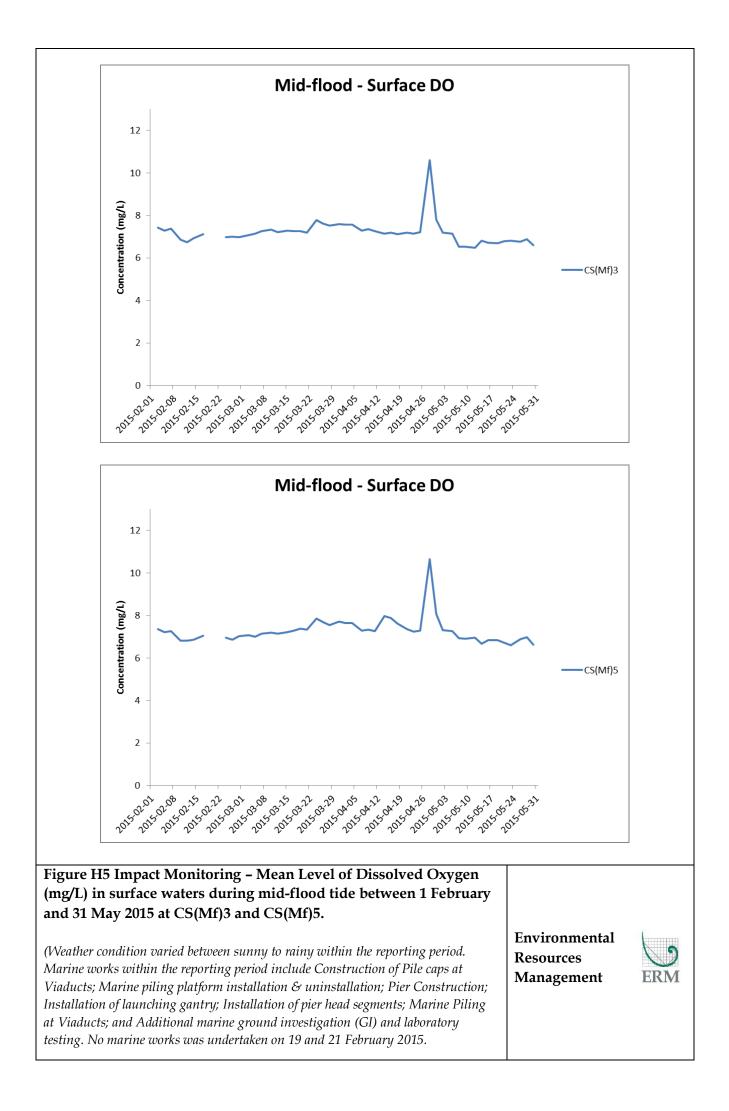


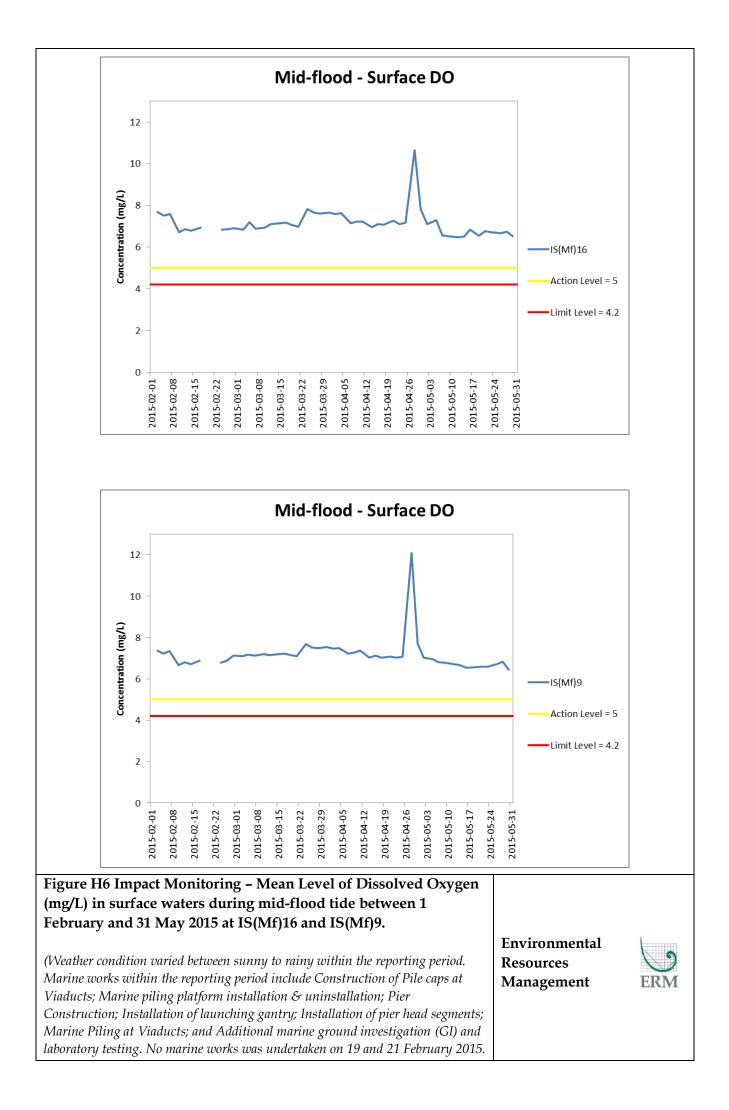
Marine works within the reporting period include Construction of Pile caps at Viaducts; Marine piling platform installation & uninstallation; Pier Construction; Installation of launching gantry; Installation of pier head segments; Marine Piling at Viaducts; and Additional marine ground investigation (GI) and laboratory testing. No marine works was undertaken on 19 and 21 February 2015.

Resources Management









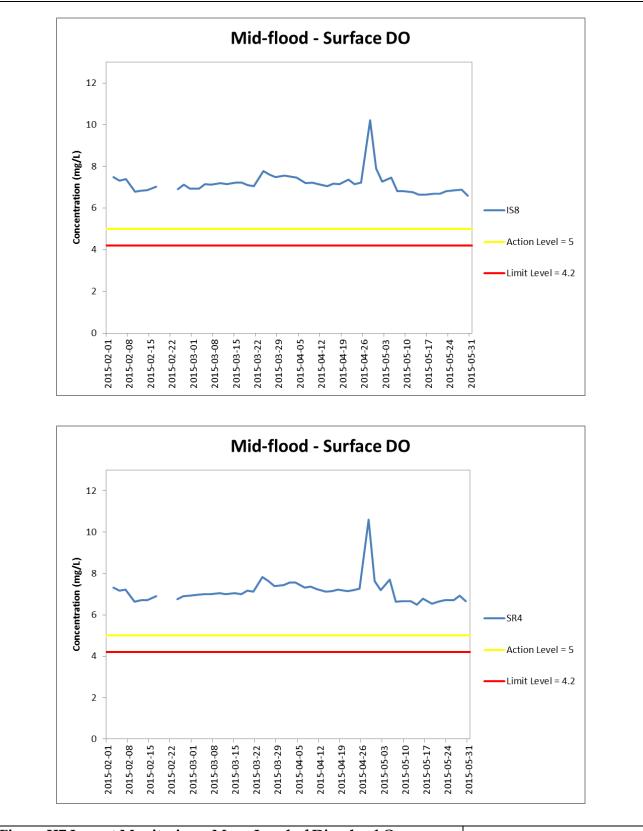
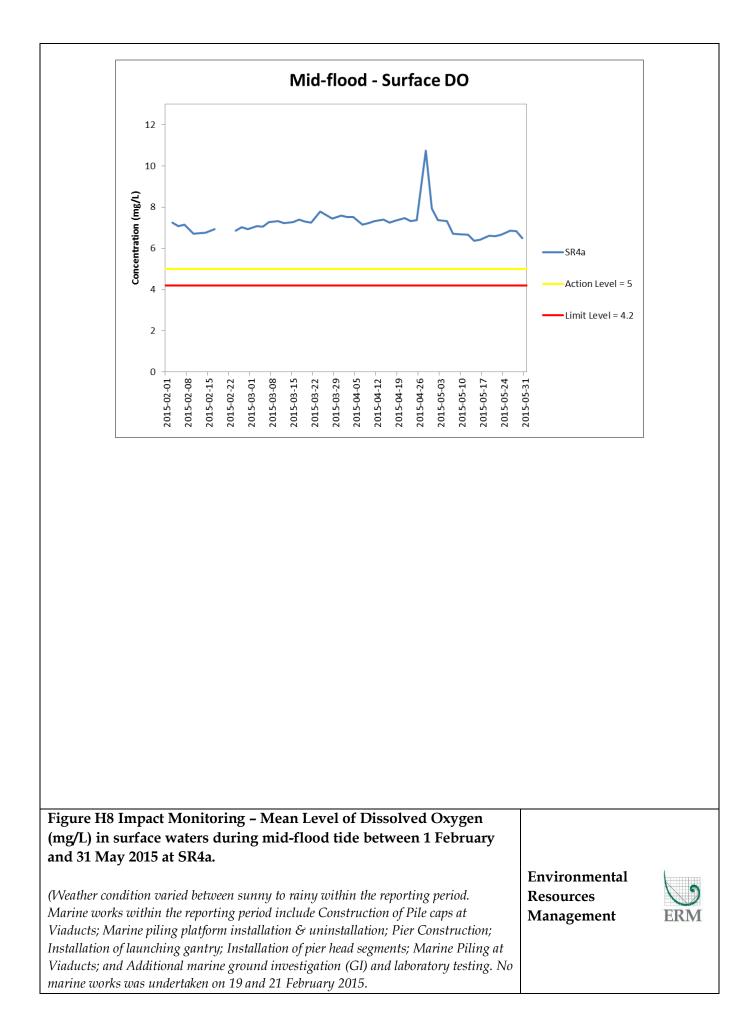
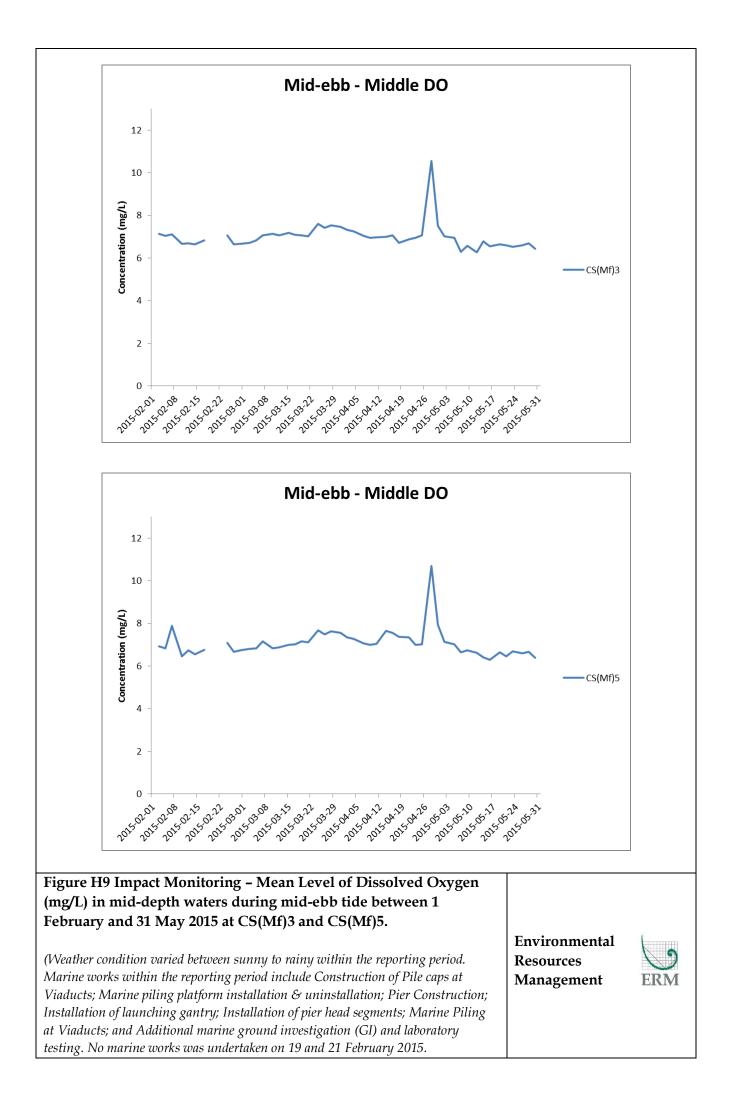


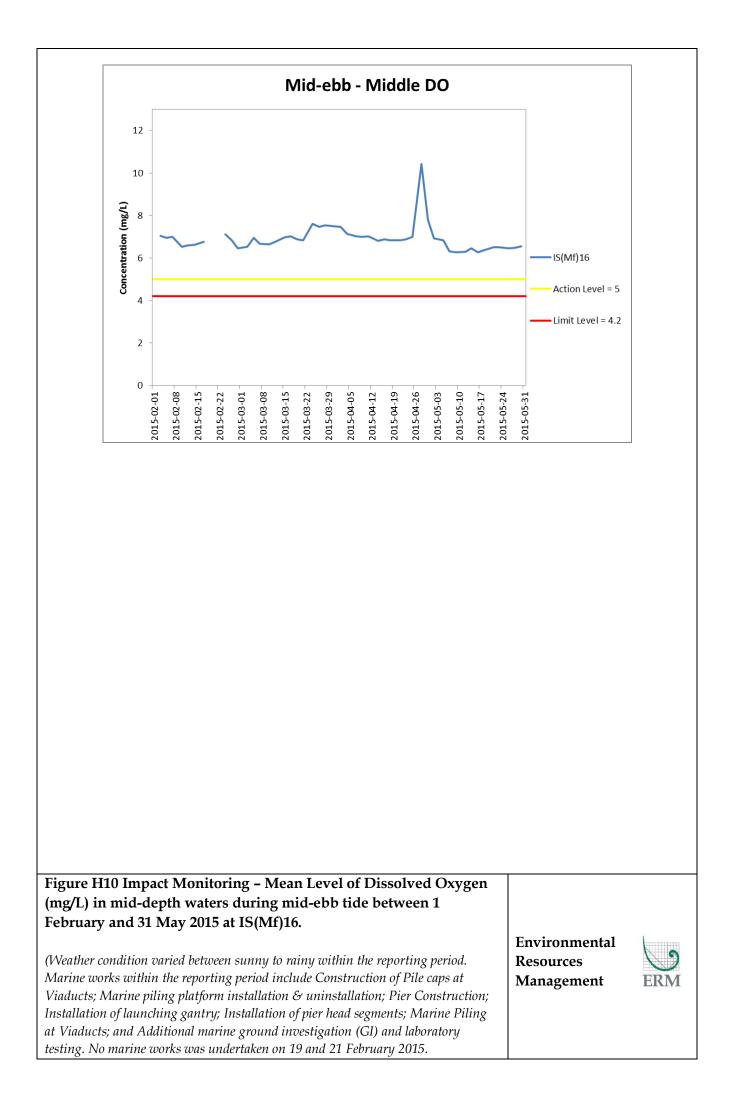
Figure H7 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 February and 31 May 2015 at IS8 and SR4.

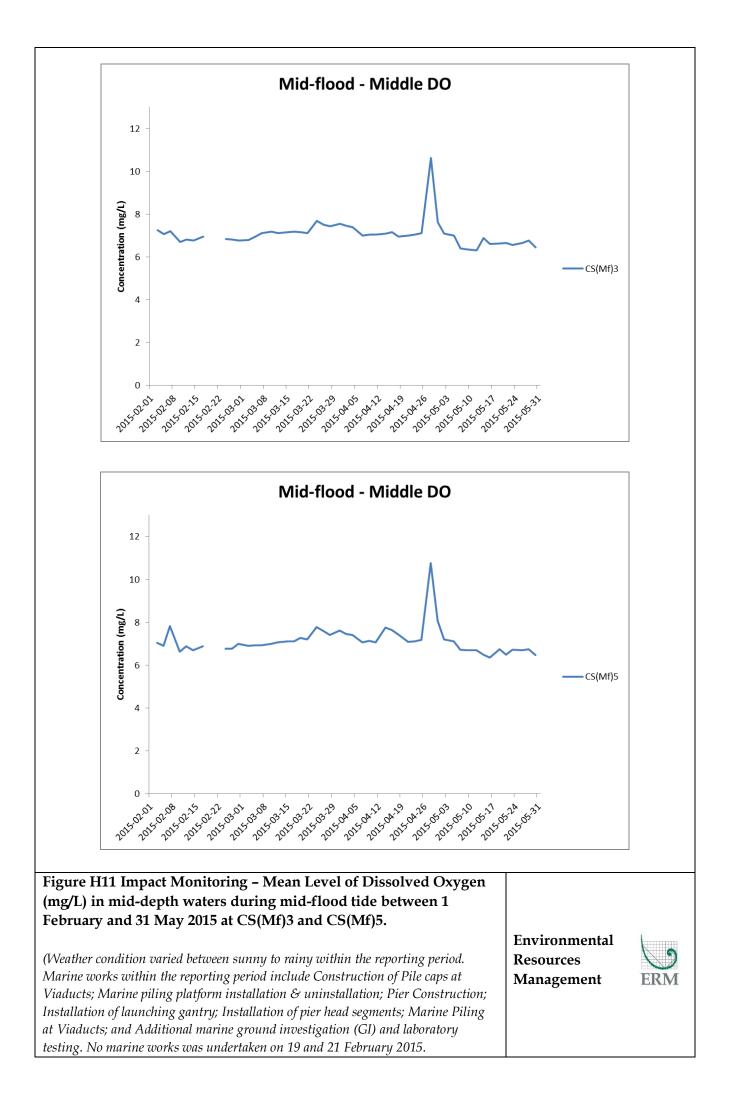
(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include Construction of Pile caps at Viaducts; Marine piling platform installation & uninstallation; Pier Construction; Installation of launching gantry; Installation of pier head segments; Marine Piling at Viaducts; and Additional marine ground investigation (GI) and laboratory testing. No marine works was undertaken on 19 and 21 February 2015.

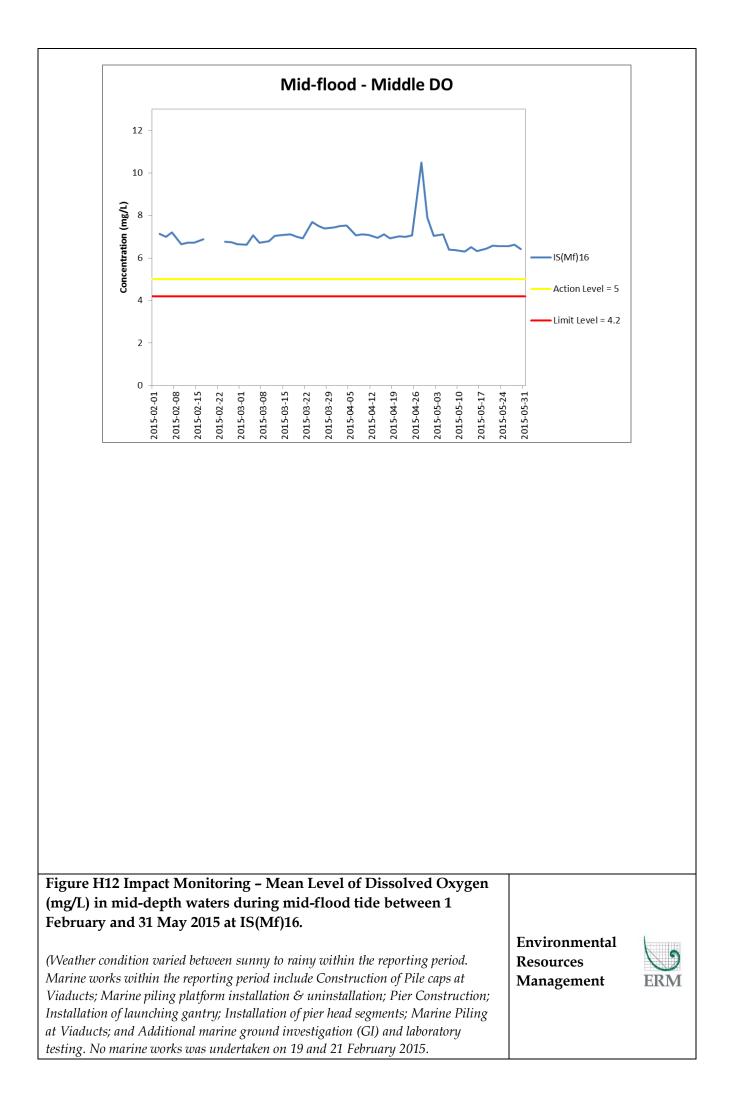


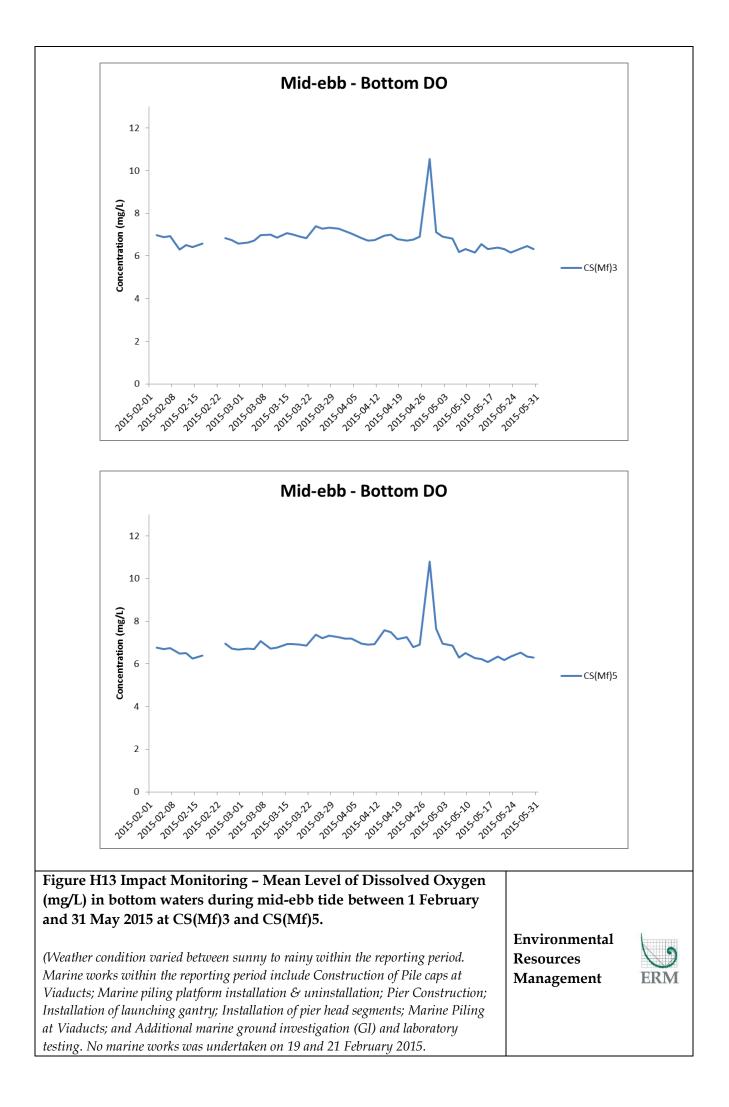












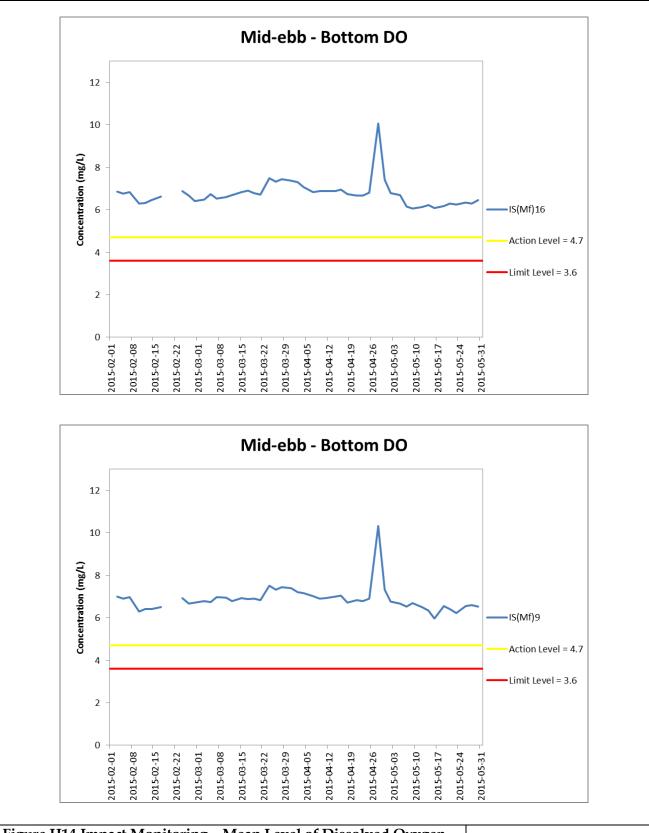


Figure H14 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 February and 31 May 2015 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include Construction of Pile caps at Viaducts; Marine piling platform installation & uninstallation; Pier Construction; Installation of launching gantry; Installation of pier head segments; Marine Piling at Viaducts; and Additional marine ground investigation (GI) and laboratory testing. No marine works was undertaken on 19 and 21 February 2015.



