



Maeda Corporation

MONTHLY REPORT (AUGUST 2018)

MTRCL Contract C3840-13C

Tsim Sha Tsui Station Carnarvon Road Subway and Entrances Modification Works



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By Email and Post

MTR Corporation Limited Fo Tan Railway House No. 9, Lok King Street, Fo Tan Shatin, N.T., Hong Kong

Attn.: Mr. Alfa Liu

10 September 2018

Dear Sirs,

Consultancy Agreement A130-13 Independent Environmental Checker for CRS and LTS CRS - Verification for 54th Monthly Environmental Monitoring and Audit (EM&A) Report (August 2018) (Report No.: EB001340R0730)

We refer to the 54th Monthly EM&A Report (August 2018) received under cover of the email from the Environmental Team, Arcadis Design & Engineering Limited, dated on 3 September 2018.

We have no further comment and have verified the captioned report (Report No.: EB001340R0730).

Should you have any queries, please feel free to contact the undersigned at 3922 9366.

Yours faithfully **AECOM Consulting Services Ltd**

Y.W.Funa Independent Environmental Checker

LLMC/wwsc

сс	Arcadis Design & Engineering Limited	(Attn.: Mr. F. N. Wong)	via email
	Maeda Corporation	(Attn.: Mr. Calvin Chan)	via email





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Tsim Sha Tsui Station Carnarvon Road Subway and Entrances Modification Works

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EXECUTIVE SUMMARY Breaches of Action and Limit Levels

- ES01 No Notice of Exceedance. The environmental monitoring results registered no breaches of Action and Limit Levels of air quality and construction noise during the Reporting Period, therefore, associated investigation and follow-up actions were not required.
- ES02 No major corrective actions were taken as the environmental audit during the Reporting Period observed:
 - 1) No deficiencies with major environmental significance of the required environmental mitigation measures;
 - 2) No non-compliance with the required waste management; and
 - No adverse environmental impacts on the sensitive receivers environed with the site of the Project.

Environmental Complaints

ES03 No environmental complaints were recorded during the Report Period.

Notification of Summons & Successful Prosecutions

ES04 No notification of summons and successful prosecutions were recorded during the Reporting Period.

Reporting Changes

ES05 No major reporting changes were made during the Reporting Period.

Future Key Issues

General

ES06 Construction noise, air quality and water quality are continued to be the key issues for the coming construction period. In order to alleviate potential adverse environmental impacts generated from construction activities to acceptable levels, environmental mitigation measures recommended in the EM&A Plan and summarised in the Implementation Schedule should be fully implemented and improved whenever appropriate.

Construction Noise

ES07 Particular attention should be paid to construction noise mitigation measures to ensure full compliance with statutory and non-statutory requirements and guidelines. Proactive review of working methods, careful selection and arrangement of the noisy equipment as well as effective noise mitigation measures are strongly recommended.

Water Quality

ES08 In addition, compliance with water quality mitigation measures remains one of the key environmental issues within the construction period, especially when water usage is high. Waste water treatment plant was replaced by sedimentation tank.

Air quality

ES09 Furthermore, implementation of necessary construction dust suppression measures is recommended during dusty activities under dry and windy conditions.

1 INTRODUCTION

1.1 The Reporting Period

- 1.1.1 This is the 54th monthly EM&A report (hereinafter referred as 'This Report') covering construction period from 1 to 31 August 2018 (hereinafter referred as 'the Reporting Period').
- 1.1.2 This Report has been written in accordance with the *Environmental Monitoring and Audit Plan* (hereinafter referred as 'the EM&A Plan') enclosed in the *Project Profile – MTR Tsim Sha Tsui Station Carnarvon Road Subway and Entrances Modification Works*, which is registered in the Environmental Permit No. EP-440/2012 (hereinafter referred as 'the EP') (Register No.: PP-462/2012).

1.2 Project Background

- 1.2.1 In order to improve the appearance of Carnarvon Road Entrance D1 and D2 of Tsim Sha Tsui (hereafter referred as 'TST') Station and to provide a more comfortable walking environment nearby, MTR Corporation Limited (hereafter referred as 'MTRC' or 'the Corporation') has commissioned Meada Corporation (hereinafter referred as 'MC') the contract MTR Tsim Sha Tsui Station Carnarvon Road Subway and Entrances Modification Works (hereafter referred as 'the Project'). The Project is proposed to rebuild the existing Entrance D1 and D2 and construct a new Entrance D3 at the basement B2 level of the K11 Art Mall to connect to the TST station by a subway, which extends from the Entrance D1 and D2 and runs approximately 80m along Carnarvon Road and across the Bristol Avenue to the Entrance D3. The Project was commenced in March 2014 and is anticipated to be completed by the end of 2018.
- 1.2.2 The existing TST Station had been in operation before the *Environmental Impact Assessment Ordinance* (hereafter referred as 'EIAO') comes into effect on 1 April 1998. It constitutes an exempted Designated Project (hereinafter referred as 'DP') according to Section 9(2) (g) of the EIAO (Cap. 499). As the Project involves a material change to an exempted DP which may have potential environmental impacts, an environmental permit is required prior to the commencement of the modification works. The Project Profile has been developed to provide information for direct application of an environmental permit. The EP has been granted since 18 July 2012, after the Project Profile and the associated *EM&A Plan* were registered.
- 1.2.3 Site map, works area and locations of the environmental monitoring under the Project are illustrated in Figure 1.1 Site Location Plan of *Appendix A*.
- 1.2.4 Management structure of the Project, including organization chart, lines of communication and contact names and telephone numbers of key personnel, is demonstrated in *Appendix B*.
- 1.2.5 Construction programme is shown in *Appendix C*, whereas implementation schedule for the recommended environmental mitigation measures (hereinafter referred as 'the Implementation Schedule') are summarised in *Appendix D*, which fine tunes the construction activities and shows inter-relationships with the environmental protection/ mitigation measures for the construction period. It is being reviewed and will be updated soon upon availability of more solid information.

1.3 Environmental Status

1.3.1 As required in the EP, AECOM Consulting Services Limited has been appointed as the Independent Environmental Checker under the Project (hereinafter referred as 'the IEC'), whereas Arcadis Design and Engineering Limited (formerly known as Hyder Consulting Limited) has been appointed as the Environmental Team under the Project (hereinafter referred as 'the ET').

- 1.3.2 According to the EP Condition 3.2 (a) under Environmental Monitoring and Audit (EM&A) during the Construction Period, baseline monitoring has been completed and the required Baseline Monitoring Report has been submitted to EPD on 14 February 2014 prior to commencement of the works under the Project.
- 1.3.3 Status of relevant environmental permits, licences, and/or notifications on environmental protection for the Project is summarised in *Table 1-3-1* below. They are detailed in *Appendix E*.

ltem	Description	License/Permit Status	
1	Air Pollution Control (Construction Dust)	Notification Ref. 403252, 421293 & 433242 acknowledged on 02 Jun 2016, 18 Sep 2017 & 07 May	
		2018 respectively	
2	Water Pollution Control	The discharge license (Ref No. WT00019722-2014) was	
	Ordinance (Discharge	granted on 01 Sep 2014 superseding the previous license	
	License)	(Ref No. WT00018229-2014)	
3	Billing Account for Disposal	A/C Ref. 7018523 granted on 25 Oct 2013	
	of Construction Waste		
4	Chemical Waste Producer	Registration Ref. 5213-2214-M2446-16 granted on 4	
	Registration	Mar 2014	
5	Construction Noise Permit	GW-RE0158-18 approved on 12 March 2018 for	
		operation of 4 submersible water pump (electric) or 1	
		drill for 24-hr; 4 drill & 4 grinder for 07:00-23:00 from 1	
		April 2018 to 30 September 2018.	

1.4 Construction Activities

1.4.1 Construction activities undertaken during the Reporting Period and the following month are summarised in *Table 1-4-1*:

Table 1-4-1 Construction Activities

Item	Description			
	Construction Activities Undertaken during the Reporting Period			
1	Construction of the ABWF works			
2	Installation of the BS related works			
3	Reinstatement of the DSD drainage			
4	Demolition of Temporary Staircase			
5	Construction of RC Structure for Entrance D1			
Construction Activities to be Undertaken in the Up-Coming Month				
1	1 Defect Rectification for ABWF and BS works at Entrance D2 & D3			
2	Backfilling of the subway			
3	Reinstatement of Underground Utility			
4	Construction of RC Structure for Entrance D1			

2 EM&A REQUIREMENTS

2.1 Air Quality

Monitoring Parameters and Frequency

- 2.1.1 24-Hour Total Suspended Particulates (hereinafter referred as '24-Hr TSP') is required to be monitored once a week during construction period of the Project.
- 2.1.2 1-Hour Total Suspended Particulates (hereinafter referred as '1-Hr TSP') is required to be monitored when exceedances of 24-Hr TSP occur, following the Event and Action Plan presented in *Appendix F*.
- 2.1.3 Schedules for 24-Hr TSP monitoring for the Reporting Period and the next month were prepared and submitted to MTRC, IEC and MC prior to implementation via e-mail and / or facsimile for ease of necessary inspection. If amendment is necessary under ad hoc conditions, including actual and broadcast adverse weather, accidental instrument failures, etc., notification will be given at least 24 hours prior to implementation or as practical as possible. The monitoring schedules are enclosed in *Appendix G*.

Monitoring Location

- 2.1.4 According to the EM&A Plan, Mirador Mansion was designated to be the air quality monitoring station of the Project. As the access to the air monitoring location designated in the EM&A Plan has been denied by the owner of the property, the ET proposes an alternative monitoring location on the roof-top above the 4/F of the commercial complex of K11 (hereinafter referred as 'K11'), which has been agreed among MTRC, IEC and MC, and the associated access to K11 has been granted by the management office of K11 prior to the commencement of the baseline monitoring in January 2014.
- 2.1.5 Air quality monitoring location is summarised in *Table 2-1-1* below and illustrated in *Appendix A*.

Table 2-1-1 Air Quality Monitoring Location

Location ID	Name of Premises	Description
K11	K11 Art Mall	Rooftop, 4/F

Monitoring Equipment

2.1.6 The air quality monitoring equipment to be used for construction air impact monitoring is shown in *Table 2-1-2* below:

Table 2-1-2 Air Quality Monitoring Equipment

Equipment Type	Model	Serial Number	Calibration Orifice Number
High Volume Air Sampler	TE5170 MFC	0462	1785
Sibata Digital Dust Monitor	LD-3B	456677	Not Applicable

2.1.7 Weather information including wind speeds and wind directions is obtained from King's Park Weather Station. The weather information is used as weather conditions during the Reporting Period. They are presented in *Appendix H*.

Calibration of Monitoring Equipment

2.1.8 The HVAS is calibrated before commencement of monitoring using standard orifice 5points calibration method with orifice calibrator to determine the actual flow rate of each HVAS. A calibration Kit (Model - TE5025A) is used for calibration of the HVAS. At least once every 12 months, recalibration of the calibration kit is carried out during its maintenance.

- 2.1.9 Calibration of the HVAS is conducted following the manufacturer's instruction manual. Initial calibration of the equipment is conducted upon installation and thereafter at bimonthly intervals throughout the period of impact monitoring. The transfer standard should be traceable to the internationally recognised primary standard and be calibrated annually.
- 2.1.10 The Sibata Digital Dust Monitor LD-3B for 1-hour TSP monitoring is calibrated annually and the calibration certificates of the equipment are shown in *Appendix I*.

Monitoring Methodology – 24-Hr TSP

2.1.11 Air quality monitoring (24-Hr TSP) will be conducted once a week under typical weather conditions (with no adverse weather such as typhoon signal or rain storm warning).

Installation of HVAS

- 2.1.12 When positioning the HVAS, the following points will be noted:
 - a) A horizontal platform with appropriate support to secure the samplers against gusty wind will be provided;
 - b) No two samplers will be placed less than 2 m apart;
 - c) The distance between the sampler and an obstacle, such as buildings, must be at least twice the height that the obstacle protrudes above the sampler where possible;
 - d) A minimum of 2 m of separation from walls, parapets and penthouses is required for rooftops samplers;
 - e) A minimum of 2 m of separation from any supporting structure, measured horizontally is required;
 - f) No furnace or incinerator flue or building vent is nearby;
 - g) Airflow around the sampler is unrestricted;
 - h) The sampler is more than 20 m from the drip line;
 - i) Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring;
 - j) Permission must be obtained to set up the samplers and to obtain access to the monitoring stations; and
 - k) A secured supply of electricity is needed to operate the samplers.

Preparation of Filter Papers and Laboratory Analysis

- 2.1.13 Sufficient pieces of filter paper should be labelled before sampling. It should be a clean filter paper with no pinholes, and should be conditioned in a humidity-controlled chamber for over 24-hour and be pre-weighed before use for the sampling. The preferred room temperature is around 25 °C ±3 °C with relative humidity (hereinafter referred as 'the RH') less than 50% ± 5%, preferably 40%.
- 2.1.14 Preparation of filters and subsequent laboratory analysis of the collected 24-Hr TSP samples were performed by ALS Technetiem (HK) Pty Ltd (hereinafter referred as 'ALS'), a local laboratory which have been accredited under Hong Kong Laboratory Accreditation Scheme (HOKLAS).
- 2.1.15 All the collected samples should be kept by the ET in standard office conditions for 6 months before disposal.

Field Monitoring Procedures

- 2.1.16 Procedures for field monitoring are as follows:
 - a) Check power supply to ensure the HVAS works properly.
 - b) Clean the filter holder and the area surrounding the filter.
 - c) Remove the filter holder by loosening the four bolts and carefully align a new filter, with stamped number upward, on a supporting screen.
 - d) Align the filter properly on the screen so that the gasket forms an airtight seal on the outer edges of the filter.
 - e) Fasten the swing bolts to hold the filter holder down to the frame. The pressure applied should be sufficient to avoid air leakage at the edges.
 - f) Close the shelter lid and secure with the aluminium strip.

- g) Warmed-up the HVAS for about 5 minutes to establish run-temperature conditions.
- h) Set a new flow rate record sheet into the flow recorder.
- i) Checked and adjust the flow rate of the HVAS at around 1.1 m³ per minute. (The range specified in the EM&A Plan is between 0.6-1.7 m³ per minute.)
- j) Set the programmable timer for a sampling period of 24 hours, and record the starting time, weather condition and the filter number.
- k) Record the initial elapsed time.
- I) At the end of sampling, remove the sampled filter carefully and fold it in half-length so that only surfaces with collected particulate matter are in contact.
- m) Place the sampled filter in a clean plastic envelope and seal.
- n) Record all monitoring information on a Field Data Sheet as shown in *Appendix J*.
- o) Send the filters to ALS for analysis.

Monitoring Methodology – 1-Hr TSP

Field Monitoring

- 2.1.17 The procedures for measurement of 1-Hr TSP follow Manufacturer's Instruction Manual, which is summarised as follows:
 - a) Turn on the power.
 - b) Close the air collecting opening cover.
 - c) Set the "TIME SETTING" switch to [BG].
 - d) Press "START/STOP" switch to perform background measurement.
 - e) Turn the knob at SENSI ADJ position.
 - f) Leave the equipment upon "SPAN CHECK" is indicated in the display.
 - g) Press "START/STOP" switch to perform automatic sensitivity adjustment.
 - h) Turn the knob at MEASURE position.
 - i) Set time period of 1 hour for the 1-hour TSP measurement.
 - j) Press "START/STOP" to start the 1-hour TSP measurement.
 - k) Check the time period to ensure monitoring time of 1 hour.
 - I) Record all monitoring information on a Field Data Sheet.

Maintenance and Calibration

- 2.1.18 The procedures for maintenance and calibration of 1-Hr TSP follow Manufacturer's Instruction Manual as follows:
 - a) The Sibata is checked at 3-month intervals and calibrated at 1-year intervals throughout the whole construction period.
 - b) Calibration records for the Sibata Digital Dust Monitor direct dust meters are shown in *Appendix I*.