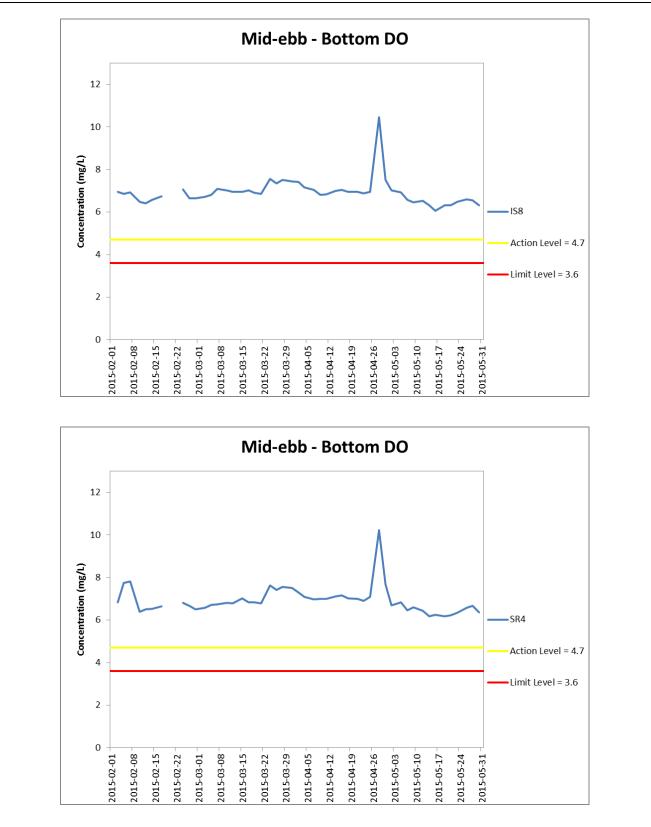
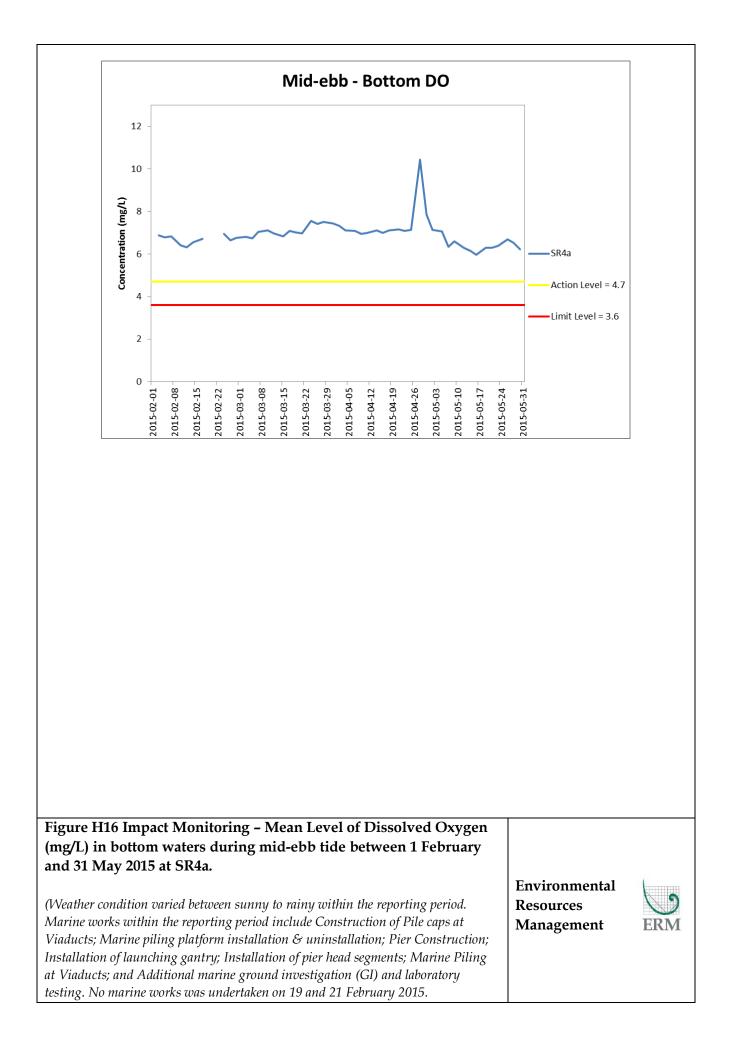
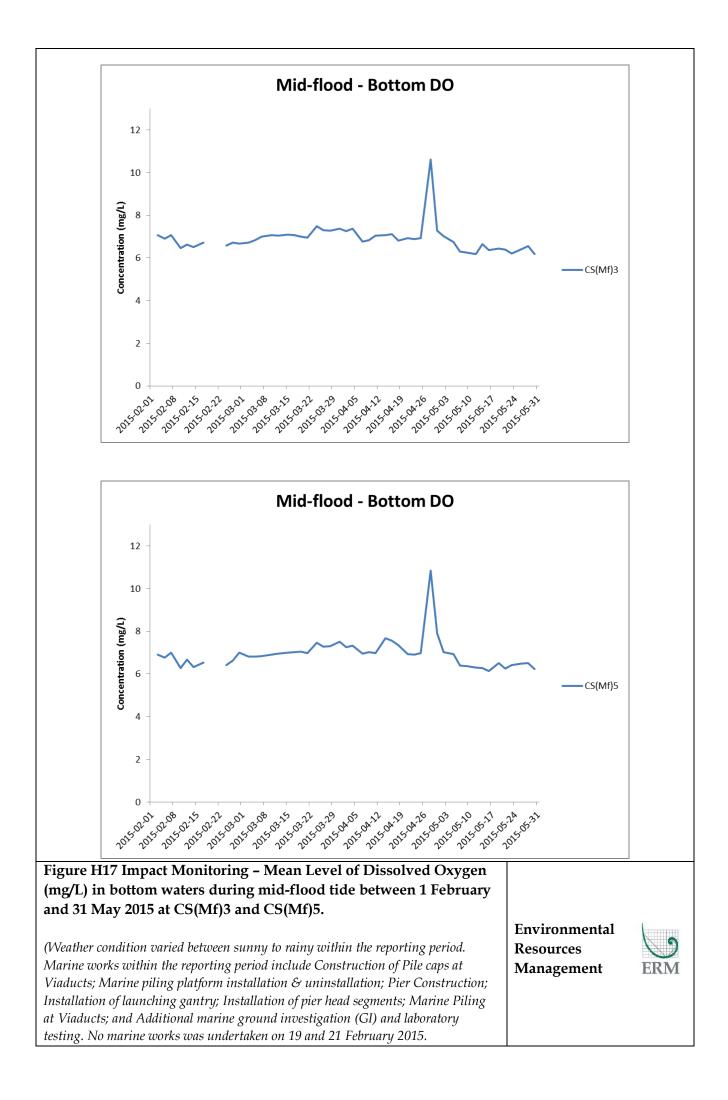


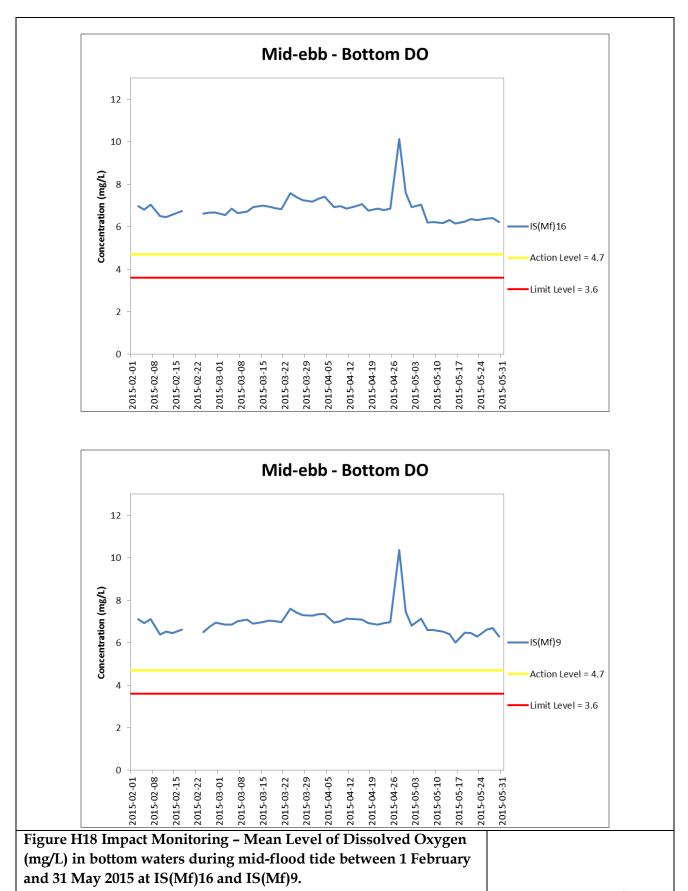
Figure H15 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 February and 31 May 2015 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include Construction of Pile caps at Viaducts; Marine piling platform installation & uninstallation; Pier Construction; Installation of launching gantry; Installation of pier head segments; Marine Piling at Viaducts; and Additional marine ground investigation (GI) and laboratory testing. No marine works was undertaken on 19 and 21 February 2015.



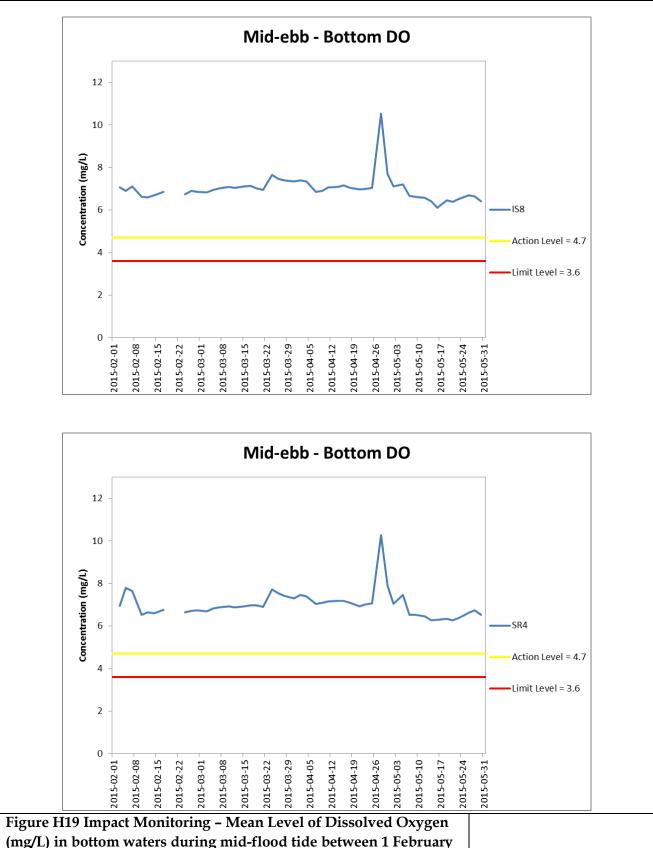






(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include Construction of Pile caps at Viaducts; Marine piling platform installation & uninstallation; Pier Construction; Installation of launching gantry; Installation of pier head segments; Marine Piling at Viaducts; and Additional marine ground investigation (GI) and laboratory testing. No marine works was undertaken on 19 and 21 February 2015.

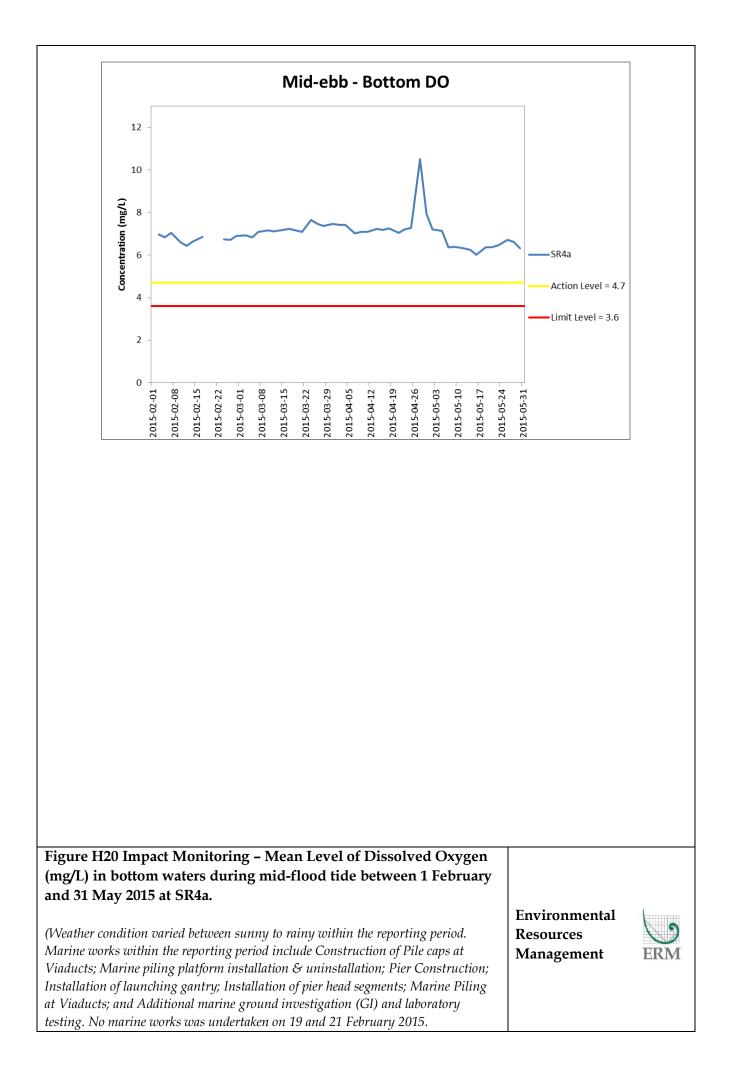


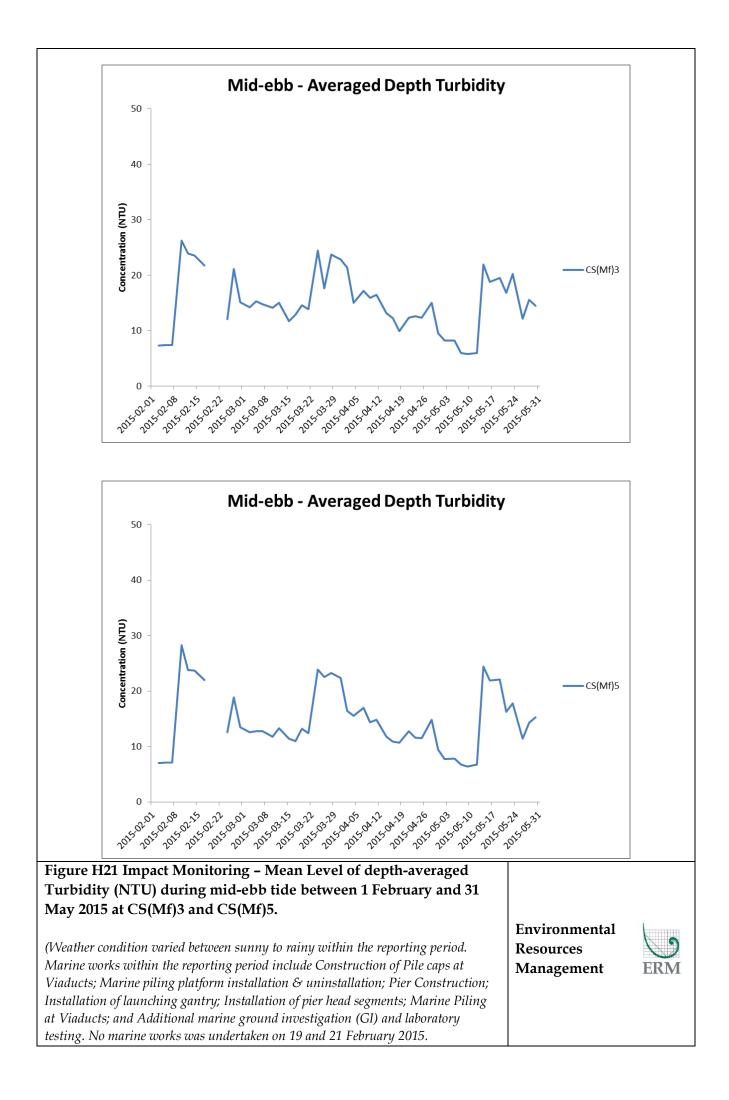


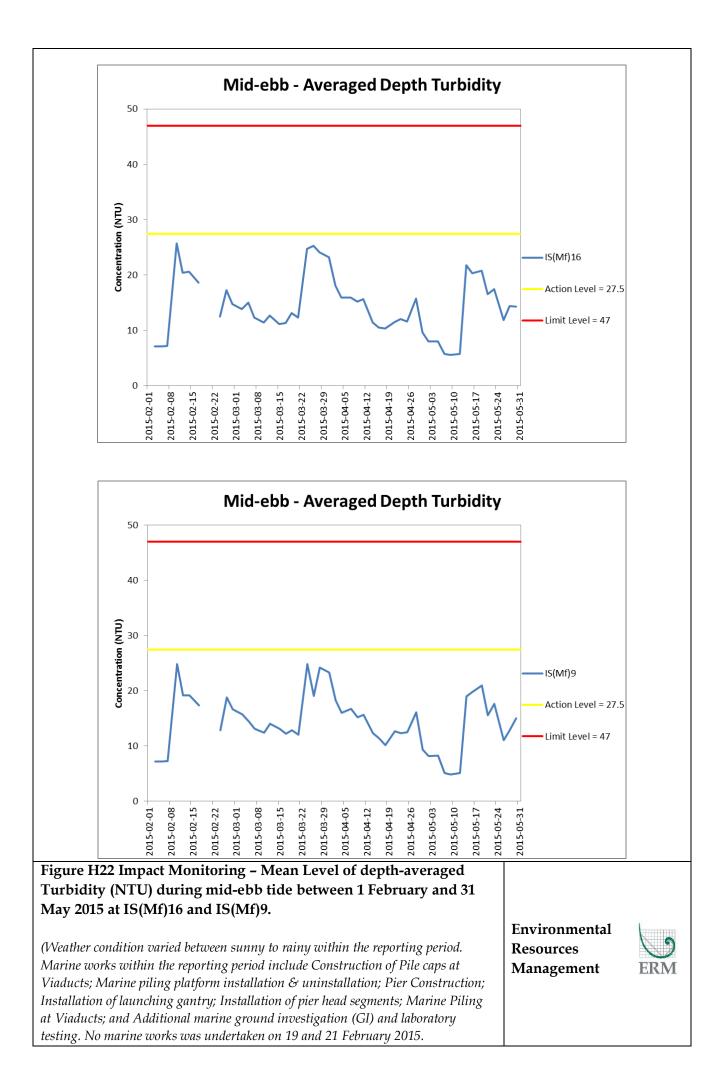
(mg/L) in bottom waters during mid-flood tide between 1 February and 31 May 2015 at IS8 and SR4.

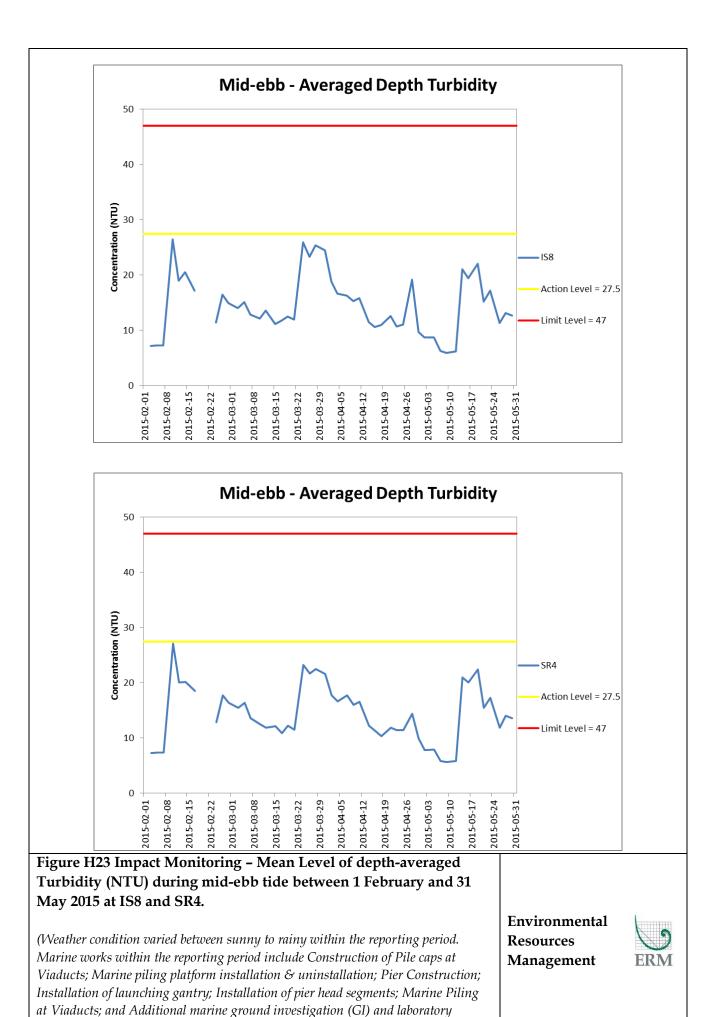
(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include Construction of Pile caps at Viaducts; Marine piling platform installation & uninstallation; Pier Construction; Installation of launching gantry; Installation of pier head segments; Marine Piling at Viaducts; and Additional marine ground investigation (GI) and laboratory testing. No marine works was undertaken on 19 and 21 February 2015.