Action and Limit Levels

2.1.19 The Action and Limit levels (hereinafter referred as 'the A/L Levels) at K11 have been established in the Baseline Monitoring Report in accordance with the derivation criteria specified in Section 3.7 of the EM&A Plan, which are summarised in **Table 2-1-3** as follows:

	Table 2-1-3	Derivation of Action and Limit Levels for Air Quality at K11, µg/m ³
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Parameter	Action Level	Limit Level
24-Hr TSP	24-Hr TSP For baseline level ≤200 μg/m ³ , Action level = (130% of baseline level + Limit level)/2	
1-Hr TSP	For baseline level ≤384 µg/m³, Action level = (130% of baseline level + Limit level)/2 For baseline level >384 µg/m³, Action level = Limit level	500

2.1.20 The established A/L Levels for 24-Hr and 1-Hr TSP are summarised in Table 2-1-4 as follows:

Table 2-1-4 Action & Limit Levels for Air Quality at K11, µg/m³

Parameter	Action Level	Limit Level
24-Hr TSP	221.6	260
1-Hr TSP	373	500

Event and Action Plan

Environmental Mitigation Measures for Air Quality

- 2.1.22 Although most of the construction works would be carried out underground, appropriate dust mitigation measures as stipulated in the EP, Project Profile, related environmental regulation including Air Pollution Control (Construction Dust) Regulation as well as those recommended in the Implementation Schedule should be implemented to control fugitive dust emission. The following key dust suppression measures are recommended:
 - a) Decking over the excavation areas;
 - b) Regular watering to reduce dust emissions from all exposed site surface, particularly during dry weather;
 - c) Frequent watering for particularly dusty construction areas and areas close to air sensitive receivers;
 - d) Provision of vehicle washing facilities at the exit points of the site; and
 - e) Provision of tarpaulin covering for any dusty materials on a vehicle leaving the site.
- 2.1.23 Details of the implementation schedule for the required environmental mitigation measures are presented in *Appendix D.*

2.2 Construction Noise

Monitoring Parameters and Frequency

2.2.1 **Table 2-2-1** summarizes the monitoring parameters and frequency for construction noise:

Table 2-2-1 Noise Monitoring Parameters and Frequency

Parameters	Frequency
L _{eq} in 30 minutes	Once a week

2.2.2 Monitoring schedules for construction noise for the Reporting Period and the next Reporting Period are prepared and submitted to MTRC, IEC and MC prior to implementation via e-mail and / or facsimile for ease of necessary inspection. Where amendment is necessary under ad hoc conditions, including actual and broadcast adverse weather, accidental instrument failures, etc., advanced notification is given at least 24 hours prior to implementation or as practical as possible.

Monitoring Equipment

2.2.3 With reference to the Technical Memorandum (TM) issued under the Noise Control Ordinance (NCO), sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications (both publications have been withdrawn and replaced by 61672:2003) are used for carrying out the noise monitoring. The details of the calibration of the sound level meters and their respective calibrators are as shown in the following **Table 2-2-2**:

^{2.1.21} In case exceedances of Action and/or Limit levels for air quality occur, Event and Action Plan for Air Quality enclosed in *Appendix F* will be implemented.

Table 2-2-2 Construction Noise Monitoring Equipment

ltem	Equipment Name	Model
1	Sound Level Meter	B&K2238 (Serial No. 2562782)
2	Acoustic Calibrator	CAL200 (Serial No. 10929)

Monitoring Location

- 2.2.4 As stated in previous **Section 2.1.4**, the alternative air quality monitoring location K11 which is proposed by the ET and agreed among MTRC, IEC and MC, i.e. on the roof-top above the 4/F of the commercial complex of K11, is used for the construction noise monitoring location. The access to K11 has been granted by the management office of the K11 prior to the commencement of the baseline monitoring in January 2014.
- 2.2.5 **Table 2-2-3** summarizes the recommended alternative noise monitoring location, which is illustrated in **Appendix A**.

Table 2-2-3 Noise Monitoring Location

Location ID	Name of Premises	Description
K11	K11 Art Mall	Rooftop, 4/F

Monitoring Methodology

Field Monitoring

2.2.6

- Procedures for noise monitoring summarised as follows:
 - a) The microphones of the Sound Level Meter are about 1 m from the exterior of the building façade.
 - b) The battery condition is checked to ensure the correct functioning of the meter.
 - c) Parameters such as frequency weighting, the time weighting, the measurement time and monitoring frequency are set as follows:
 - i. Frequency weighting: A
 - ii. Time weighting: Fast
 - iii. Time measurement: 30 minutes' intervals (between 0700-1900 on normal weekdays)
 - iv. Monitoring frequency: one set of measurement on a weekly basis
 - d) Prior to and after each noise measurement, the meter is calibrated using a Calibrator for 94 dB at 1 kHz. If the difference in the calibration level before and after measurement is more than 1 dB, the measurement should be considered invalid and the measurement repeated after re-calibration or repair of the equipment.
 - e) During the monitoring period, the Leq(30 min) are recorded.
 - f) Record all monitoring information on a Field Data Sheet as shown in Appendix J.
 - g) Maintenance and Calibration.
 - h) The meter and calibrator are sent to the supplier or HOKLAS laboratory to check and calibrate prior to the monitoring. Calibration records are presented in *Appendix I.*

Weather Condition

2.2.7 The wind speeds and directions during the monitoring period are recorded and shown in *Appendix H.*

Action and Limit Levels

2.2.8 The Action and Limit levels (hereinafter referred as 'the A/L Levels) at K11 have been established in the Baseline Monitoring Report. They are summarised in *Table 2-2-4* as follows:

Table 2-2-4 Action and Limit Levels for Construction Noise

Time Period	Action Level	Limit Level
0700-1900 hours on normal	When one valid documented	75*
weekdays	complaint is received.	75

Note: If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

Event and Action Plan

2.2.9 In case exceedances of Action and/or Limit levels for construction noise occur, the Event and Action Plan enclosed in *Appendix F* will be triggered.

Mitigation Measures for Construction Noise

- 2.2.10 Although no residual noise impact would be generated after the proposed mitigation measures are in place, the general construction noise control measures stipulated in the EP, Project Profile as well as those recommended in the Implementation Schedule should be fully implemented in order to minimise noise impacts during the construction phase. They are summarised as follows:
 - a) The Code of Practice on Good Management Practice to Prevent Violation of the Noise Control Ordinance (Chapter 400) (for Construction Industry) published by EPD shall be adopted;
 - b) The statutory and non-statutory requirements and guidelines shall be complied with;
 - c) Approval for the method of working, equipment and noise mitigation measures intended to be used at the site shall be granted from the Project Engineer before commencing any work;
 - Working methods to minimize the noise impact on the surrounding NSRs shall be formulated and executed, and the implementation of these methods shall be monitored by experienced personnel with suitable training;
 - e) Noisy equipment and noisy activities shall be located as far away from the NSRs as is practical;
 - f) Unused equipment shall be turned off;
 - g) PME should be kept to a minimum and the parallel use of noisy equipment / machinery should be avoided;
 - h) All plant and equipment shall be maintained regularly; and
 - i) Material stockpiles and other structures shall be effectively utilised as noise barriers, whenever practicable.
- 2.2.11 Details of the implementation schedule for the mitigation measures are presented in *Appendix D*.

3 MONITORING RESULTS

3.1 Air Quality

Monitoring Results

- 3.1.1 24-Hr TSP monitoring during the Reporting Period was conducted following the agreed monitoring schedule.
- 3.1.2 24-Hr TSP results of the Reporting Period are summarised in the following *Table 3-1-1*. Graphical plots of the parameter are illustrated in *Appendix K*.

Monitoring Date	24-Hr TSP	Action Level	Limit Level
6 August 2018	41.9		
13 August 2018	30.3		
20 August 2018	42.5	221.6	260
27 August 2018	39.0		
Mean (Min – Max)	38.4 (30.3- 42.5)		

Table 3-1-1 Summary of 24-Hr TSP Monitoring Results, µg/m³

Discussion

- 3.1.3 **Table 3-1-1** demonstrates that all 24-Hr TSP results of the Reporting Period fluctuated well below the A/L Levels of the parameter, i.e. neither Action Level nor Limit Level exceedances were recorded.
- 3.1.4 No Notice of Exceedances (thereinafter referred as 'NOE'). Therefore, the associated NOE Investigation as well as remedial actions were not required during the Reporting Period.

3.2 Construction Noise

Monitoring Results

Mean (Min – Max), Leg (30 min)

- 3.2.1 Construction noise monitoring during the Reporting Period was conducted following the agreed monitoring schedule.
- 3.2.2 Construction noise monitoring results of the Reporting Period are summarised in the following *Table 3-2-1*. Graphical plots of the parameter are illustrated in *Appendix K*.

iction noise moni	toring Results at KIT, di	<u> D(A)</u>
Leq (30 min)	Action Level	Limit Level
68.7		
68.3	Any documented	
64.9	-	75
65.6	construction noise.	
	Leq (30 min) 68.7 68.3 64.9	68.768.364.9complaint against

67.2 (64.9-68.7)

Table 3-2-1 Summary of Construction Noise Monitoring Results at K11, dB(A)

Discussion

- 3.2.3 No environmental complaint against construction noise was registered during the Reporting Period, whereas Table 3-2-1 demonstrates that all construction noise results of the Reporting Period were fell below the Limit Level of the parameter. Neither exceedances of Action Level nor exceedances of Limit Level were recorded.
- 3.2.4 Neither NOE nor NOE investigation and the associated remedial actions were required during the Reporting Period.
- 3.2.5 The Contractor's attention is drawn to certain noisy construction activities, which were scheduled to be conducted during the coming month as listed in **Table 1-4-1** under **Section 1.4:** Construction Activities Undertaken during the Reporting Period and Up-Coming Month.
- 3.2.6 Attention is drawn to adequate mitigation measures to be implemented during the noisy construction activities in order to alleviate noise nuisance generated from the Project related construction activities.