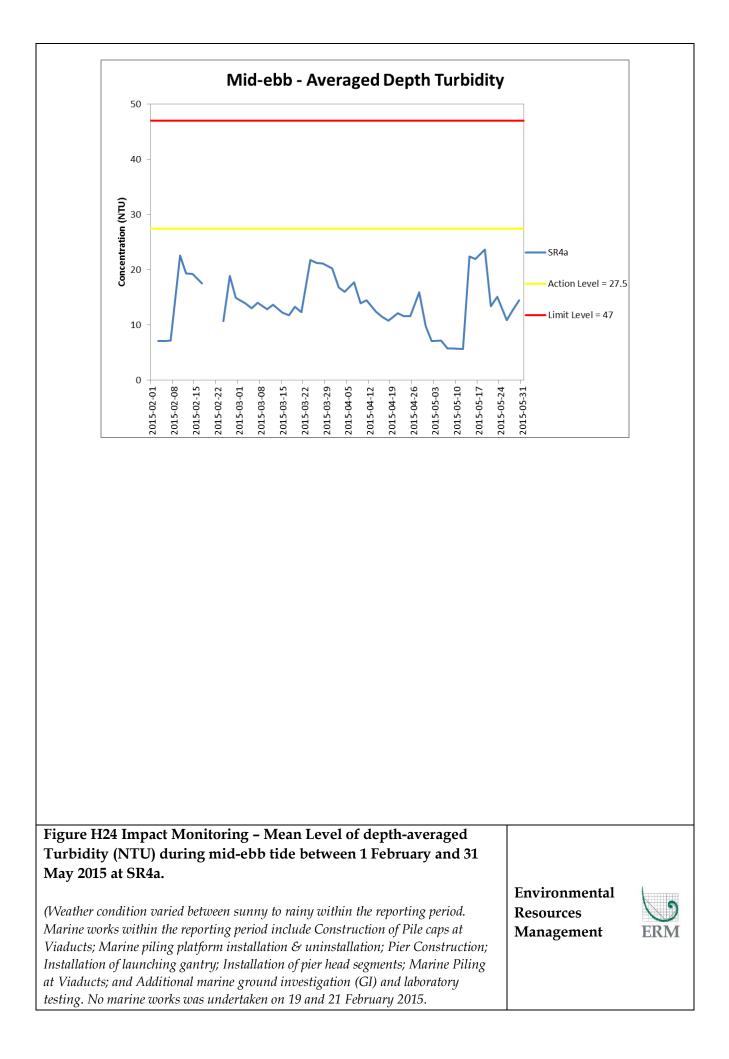


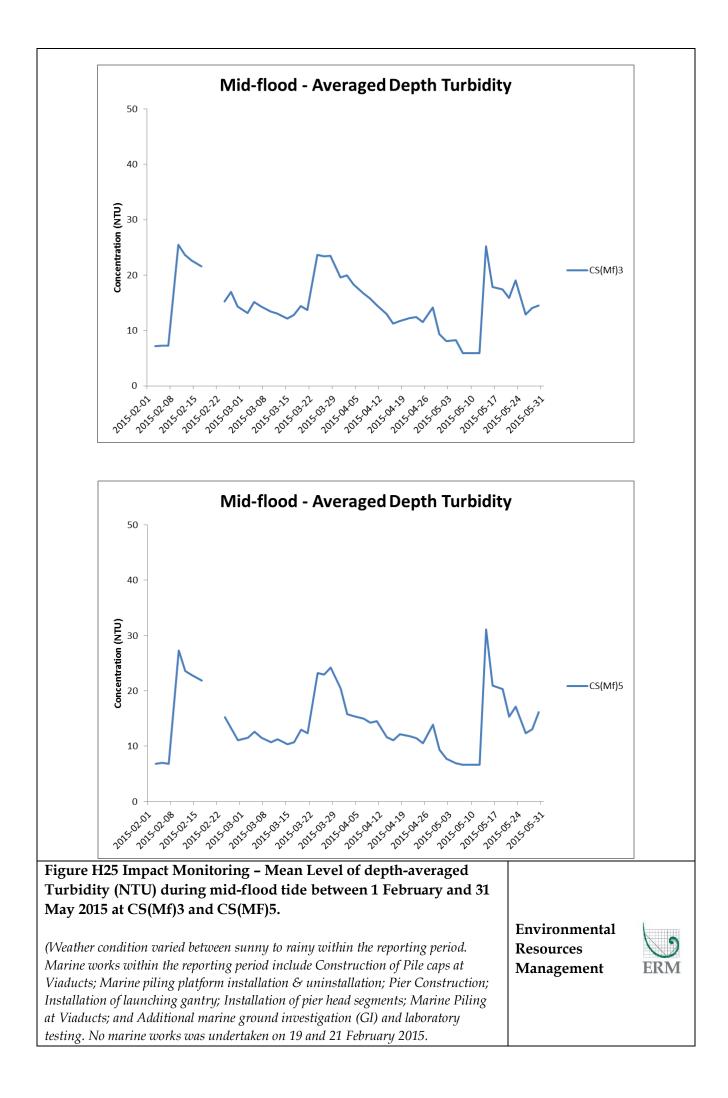


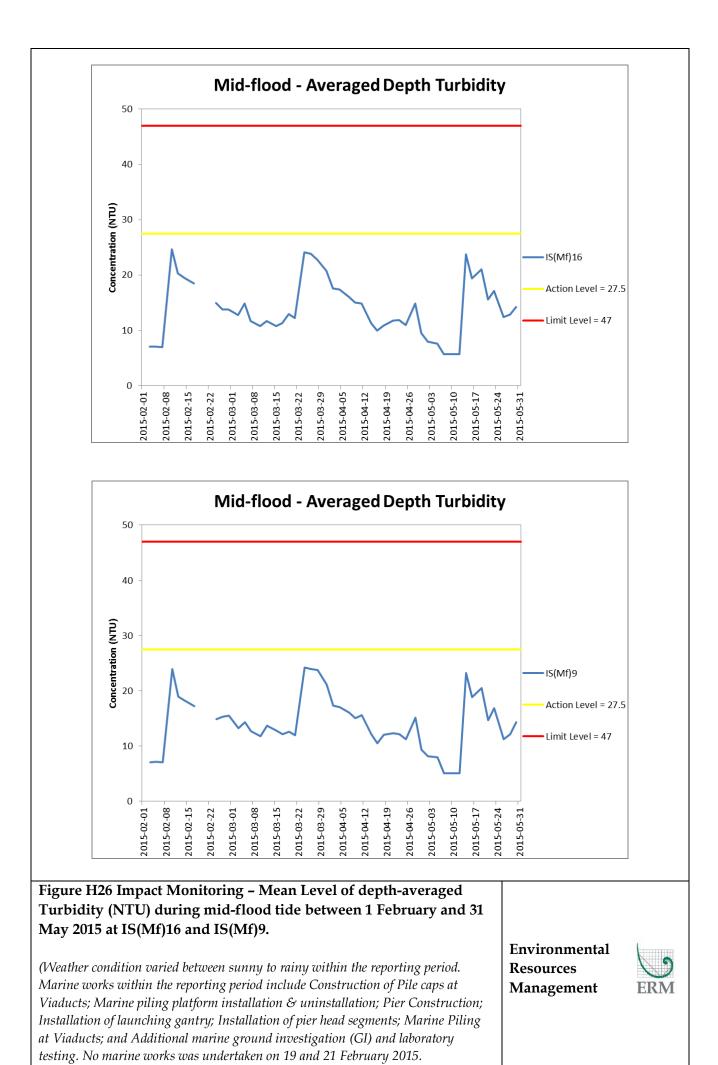


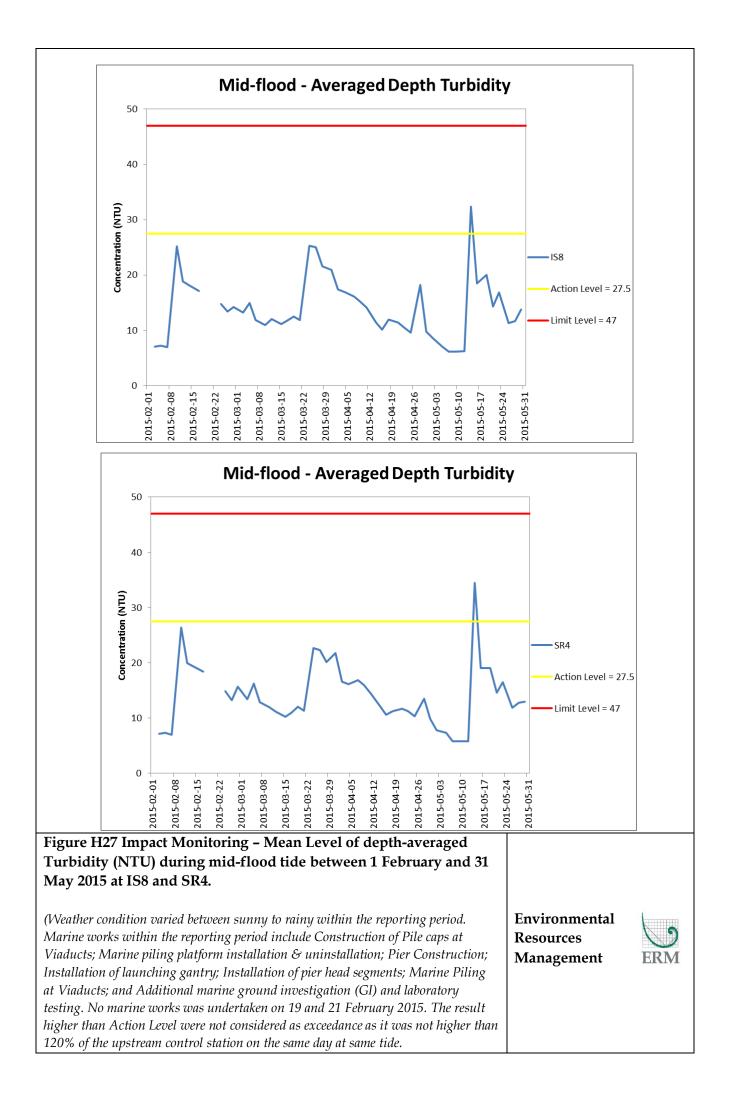


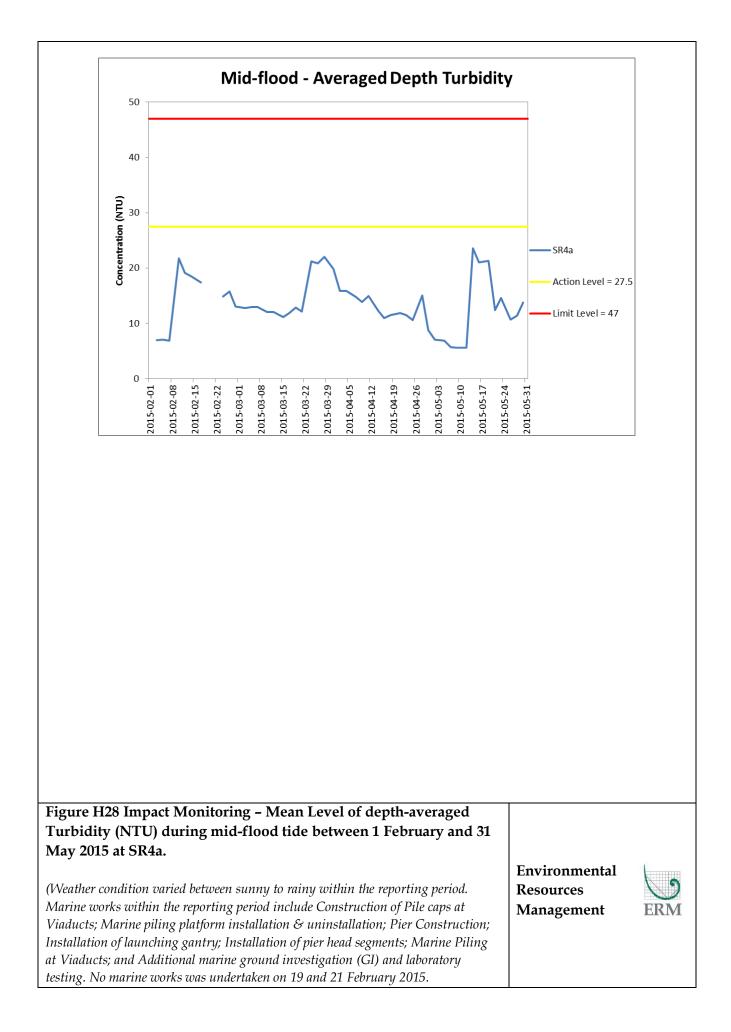
testing. No marine works was undertaken on 19 and 21 February 2015.

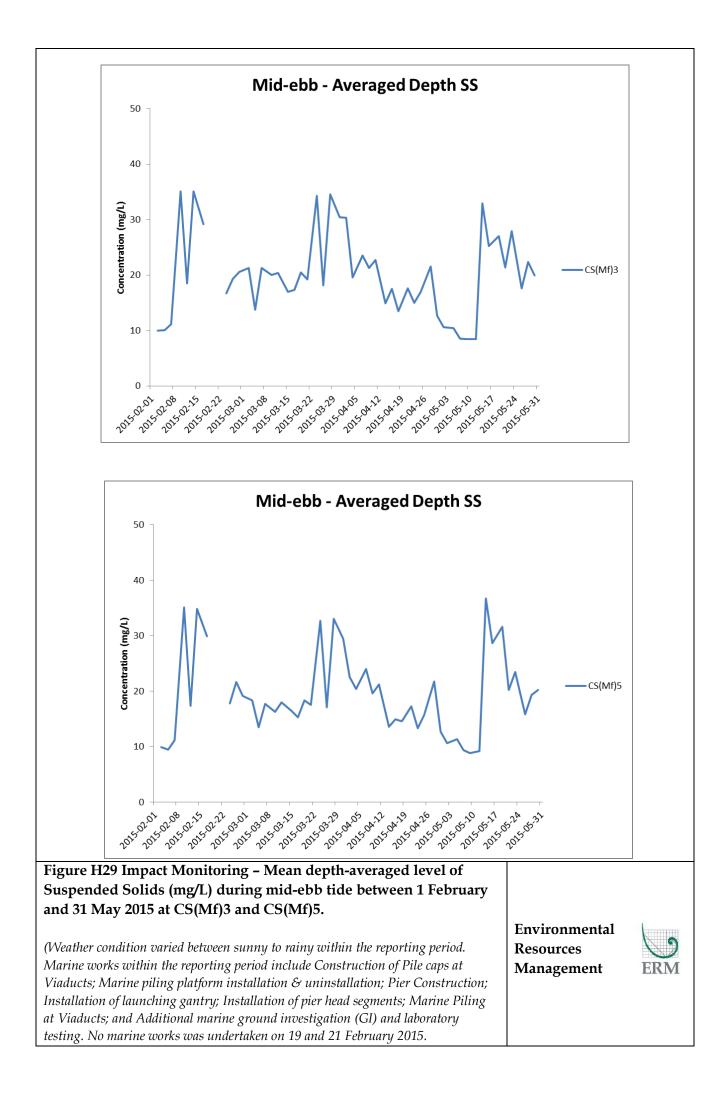


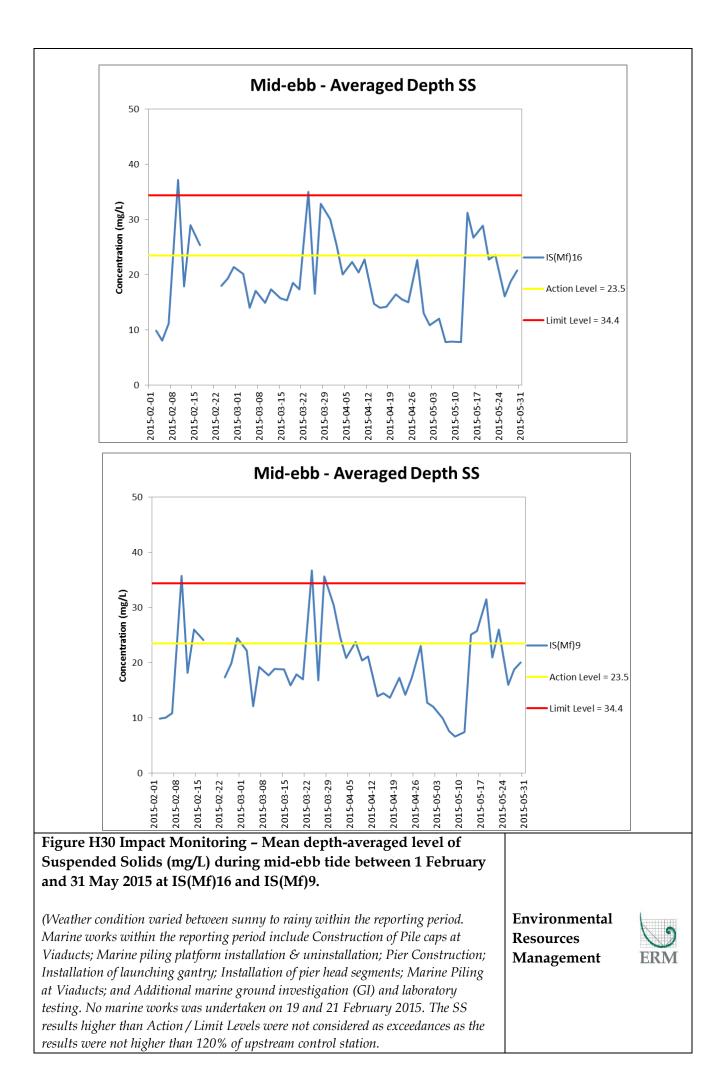


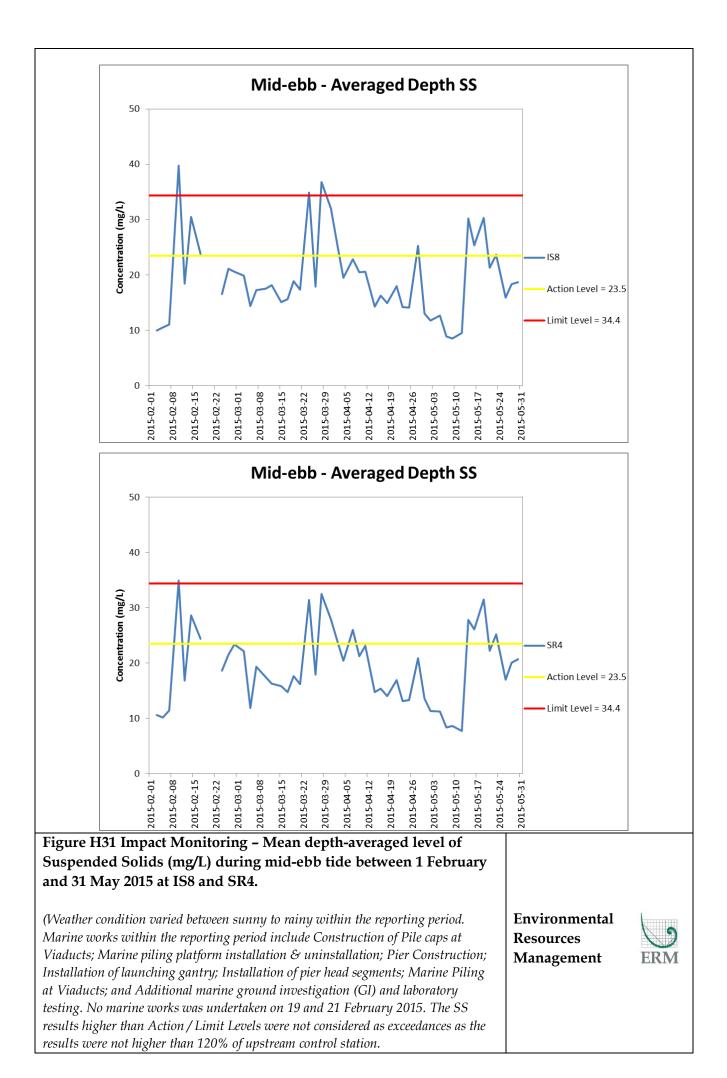


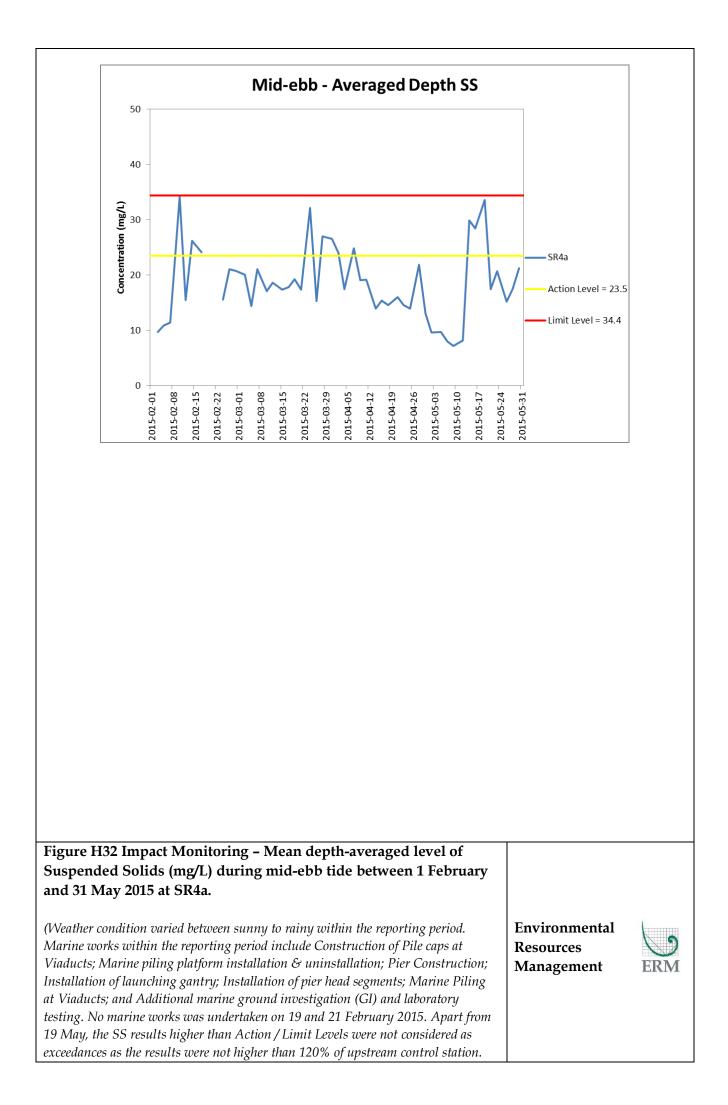


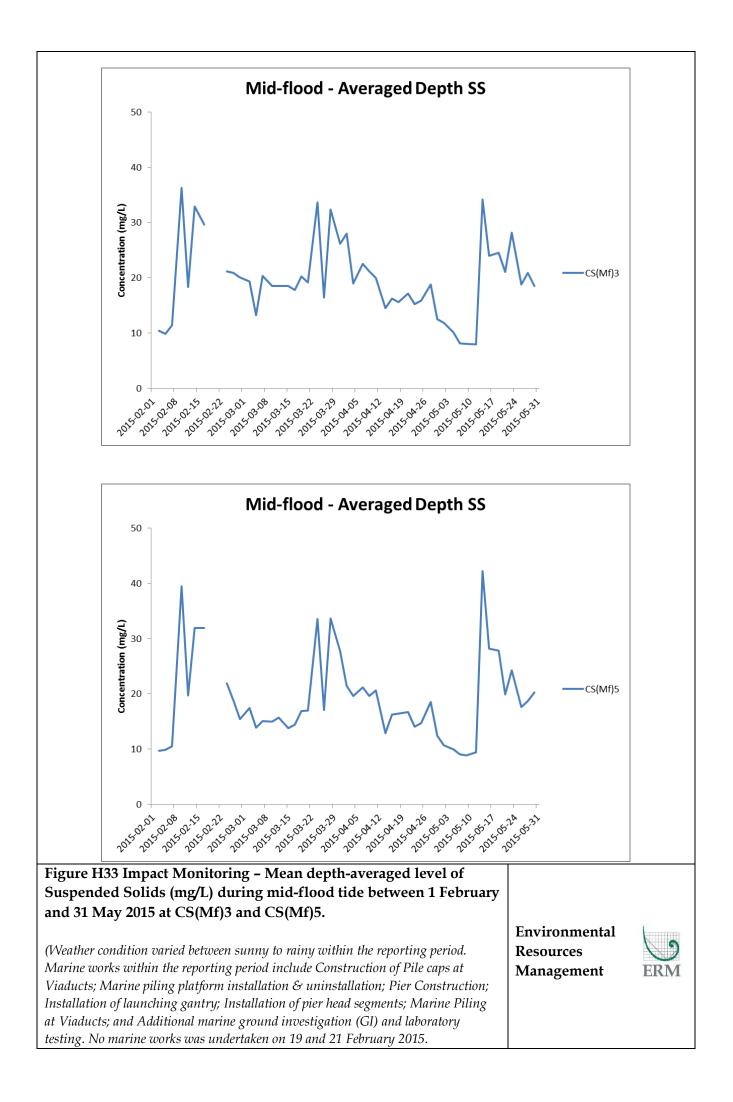


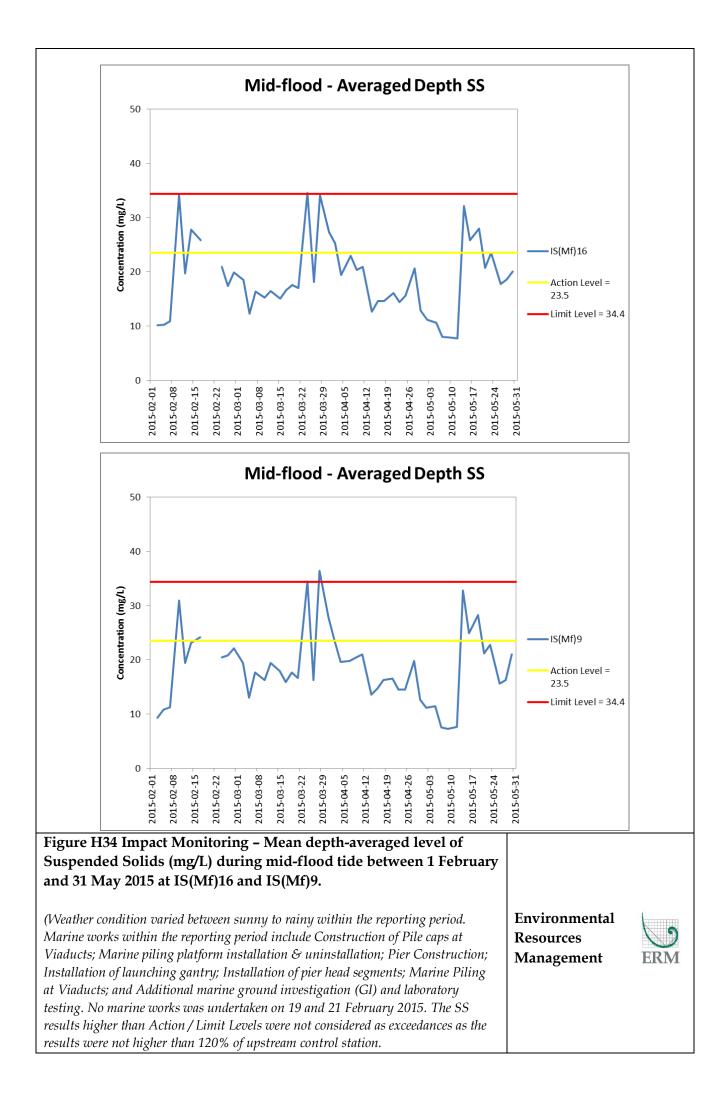


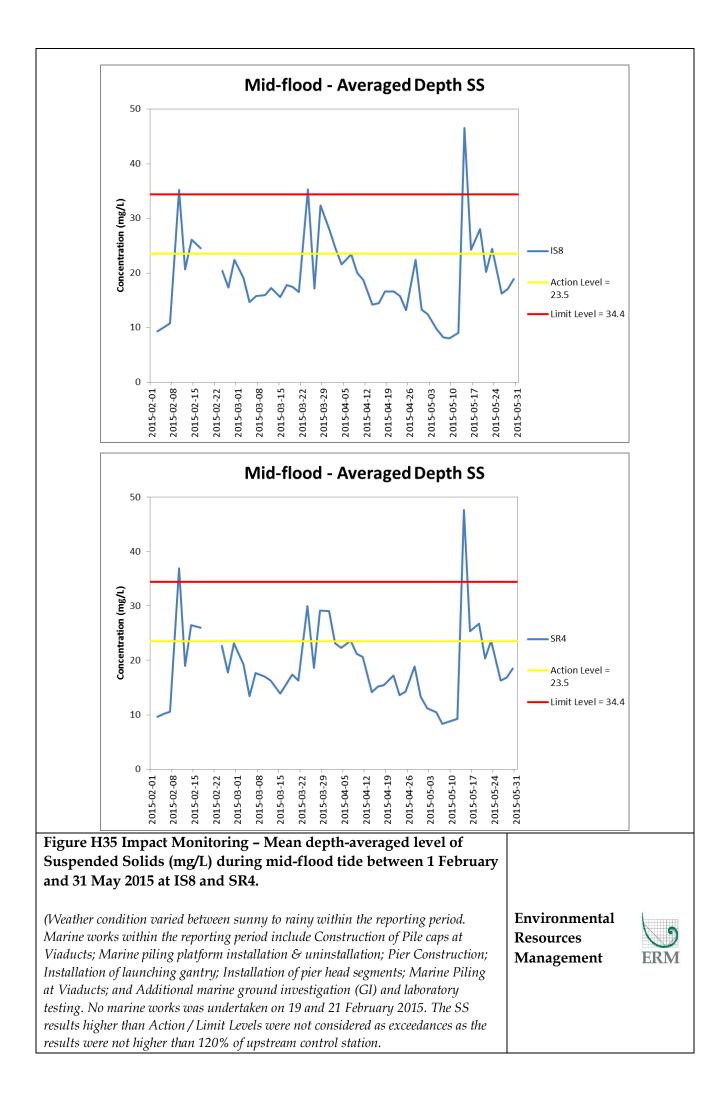


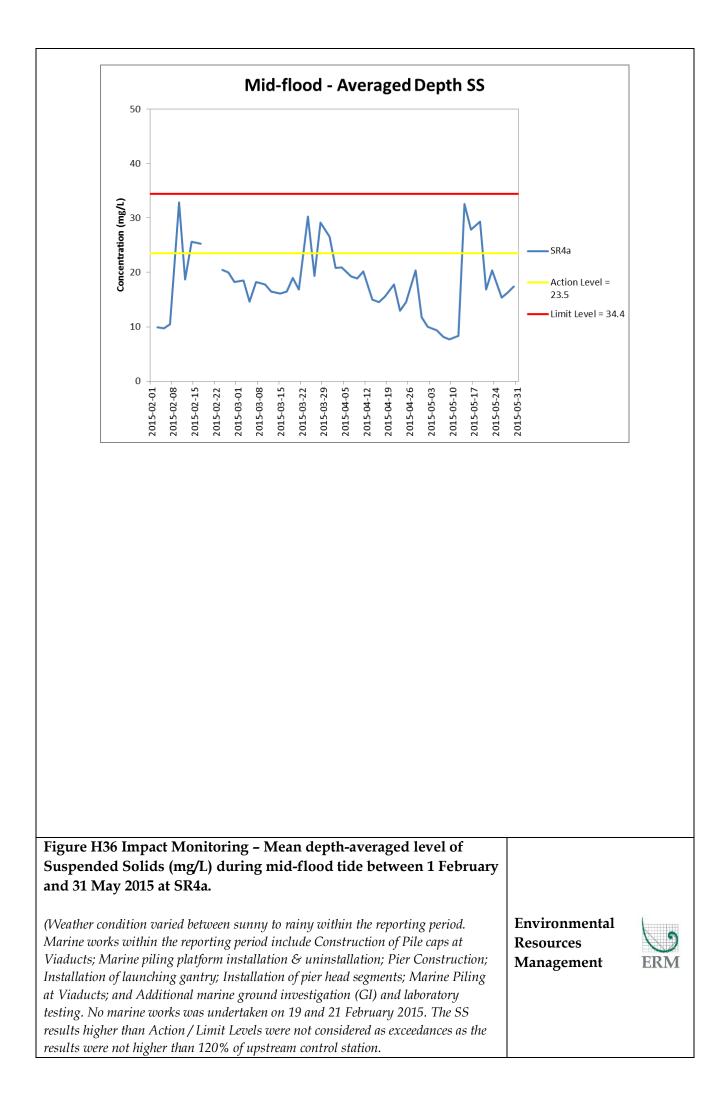












Appendix I

Impact Dolphin Monitoring Survey Results



CONTRACT NO. HY/2012/07 Hong Kong-Zhuhai-Macao Bridge Tuen Mun – Chek Lap Kok Link (Southern Connection Viaduct Section) Dolphin Quarterly Monitoring

6th Quarterly Progress Report (March-May 2015) submitted to Gammon Construction Limited

Submitted by Samuel K.Y. Hung, Ph.D., Hong Kong Cetacean Research Project

1 September 2015

1. Introduction

- 1.1. The Tuen Mun-Chek Lap Kok Link (TM-CLKL) comprises a 1.6 km long dual 2-lane viaduct section between the Hong Kong Boundary Crossing Facilities (HKBCF) and the North Lantau Highway and associated roads at Tai Ho. Gammon Construction Limited (hereinafter called the "Contractor") was awarded as the main contractor of "Contract No. HY/2012/07 Hong Kong-Zhuhai-Macao Bridge Tuen Mun-Chek Lap Kok Link Southern Connection Viaduct Section".
- 1.2. According to the updated Environmental Monitoring and Audit (EM&A) Manual (for TM-CLKL), monthly line-transect vessel surveys for Chinese White Dolphin should be conducted to cover the Northwest (NWL) and Northeast Lantau (NEL) survey areas as in AFCD annual marine mammal monitoring programme. However, as such surveys have been undertaken by the HKLR03 and HKBCF projects in the same areas (i.e. NWL and NEL), a combined monitoring approach is recommended by the Highways Department, that the TM-CLKL EM&A project can utilize the monitoring data collected by HKLR03 or HKBCF project to avoid any redundancy in monitoring effort. Such exemption for the dolphin monitoring will end upon the completion of the dolphin monitoring carried out by HKLR03 contract as well as the TM-CLKL Northern Connection Sub-Sea Tunnel Section (HY/2012/08)
- 1.3. In November 2013, the Director of Hong Kong Cetacean Research Project (HKCRP), Dr. Samuel Hung, has been appointed by Gammon Construction Limited as the dolphin specialist for the TM-CLKL Southern Viaduct Section EM&A project. He is responsible for the dolphin monitoring study, including the data collection on Chinese White Dolphins during the construction phase (i.e. impact period) of the TM-CLKL project in Northwest Lantau (NWL) and Northeast Lantau (NEL) survey areas.
- 1.4. During the construction period of HKLR, the dolphin specialist would be in charge of reviewing and collating information collected by HKLR03 dolphin monitoring programme to



examine any potential impacts of TM-CLKL construction works on the dolphins.

- 1.5. From the monitoring results, any changes in dolphin occurrence within the study area will be examined for possible causes, and appropriate actions and additional mitigation measures will be recommended as necessary.
- 1.6. This report is the sixth quarterly progress report under the TM-CLKL construction phase dolphin monitoring programme submitted to the Gammon Construction Limited, summarizing the results of the surveys findings during the period of March to May 2015, utilizing the survey data collected by HKLR03 project.

2. Monitoring Methodology

2.1. Vessel-based Line-transect Survey

2.1.1. According to the requirement of the updated EM&A manual, dolphin monitoring programme should cover all transect lines in NEL and NWL survey areas (see Figure 1) twice per month throughout the entire construction period. The co-ordinates of all transect lines conducted during the HKLR03 dolphin monitoring surveys are shown in Table 1.

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

Table 1 Co-ordinates of transect lines conducted b	V HKI DO3 project



HK CETACEAN RESEARCH PROJECT 香港鯨豚研究計劃

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				

- 2.1.2. The HKLR03 survey team used standard line-transect methods (Buckland et al. 2001) to conduct the systematic vessel surveys, and followed the same technique of data collection that has been adopted over the last 16 years of marine mammal monitoring surveys in Hong Kong developed by HKCRP (see Hung 2013, 2014). For each monitoring vessel survey, a 15-m inboard vessel with an open upper deck (about 4.5 m above water surface) was used to make observations from the flying bridge area.
- 2.1.3. Two experienced observers (a data recorder and a primary observer) made up the on-effort survey team, and the survey vessel transited different transect lines at a constant speed of 13-15 km per hour. The data recorder searched with unaided eyes and filled out the datasheets, while the primary observer searched for dolphins and porpoises continuously through 7 x 50 *Fujinon* marine binoculars. Both observers searched the sea ahead of the vessel, between 270° and 90° (in relation to the bow, which is defined as 0°). One to two additional experienced observers were available on the boat to work in shift (i.e. rotate every 30 minutes) in order to minimize fatigue of the survey team members. All observers were experienced in small cetacean survey techniques and identifying local cetacean species.
- 2.1.4. During on-effort survey periods, the survey team recorded effort data including time, positions (latitude and longitude), weather conditions (Beaufort sea state and visibility), and distance traveled in each series (a continuous period of search effort) with the assistance of a handheld GPS (*Garmin eTrex Legend*).
- 2.1.5. Data including time, position and vessel speed were also automatically and continuously logged by handheld GPS throughout the entire survey for subsequent review.
- 2.1.6. When dolphins were sighted, the survey team would end the survey effort, and immediately record the initial sighting distance and angle of the dolphin group from the survey vessel, as well as the sighting time and position. Then the research vessel was diverted from its course to approach the animals for species identification, group size estimation, assessment of group composition, and behavioural observations. The perpendicular distance (PSD) of the dolphin group to the transect line was later calculated from the initial sighting distance and angle.
- 2.1.7. Survey effort being conducted along the parallel transect lines that were perpendicular to the coastlines (as indicated in Figure 1) was labeled as "primary" survey effort, while the survey effort conducted along the connecting lines between parallel lines was labeled as "secondary" survey effort. According to HKCRP long-term dolphin monitoring data, encounter rates of Chinese white dolphins deduced from effort and sighting data collected



along primary and secondary lines were similar in NEL and NWL survey areas. Therefore, both primary and secondary survey effort were presented as on-effort survey effort in this report.

- 2.2. Photo-identification Work
- 2.2.1. When a group of Chinese White Dolphins were sighted during the line-transect survey, the HKLR03 survey team would end effort and approach the group slowly from the side and behind to take photographs of them. Every attempt was made to photograph every dolphin in the group, and even photograph both sides of the dolphins, since the colouration and markings on both sides may not be symmetrical.
- 2.2.2. A professional digital camera (*Canon* EOS 7D or 60D model), equipped with long telephoto lenses (100-400 mm zoom), were available on board for researchers to take sharp, close-up photographs of dolphins as they surfaced. The images were shot at the highest available resolution and stored on Compact Flash memory cards for downloading onto a computer.
- 2.2.3. All digital images taken in the field were first examined, and those containing potentially identifiable individuals were sorted out. These photographs would then be examined in greater detail, and were carefully compared to the existing Chinese White Dolphin photo-identification catalogue maintained by HKCRP since 1995.
- 2.2.4. Chinese White Dolphins can be identified by their natural markings, such as nicks, cuts, scars and deformities on their dorsal fin and body, and their unique spotting patterns were also used as secondary identifying features (Jefferson 2000).
- 2.2.5. All photographs of each individual were then compiled and arranged in chronological order, with data including the date and location first identified (initial sighting), re-sightings, associated dolphins, distinctive features, and age classes entered into a computer database.

2.3. Data Analysis

- 2.3.1. Distribution Analysis The line-transect survey data was integrated with the Geographic Information System (GIS) in order to visualize and interpret different spatial and temporal patterns of dolphin distribution using sighting positions. Location data of dolphin groups were plotted on map layers of Hong Kong using a desktop GIS (ArcView[©] 3.1) to examine their distribution patterns in details. The dataset was also stratified into different subsets to examine distribution patterns of dolphin groups with different categories of group sizes, young calves and activities.
- 2.3.2. Encounter rate analysis Encounter rates of Chinese white dolphins (number of on-effort sightings per 100 km of survey effort, and total number of dolphins sighted on-effort per 100 km of survey effort) were calculated in NEL and NWL survey areas in relation to the amount of survey effort conducted during each month of monitoring survey. Only data



collect under Beaufort 3 or below condition would be used for the encounter rate analyses. Dolphin encounter rates were calculated in two ways for comparisons with the HZMB baseline monitoring results as well as to AFCD long-term marine mammal monitoring results.

Firstly, for the comparison with the HZMB baseline monitoring results, the encounter rates were calculated using primary survey effort alone. The average encounter rate of sightings (STG) and average encounter rate of dolphins (ANI) were deduced based on the encounter rates from six events during the present quarter (i.e. six sets of line-transect surveys in North Lantau), which was also compared with the one deduced from the six events during the baseline period (i.e. six sets of line-transect surveys in North Lantau).

Secondly, the encounter rates were calculated using both primary and secondary survey effort collected under Beaufort 3 or below condition as in AFCD long-term monitoring study. The encounter rate of sightings and dolphins were deduced by dividing the total number of on-effort sightings (STG) and total number of dolphins (ANI) by the amount of survey effort for the present quarterly period.

Quantitative grid analysis on habitat use – To conduct quantitative grid analysis of habitat 2.3.3. use, positions of on-effort sightings of Chinese White Dolphins collected during the quarterly impact phase monitoring period were plotted onto 1-km² grids among NWL and NEL survey areas on GIS. Sighting densities (number of on-effort sightings per km^2) and dolphin densities (total number of dolphins from on-effort sightings per km²) were then calculated for each 1 km by 1 km grid with the aid of GIS. Sighting density grids and dolphin density grids were then further normalized with the amount of survey effort conducted within each grid. The total amount of survey effort spent on each grid was calculated by examining the survey coverage on each line-transect survey to determine how many times the grid was surveyed during the study period. For example, when the survey boat traversed through a specific grid 50 times, 50 units of survey effort were counted for that grid. With the amount of survey effort calculated for each grid, the sighting density and dolphin density of each grid were then normalized (i.e. divided by the unit of survey effort).

The newly-derived unit for sighting density was termed SPSE, representing the number of on-effort <u>s</u>ightings <u>p</u>er 100 units of <u>s</u>urvey <u>effort</u>. In addition, the derived unit for actual dolphin density was termed DPSE, representing the number of <u>d</u>olphins <u>p</u>er 100 units of <u>s</u>urvey <u>effort</u>. Among the 1-km² grids that were partially covered by land, the percentage of sea area was calculated using GIS tools, and their SPSE and DPSE values were adjusted accordingly. The following formulae were used to estimate SPSE and DPSE in each 1-km² grid within the study area:

SPSE = ((S / E) x 100) / SA% DPSE = ((D / E) x 100) / SA%

where S = total number of on-effort sightings D = total number of dolphins from on-effort sightings E = total number of units of survey effort SA% = percentage of sea area



- 2.3.4. Behavioural analysis When dolphins were sighted during vessel surveys, their behaviour was observed. Different activities were categorized (i.e. feeding, socializing, traveling, and milling/resting) and recorded on sighting datasheets. This data was then input into a separate database with sighting information, which can be used to determine the distribution of behavioural data with a desktop GIS. Distribution of sightings of dolphins engaged in different activities and behaviours would then be plotted on GIS and carefully examined to identify important areas for different activities of the dolphins.
- 2.3.5. Ranging pattern analysis Location data of individual dolphins that occurred during the 3-month impact phase monitoring period were obtained from the dolphin sighting database and photo-identification catalogue. To deduce home ranges for individual dolphins using the fixed kernel methods, the program Animal Movement Analyst Extension, was loaded as an extension with ArcView[©] 3.1 along with another extension Spatial Analyst 2.0. Using the fixed kernel method, the program calculated kernel density estimates based on all sighting positions, and provided an active interface to display kernel density plots. The kernel estimator then calculated and displayed the overall ranging area at 95% UD level.

3. Monitoring Results

- 3.1. Summary of survey effort and dolphin sightings
- 3.1.1. During the period of March to May 2015, six sets of systematic line-transect vessel surveys were conducted under the HKLR03 monitoring works to cover all transect lines in NWL and NEL survey areas twice per month.
- 3.1.2. From these HKLR03 surveys, a total of 899.81 km of survey effort was collected, with 97.7% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility). Among the two areas, 344.55 km and 555.26 km of survey effort were conducted in NEL and NWL survey areas respectively.
- 3.1.3. The total survey effort conducted on primary lines was 655.32 km, while the effort on secondary lines was 244.49 km. Survey effort conducted on both primary and secondary lines were considered as on-effort survey data. Summary table of the survey effort is shown in Appendix I.
- 3.1.4. During the six sets of HKLR03 monitoring surveys in March to May 2015, a total of seven groups of 25 Chinese White Dolphins were sighted. Four of the seven dolphin sightings were made during on-effort search. Two of the four on-effort sightings were made on primary lines, while the other two were made on secondary lines. In this quarterly period, all dolphin groups were sighted in NWL, while none of them were sighted in NEL. A summary table of the dolphin sightings is shown in Appendix II.



- 3.2. Distribution
- 3.2.1. Distribution of dolphin sightings made during monitoring surveys in March to May 2015 is shown in Figure 1. These sightings made in the present quarter were scattered to the western end of the NWL survey area, with no particular concentration (Figure 1). No dolphin was sighted at all in NEL survey area.
- 3.2.2. Notably, none of the dolphin groups were sighted in the vicinity of TMCLKL southern viaduct or northern landfall section, as well as the HKLR03/HKBCF reclamation sites (Figure 1). However, a lone individual was sighted adjacent to the HKLR09 alignment (Figure 1).
- 3.2.3. Sighting distribution of the present impact phase monitoring period (March to May 2015) was compared to the one during the baseline monitoring period (September to November 2011). In the present quarter, dolphins have completely avoided the NEL region, which was in stark contrast to their frequent occurrence around the Brothers Islands, near Shum Shui Kok and in the vicinity of HKBCF reclamation site during the baseline period (Figure 1). The nearly complete abandonment of NEL region by the dolphins has been consistently recorded in the past quarters, which has resulted in extremely low to zero dolphin encounter rate in this area.
- 3.2.4. In NWL survey area, dolphin occurrence was also drastically different between the baseline and impact phase quarters. During the present impact monitoring period, much fewer dolphins occurred throughout this survey area than during the baseline period, when many of the dolphin sightings were concentrated between Lung Kwu Chau and Black Point, around Sha Chau, near Pillar Point and to the west of the Chek Lap Kok Airport (Figure 1).
- 3.2.5. Another comparison in dolphin distribution was made between the three quarterly periods of spring months in 2013, 2014 and 2015 (Figure 2). Among the three spring periods, no dolphin sighting was made in NEL in 2014 and 2015, while there were a few sightings made there in 2012 (Figure 2). The near absence of dolphins in this quarter in NEL was probably more related to the seasonal occurrence that has been consistently recorded in the past.
- 3.2.6. On the other hand, dramatic changes in dolphin distribution in NWL waters have observed in the spring months during the three-year period. In 2013, dolphin regularly occurred throughout the NWL survey area, with higher concentration around Sha Chau and Lung Kwu Chau as well as near Black Point. In 2014, dolphin still occurred around Lung Kwu Chau at a high level, but less frequently in the middle portion of North Lantau region. In 2014, they rarely occurred in NWL survey area with scattered sightings without any particular concentration. The temporal trend indicated that dolphin usage in the NWL region has greatly diminished during the spring months of the past few years.

3.3. Encounter rate

3.3.1. During the present quarterly period, the encounter rates of Chinese White Dolphins deduced from the survey effort and on-effort sighting data from the primary transect lines under favourable conditions (Beaufort 3 or below) for each set of the HKLR03 surveys in



NEL and NWL are shown in Table 2. The average encounter rates deduced from the six sets of HKLR03 surveys were also compared with the ones deduced from the baseline monitoring period (September – November 2011) (Table 3).