Weather Conditions

- 3.2.7 No weather conditions or any other factors were identified to have significant effects on the air and noise monitoring results within the Reporting Period.
- 3.2.8 Weather information during the Reporting Period which is extracted from Hong Kong Observatory King's Park Weather Station and enclosed for reference in *Appendix H*.

3.3 **Conclusions and Recommendations**

Conclusions

- 3.3.1 No exceedances of A/L Levels of air quality and construction noise were registered during the Reporting Period.
- 3.3.2 No NOE and the associated NOE Investigation and corrected actions were required during the Reporting Period.

Recommendations

- 3.3.3 Full implementation of the environmental mitigation measures, which are required in the EM&A Plan and summarised in Implementation Schedule of *Appendix D*, is recommended. Where necessary, proper maintenance and improvement of the implemented mitigation measures are reminded.
- 3.3.4 Construction dust shall be suppressed during dusty construction activities under dry and windy conditions.
- 3.3.5 In addition, construction noise shall be eliminated to avoid adverse impacts on the nearby sensitive receivers.

4 ENVIRONMENTAL AUDIT

4.1 Site Inspection

- 4.1.1 Weekly site inspections during the Reporting Period were conducted by MTRC, MC and ET, whereas the monthly site inspection of the Reporting Period was jointly conducted by the IEC, MTRC, MC and ET. The site inspection follows strictly to the agreed Site Inspection Checklist, which covers all the site audit requirements stipulated in the EM&A Plan, PS and all relevant environmental laws.
- 4.1.2 The completed Site Inspection Checklists are distributed to relevant parties upon completion of the site inspection for agreement and signature of the relevant parties and, where appropriate, for implementation of the recommended corrected actions to promptly rectify the situation.
- 4.1.3 The site inspections during the Reporting Period were conducted on 07, 14, 21 and 28 August 2018. A joint site inspection was conducted by IEC, MTRC, MC and ET on 14 August 2018.
- 4.1.4 As the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation has been enforced since December 2015, particular attention was paid to check EPD's Non-Road Mobile Machinery (NRMM) labels demonstrated on the regulated NRMM, except those which application is in progress. Deficiencies or findings of the site audit and the associated follow up actions are summarised in the following **Table 4-1-1**:

Date	Deficiencies or findings	Follow-Up Action
07 - August -2018	Follow-up item(s)	
	No follow-up item.	Not required.
	Observation(s) on the day of inspection	
	No deficiency was observed on site.	Not required.
14 - August -2018	Follow-up item(s)	
	No follow-up item.	Not required.
	Observation(s) on the day of inspection	
	No deficiency was observed on site.	Not required.
21 - August -2018	Follow-up item(s)	
	No follow-up item.	Not required.
	Observation(s) on the day of inspection	
	No deficiency was observed on site.	Not required.
28 – August -2018	Follow-up item(s)	
	No follow-up item.	Not required.
	Observation(s) on the day of inspection	
	No deficiency was observed on site.	Not required.

Table 4-1-1 Summary of Findings and Follow-Up Actions of the Site Inspection

4.1.1 As shown in *Table 4-1-1*, no major deficiencies or non-compliance of environmental mitigation measures or adverse environmental impacts were observed during the Reporting Period.

4.2 Compliance with Legal/Contractual Requirement

4.2.1 Construction activities under the Project must comply with all environmental protection and pollution control laws in Hong Kong, as well as the contractual requirements of the Project.
 Table 4-2-1 summarizes breaches of legal and contractual requirements.

Table 4-2-1 Summary of Breaches of Legal and Contractual Requirements

Month	No. of Breach(s)	Cumulative no. from March 2014 to the Reporting Period
August 2018	0	0

4.3 Environmental Complaints

- 4.3.1 Environmental complaints are handled following closely the flow chart of complaint response procedure which is enclosed in *Appendix L*.
- 4.3.2 Environmental complaints registered during the Reporting Period are summarised in *Table 4-3-1* below:

Table 4-3-1 Summary of Complaint

Month	No. of Complaint(s)	Cumulative no. from March 2014 to the Reporting Period
August 2018	0	6

4.4 Notification of Summons/Successful Prosecutions

4.4.1 Notification of summons and successful prosecutions registered during the Reporting Period are summarised in *Table 4-4-1* below:

Table 4-4-1 Summary of Summon and Successful Prosecutions

Month	No. of Breach(s)	Cumulative no. from March 2014 to the Reporting Period
August 2018	0	0

5 CONSTRUCTION WASTE

5.1 Waste Management

5.1.1 Waste management under the Project is performed in accordance with the Waste Management Plan, which has been prepared for implementation of the construction waste mitigation measures in compliance with the requirements stipulated in the EM&A Plan, PS, Waste Disposal Ordinance and the associated subsidiary regulations.

5.2 Waste Management Status and Record

- 5.2.1 Updated waste management status is detailed in *Appendix M*, where the 3-R status of the construction waste generated from construction of the Project during the Reporting Period is presented.
- 5.2.2 Despite small scale of the Project and the amount of C&D material that needs to be hauled off site and disposed of is anticipated not to be significant, 3-R waste management i.e. Reduce, Reuse and Recycle, is adopted in order to minimize adverse environmental impacts to be generated from construction of the Project.

6 FUTURE ENVIRONMENTAL ISSUES

6.1 Key Environmental Issues

6.1.1 Future key environmental issues include:

- 1) Air quality, in particular construction dust during dusty construction activities, e.g. handling of dusty materials under dry and windy conditions;
- 2) Construction noise during noisy activities; and
- 3) Site surface water run-off and construction wastewater discharge.

6.2 Mitigation Measures

- 6.2.1 To avoid potential adverse environmental impacts to be generated from future key environmental issues as stated above, full implementation of the mitigation measures as stipulated in the Implementation Schedule in *Appendix D* is required.
- 6.2.2 Mitigation measures for air quality, construction noise and water quality implemented to date shall be properly maintained.
- 6.2.3 Where appropriate, improvement of the implemented mitigation measures is reminded to ensure effectiveness of the mitigation measures.

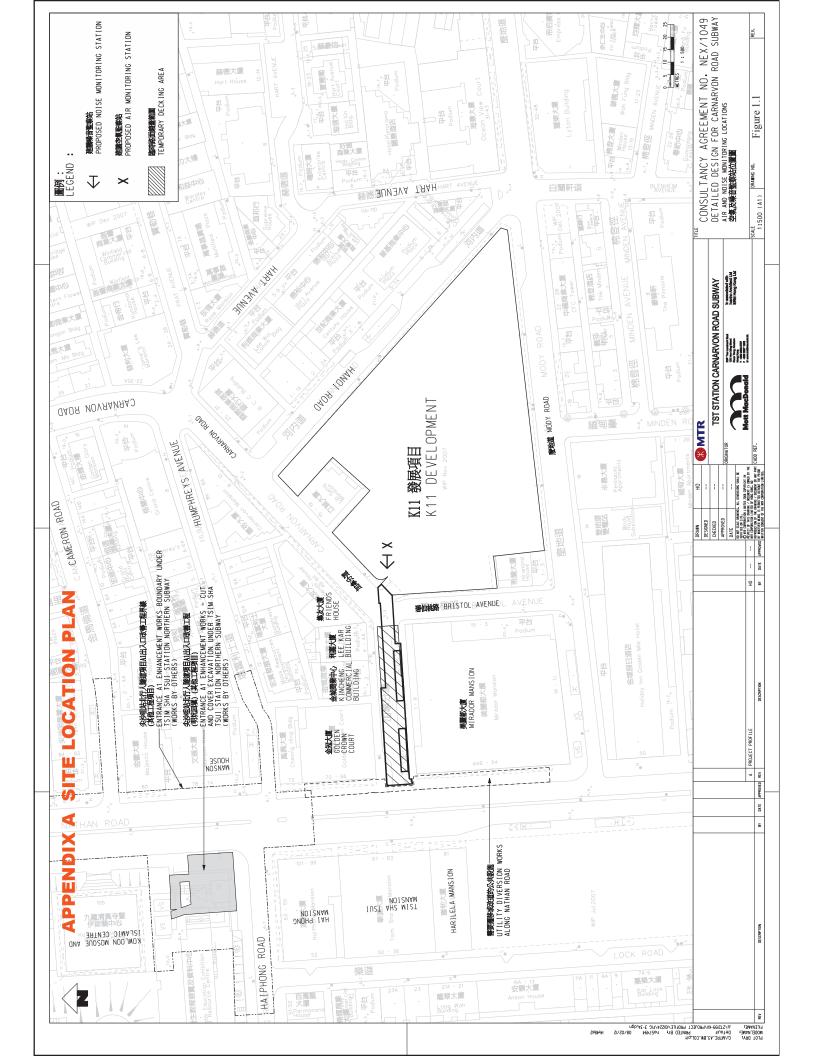
7 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

- 7.1.1 EM&A results during the Reporting Period showed that adverse environmental impacts generated from construction activities under the Project was alleviated to acceptable levels via implementation of the environmental mitigation measures recommended in the EM&A Plan and summarised in the Implementation Schedule.
- 7.1.2 Neither NOE & the associated NOE investigation nor follow-up actions were required as the environmental monitoring results registered no exceedances of A/L Levels of air quality and construction noise during the Reporting Period.
- 7.1.3 No corrective actions were required as the environmental audit during the Reporting Period observed:
 - 1) No deficiencies with major environmental significance of the required environmental mitigation measures;
 - 2) No non-compliance with the required waste management; and
 - 3) No adverse environmental impacts on the sensitive receivers environed with the site of the Project.
- 7.1.4 In addition, no remedial actions were required as no notification of summons and successful prosecutions were reported during the Reporting Period.

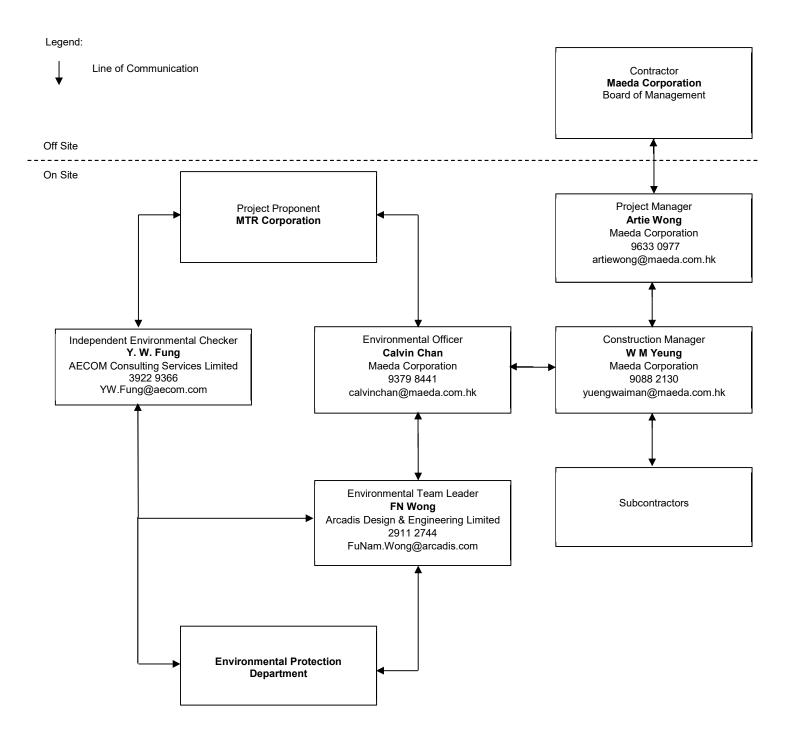
7.2 Recommendations

- 7.2.1 The existing environmental mitigation measures have been proven effective. They should be properly maintained.
- 7.2.2 Where appropriate, additional or improvement of the environmental mitigation measures should be implemented.
- 7.2.3 Particular attention should be paid to construction noise mitigation measures to ensure full compliance with statutory and non-statutory requirements and guidelines. Proactive review of working methods, careful selection and arrangement of the noisy equipment as well as effective noise mitigation measures are strongly recommended.
- 7.2.4 In addition, suppression of construction dust is reminded during dusty construction activities under dry and windy conditions.
- 7.2.5 Furthermore, monitoring of site water runoff is reminded to prevent any direct water discharge off site, especially when water usage is high during the construction period. When necessary, the Contractor is reminded to apply additional precautionary measures to prevent any possible environmental deficiency.



APPENDIX B MANAGEMENT STRUCTURE

Project Organization Chart in Environmental Management (Rev.05)



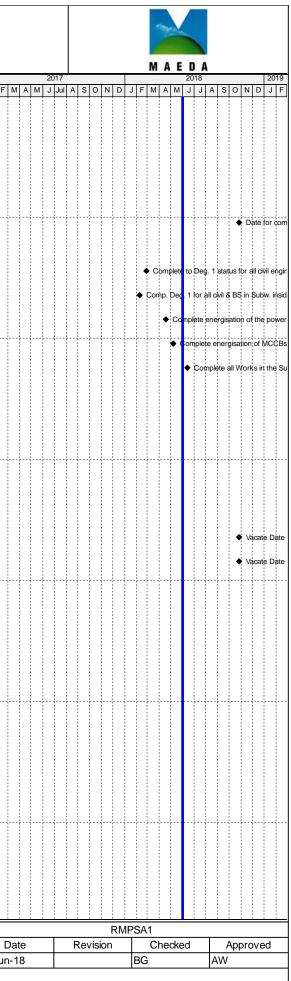
Note: In Compliance with

i) Clause.1.3 of Environmental Monitoring and Audit Manual (Appendix VII of Project Profile PP462/2012)

APPENDIX C

CONSTRUCTION PROGRAMME

	MTR								_	_	_	_			ntrao							_							
							_	Т	sim	n S	ha			Stat	ion	, Ca	arna	arv	on F			Subv	way	'					
D	Activity Name	Dur	Rem Start Dur		Finish	% Complete	Total Float	D N C	J	FN	1 A		014 Jul	A	s o	N D	JI	FM	A M	201: I J J		S O	/ N /	D J	FM	1 A	20 ⁻ M J	 S O	Τ
aster Programme	Revision As Per SA1		175d 11-O				0d																						
Preliminaries		1633d	175d 11-O	oct-13 A	30-Dec-18		0d																						
Contract Key Dates		1670d	0d 11-O	oct-13 A	26-Oct-18		Od																						
C3840-CD-10	Date of Contract Award	0d	0d 11-O	ct-13 A		100%	•	Date o	f Con	ntract	Awar	d																	
C3840-CD-20	Date of Commencement	0d	0d 14-0	Oct-13 A		100%		Date	of Cor	mme	nceme	ent																	
C3840-CD-30	Date for completion of the whole of the Works	0d	0d		26-Oct-18*	0%	0d																					 	+
Specified Degrees of	Completion	107d	0d 08-F	eb-18 A	13-Jun-18		200d																						
C3840-CD-2A	Complete to Deg. 1 status for all civil engineering works and ABWF in Subway outside K11 Lot Boundary	Od	0d		26-Feb-18 A	100%																							
C3840-CD-2B	Comp. Deg. 1 for all civil & BS in Subw. inside K11, incl. works ass. with breakthro & make good K1	1 0d	0d		08-Feb-18 A	100%																							
C3840-CD-2C	D. wall Complete energisation of the power isolator in the Telephone Equipment Rm	0d	0d		18-Apr-18 A	100%																							
C3840-CD-2D	Complete energisation of MCCBs CRS1 and CRS2 in the Electrical Rm	0d	0d		08-May-18 A	100%																						 	
C3840-CD-2E	Complete all Works in the Subway and New Entrances D2 and D3	Od	0d		13-Jun-18	0%	16d																						
Possession of Works	s Area As PS Clause P8 & PS Appendix G	0d	0d 31-O	ct-13 A	31-Oct-13A																								
C3840-AD-20	Access Date for Works Area 3840.W1 (subject to SLG/TMLG Approval)	0d	0d 31-0			100%		♦ Aco		ate fr	www	rke Ar	42.38	240.14	/1 (euk	niect to	500	2/11/11	G Ann	uroval)									
C3840-AD-30	Access Date for Works Areas 3840.W2 (subject to SLG/TMLG Approval)	Od	0d 31-O			100%		♦ Aco	ess Da	aterio	or vvoi	rksar	eas 3	384Q.\	w2 (su	ibject i	to SL	G/TM	LG AP	provai	1)							 	
Initial Site Survey		35d			10-Dec-13 A																								
C3840-SS-20	Validate the survey record and carry out any necessary additional survey at Works Areas 3840.W1 W2	& 35d	0d 31-O	Oct-13 A	10-Dec-13 A	100%			Valid	ate ti	ne sur	veyre	cord	and	cairry b	ut any	nece	essary	additic	onal su	irvey a	at Wor	ksAre	eas 38	40.W1	1 & W2	2		
Vacation of Works Are	eas as PS Clause P8 and PS Appendix G	Od	0d 26-O	oct-18	26-Oct-18		65d																						
C3840-VD-20	Vacate Date for Works Area 3840.W1 (subject to SLG/TMLG Approval)	0d	0d		26-Oct-18	0%	65d																						
C3840-VD-30	Vacate Date for Works Area 3840.W2 (subject to SLG/TMLG Approval)	0d	0d		26-Oct-18	0%	65d																						
Procurement of Subc	contract Packages	1335d	6d 11-O	ct-13 A	05-Oct-18		70d								-++-		++-					++						 	
Preliminaries and Ut	tilities Diversion	60d	0d 11-0	oct-13 A	13-Jan-14 A																								
C3840-PRC-100	Hoardings, Fencing and Associated Metalwork	40d	0d 15-O	Oct-13 A	13-Jan-14 A	100%	1		-	Hoar	dings,	Fenci	ing ar	nd As	sociate	ed Me	talwo	rk											
C3840-PRC-110	Land Survey/Setting Out	5d	0d 15-0	Oct-13 A	19-Oct-13 A	100%	1	Land	Surve	ey/Se	tting (Out																	
C3840-PRC-120	Instrumentation and Monitoring	53d	0d 15-O	Oct-13 A	14-Dec-13 A	100%		—	Instr	rume	ntatior	n and	Monit	toring	,														
C3840-PRC-130	Advance Ground Works	28d	0d 15-0	Oct-13 A	15-Nov-13 A	100%	1	A	lvance	e Gro	ound	Works																 	
C3840-PRC-140	Temporary Traffic Diversion (Consultant)	4d	0d 11-0	ct-13 A	18-Oct-13 A	100%		Temp	orary	Traf	ic Div	ersion	(Cor	hsulta	int)														
C3840-PRC-150	Obtain Eng's Approval for Temporary Traffic Diversion (Consultant)	6d	0d 19-0	Oct-13 A	31-Oct-13 A	100%		Obt	ain Eh	ng's A	pprov	/al for	Temp	oorar	y Traffi	ic Dive	ersion	(Con	sultant))									
C3840-PRC-160	Site Security	48d	0d 15-O	Oct-13 A	24-Dec-13 A	100%			Site	e Sec	urity																		
C3840-PRC-200	Independent Checking Engineer (ICE)	6d	0d 18-N	lov-13 A	27-Nov-13 A	100%						ecking	Engi	ineer	(ICE)														
C3840-PRC-210	Obtain Eng's Approval for ICE	6d			13-Dec-13 A	100%						pprova					ļļ.											 	÷
C3840-PRC-220	Ground Investigation (Pre-drilling work)	60d			28-Dec-13 A	100%			G	ounc	linves	sugauc	лі (Рі	re-un	lling wo														
Temporary Works, El					17-Oct-15 A																								
C3840-PRC-240	Specialist Demolition Contractor	40d	0d 16-D	ec-13 A	20-Feb-14 A	100%		I			specia	list De	emoliti	ion C	ontrac	tor													
Current Bar	Critical Remaining Work Data Date	: 01-Jur	n-18								F					P												 	_
Actual Work	♦ ♦ Milestone Page	1 of 26						N	las	tei	' Pi	rog	gra	m	ne .	Ke	VIS	10N	K	vi P	KS	5A1							
Remaining W	/ork																												