 Table 2.
 Dolphin encounter rates (sightings per 100 km of survey effort) during March-May 2015

SURVEY AREA	DOLPHIN MONITORING DATES	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	
	Set 1 (4 & 11 Mar 2015)	0.00	0.00	
	Set 2 (17 & 26 Mar 2015)	0.00	0.00	
Northeast	Set 3 (8 & 10 Apr 2015)	0.00	0.00	
Lantau	Set 4 (17 & 22 Apr 2015)	0.00	0.00	
	Set 5 (4 & 8 May 2015)	0.00	0.00	
	Set 6 (14 & 18 May 2015)	0.00	0.00	
	Set 1 (4 & 11 Mar 2015)	1.42	9.93	
	Set 2 (17 & 26 Mar 2015)	0.00	0.00	
Northwest	Set 3 (8 & 10 Apr 2015)	1.40	4.20	
Lantau	Set 4 (17 & 22 Apr 2015)	0.00	0.00	
	Set 5 (4 & 8 May 2015)	0.00	0.00	
	Set 6 (14 & 18 May 2015)	0.00	0.00	

Table 3. Comparison of average dolphin encounter rates from impact monitoring period (March-May 2015) and baseline monitoring period (September – November 2011) (Note: encounter rates deduced from the baseline monitoring period have been recalculated based only on survey effort and on-effort sighting data made along the primary transect lines under favourable conditions; ± denotes the standard deviation of the average encounter rates)

	Encounter i	rate (STG)	Encounter rate (ANI)		
	(no. of on-effort dolph	in sightings per 100	(no. of dolphins from all on-effort sightings		
	km of surve	ey effort)	per 100 km o	f survey effort)	
	March-May September -		March-May	September -	
	2015	November 2011	2015	November 2011	
Northeast Lantau	0.00	6.00 ± 5.05	0.00	22.19 ± 26.81	
Northwest Lantau	0.47 ± 0.73	9.85 ± 5.85	2.36 ± 4.07	44.66 ± 29.85	

3.3.2. To facilitate the comparison with the AFCD long-term monitoring results, the encounter rates were also calculated for the present quarter using both primary and secondary survey effort. The encounter rates of sightings (STG) and dolphins (ANI) in NWL were 0.75 sightings and 3.91 dolphins per 100 km of survey effort respectively, while the encounter



rates of sightings (STG) and dolphins (ANI) in NEL were both nil for this quarter.

- 3.3.3. In NEL, the average dolphin encounter rates (both STG and ANI) in the present three-month impact monitoring period were zero, and such low occurrence of dolphins in NEL have been consistently recorded in the past nine quarters (Table 4). It is a serious concern that dolphin occurrence in NEL in the nine quarters (0.0-1.0 for ER(STG) and 0.0-3.9 for ER(ANI)) have been exceptionally low when compared to the baseline period (Table 4). Dolphins have almost vacated from NEL waters since January 2014, with only one group of four dolphins sighted since then.
- 3.3.4. Moreover, the average dolphin encounter rates (STG and ANI) in NWL during the present impact phase monitoring period were also much lower (reductions of 95.2% and 94.7% respectively) than the ones recorded in the 3-month baseline period, indicating a dramatic decline in dolphin usage of this survey area during the present impact phase period (Table 5).
- 3.3.5. Even within the same spring quarters, the dolphin encounter rates in NWL during spring 2015 were small fractions of the ones recorded in spring 2013 and 2014 (Table 5).

Table 4. Comparison of average dolphin encounter rates in Northeast Lantau survey area from all quarters of HKLR03 impact monitoring period and baseline monitoring period (September-November 2011) (Note: encounter rates deduced from the baseline monitoring period have been recalculated based only on survey effort and on-effort sighting data made along the primary transect lines under favourable conditions; the encounter rates in spring months were highlighted in blue; ± denotes the standard deviation of the 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)
September-November 2011 (Baseline)	6.00 ± 5.05	22.19 ± 26.81
December 2012-February 2013 (Impact)	3.14 ± 3.21	6.33 ± 8.64
March-May 2013 (Impact)	0.42 ± 1.03	0.42 ± 1.03
June-August 2013 (Impact)	0.88 ± 1.36	3.91 ± 8.36
September-November 2013 (Impact)	1.01 ± 1.59	3.77 ± 6.49
December 2013-February 2014 (Impact)	0.45 ± 1.10	1.34 ± 3.29
March-May 2014 (Impact)	0.00	0.00
June-August 2014 (Impact)	0.42 ± 1.04	1.69 ± 4.15
September-November 2014 (Impact)	0.00	0.00
December 2014-February 2015 (Impact)	0.00	0.00
March-May 2015 (Impact)	0.00	0.00



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Table 5. Comparison of average dolphin encounter rates in Northwest Lantau survey area from all quarters of HKLR03 impact monitoring period and baseline monitoring period (September-November 2011) (Note: encounter rates deduced from the baseline monitoring period have been recalculated based only on survey effort and on-effort sighting data made along the primary transect lines under favourable conditions; the encounter rates in spring months were highlighted in blue; ± denotes the standard deviation of the 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)
September-November 2011 (Baseline)	9.85 ± 5.85	44.66 ± 29.85
December 2012-February 2013 (Impact)	8.36 ± 5.03	35.90 ± 23.10
March-May 2013 (Impact)	7.75 ± 3.96	24.23 ± 18.05
June-August 2013 (Impact)	6.56 ± 3.68	27.00 ± 18.71
September-November 2013 (Impact)	8.04 ± 1.10	32.48 ± 26.51
December 2013-February 2014 (Impact)	8.21 ± 2.21	32.58 ± 11.21
March-May 2014 (Impact)	6.51 ± 3.34	19.14 ± 7.19
June-August 2014 (Impact)	4.74 ± 3.84	17.52 ± 15.12
September-November 2014 (Impact)	5.10 ± 4.40	20.52 ± 15.10
December 2014-February 2015 (Impact)	2.91 ± 2.69	11.27 ± 15.19
March-May 2015 (Impact)	0.47 ± 0.73	2.36 ± 4.07

- 3.3.6. Notably, the first eight consecutive quarters have triggered the Action Levels under the Event and Action Plan, while the previous and present quarters have both triggered the Limit Levels. As discussed recently in Hung (2014), the dramatic decline in dolphin usage of NEL waters in 2012 and 2013 (including the declines in abundance, encounter rate and habitat use in NEL, as well as shifts of individual core areas and ranges away from NEL waters) was possibly related to the HZMB construction works that were commenced in 2012. It appeared that such noticeable decline has already extended to NWL waters progressively in 2013 and 2014.
- 3.3.7. A two-way ANOVA with repeated measures and unequal sample size was conducted to examine whether there were any significant differences in the average encounter rates between the baseline and impact monitoring periods. The two variables that were examined included the two periods (baseline and impact phases) and two locations (NEL and NWL).
- 3.3.8. For the comparison between the baseline period and the present quarter (tenth quarter of the impact phase being assessed), the p-values for the differences in average dolphin encounter rates of STG and ANI were 0.0015 and 0.0139 respectively. If the alpha value is set at 0.05, significant differences were detected between the baseline and present quarters in both dolphin encounter rates of STG and ANI.



- 3.3.9. For the comparison between the baseline period and the cumulative quarters in impact phase (i.e. first ten quarters of the impact phase being assessed), the p-values for the differences in average dolphin encounter rates of STG and ANI were 0.0004 and 0.0001 respectively. Even if the alpha value is set at 0.01, significant differences were detected in both the average dolphin encounter rates of STG and ANI (i.e. between the two periods and the locations).
- 3.3.10. As indicated in both dolphin distribution patterns and encounter rates, dolphin usage has been significantly reduced in NEL and NWL waters in the present quarterly period, and such low occurrence has been consistently documented in previous quarters. This raises serious concern, as the decline in dolphin usage in North Lantau waters could possibly link to the HZMB-related construction activities.
- 3.3.11. To ensure the continuous usage of North Lantau waters by the dolphins, every possible measure should be implemented by the contractors and relevant authorities to minimize all disturbances to the dolphins.
- 3.4. Group size
- 3.4.1. Group size of Chinese White Dolphins ranged from one to eight individuals per group in North Lantau region during March to May 2015. The average dolphin group sizes from these three months were compared with the ones deduced from the baseline period in September to November 2011, as shown in Table 6.

Table 6. Comparison of average dolphin group sizes from impact monitoring period (March – May 2015) and baseline monitoring period (September – November 2011) (Note: \pm denotes the standard deviation of the average group size)

	Average Dolphin Group Size				
	March – May 2015	September – November 2011			
Overall	3.57 ± 2.82 (n = 7)	3.72 ± 3.13 (n = 66)			
Northeast Lantau	0.00	3.18 ± 2.16 (n = 17)			
Northwest Lantau	3.57 ± 2.82 (n = 7)	3.92 ± 3.40 (n = 49)			

- 3.4.2. The average dolphin group sizes in NWL waters during March to May 2015 were slightly smaller than the ones recorded during the three-month baseline period (Table 6). Five of the seven groups were composed of 1-3 individuals only, while none of the dolphin groups had more than 10 individuals.
- 3.4.3. Distribution of dolphins with larger group sizes (five individuals or more per group) during the present quarter is shown in Figure 3, with comparison to the one in baseline period. During the spring of 2015, distribution of the two larger dolphin groups were



located near Black Point and to the west of the airport (Figure 3). This distribution pattern was drastically different from the baseline period, when the larger dolphin groups were distributed more evenly in NWL waters with a few more sighted in NEL waters (Figure 3).

3.5. Habitat use

- 3.5.1. From March to May 2015, there was no particular habitat that was heavily utilized by Chinese White Dolphins in North Lantau waters, as only four grids recorded the presence of dolphins during on-effort search (Figures 4a and 4b). As in previous quarters, none of the grids in NEL recorded the presence of dolphins in the present quarter. Moreover, all grids near HKLR03/HKBCF reclamation sites, HKLR09 or TMCLKL alignment did not record any presence of dolphins during on-effort search in the present quarterly period.
- 3.5.2. It should be emphasized that the amount of survey effort collected in each grid during the three-month period was fairly low (6-12 units of survey effort for most grids), and therefore the habitat use pattern derived from the three-month dataset should be treated with caution. A more complete picture of dolphin habitat use pattern will be presented when more survey effort for each grid will be collected throughout the impact phase monitoring programme.
- 3.5.3. When compared with the habitat use patterns during the baseline period, dolphin usage in NEL and NWL has dramatically diminished during the present impact monitoring period (Figure 5). During the baseline period, nine grids between Siu Mo To and Shum Shui Kok recorded moderately high to high dolphin densities, which was in stark contrast to the complete absence of dolphins during the present impact phase period (Figure 5).
- 3.5.4. The density patterns between the baseline and impact phase monitoring periods were also very different in NWL, with higher dolphin usage around Sha Chau, near Black Point, to the west of the airport, as well as between Pillar Point and airport platform during the baseline period. However, these once-highly utilized habitats in the past only recorded rare presence of dolphins during the present impact phase period (Figure 5).

3.6. Mother-calf pairs

- 3.6.1. During the present quarterly period, no young calf (i.e. unspotted calf or unspotted juvenile) was sighted for the second consecutive quarter among the eleven quarters of impact phase monitoring.
- 3.6.2. This absence of young calves is also in stark contrast to their regular occurrence during the baseline period. Their absence should be of a serious concern, and the occurrence of calves should be closely monitored in the upcoming quarters.

3.7. Activities and associations with fishing boats

- 3.7.1. Three dolphin sightings were associated with feeding activities, while only one sighting of dolphin was associated with socializing activity during the three-month study period.
- 3.7.2. The percentage of sightings associated with feeding activities during the present quarter (42.9%) was much higher than the one recorded during the baseline period (11.6%). On



the other hand, the percentage of socializing activities during the present impact phase monitoring period (14.3%) was slightly higher than the one recorded during the baseline period (5.4%). However, the higher percentages of both feeding and socializing activities were probably due to the overall small sample size of dolphin sightings. Notably, none of the seven dolphin groups were engaged in traveling or milling/resting behaviour.

- 3.7.3. Distribution of dolphins engaged in feeding and socializing activities during the present three-month period is shown in Figure 6. The three sightings of feeding activities were located near Black Point, to the north of the airport platform and near HKLR09 alignment adjacent to Sham Wat respectively (Figure 6). The lone sighting associated with socializing activity was located near Black Point as well (Figure 6). Distribution of dolphin sightings associated with these activities during the impact phase was very different from the distribution pattern of these activities during the baseline period (Figure 6).
- 3.7.4. As in the past monitoring quarters, none of the seven dolphin groups was found to be associated with an operating fishing vessel in North Lantau waters during the present impact phase period. The extremely rare events of fishing boat association in the present and previous quarters were consistently found, and were likely related to the recent trawl ban being implemented in December 2012 in Hong Kong waters.

3.8. Summary of photo-identification works

- 3.8.1. From March to May 2015, over 800 digital photographs of Chinese White Dolphins were taken during the impact phase monitoring surveys for the photo-identification work.
- 3.8.2. In total, 16 individuals sighted 18 times altogether were identified (see summary table in Appendix III and photographs of identified individuals in Appendix IV). All of these 18 re-sightings were made in NWL.
- 3.8.3. The majority of identified individuals were sighted only once during the three-month period, with the exception of two individuals (NL136 and NL284) being sighted thrice.
- 3.8.4. Two of these 16 individuals (NL123 and NL285) were also sighted in West Lantau waters during the HKLR09 monitoring surveys during the same three-month period (i.e. March-May 2015), but the locations of their re-sightings in NWL and WL were not too far apart even though they were separated by the HKLR09 bridge alignment.
- 3.8.5. Three recognized females (NL104, NL123 and NL202) were accompanied with calves during their re-sightings. All three mothers were frequently sighted with their calves throughout the HKLR03 impact phase monitoring period since October 2012.
- *3.9. Individual range use*
- 3.9.1. Ranging patterns of the 16 individuals identified during the three-month study period were determined by fixed kernel method, and are shown in Appendix V.
- 3.9.2. All identified dolphins sighted in this quarter were ranged primarily in NWL, but have



avoided the NEL waters where many of them have utilized as their core areas in the past (Appendix V). This is in contrary to the extensive movements between NEL and NWL survey areas observed in the earlier impact monitoring quarters as well as during the baseline period.

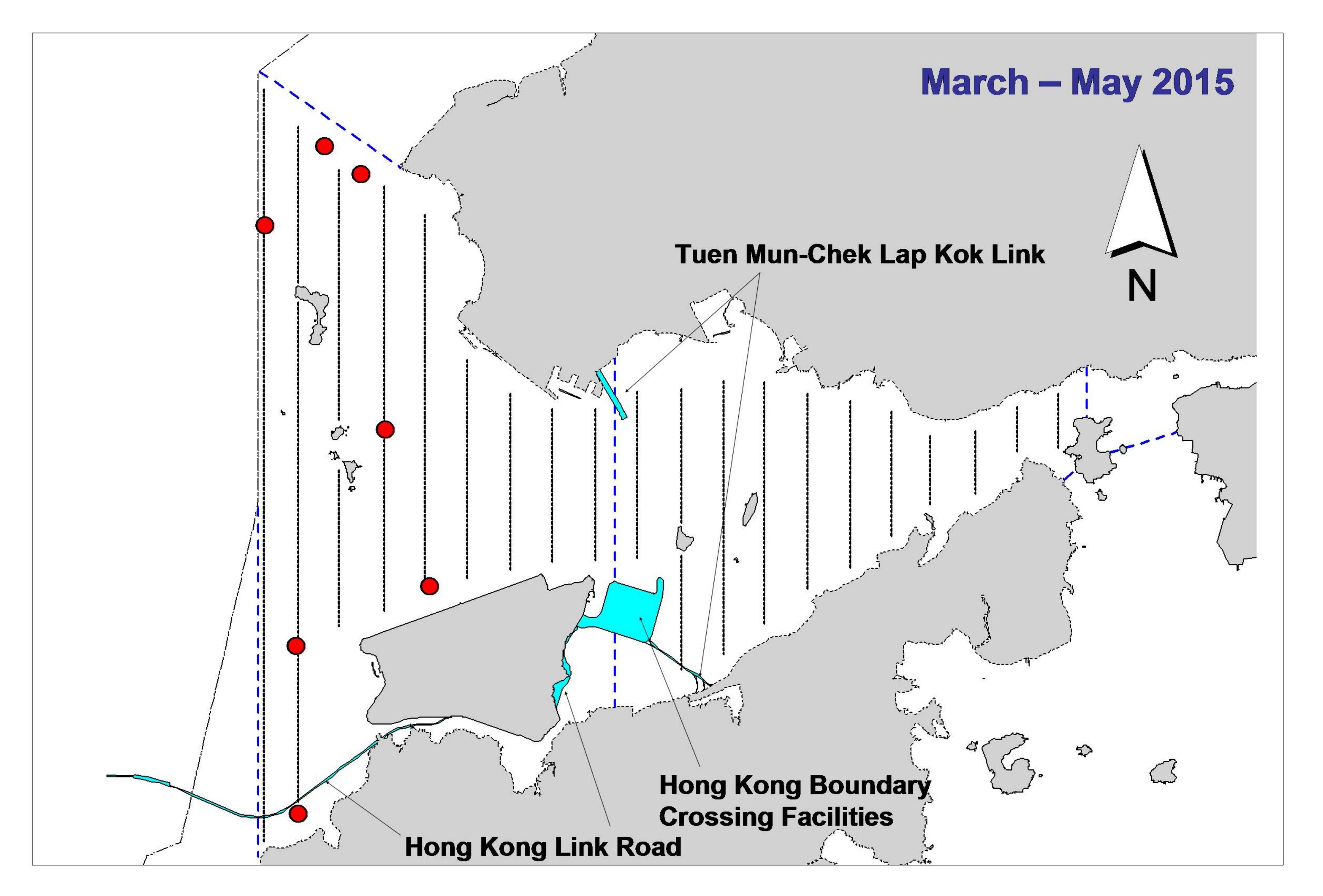
3.9.3. Notably, a mother-calf pair (i.e. NL123 and NL285) sighted in NWL and NEL waters consistently in the past have extended their range use to WL waters in the present quarter. It should be further monitored to examine whether there has been any consistent shifts of home ranges of some individuals from North Lantau to West Lantau, which could also possibly be related to the HZMB-related construction works.

4. Conclusion

- 4.1. During this quarter of dolphin monitoring, no adverse impact from the activities of the TMCLKL construction project on Chinese White Dolphins was noticeable from general observations.
- 4.2. Although the dolphins infrequently occurred along the alignment of TMCLKL southern connection viaduct in the past and during the baseline monitoring period, it is apparent that dolphin usage has been significantly reduced in NEL, and many individuals have shifted away from the important habitat around the Brothers Islands.
- 4.3. It is critical to monitor the dolphin usage in North Lantau region in the upcoming quarters, to determine whether the dolphins are continuously affected by the various construction activities in relation to the HZMB-related works, and whether suitable mitigation measure can be applied to revert the situation.

5. References

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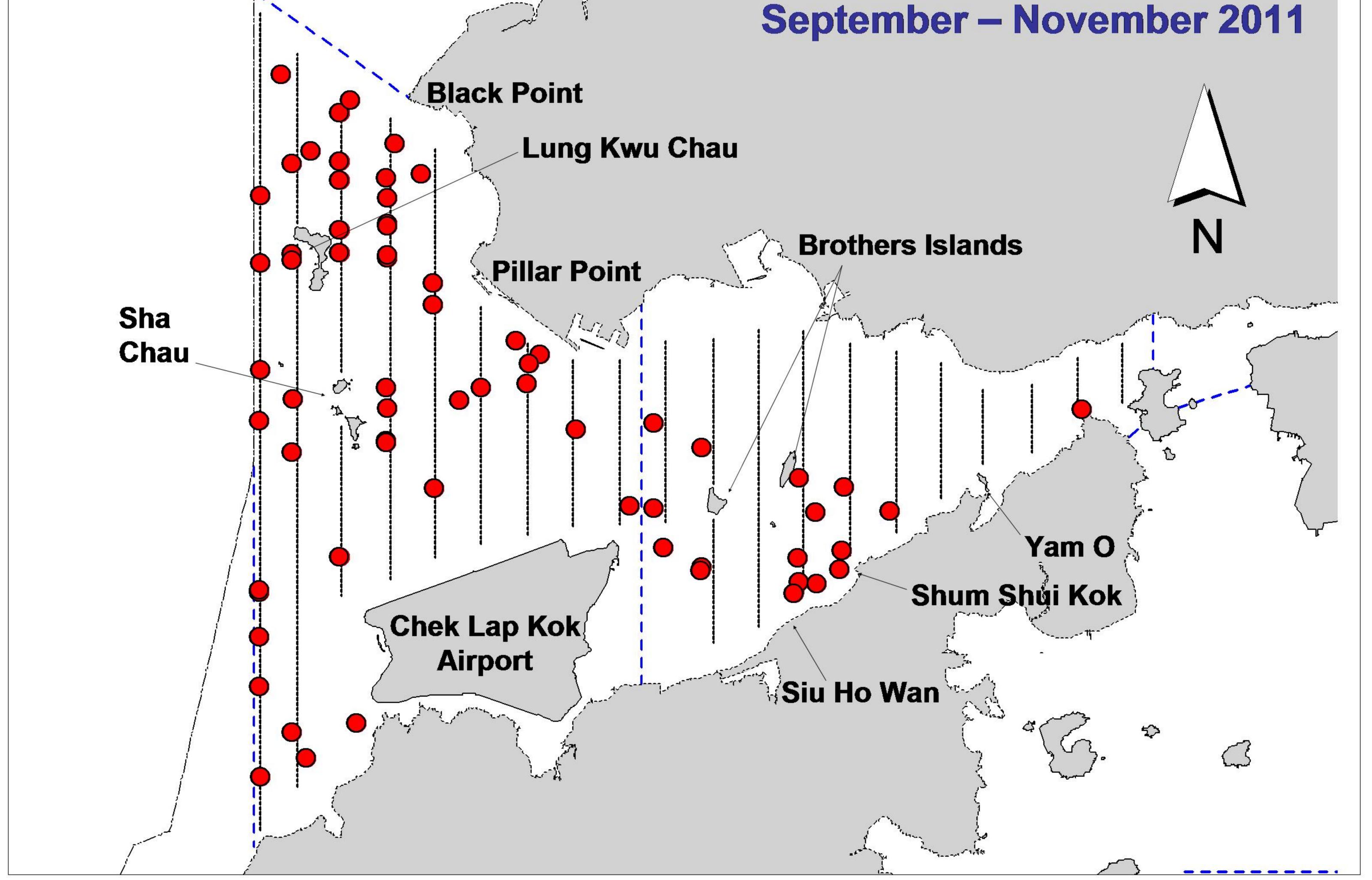


Figure 1. Distribution of Chinese white dolphin sighting in Northwest and Northeast Lantau during HKLR03 impact phase (top) and baseline monitoring surveys (bottom)