	XMTR						Contract C3840-13C Tsim Sha Tsui Station, Carnarvon Road Subway	
	Activity Name	Orig Dur	Rem Start Dur	Finish	% Complete	Total Float	2014 2015 2016 2017 N D J F M A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul	
C3840-PRC-250	Sheet Piling		0d 29-Jan-14 A	27-Mar-14 A			Sheet Pilng	A 5 0
C3840-PRC-260	Pipe Piling & grouting	60d	0d 16-Nov-13A	27-Mar-14 A	100%		Pipe Piling & grouting	
C3840-PRC-270	Pipe Roofing & horizontal grouting	60d	0d 03-Oct-14A	31-Dec-14 A	100%		Pipe Roofing & horizontal grouting	
C3840-PRC-280	Flood Barrier Wall	40d	0d 10-Dec-13 A	28-Jan-14 A	100%		Flood Barriet Wall	
C3840-PRC-300	Earthworks including for Tunnel	443d	0d 07-Jul-14 A	17-Oct-15 A	100%		Earthworks including for Tunnel	
Permanent Works		550d	0d 01-Feb-14A	18-Mar-17 A				
	Rebar Supply		0d 01-Feb-14A				Rebár Supply	
C3840-PRC-320	Concrete Supply		0d 01-Feb-14A				Condreté Supply	
C3840-PRC-330	Structural S.S.Steelworks.	54d	0d 01-Mar-16 A	18-Mar-17 A	100%		Structural S.S	Steelworks
C3840-PRC-340	Subway, RC Work Package Contractor	90d	0d 02-Jan-15 A	30-Jun-15 A	100%		Subway, RC Work Package Contractor	
External Works		789d	6d 02-Jan-14 A	05-Oct-18		0d		
C3840-PRC-360	Closed Circuit TV Inspection	24d	0d 02-Jan-14 A	16-Jan-14 A	100%		Cldsed Circuit TV:Inspection	
C3840-PRC-370	Asphalt Surfacing	6d	6d 28-Sep-18	05-Oct-18	0%	0d		
ABWF & Building Servi	ices	625d	0d 01-Nov-13 A	18-Mar-17 A				
C3840-PRC-380	BS Works	90d	0d 01-Nov-13 A	30-Apr-14 A	100%		BŞ Works	
C3840-PRC-390	ABWF Works for TS	749d	0d 01-Nov-13 A	24-Oct-15 A	100%		ABWF; Works for TS	
C3840-PRC-395	ABWF Works for the Permanent Works	60d	0d 15-Feb-16A	18-Mar-17 A	100%			s for the Per
Removal of Existing Es	scalator	190d	0d 21-Apr-15 A	11-Mar-16 A				
C3840-PRC-400	Specialist Contractor		0d 21-Apr-15 A				Specialist Contractor	
Site Establishment			0d 14-Oct-13A					
Apply Utilities		90d	0d 18-Oct-13 A	25-Apr-14 A				
C3840-AU-100	Temporary Water Supply (subject to approval from WSD)	90d	0d 25-Oct-13 A	25-Apr-14 A	100%		Temporaty Water Supply (subject to approval from WSD)	
C3840-AU-110	Temporary CLP Power Supply (subject to approval from CLP)	90d	0d 18-Oct-13 A	25-Feb-14 A	100%		Temporary CLP Power Supply (subject to approval from CLP)	
Contractor's Site Offic	e	30d	0d 14-Oct-13A	12-Nov-13 A				
C3840-OS-100	Setup Project Office	30d	0d 14-Oct-13A	12-Nov-13 A	100%	-	Setup Project Office	
Condition Survey		100d	0d 07-Jan-14 A	17-Feb-14 A				
C3840-CS-20	Propose the influence zone to the satisfaction of the Eng	60d	0d 28-Jan-14 A	17-Feb-14 A	100%		Propose the influence zone to the satisfaction of the Eng	
C3840-CS-35	Obtain condition report from MTR	Od	0d	07-Jan-14 A	100%		Obtain condition report from NTR	
C3840-CS-40	Verify and accept the conditionsurvey report	28d	0d 28-Jan-14 A	17-Feb-14 A	100%		📕 Veřífy and accept the conditions urvey report	
Environmental Manager	ment Plan and Quality Plan	129d	0d 11-Oct-13 A	28-Apr-14 A				
C3840-EQ-100	EMP (G5.1.10) - Prepare and submit for Eng approval	28d	0d 11-Oct-13 A	28-Nov-13 A	100%		EMIP (G5.1.10) - Prepare and submit for Eng.approval	
C3840-EQ-110	EMP - Eng comment and approve	14d	0d 29-Nov-13 A				EMR - Eng contiment and approve	
C3840-EQ-150	Environmental Team Leader (ET) (P22.14) - Appoint and submit for Eng approva		0d 14-Oct-13 A				Envirorimental Team Leader (ET) (P22.14) - Appoint and submit for Eng approval	
C3840-EQ-160	ET - Eng comment and approve	14d	0d 15-Nov-13 A	22-Nov-13 A	100%		ET - Eng comimeint and approve	
 Current Bar 	Critical Remaining Work	Data Date: 01-Jun	-18					
Actual Work	♦ Milestone	Page 2 of 26					Master Programme Revision RMPRSA1 Date	Revisio