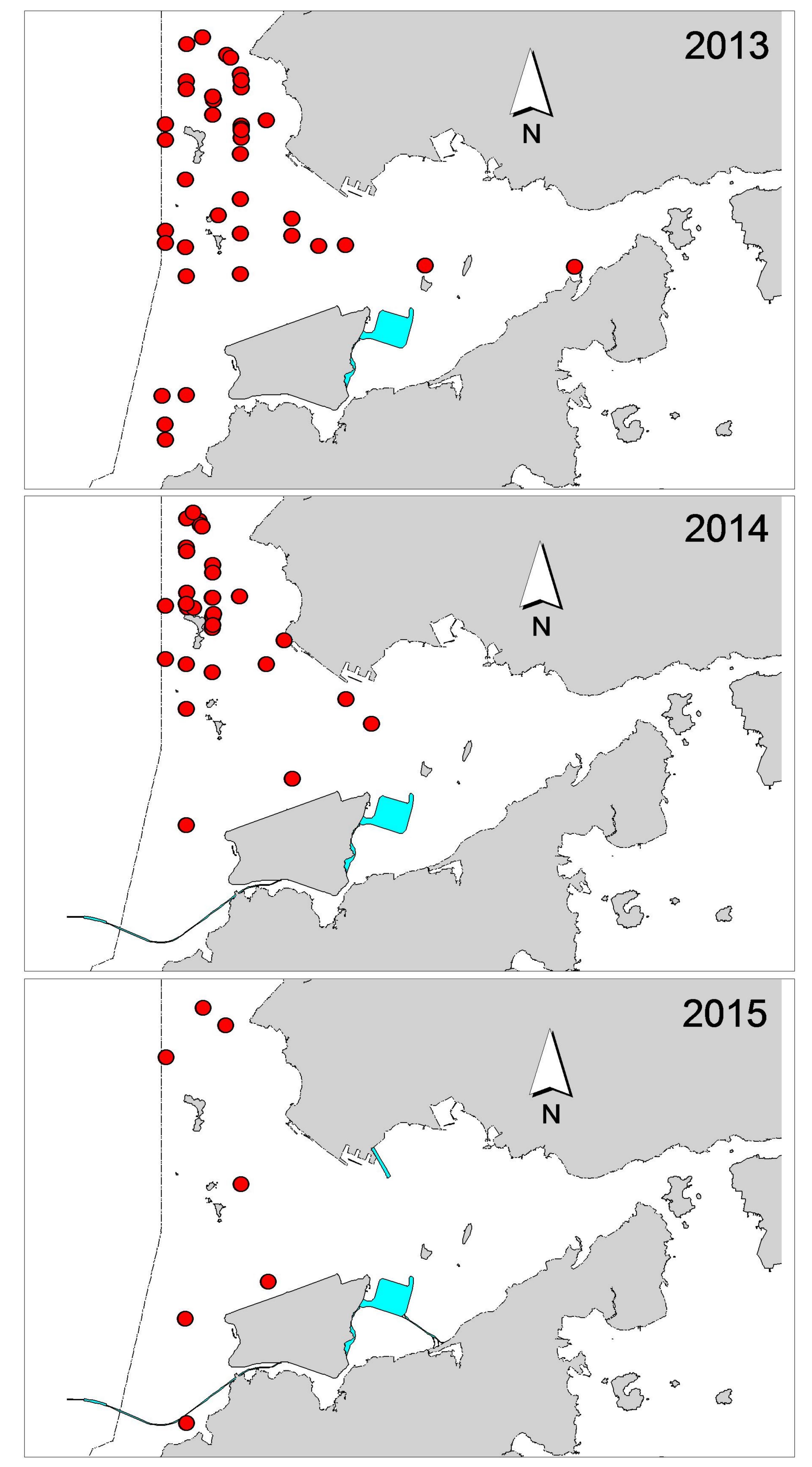
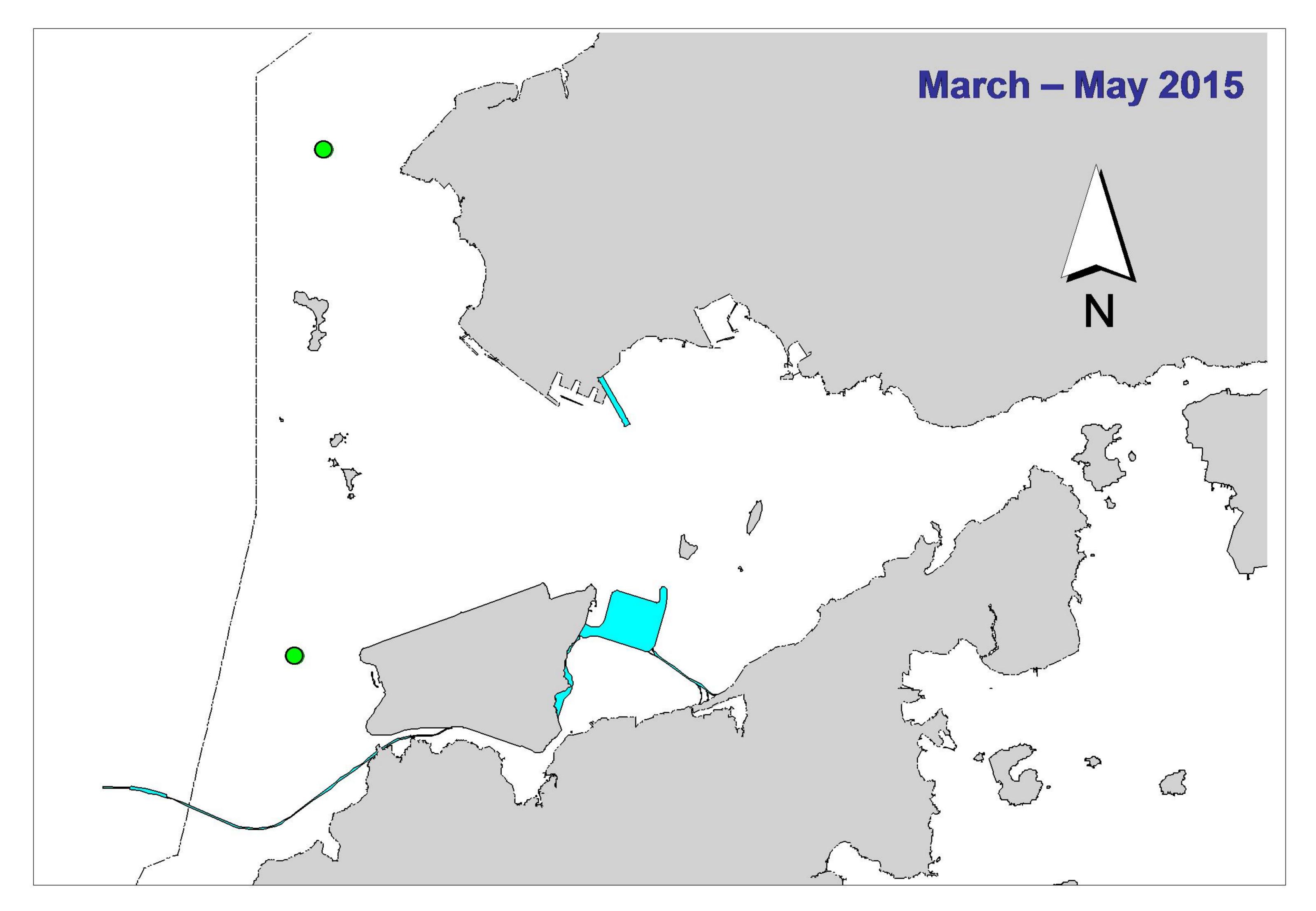


Figure 2. Distribution of Chinese white dolphin sightings in Northwest and Northeast Lantau during the same spring quarters of HKLR03 impact phase in 2013-15



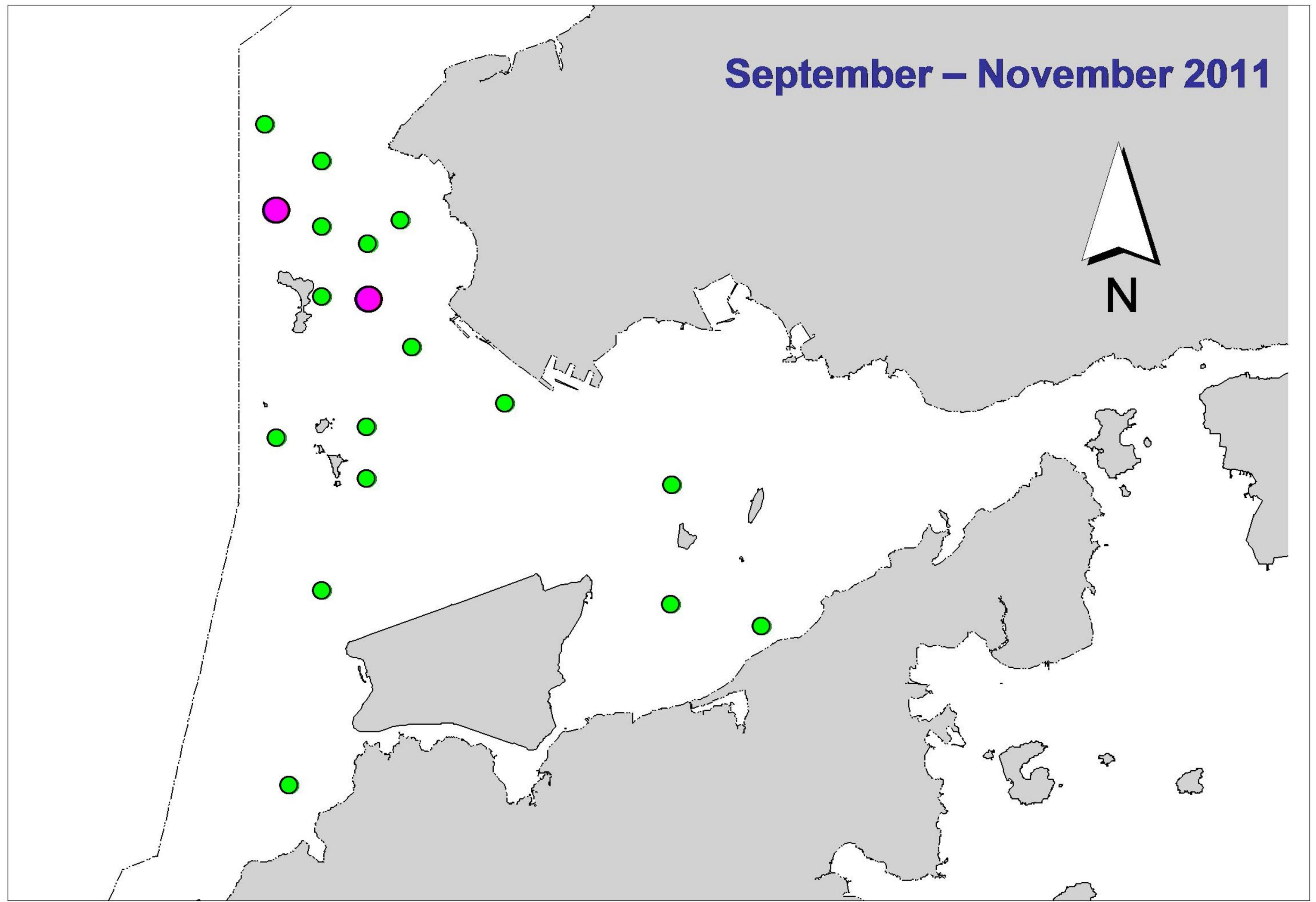


Figure 3. Distribution of Chinese white dolphins with larger group sizes during HKLR03 impact phase (top) and baseline monitoring surveys (bottom) (green dots: group sizes of 5 or more; purple dots: group sizes of 10 or more)

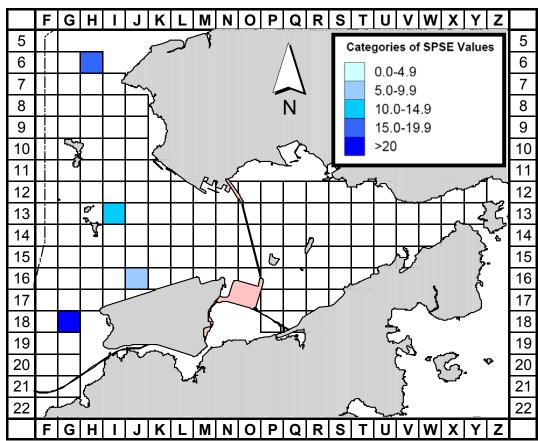


Figure 4a. Sighting density of Chinese white dolphins with corrected survey effort per km^2 in Northeast and Northwest Lantau survey areas, using data collected during HKLR03 impact monitoring period monitoring period (Mar-May 15) (SPSE = no. of on-effort sightings per 100 units of survey effort)

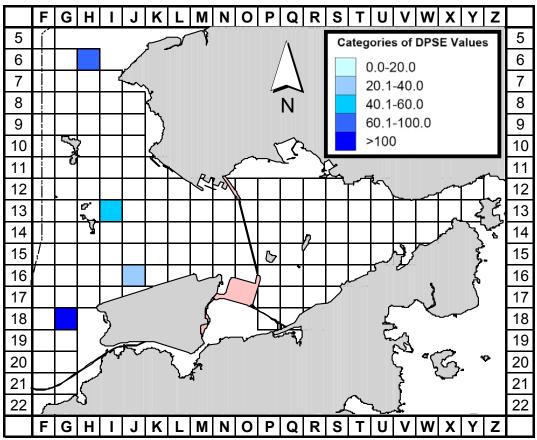


Figure 4b. Density of Chinese white dolphins with corrected survey effort per km^2 in Northeast and Northwest Lantau survey areas, using data collected during HKLR03 impact monitoring period (Mar-May 15) (DPSE = no. of dolphins per 100 units of survey effort)

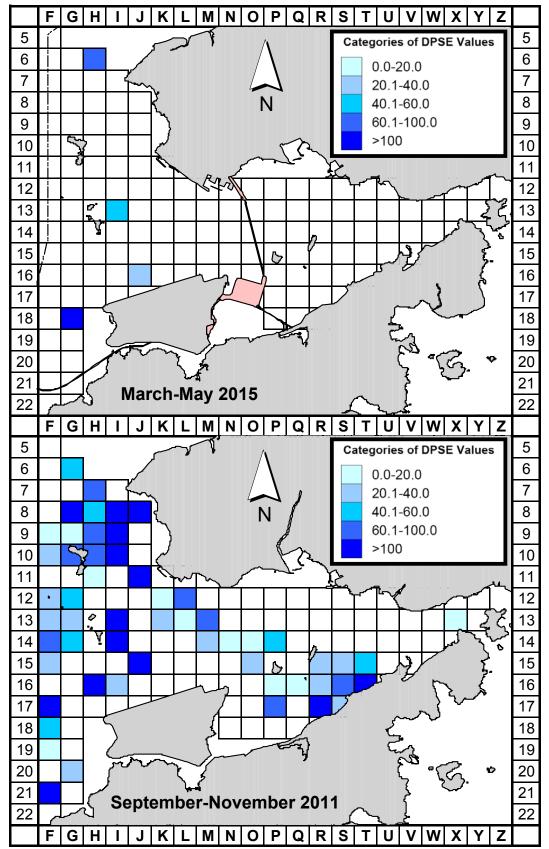
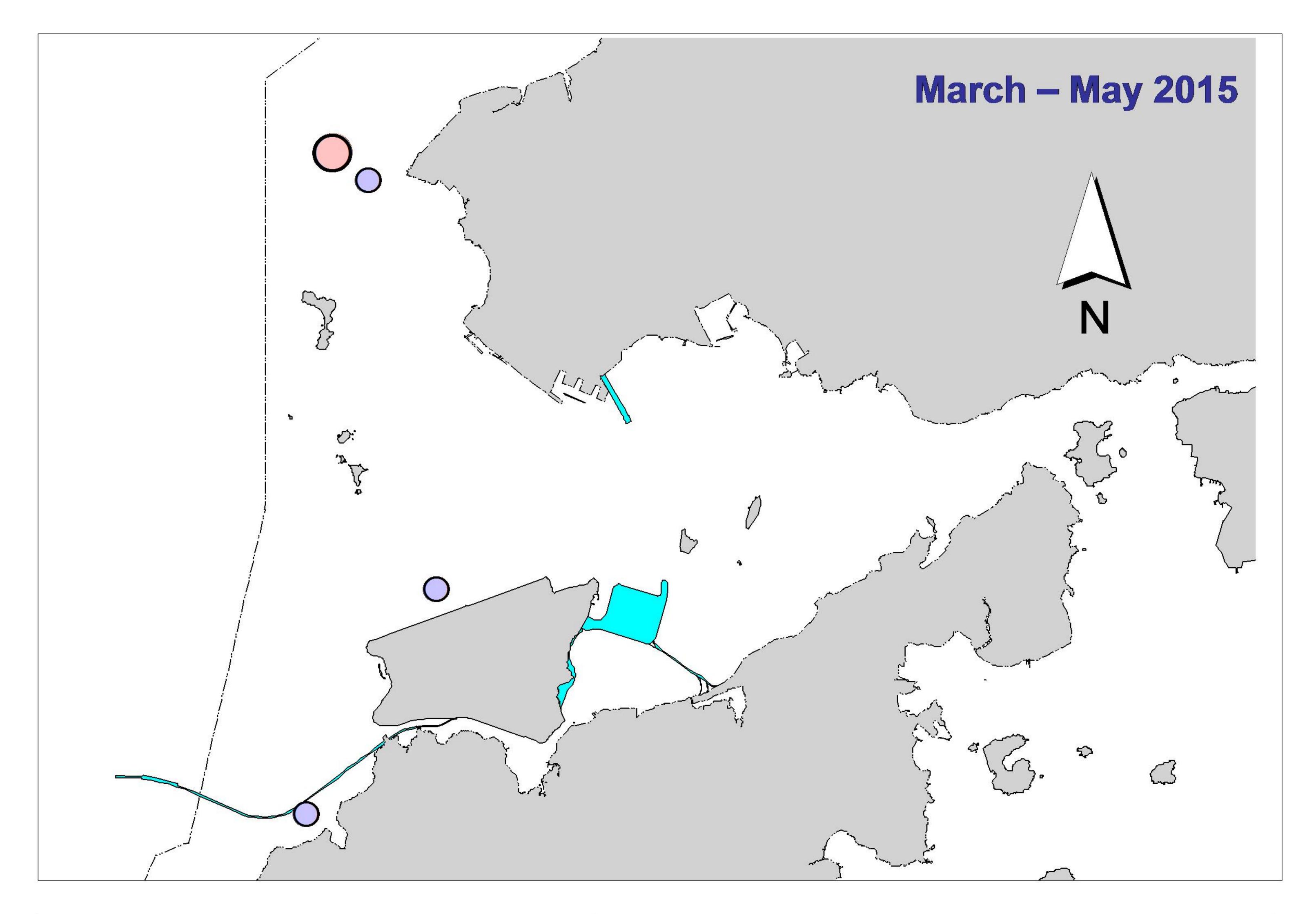


Figure 5. Comparison of density of Chinese white dolphins with corrected survey effort per km^2 in Northwest and Northeast Lantau survey area between the impact monitoring period (March-May 2015) and baseline monitoring period (September-November 2011) (DPSE = no. of dolphins per 100 units of survey effort)



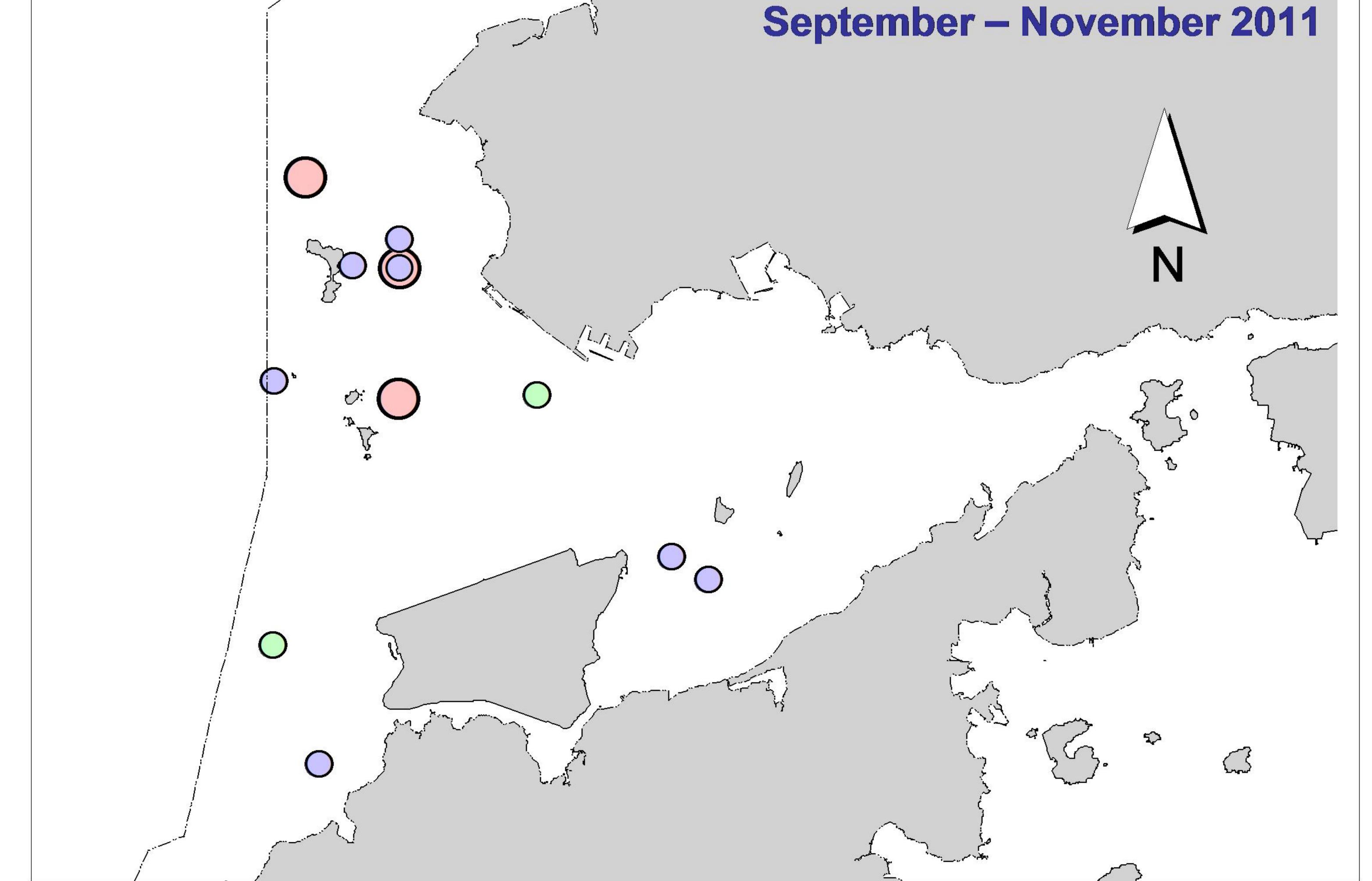


Figure 6. Distribution of Chinese white dolphins engaged in feeding (purple dots), socializing (pink dots) and traveling (green dots) activities during HKLR03 impact phase (top) and baseline monitoring surveys (bottom)

Appendix I. HKLR03 Survey Effort Database (March-May 2015)

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

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
4-Mar-15	NW LANTAU	1	1.07	SPRING	STANDARD31516	HKLR	Р
4-Mar-15	NW LANTAU	2	12.71	SPRING	STANDARD31516	HKLR	Р
4-Mar-15	NW LANTAU	3	25.62	SPRING	STANDARD31516	HKLR	Р
4-Mar-15	NW LANTAU	4	1.40	SPRING	STANDARD31516	HKLR	Р
4-Mar-15	NW LANTAU	2	8.00	SPRING	STANDARD31516	HKLR	S
4-Mar-15	NW LANTAU	3	3.30	SPRING	STANDARD31516	HKLR	S
4-Mar-15	NW LANTAU	4	1.00	SPRING	STANDARD31516	HKLR	S
4-Mar-15	NE LANTAU	2	5.38	SPRING	STANDARD31516	HKLR	Р
4-Mar-15	NE LANTAU	3	12.87	SPRING	STANDARD31516	HKLR	Р
4-Mar-15	NE LANTAU	2	3.40	SPRING	STANDARD31516	HKLR	S
4-Mar-15	NE LANTAU	3	5.39	SPRING	STANDARD31516	HKLR	S
11-Mar-15	NW LANTAU	2	25.99	SPRING	STANDARD31516	HKLR	P
11-Mar-15	NW LANTAU	3	5.09	SPRING	STANDARD31516	HKLR	P
11-Mar-15	NW LANTAU	2	7.53	SPRING	STANDARD31516	HKLR	S
11-Mar-15	NE LANTAU	2	20.05	SPRING	STANDARD31516	HKLR	P
11-Mar-15	NE LANTAU	2	10.95	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NW LANTAU	2	3.26	SPRING	STANDARD31516	HKLR	P
17-Mar-15		3	36.14	SPRING	STANDARD31516	HKLR	P
17-Mar-15		4	0.80	SPRING	STANDARD31516	HKLR	P
17-Mar-15	NW LANTAU	2	2.20	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NW LANTAU	3	10.40	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NE LANTAU	2	14.63	SPRING	STANDARD31516	HKLR	P
17-Mar-15	NE LANTAU	3	1.97	SPRING	STANDARD31516	HKLR	P
17-Mar-15	NE LANTAU	1	1.94	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NE LANTAU	2	7.69	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NE LANTAU	3	0.68	SPRING	STANDARD31516	HKLR	S
26-Mar-15	NW LANTAU	1	20.26	SPRING	STANDARD31516	HKLR	P
26-Mar-15	NW LANTAU	2	10.63	SPRING	STANDARD31516	HKLR	P
26-Mar-15	NW LANTAU	2	6.76	SPRING	STANDARD31516	HKLR	S
26-Mar-15	NE LANTAU	1	11.38	SPRING	STANDARD31516	HKLR	P
26-Mar-15	NE LANTAU	2	8.40	SPRING	STANDARD31516	HKLR	P
26-Mar-15	NE LANTAU	1	4.32	SPRING	STANDARD31516	HKLR	S
26-Mar-15		2	6.2	SPRING	STANDARD31516	HKLR	S
8-Apr-15		2	14.22	SPRING	STANDARD31516	HKLR	P
8-Apr-15	NE LANTAU	3	5.10	SPRING	STANDARD31516	HKLR	P
8-Apr-15	NE LANTAU	1	0.50	SPRING	STANDARD31516	HKLR	S
8-Apr-15	NE LANTAU	2	9.09	SPRING	STANDARD31516	HKLR	S
8-Apr-15		3	0.99	SPRING	STANDARD31516	HKLR	S
8-Apr-15		2	4.96	SPRING	STANDARD31516	HKLR	Р
8-Apr-15		3	25.95	SPRING	STANDARD31516	HKLR	Р
8-Apr-15		4	0.84	SPRING	STANDARD31516	HKLR	Р
8-Apr-15		2	2.29	SPRING	STANDARD31516	HKLR	S
8-Apr-15		3	5.26	SPRING	STANDARD31516	HKLR	S
10-Apr-15		2	14.40	SPRING	STANDARD31516	HKLR	Р
10-Apr-15		3	26.10	SPRING	STANDARD31516	HKLR	Р
10-Apr-15		2	9.40	SPRING	STANDARD31516	HKLR	S
10-Apr-15		3	4.20	SPRING	STANDARD31516	HKLR	S
10-Apr-15		2	15.44	SPRING	STANDARD31516	HKLR	Р
10-Apr-15	NE LANTAU	3	1.30	SPRING	STANDARD31516		P
10-Apr-15	NE LANTAU NW LANTAU	2 2	10.06 4.84	SPRING SPRING	STANDARD31516 STANDARD31516	HKLR HKLR	S P
17-Apr-15	INVI LAINTAU	2	4.04	SPRING	STANDARDS1310		Г

Appendix I. (cont'd)

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

17.Apr-15 NW LANTAU 3 29.76 SPRING STANDARD31516 HKLR P 17.Apr-15 NW LANTAU 4 5.8 SPRING STANDARD31516 HKLR P 17.Apr-15 NW LANTAU 3 7.6 SPRING STANDARD31516 HKLR S 17.Apr-16 NW LANTAU 4 4.8 SPRING STANDARD31516 HKLR S 17.Apr-15 NE LANTAU 2 3.60 SPRING STANDARD31516 HKLR P 17.Apr-15 NE LANTAU 2 4.41 SPRING STANDARD31516 HKLR P 17.Apr-15 NE LANTAU 2 4.41 SPRING STANDARD31516 HKLR S 22-Apr-15 NW LANTAU 2 20.00 SPRING STANDARD31516 HKLR P 22-Apr-15 NW LANTAU 2 25.27 SPRING STANDARD31516 HKLR P 22-Apr-15 NW LANTAU 2 7.07 SPRING STANDARD31516<	DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
17.Apr-15 NW LANTAU 2 0.3 SPRING STANDARD31516 HKLR S 17.Apr-15 NW LANTAU 3 7.6 SPRING STANDARD31516 HKLR S 17.Apr-15 NW LANTAU 4 8.8 SPRING STANDARD31516 HKLR S 17.Apr-15 NE LANTAU 2 3.60 SPRING STANDARD31516 HKLR P 17.Apr-15 NE LANTAU 2 2.41 SPRING STANDARD31516 HKLR P 17.Apr-15 NE LANTAU 2 2.000 SPRING STANDARD31516 HKLR S 22.Apr-15 NW LANTAU 2 10.90 SPRING STANDARD31516 HKLR P 22.Apr-15 NW LANTAU 2 2.527 SPRING STANDARD31516 HKLR P 22.Apr-15 NW LANTAU 2 7.07 SPRING STANDARD31516 HKLR S 22.Apr-15 NW LANTAU 3 3.37 SPRING STANDARD31516<	17-Apr-15	NW LANTAU	3	29.76			HKLR	Р
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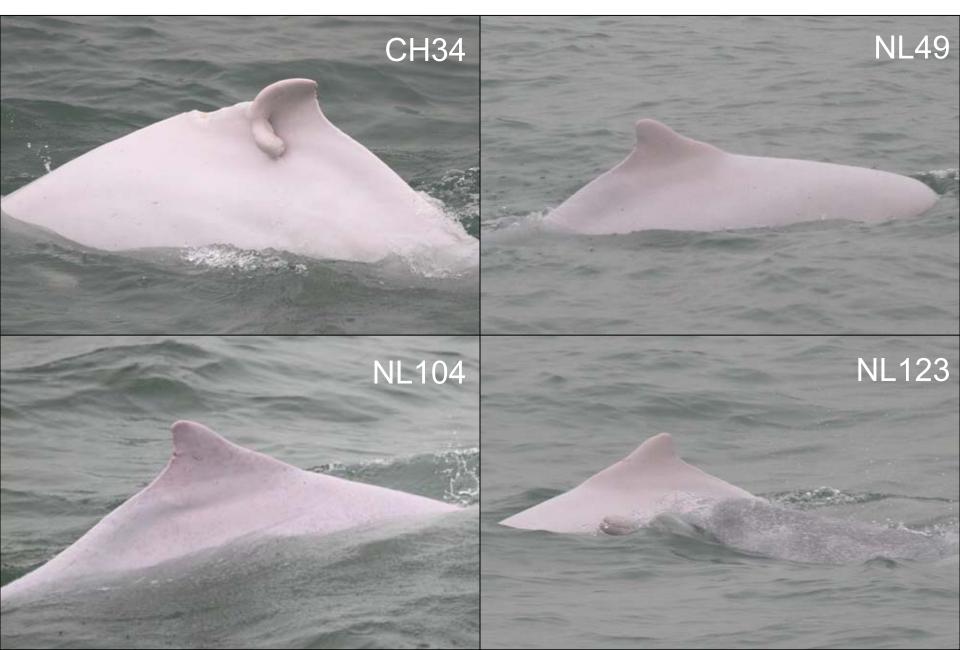
Appendix II. HKLR03 Chinese White Dolphin Sighting Database (March-May 2015) (Abberviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Association P/S: Sighting Made on Primary/Secondary Lines

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
04-Mar-15	1	1009	1	NW LANTAU	2	ND	OFF	HKLR	815213	805485	SPRING	NONE	
11-Mar-15	1	1347	1	NW LANTAU	2	ND	OFF	HKLR	829495	806976	SPRING	NONE	
11-Mar-15	2	1519	7	NW LANTAU	2	258	ON	HKLR	818956	805421	SPRING	NONE	Р
26-Mar-15	1	1201	3	NW LANTAU	2	21	ON	HKLR	820290	808597	SPRING	NONE	S
08-Apr-15	1	1309	3	NW LANTAU	3	142	ON	HKLR	823791	807532	SPRING	NONE	Р
10-Apr-15	1	1103	2	NW LANTAU	2	ND	OFF	HKLR	828359	804688	SPRING	NONE	
22-Apr-15	1	1432	8	NW LANTAU	2	354	ON	HKLR	830139	806113	SPRING	NONE	S

Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in March-May 2015

ID#	DATE	STG#	AREA
CH34	11/03/15	1	NW LANTAU
NL49	11/03/15	2	NW LANTAU
NL104	22/04/15	1	NW LANTAU
NL123	11/03/15	2	NW LANTAU
NL136	11/03/15	2	NW LANTAU
	08/04/15	1	NW LANTAU
NL153	22/04/15	1	NW LANTAU
NL165	11/03/15	2	NW LANTAU
NL202	22/04/15	1	NW LANTAU
NL236	22/04/15	1	NW LANTAU
NL261	26/03/15	1	NW LANTAU
NL272	26/03/15	1	NW LANTAU
NL284	11/03/15	2	NW LANTAU
	26/03/15	1	NW LANTAU
NL285	11/03/15	2	NW LANTAU
NL286	22/04/15	1	NW LANTAU
NL307	22/04/15	1	NW LANTAU
WL178	04/03/15	1	NW LANTAU

Appendix IV. Sixteen individual dolphins that were identified during March-May 2015 under HKLR03 impact phase monitoring surveys



Appendix IV. (cont'd)



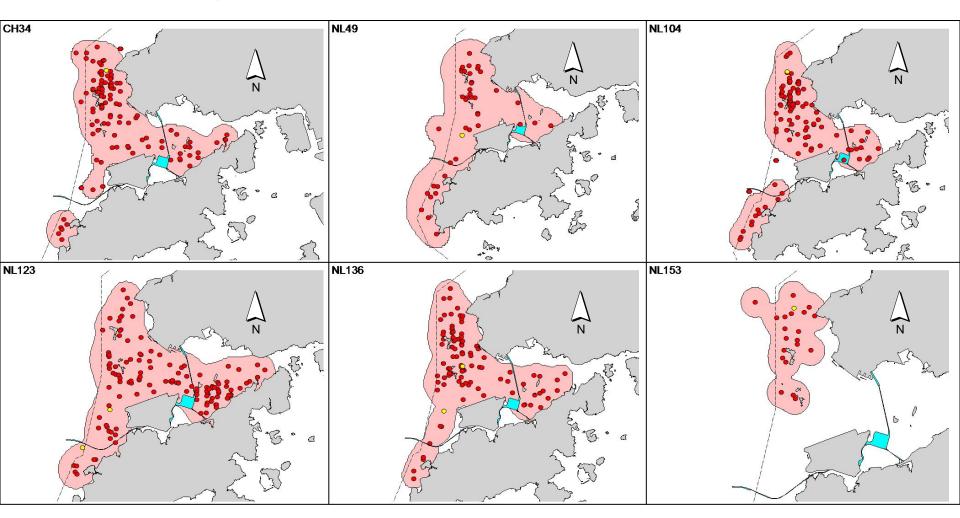
Appendix IV. (cont'd)



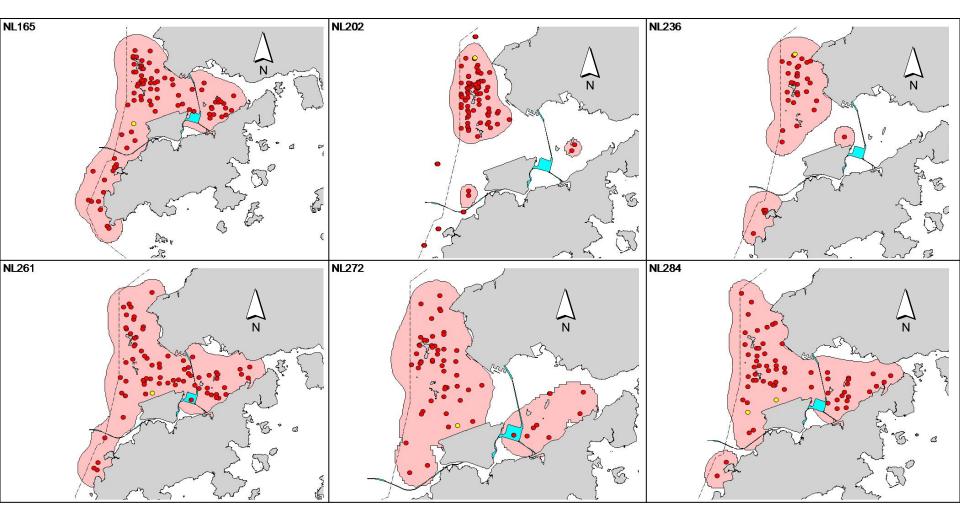
Appendix IV. (cont'd)



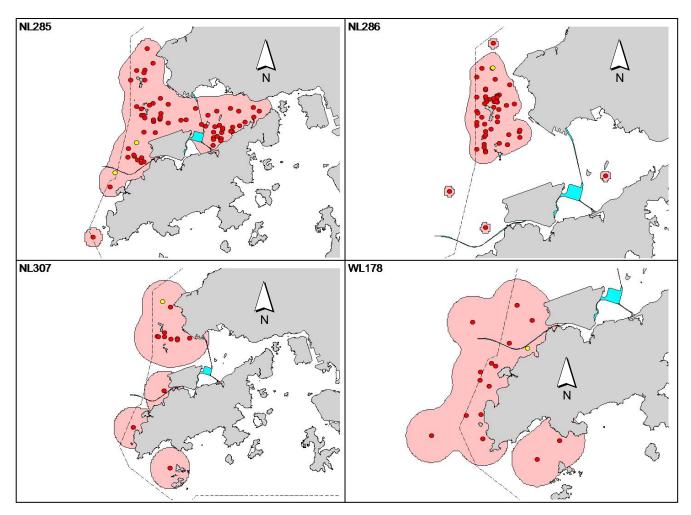
Appendix V. Ranging patterns (95% kernel ranges) of 16 individual dolphins that were sighted during HKLR03 impact phase monitoring period (note: yellow dots indicates sightings made in March-May 2015)



Appendix V. (cont'd)



Appendix V. (cont'd)



Appendix J

Event Action Plan

Appendix J1Event/Action Plan for Air Quality

	IEC ⁽¹⁾	SOR ⁽¹⁾	
		JOK	Contractor
urce. and the SOR. ement to confirm oring frequency to	 Check monitoring data submitted by the ET. Check Contractor's working method. 	1. Notify Contractor.	 Rectify any unacceptable practice Amend working methods if appropriate
urce. C and the SOR. rements to confirm coring frequency to he IEC and the remedial actions continues, arrange the IEC and the	 Check monitoring data submitted by the ET. Check the Contractor's working method. Discuss with the ET and the Contractor on possible remedial measures. Advise the SOR on the effectiveness of the proposed remedial measures. Supervisor implementation of remedial measures. 	 Confirm receipt of notification of failure in writing. Notify the Contractor. Ensure remedial measures properly implemented. 	 Submit proposals for remedial actions to IEC within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate
rem contin the I stops	edial actions nues, arrange	 edial actions 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures. , cease 	 edial actions 4. Advise the SOR on the effectiveness of the proposed remedial measures. nues, arrange EC and the 5. Supervisor implementation of remedial measures. , cease

	ACTION							
EVENT	ET ⁽¹⁾	IEC ⁽¹⁾	SOR ⁽¹⁾	Contractor				
Limit Level								
1. Exceedance for one sample	 Identify the source. Inform the SOR and the DEP. 	1. Check monitoring data submitted by the ET.	1. Confirm receipt of notification of failure in writing.	1. Take immediate action to avoid further exceedance				
	 Repeat measurement to confirm finding. 	 Check Contractor's working method. Diamondal and a Diamondal and a D	 2. Notify the Contractor. 3. Ensure remedial measures are 	 Submit proposals for remedial actions to IEC within 3 working days of notification 				
	 Increase monitoring frequency to daily. 	 Discuss with the ET and the Contractor on possible remedial measures. 	properly implemented.	3. Implement the agreed proposals				
	5. Assess effectiveness of Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of	4. Advise the SOR on the effectiveness of the proposed remedial measures.		4. Amend proposal if appropriate				
	the results.	5. Supervisor implementation of remedial measures.						
2. Exceedance for two or more consecutive	1. Notify the IEC, the SOR, the DEP and the Contractor.	 Discuss amongst the SOR, ET and the Contractor on the potential remedial actions. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the SOR accordingly. Supervise the implementation of remedial measures. 	1. Confirm receipt of notification of failure in writing.	1. Take immediate action to avoid further exceedance.				
samples	2. Identify the source.		2. Notify the Contractor.	2. Submit proposals for remedial				
	3. Repeat measurements to confirm findings.		3. In consultation with the IEC, agree with the Contractor on the	actions to IEC within 3 working days of notification.				
	4. Increase monitoring frequency to		remedial measures to be implemented. 4. Ensure remedial measures are	3. Implement the agreed proposals.				
	daily.			 Resubmit proposals if problem still not under control. 				
	5. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented.		properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the	5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated.				
	 Arrange meeting with the IEC and the SOR to discuss the remedial actions to be taken. 		Contractor to stop that activity of work until the exceedance is abated.					
	 Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and 							

the SOR informed of the results.

8. If exceedance stops cease additional monitoring.

Appendix J2Event/ Action Plan for Construction Noise

	ACTION									
EVENT	ET	IEC	SOR	Contractor						
Action Level	 Notify the IEC and the Contractor. Carry out investigation. 	 Review the analysed results submitted by the ET. 	1. Confirm receipt of notification of failure in writing.	1. Submit noise mitigation proposal to IEC						
	 Carry out investigation. Report the results of investigation to the IEC and the Contractor. 	measures by the Contractor and	 Notify the Contractor. Require the Contractor to propose 	2. Implement noise mitigation proposals						
	 Discuss with the Contractor and formulate remedial measures. 	advise the SOR accordingly.3. Supervise the implementation of	remedial measures for the analysed noise problem.							
	 Increase monitoring frequency to check mitigation effectiveness. 	remedial measures.	4. Ensure remedial measures are properly implemented.							
Limit Level	 Notify the IEC, the SOR, the DEP and the Contractor. 	and the Contractor on the potential	1. Confirm receipt of notification of failure in writing.	1. Take immediate action to avoid further exceedance						
	2. Identify the source.	remedial actions.	2. Notify the Contractor.	2. Submit proposals for remedial						
	Repeat measurement to confirm findings.	2. Review the Contractor's remedial actions whenever necessary to	3. Require the Contractor to propose remedial measures for the analysed	actions to IEC within 3 working days of notification						
	4. Increase monitoring frequency.	assure their effectiveness and advise the SOR accordingly.	noise problem.	3. Implement the agreed proposals						
	 Carry out analysis of Contractor's working procedures to determine 	3. Supervise the implementation of	4. Ensure remedial measures are properly implemented.	 Resubmit proposals if problem st not under control 						
	Temediai measures.	5. If exceedance continues, consider what activity of the work is	5. Stop the relevant activity of works as determined by the SOR until th							
 6. Inform the IEC, the SOR and the DEP the causes & actions taken for the exceedances. 	responsible and instruct the Contractor to stop that activity of work until the exceedance is abated	exceedance is abated.								
	 Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of the results. 									
	8. If exceedance stops, cease additiona monitoring.	1								

Event	ET	Leader		IEC	S	OR		Contractor
Action level being exceeded by one sampling day	1.	Repeat in situ measurement on next day of exceedance to confirm findings;	1.	Check monitoring data submitted by ET and Contractor's working methods.	1.	Confirm receipt of notification of non-compliance in writing;	1.	Inform the SOR and confirm notification of the non- compliance in writing;
	2.	Identify source(s) of impact;			2.	Notify Contractor.	2.	Rectify unacceptable practice;
	3.	Inform IEC, contractor and SOR;					3.	Amend working methods if appropriate.
	4.	Check monitoring data, all plant, equipment and Contractor's working methods.						
Action 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 on the proposed mitigation measures;	1.	Inform the Supervising Officer and confirm notification of the non-
	2.	Identify source(s) of impact;	2.	Discuss with ET and Contractor	2.	Ensure mitigation manufactures		compliance in writing;
	3.	Inform IEC, contractor, SOR and EPD;	۷.	on possible remedial actions;	۷.	Ensure mitigation measures are properly implemented;	2.	Rectify unacceptable practice;
	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.	Assess the effectiveness of the implemented mitigation measures.	3.	Check all plant and equipment and consider changes of working methods;
	5.	Discuss mitigation measures with IEC, SOR and Contractor;	4.	Supervise the implementation of			4.	Submit proposal of additiona mitigation measures to SOR
	6.	Ensure mitigation measures are implemented;		mitigation measures.				within 3 working days of notification and discuss with ET, IEC and SOR;
	7.	Increase the monitoring frequency to daily until no exceedance of Action level;					5.	Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	1.	Repeat measurement on next day of exceedance to confirm findings;	1.	Check monitoring data submitted by ET and Contractor's working method;	1.	Confirm receipt of notification of failure in writing;	ı 1.	Inform the SOR and confirm notification of the non- compliance in writing;
	2.	Identify source(s) of impact;	2.	Discuss with ET and Contractor	2.	Discuss with IEC, ET and Contractor on the proposed	2.	Rectify unacceptable practice;

Appendix J3Event/Action Plan for Water Quality

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

Event	ET Leader	IEC	SOR	Contractor
Action Level	1. Repeat statistical data analysis to confirm findings;	1. Check monitoring data submitted by ET and Contractor;	1. Discuss monitoring with the IEC and any other measures	1. Inform the SOR and confirm notification of the non-
	2. Review all available and relevant data, including		proposed by the ET;	compliance in writing;
	raw data and statistical analysis results of other	2. Discuss monitoring results and		
	parameters covered in the EM&A, to ascertain if	findings with the ET and the	2. If SOR is satisfied with the	2. Discuss with the ET and the
	differences are as a result of natural variation or	Contractor.	proposal of any other measures,	IEC and propose measures to
	previously observed seasonal differences;		SOR to signify the agreement in	the IEC and the SOR;
			writing on the measures to be	
	3. Identify source(s) of impact;		implemented.	3. Implement the agreed
			-	measures.
	4. Inform the IEC, SOR and Contractor;			

Appendix J4 Implementation of Event-Action Plan for Dolphin Monitoring

5. Check monitoring data.

6. Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.

Event ET Leader	I	IEC	SC	OR	Contractor
Limit Level1. Repeat statistical da2. Review all available raw data and statist parameters covered differences are as a previously observed 3. Identify source(s) of 4. Inform the IEC, ER/ findings; 5. Check monitoring d 6. Repeat review to en measures are fully a advise on additiona 7. If ET proves that the any of the construct contract, ET to arran IEC, ER/SOR and C additional dolphin modify the perimete control/temporarily activity etc.) and sultable	ta analysis to confirm findings; 1 and relevant data, including cal analysis results of other 2 in the EM&A, to ascertain if result of natural variation or seasonal differences; 3 impact; SOR and Contractor of ata; sure all the dolphin protective 4 nd properly implemented and measures if necessary; source of impact is caused by on activity by the works ge a meeting to discuss with ontractor the necessity of 5 nonitoring and/or any other measures (e.g., consider to r silt curtain or consider to stop relevant construction pomit to IEC a proposal of nonitoring and/or mitigation	 Check monitoring data submitted by ET and Contractor; Discuss monitoring results and findings with the ET and the Contractor; Attend the meeting to discuss with ET, ER/SOR and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures; 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; Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise ER/SOR the results and findings accordingly. 	1.		 Inform the ER/SOR and confirm notification of the non- compliance in writing; Attend the meeting to discuss with ET, IEC and ER/SOR the necessity of additional dolphin monitoring and any other potential mitigation measures; Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary; Implement the agreed additional dolphin monitoring and/or any other mitigation measures.

EVENT		ACTION		
	ET Leader	IEC	SO	Contractor
Action Level				
With the numerical values presented in <i>Table 5.7</i> of <i>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</i> of <i>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	 Repeat statistical data analysis to confirm findings; Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; Identify source(s) of impact; Inform the IEC, SO and Contractor; Check monitoring data; Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary 	 Check monitoring data submitted by ET and Contractor; Discuss monitoring with the ET and the Contractor; 	 Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; Make agreement on measures to be implemented. 	 Inform the SO and confirm notification of the non- compliance in writing; Discuss with the ET and the IEC and propose measures to the IEC and the SO; Implement the agreed measures.

Appendix J5Event and Action Plan on Dolphin Acoustic Behaviour

EVENT		ACTION		
	ET Leader	IEC	SO	Contractor
Limit Level				
With the numerical values presented in <i>Table 5.7</i> 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 <i>Table 5.8</i> of <i>Baseline</i> <i>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	 Repeat statistical data analysis to confirm findings; Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; Identify source(s) of impact; Inform the IEC, SO and Contractor; Check monitoring data; Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary 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. 	 Check monitoring data submitted by ET and Contractor; Discuss monitoring with the ET and the Contractor; Review proposals for additional monitoring and any other measures submitted by the Contractor and advise ER accordingly. 	 Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; Make agreement on measures to be implemented. 	 Inform the SO and confirm notification of the non- compliance in writing; Discuss with the ET and the IEC and propose measures to the IEC and the SO; Implement the agreed measures.