																								M	A	E	D								
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Activity ID		Activity Name	Orig Rem Start Dur Dur	Finish	% Complete	Float O N		2014 - M A M J Jul A					ASON	N D J	FMA	2010 M J J		JFM	201 A M J J		OND	JFM	201	JAS	0 N D J F
	C3840-EQ-170	Confirm monitiroing location & setup noise monitoring deivices	30d 0d 17-Dec-	-13 A 09-Jan-14 A	A 100%		Co	onfirm monitiroing location	in & setup r	noise mo	nitoring deiv	vices													
	C3840-EQ-180	Baseline noise monitoring	14d 0d 10-Jan-	14 A 24-Jan-14 A	A 100%		= E	Baseline noise monitorir	g																
	C3840-EQ-190	Prepare baseline noise monitoring report & submit to Eng, ICE and EPD	7d 0d 25-Jan-	14A 11-Feb-14	A 100%			Prepare baseline nois	e monitorin	g report	& submit to	Eng, ICE	and EPD				 								
	C3840-EQ-200	Baseline noise monitoring report review and approved by Eng, ICE and EF	PD 14d 0d 14-Feb-	-14 A 01-Apr-14 A	A 100%		1	Baseline noise r	nonitoring r	eport rev	view and app	proved by	Eng, ICE ar	nd EPD											
	C3840-EQ-210	Confirm monitoring location & setup air monitoring deivices	30d 0d 17-Dec-	-13 A 09-Jan-14 A	A 100%		🗖 Co	onfirm monitoring locatio	n & setup a	air monito	oring deivice	s													
	C3840-EQ-220	Baseline air monitoring	14d 0d 10-Jan-	14 A 25-Jan-14 A	A 100%		E	Baseline air monitoring																	
_	C3840-EQ-230	Prepare baseline air monitoring report & submit to Eng, ICE and EPD	7d 0d 27-Jan-	14A 11-Feb-14	A 100%			Prepare baseline air r	ionitoring n	eport & s	submit to En	ng, ICE an	I EPD												
	C3840-EQ-240	Baseline air monitoring report review and approved by Eng, ICE and EPD	14d 0d 14-Feb-	-14 A 01-Apr-14 A	A 100%			Baseline air mo	itoring rep	ort reviev	v and appro	oved by Er	g, ICE and	EPD			 								
	C3840-EQ-320	Quality Plan (G9.2.1) - Prepare and submit for Eng approval	28d 0d 14-Oct-					ality Plan (G9.2.1) - Pre																	
							Gu					vai													
	C3840-EQ-330	Quality Plan - Eng comment and approve	14d 0d 31-Dec-					Quality Plan	Eng comm	nent and	approve														
	Health & Safety Plan		74d 0d 11-Oct-	13 A 22-Jan-14 A	A																				
	C3840-HS-100	Health and Safety Plan (G3.6.1) - Prepare and submit for Eng approval	60d 0d 11-Oct-	13 A 13-Dec-13	A 100%		Health	n and Safety Plan (G3.6	.1) - Prepa	are and s	ubmit for Er	ng approva	al I												
	C3840-HS-110	Health and Safety Plan - Eng comment and approve	14d 0d 14-Dec-	-13 A 22-Jan-14 A	A 100%			lealth and Safety Plan	Eng comm	hent and	approve														
	C3840-HS-130	System Assurance Plan as per App. K of PS - Prepare and submit for Eng	approval 28d 0d 11-Oct-	13 A 20-Dec-13	A 100%		Syste	em Assurance Plan as p	er App. K o	of P\$ - Pi	epare and s	submit for	Eng approv	al											
	C3840-HS-140	System Assurance Plan - Eng comment and approve	14d 0d 21-Dec-	-13 A 09-Jan-14 A	A 100%		🗖 \$y	stem Assurance Plan -	Ing comme	ent and a	pprove														
	Programme Manageme	nt	116d 0d 11-Oct-	13 A 30-Mar-14	A																				
	C3840-PM-100	Initial Three Month Rolling Programme (G4.8.1) - Prepare and submit for	Eng review 14d 0d 11-Oct-	13 A 28-Oct-13 A	A 100%	🗖 រាជ	itial:Three	Month Rolling Program	nme (G4.8	1) - Prei	pare and su	bmit for E	ng revlew												
	C3840-PM-110	Preliminary Master Programme (G4.6.1) - Prepare and submit for Eng ap	proval 60d 0d 11-Oct-	13 A 12-Dec-13	A 100%		Prelim	iihary Master Programr	ne (G4.6.1)) - Prepa	re and subn	nit for Eng	approval				 								
	C3840-PM-120	Preliminary Master Programme (G4.6.1) - Eng comment	28d 0d 13-Dec-	-13 A 13-Jan-14 A	A 100%		Pr	reliminary Master Progr	amme (G4	6.1) - Er	na comment														
	C3840-PM-130	Preliminary Master Programme (G4.6.1) - Re-submit for Eng approval		14A 11-Feb-14				Preliminary Master Pr					oproval												
								Preliminary Master F																	
	C3840-PM-135	Preliminary Master Programme (G4.6.1) - Eng's further comment	14d 0d 12-Feb-						C																
	C3840-PM-136	Preliminary Master Programme (G4.6.1) - Further re-submission	14d 0d 23-Feb-	14 A 27-Feb-14	A 100%			Preliminary Master	rogramme	9 (G4.6.1) - Further i	re-submis	sion												
	C3840-PM-140	Preliminary Master Programme (G4.6.1) - Eng approval	14d 0d 28-Feb-	-14 A 07-Mar-14	A 100%			Preliminary Master	Programm	ie (G4.6.	1) - Ehg app	proval													
	C3840-PM-170	Submission Schedule (G12.11.1) - Prepare and submit for Eng approval	28d 0d 11-Oct-	13 A 12-Nov-13	A 100%		Submissio	on Schedule (G12.11.1)	- Prepare	and subr	nit for Eng a	approval													
	C3840-PM-180	Submission Schedule - Eng comment and approve	28d 0d 13-Nov-	13 A 30-Mar-14	A 100%			Submission \$ch	edule - Eng	g comme	nt and appr	rove													
	Temporary Works Desig	gn & Approval Process (Incl. Demolition)	1581d 175d 15-Oct-	13A 30-Dec-18		Od																			
	Hoarding Plan		84d 0d 15-Oct-	13 A 18-Mar-14	A																				
	C3840-TD-100	Prepare Hoarding Plan	27d 0d 15-Oct-	13A 11-Jan-14 A	A 100%		Pr	eþare Høarding Plah									 								
	C3840-TD-110	Hoarding plan review & endorse by ICE	40d 0d 01-Feb-	-14 A 08-Mar-14	A 100%			📫 Hoarding plan revi	w & endor	se by ICI															
	C3840-TD-120	Hoarding plan review & comment by Eng/MTRC	28d 0d 12-Jan-	14 A 23-Jan-14 A	A 100%		E F	loarding plan review &	comment b	y Eng/M	TRC														
	C3840-TD-140	Hoarding plan re-submission	11d 0d 24-Jan-	14A 28-Feb-14	A 100%			Hoarding plan re-su	bmission																
	C3840-TD-150			14 A 18-Mar-14				 Hoarding plan rev 		ovebur															
		Hoarding plan review & approve by Eng/MTRC								ove by E							 								
	C3840-TD-160	Obtain Final Approval	0d 0d	18-Mar-14				 Obtain Final Appr 	vai																
	Flood Protection Wall		89d 0d 01-Dec-	13 A 18-Mar-14	A																				
	 Current Bar 	Critical Remaining Work	Data Date: 01-Jun-18						_				a.c.									IPSA1			
	Actual Work	♦ Milestone	Page 3 of 26			1	vlast	er Program	me R	levis	ion R	MPR	SA1				0	Date 1-Jun-18		Re	vision	BG	hecked	Aı AW	pproved
	Remaining Wo	rk																	L			120			