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

Appendix K Quarterly 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)

		Actual Qu	antities of Inert	C&D Materials G	Generation			Actua	al Quantities of C	C&D wastes Ger	neration		Actua	I Quantities of R	ecyclables Gene	ration
Month\Material	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fills	Imported Fill	Marine Sediment, Cat. L	Marine Sediment, Cat. Mp	Marine Sediment, Cat. Mf	Marine Sediment, Cat. H	Chemical Waste	General Refuse	Metals	Felled trees	Paper/ cardboard packaging	Plastics
Unit	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)
Jan	13.578	0.081	0.990	-	12.474	0.115	0.178	0.229	0.258	-	-	132.170	-	-	0.091	-
Feb	6.233	0.148	0.461	-	5.759	0.014	0.801	0.110	0.223	-	0.400	141.020	-	-	0.112	-
Mar	10.149	0.220	0.473	-	9.600	0.077	0.618	0.073	0.149	-	-	120.940	-	-	0.203	-
Apr	9.986	0.410	2.261	-	7.694	0.032	-	-	-	-	-	133.630	-	-	0.105	-
May	8.743	0.177	0.653	-	8.091	-	0.550	-	-	-	-	107.920	-	-	0.042	-
Jun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL	48.691	1.036	4.836	-	43.616	0.238	2.147	0.412	0.630	-	0.400	635.680	-	0.000	0.553	-
Jul	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	48.691	1.036	4.836	-	43.616	0.238	2.147	0.412	0.630	-	0.400	635.680	-	-	0.553	-

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 L

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

Appendix L1 Cumulative Statistics on Exceedances

		Total No. recorded in this quarter	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	1	2
	Limit	0	0
Impact Dolphin	Action	0	7
Monitoring	Limit	1	2

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

Reporting Period	Cumulative Statistics								
—	Complaints	Notifications of	Successful						
		Summons	Prosecutions						
This quarter	0	0	0						
Total No. received since project commencement	2	0	0						

Email message

nicssage		Management
То	ENVIRON - Hong Kong, Limited (ENPO)	16/F Berkshire House, 25 Westlands Road Quarry Bay, Hong Kong
From	ERM- Hong Kong, Limited	Telephone: (852) 2271 3113 Facsimile: (852) 2723 5660 E-mail: jovy.tam@erm.com
Ref/Project number	Contract No. HY/2012/07	
	Tuen Mun – Chek Lap Kok Link – Southern	
	Connection Viaduct Section	
Subject	Notification of Exceedance for Marine Water Quality Impact Monitoring	
Date	3 June 2015	ERM

Environmental Resources

Dear Sir/ Madam,

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

Action Level Exceedance: 0215660_19 May 2015_ SS_E_Station SR4a

Recorded on 19 May 2015.

Regards,

Mr Jovy Tam Environmental Team Leader

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ERM-Hong Kong, Limited



CONTRACT NO. HY/2012/07 TUEN MUN – CHEK LAP KOK LINK – SOUTHERN CONNECTION VIADUCT SECTION

Marine Water Quality Impact Monitoring

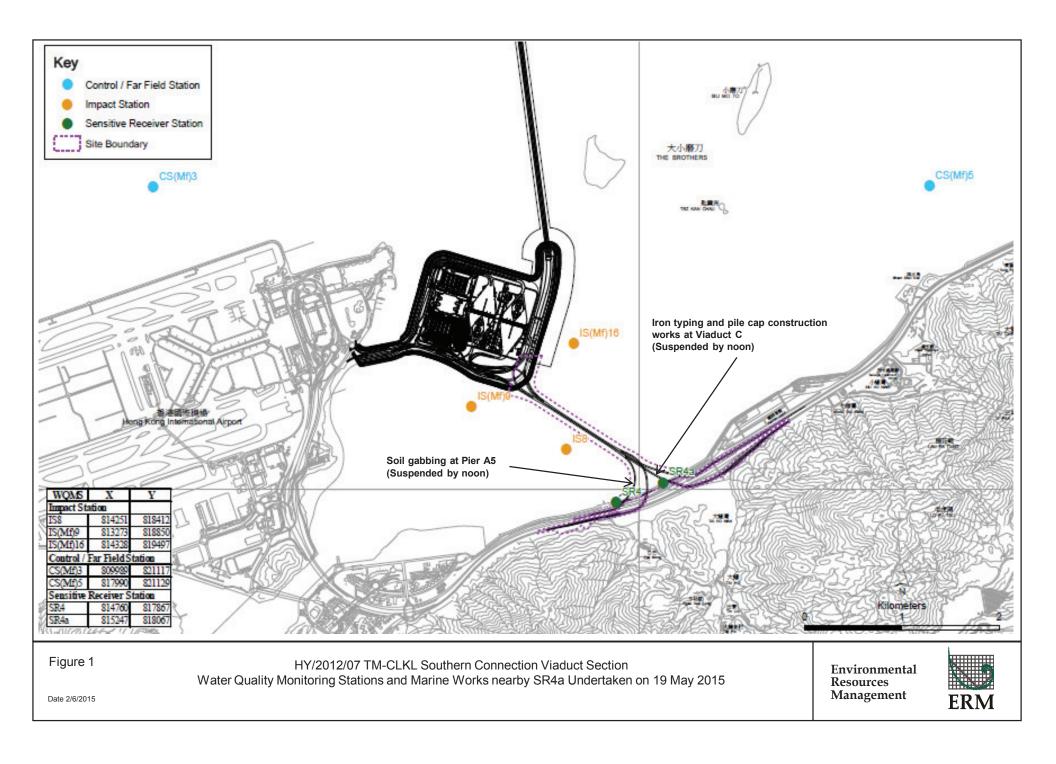
Notification of Exceedance

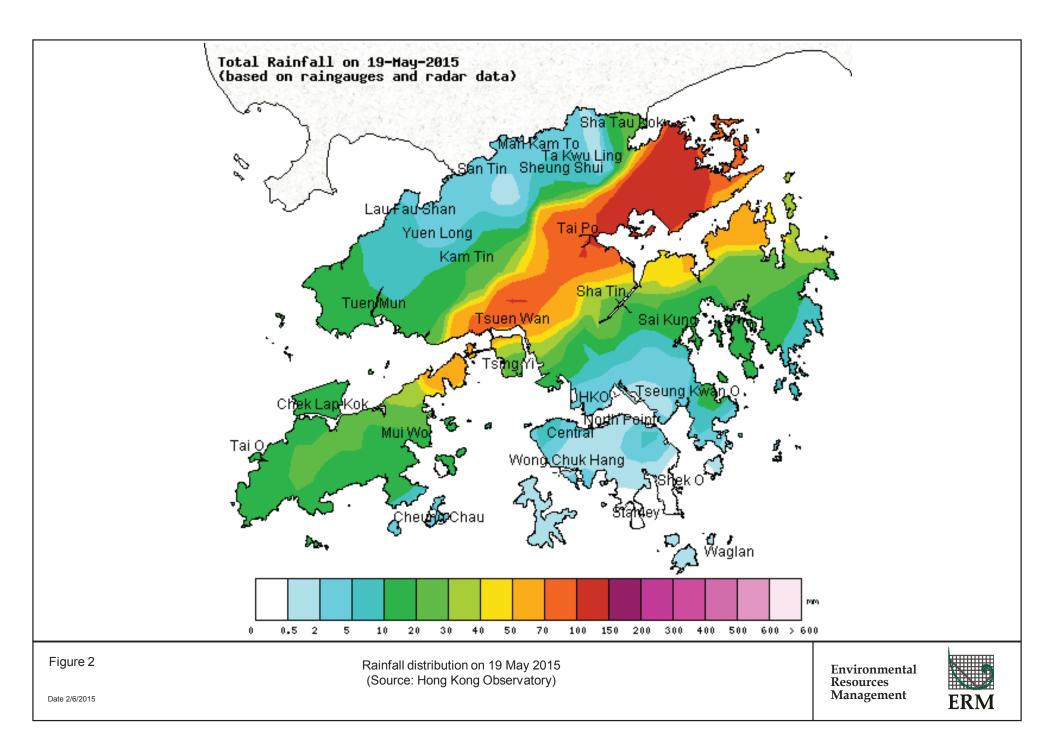
Log No.	021	5660_19 May 2015_ SS_E_Station SR4a								
	[Total No. of Exceedances = 1]									
Date		19 May 2015 (Measured)								
	21 May 2015 (In situ results received by ERM)									
	26 May	26 May 2015 (Laboratory results received by ERM)								
Monitoring Station	CS(Mf)	5, SR4a, SR4, IS8, IS(Mf)16, IS(Mf)9, CS(Mf)3								
Parameter(s) with	L. L	North avone and Guaran dad Calida (CC)								
Exceedance(s)	L	epth-averaged Suspended Solids (SS)								
Action Levels	SS	95%-ile of baseline data (23.5 mg/L) and 120% of upstream control								
		station on same day at same tide (32.5 mg/L)								
Limit Levels	SS	99%-ile of baseline data (34.4 mg/L) and 130% of upstream control								
		station on same day at same tide (35.2 mg/L)								
Measured Levels	Action Level Exceedance was ob	oserved at SR4a (33.6 mg/L) during mid-ebb tide.								
Works Undertaken (at	Marine works on 19 May 2015 a	t the nearby marine platforms were:								
the time of monitoring	• Soil grabbing at Pier A5;									
event)	• Iron typing and pile cap co	onstruction works at platforms of Viaduct C.								
	There were no bored piling wor	ks at the nearby marine platforms of Viaducts B, C and D. The								
	aforesaid works were suspended	d before sampling at mid-ebb tide (12:03 to 15:33) due to adverse								
	weather.									
Possible Reason for	The exceedance of depth-averag	ed SS at SR4a during mid-ebb tide is unlikely to be due to the								
Action or Limit Level	Project, in view of the following									
Exceedance(s)	• The marine works nearby SR4a (13:39).	monitoring station SR4a had been suspended before sampling at								
		so observed in all monitoring stations on the same day which may								
		infall on 19 May 2015. Apart from SR4a during mid-ebb tide, the								
	0	ng stations were in compliance with the Action and Limit Levels								
	during both mid-ebb and i	•								
	° .	lity and dissolved oxygen levels in all monitoring stations on during								
		od tides were in compliance with the Action and Limit Levels.								
		narine platforms were checked and in function. There was also no								
	waste water runoff recorde	*								
	No malpractice was observed	ved during the sampling process.								
Actions Taken / To Be	_	red necessary. The contractor is reminded to properly implement								
Taken		ed in EM&A Manual. The ET will monitor for future trends in								
	exceedances.									
Remarks	The monitoring results, location	s of water quality monitoring stations and rainfall distribution on 19								
	May 2015 are attached.									
	-									

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
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	19:00	26.1	6.93	20.5	6.81		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	19:00	26	6.96	20.4	6.86		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)5	Middle	6.6	2	1	19:00	26.3	7.04	21.2	6.73	20.4	27.8
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)5	Middle	6.6	2	2	19:00	26.2	7.08	21.3	6.76	20.4	27.0
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)5	Bottom	12.2	3	1	19:00	26.4	7.1	21.8	6.5		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)5	Bottom	12.2	3	2	19:00	26.5	7.08	21.9	6.52		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	19:19	26.2	7.11	20.3	6.63		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	19:19	26.1	7.07	20.4	6.58		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4a	Middle		2	1	19:19					21.3	29.4
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4a	Middle		2	2	19:19					21.5	29.4
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4a	Bottom	3.8	3	1	19:19	26.3	6.93	20.4	6.38		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4a	Bottom	3.8	3	2	19:19	26.2	6.99	20.5	6.34		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4	Surface	1	1	1	19:33	26.1	6.89	20.5	6.53		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4	Surface	1	1	2	19:33	26	6.84	20.6	6.57		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4	Middle		2	1	19:33					10.1	26.7
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4	Middle		2	2	19:33					19.1	26.7
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4	Bottom	3.3	3	1	19:33	26.2	6.73	20.6	6.32		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	SR4	Bottom	3.3	3	2	19:33	26.1	6.75	20.6	6.37		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS8	Surface	1	1	1	19:46	26.2	6.74	20.4	6.67		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS8	Surface	1	1	2	19:46	26.1	6.76	20.3	6.71		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS8	Middle		2	1	19:46					20.1	20.1
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS8	Middle		2	2	19:46					20.1	28.1
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS8	Bottom	3.1	3	1	19:46	26.1	6.81	20.3	6.48		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS8	Bottom	3.1	3	2	19:46	26.2	6.77	20.3	6.42		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	20:01	26.2	6.63	20.4	6.56		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	20:01	26.2	6.68	20.3	6.52		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS(Mf)16	Middle	5.3	2	1	20:01	26.4	6.79	20.6	6.43	21.0	20.0
TMCLKL	HY/2012/07		Mid-Flood			Middle	5.3	2	2	20:01	26.3	6.8	20.5	6.47	21.0	28.0
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS(Mf)16	Bottom	9.6	3	1	20:01	26.6	6.87	21.1	6.28		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS(Mf)16	Bottom	9.6	3	2	20:01	26.5	6.92	21.2	6.22		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	20:19	26.2	6.89	20.6	6.56		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	20:19	26.1	6.9	20.5	6.59		
TMCLKL	HY/2012/07		Mid-Flood		IS(Mf)9	Middle		2	1	20:19					20.5	20.2
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	20:19					20.5	28.3

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
TMCLKL	HY/2012/07		Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.4	3	1	20:19	26.1	6.86	20.8	6.49		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.4	3	2	20:19	26.1	6.85	20.8	6.47		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	20:38	26.1	7.04	20.7	6.67		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	20:38	26	7.07	20.8	6.71		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)3	Middle	6.3	2	1	20:38	25.9	7.11	20.5	6.62	17.4	24.5
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)3	Middle	6.3	2	2	20:38	26	7.13	20.6	6.65	17.4	24.3
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)3	Bottom	11.6	3	1	20:38	26.3	6.96	21.8	6.47		
TMCLKL	HY/2012/07	2015-05-19	Mid-Flood	Cloudy	CS(Mf)3	Bottom	11.6	3	2	20:38	26.4	6.98	21.9	6.41		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	12:03	26.4	6.98	20.6	6.54		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	12:03	26.4	7.01	20.5	6.56		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)3	Middle	6.1	2	1	12:03	26.4	6.94	20.9	6.66	19.5	27.1
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)3	Middle	6.1	2	2	12:03	26.5	6.96	21	6.63	19.5	27.1
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	11.2	3	1	12:03	26.6	6.87	21.3	6.38		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	11.2	3	2	12:03	26.7	6.9	21.4	6.41		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	13:39	26.6	7.01	20.1	6.52		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	13:39	26.6	6.97	20.2	6.48		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4a	Middle		2	1	13:39					23.7	33.6
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4a	Middle		2	2	13:39					23.1	55.0
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4a	Bottom	3.2	3	1	13:39	26.6	6.86	20.7	6.27		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4a	Bottom	3.2	3	2	13:39	26.6	6.89	20.6	6.31		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	13:21	26.6	6.78	20.2	6.41		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	13:21	26.6	6.8	20.3	6.39		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4	Middle		2	1	13:21					22.4	31.6
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4	Middle		2	2	13:21					22.4	51.0
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4	Bottom	3	3	1	13:21	26.6	6.67	20.6	6.18		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	SR4	Bottom	3	3	2	13:21	26.5	6.7	20.5	6.16		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	13:05	26.5	6.72	20.1	6.53		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	13:05	26.6	6.76	20.2	6.49		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS8	Middle		2	1	13:05					22.0	30.4
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS8	Middle		2	2	13:05					22.0	30.4
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS8	Bottom	2.9	3	1	13:05	26.5	6.75	20.4	6.35		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS8	Bottom	2.9	3	2	13:05	26.4	6.79	20.4	6.31		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	12:43	26.5	6.78	20.2	6.38		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	12:43	26.5	6.8	20.2	6.34		

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
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)16	Middle	5	2	1	12:43	26.5	6.74	20.4	6.41	20.8	28.9
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)16	Middle	5	2	2	12:43	26.4	6.77	20.5	6.42	20.0	20.9
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	8.9	3	1	12:43	26.6	6.82	20.8	6.2		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	8.9	3	2	12:43	26.7	6.79	20.7	6.17		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	12:26	26.4	6.84	20.4	6.47		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	12:26	26.5	6.87	20.4	6.44		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	12:26					21.0	31.5
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	12:26					21.0	51.5
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4	3	1	12:26	26.5	6.79	20.7	6.53		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4	3	2	12:26	26.5	6.81	20.8	6.56		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	13:55	26.6	6.89	20.2	6.74		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	13:55	26.5	6.85	20.3	6.7		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)5	Middle	6.5	2	1	13:55	26.5	6.93	20.8	6.63	22.1	31.6
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)5	Middle	6.5	2	2	13:55	26.5	6.9	23.9	6.65	22.1	51.0
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	11.9	3	1	13:55	26.6	6.96	21.6	6.34		
TMCLKL	HY/2012/07	2015-05-19	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	11.9	3	2	13:55	26.7	6.99	21.5	6.36		





То

From

Subject

Date

Environmental Resources Management

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



Dear Sir or Madam,

Ref/Project number

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

Monitoring

19 October 2015

ENVIRON - Hong Kong, Limited (ENPO)

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

Notification of Exceedance for Impact Dolphin

ERM-Hong Kong, Limited

0215660_Mar2015/May2015_dolphin_STG&ANI_NEL&NWL

A total of one limit level exceedance was recorded in the quarterly impact dolphin monitoring data between March and May 2015.

Regards,

Mr Jovy Tam Environmental Team Leader

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ERM-Hong Kong, Limited



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

Impact Dolphin Monitoring Notification of Exceedance

Log No.	0215660_Mar2014/May2015_dolphin_STG&ANI_NEL&NWL [Total No. of Exceedance = 1]										
	[Total No. of Exceedance = 1]										
Date	March 2015 to May 2015 (monitored)										
	1 September 2015 (results received by ERM)										
Monitoring Area	Northeast	Lantau (NEL) and Northwest Lantau (NWL)									
Parameter(s) with	Quarterl	y encounter rate of dolphin sightings (STG)									
Exceedance(s)	Quarterly er	ncounter rate of total number of dolphins (ANI)									
Action Levels	NEL: STG < 4.2 & ANI < 15.5										
	or NWL: STG < 6.9 & ANI < 31.3										
Limit Levels	North Lantau Social cluster	NWL: STG < 0.9 & ANI < 31.5 NEL: STG < 2.4 & ANI < 8.9									
Limit Levels		NEL: 51G < 2.4 & ANI < 8.9 and									
		NWL: STG< 3.9 & ANI < 17.9									
Recorded Levels	NEL	STG = 0.0 & ANI = 0.0									
	NWL	STG = 0.47 & ANI = 2.36									
		corded in the quarterly impact dolphin monitoring at NEL and									
		015. The exceedance was reported in the approved <i>Nineteenth</i>									
	Monthly EM&A Report dated 9 Ju										
Statistical Analyses		able and relevant dolphin monitoring data in the EM&A under this									
	Contract, statistical analyses were	i ü									
	-	repeated measures and unequal sample size was conducted using									
	-	s impact – present impact quarter, March to May 2015) and									
		d NWL) as fixed factors to examine whether there were any									
	significant differences in th	ne averages encounter rates between the baseline and present									
	impact monitoring quarter	. By setting $\alpha = 0.05$ as the significance level in the statistical tests,									
	significant difference in ST	G ($p = 0.0015$) and in ANI ($p = 0.0139$) between Period were									
	detected.										
		repeated measures and unequal sample size was conducted using									
		s: baseline vs impact – cumulative quarters, December 2012 to May									
		s: NEL and NWL) as fixed factors to examine whether there were									
		in the averages encounter rates between the baseline and ring quarter. By setting $\alpha = 0.01$ as the significance level in the									
	-	difference in STG ($p = 0.0004$) and in ANI ($p = 0.0001$) between									
	Cumulative Period and Lo										
		thate under <i>Contract No. HY/2012/07</i> is 31 October 2013.									
Works Undertaken (in		15 and May 2015, the major marine works under <i>Contract No</i> .									
the monitoring	<i>HY/2012/07</i> included:										
quarter)	• Construction of Pile caps;										
	Marine piling platform inst	Marine piling platform installation & uninstallation;									
	Pier Construction;										
	 Installation of launching gantry; 										
	 Installation of pier head seg 										
	Marine Piling at Viaducts; a										
	Additional marine ground i	investigation (GI) and laboratory testing.									

Possible Reason for	There is no direct evidence showing the exceedance is due to this Contract in view of the followings:
Action or Limit Level	
Action or Limit Level Exceedance(s)	 The Monitoring of Marine Mammals in Hong Kong Waters (2014 – 15) ⁽¹⁾ reported that dolphin usage and traveling activities to the northern side of the airport (dolphin traveling corridor) are affected by frequent high-speed ferry traffic from Sky Pier (not related to this Contract), which is likely a major factor resulting in the decrease in dolphin abundances in North Lantau. As per the findings from the EIA report (<i>Section 8.11.9</i>), the major influences on the Chinese White Dolphin (CWD) Sousa chinensis under this Contract are marine traffics and bored piling works. The Contractor has implemented the marine traffic control as per the requirements in the <i>EP-354/2009/D</i> and the updated <i>EM&A Manual</i>. Likewise, the bored piling works were undertaken within a metal casing as described in the EP and the approved EIA Report. After reviewing of the bored piling records, the bored piling working rates in this quarter are within the allowable working rate described in the EP (<i>Clause 3.11</i>), in which construction works were not undertaken at more than 15 piers sites from March to May 2015. During this quarter of dolphin monitoring, no unacceptable impact on CWD due to the activities under this Contract was observed. According to the findings in the water quality monitoring results at the impact monitoring stations between March and May 2015, there was an Action Level exceedance on depth-averaged SS on 19 May 2015, however, the recorded exceedance was considered not related to this Contract, and thus no indirect impacts on marine habitat quality due to change in water quality is observed in this Contract.
Actions Taken / To Be	With reference to the site inspection records in this quarter, the respective marine ecological
Taken	mitigation measures (including 250 m dolphin exclusion zone, Passive Acoustic Monitoring (PAM) for night time works, acoustic decoupling plan, training to workers, marine vessels speed control and offsite travel route control) have been implemented properly by the Contractor throughout the marine works period. No immediate additional action is considered necessary. The ET will monitor for future trends in exceedance(s).
	A joint team meeting was held on 10 July 2015 for discussion on CWD trend, with attendance of ENPO, HyD, Representatives of Resident Site Staff (RSS), Environmental Team (ET) for Contract No. HY/2010/02, HY2011/03, HY/2012/07 and HY/2012/08, and Representatives of Main Contractor for Contract No. HY/2011/03 and HY/2012/08. The discussion/recommendation as recorded in the minutes of the meeting, which might be relevant to this Contract are summarized below. It was concluded that the HZMB works is one of the contributing factors affecting the dolphins. It was also concluded the contribution of impacts due to the HZMB works as a whole (or individual marine contracts) cannot be quantified nor separate from the other stress factors. It was reminded that the ETs shall keep reviewing the implementation status of the dolphin related mitigation measures and remind the contractor to ensure the relevant measures were fully implemented. The participants were requested by ENPO to collect and report the marine traffic statistics. It was recommended that the marine works of HZMB projects should be completed as soon as possible so as to reduce the overall duration of impacts and allow the dolphins population to recover as early as possible.
Remarks	The results of impact water quality and impact dolphin monitoring, the status of implemented marine ecological mitigation measures are documented in the approved <i>Seventeenth</i> to <i>Nineteenth Monthly EM&A Reports</i> . Comparison on water quality between impact and baseline periods will be elaborated in the 6 th Quarterly EM&A Report.