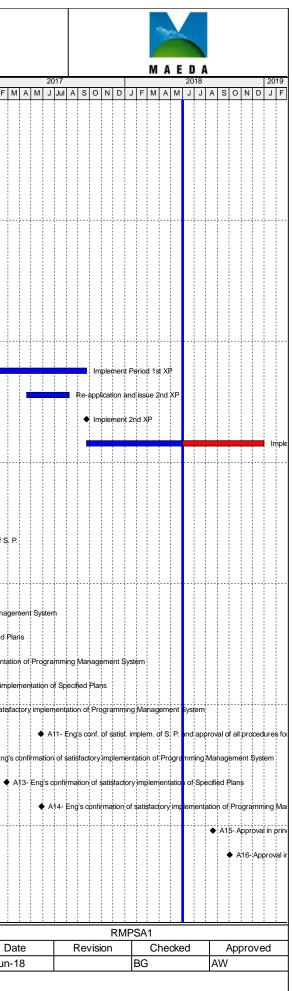
	MTR			Contract C3840-13C Tsim Sha Tsui Station, Carnarvon Road Subway	
C3840-TD-170	Activity Name	Orig Rem Start Dur Dur	Complete	Total 2014 2015 2016 Float O N D J F M A M J J K N D J F M A N D J F M A N D J F M A N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J I N D J N D D N	2017 2018 F M A M J Jul A S O N D J F M A M J J A S O N
	Prepare Temporary Work Design				
C3840-TD-180	Design review & endorse by ICE		an-14 A 04-Feb-14 A 100%	Design review & eridorse by ICE	
C3840-TD-190	Design review & comment by Eng/MTRC	28d 0d 07-J	an-14A 21-Jan-14A 100%	Désigà review & comment by Eåg/MTRC	
C3840-TD-210	Design review & approve by Eng/MTRC	28d 0d 05-F	Feb-14 A 18-Mar-14 A 100%	Deşign review & approve by Eng/MTRC	
C3840-TD-220	Obtain Final Approval	0d 0d	18-Mar-14 A 100%	Obtain Final Approvat	
Temporary Works Desig	n for Temporary Traffic Decking	129d Od 18-D	Dec-13 A 23-Jun-14 A		
C3840-TD-230	Prepare Temporary Work Design	24d 0d 18-D	Dec-13 A 09-Jan-14 A 100%	Preparé Temporaty Work:Design	
C3840-TD-240	Design review & endorse by ICE	40d 0d 27-M	Mar-14 A 11-Jun-14 A 100%	Design review & endorse by ICE	
C3840-TD-250	Design review and comment by Eng/MTRC	28d 0d 10-J	an-14 A 14-Apr-14 A 100%	Design review and comment by Eng/MTRC	
C3840-TD-260	Design re-submission	18d Od 01-M	Mar-14 A 26-Mar-14 A 100%	Design re-submission	
C3840-TD-270	Design review and approve by Eng/MTRC	28d 0d 27-M	Mar-14 A 23-Jun-14 A 100%	Dęsigo review and approve by Eng/MTRC	
C3840-TD-310	Obtain Final Approval	Od Od	23-Jun-14 A 100%	Obtain Final Approval	
Temporary Work Design	n for Utilities Supports	118d Od 16-D	Dec-13 A 23-Jun-14 A		
C3840-TD-320	Prepare Temporary Work Design	24d 0d 16-D	Dec-13 A 09-Jan-14 A 100%	Preparę Temporały Work;Deşigri	
C3840-TD-330	Design review & endorse by ICE	24d 0d 27-M	Mar-14 A 11-Jun-14 A 100%	Design review & endorse by ICE	
C3840-TD-340	Design review & comment by Eng/MTRC		an-14 A 14-Apr-14 A 100%	Design; review & comment by:Eng/M/TRC	
				Design re-submission	
C3840-TD-350	Design re-submission				
C3840-TD-360	Design review & approve by Eng/MTRC		Mar-14 A 23-Jun-14 A 100%	Design review & approve by Eng/MTRC	
C3840-TD-370	Obtain Final Approval	0d 0d	23-Jun-14 A 100%		
Demolition Plan for Exi	isting D1, D2 and Subway	89d Od 15-N	Nov-13 A 18-Mar-14 A		
C3840-DMD-100	Develop Demolition Plan, Temporary Works Design, Risk Assessment & Method Sta	atement 24d 0d 15-N	Nov-13 A 24-Dec-13 A 100%	Develop Demolition Plan, Tempprary Works Design, Risk Assessment & Method Statement	
C3840-DMD-110	Demolition plan review & endorse by ICE	24d 0d 01-F	Feb-14 A 06-Mar-14 A 100%	Demolition plan; review;& enddrse;by ICE	
C3840-DMD-120	Demolition plan review & comment by Eng/MTRC/ BD consultation	28d 0d 25-D	Dec-13 A 13-Jan-14 A 100%	Demolition plan review & comment by Eng/NTRC/ BD consultation	
C3840-DMD-130	Demolition plan re-submission	18d Od 14-J	an-14 A 08-Mar-14 A 100%	Demolition plan re-submission	· ***
C3840-DMD-140	Demolition plan review & approve by Eng/MTRC/ BD consultation	28d 0d 09-M	Mar-14 A 18-Mar-14 A 100%	Demolition plan review & approve by Eng/MTRC/ BD consultation	
C3840-DMD-190	Final approval for demolition to commence granted	Od Od	18-Mar-14 A 100%	Final approval for demolition to commence granted	
Submission/Approval fo	or Demolition & Modification Works at Basement Wall of K11	99d 0d 18-A	Aug-14 A 27-Jul-15 A		
C3840-DMD-400	Develop & submit Demolition Plan	24d 0d 18-A	Aug-14 A 18-Sep-14 A 100%	Develop & submit Demotriori Plán	
C3840-DMD-430	Review & comment by Eng/MTRC	28d 0d 19-S	Sep-14 A 23-Oct-14 A 100%	Révieiv & comment by Eng/MTRC	•
C3840-DMD-440	Demolition Plan re-submission	18d 0d 24-C	Dct-14 A 31-Oct-14 A 100%		
C3840-DMD-450	Review & approve by Eng/MTRC		lov-14 A 27-Jul-15 A 100%	Review & approve by Eng/MTRC	
ELS Design for Tunnel (Oct-13 A 26-May-14 A		
C3840-ED-100	Prepare Temporary Work Design		Dct-13 A 12-Nov-13 A 100%	Preþaré Témpbrafy Work Désign	
C3840-ED-110	Design review & endorse by ICE	40d 0d 22-J	an-14 A 12-May-14 A 100%	Design review & endorse by ICE	
Current Bar	Critical Remaining Work	Data Date: 01-Jun-18			RMPSA1
Actual Work	♦ Milestone	Page 4 of 26			Date Revision Checked Appro un-18 BG AW

	MTR											Cor	ntract	t C38	340-13	BC										
									Ts	sim Sha	Tsu	i Sta	tion, (Carr	arvor	n Ro	oad S	ubv	vay							
	Activity Name	C	Drig Dur	Rem Start Dur		Finish	% Complete	Total Float	ND	JFMA	20 M J	14 Jul A	SON	D J	F M A	MJ	015 Jul A	S O	N D	JF	MAM	2016 I J Jul	A S	0 N	D J	F
C3840-ED-120	Design review & comment by Eng/MTRC, GEO and BD consutation	2	28d	0d 13-No	ov-13 A	27-Jan-14 A	100%			Design r	eview 8	commer	nt by Eng/	MTRC,	GEO and	BD co	nsutation									
C3840-ED-130	Design re-submission		14d	0d 09-Jar	n-14 A	22-May-14 A	100%				De	sign re-s	submission	'n												
C3840-ED-140	Design review & approve by Eng/MTRC, GEO and BD consutation	2	28d	0d 13-Fe	b-14 A	26-May-14 A	100%				D	esigh rev	iew & app	prove by	Eng/MTR	RC, GE	O and BI) consi	Itation							
3840-ED-170	Obtain Final Approval		0d	0d		26-May-14 A	100%				♦ 0	btain Fin	al Approva	al												
Design for Subwa	ay and Temporary Staircase	3	32d	0d 18-De	ec-13 A	23-Jun-14 A			-+							4										
C3840-ED-180	Prepare ELS Design	2	24d	0d 18-De	ec-13 A	09-Jan-14 A	100%			Prepare El	LS Desi	gn														
3840-ED-190	Design review & endorse by ICE		40d	0d 06-Ma	ar-14 A	11-Jun-14 A	100%					Design re	eview & ei	ndorse	by ICE											
3840-ED-200	Design review & comment by Eng/MTRC, GEO and BD consultation	2	28d	0d 10-Jar	n-14 A	27-Jan-14 A	100%			Design r	eview 8	corhmer	nt by Eng/	MTRC,	GEO and	BD co	nsultation	1								
3840-ED-210	Design re-submission		12d	0d 05-Ma	ar-14 A	12-Jun-14 A	100%			-		Design r	e-submiss	sion												
C3840-ED-220	Design review & approve by Eng/MTRC, GEO and BD consultation		28d	0d 06-Ma	ar-14 A	23-Jun-14 A	100%					Design	review &	approve	by Eng/M	ITRC,	GEO and	d BD cc	nsultatio	n						
C3840-ED-230	Obtain Final Approval		0d	0d		23-Jun-14 A	100%				•	Obtain	Final App	roval												
S Design for Tunnel	l (Horizontal Pipe Piling)	34	49d	0d 02-Jur	n-14 A	02-Jun-15 A																				
C3840-ED-240	Prepare Temporary Work Design (AIP)		24d	0d 02-Jur	n-14 A	16-Jun-14 A	100%					Prepare	Témpora	rv Work	Desigh (A	AIP)										
C3840-ED-260	Design review & comment by Eng/MTRC and GEO		28d			22-Jul-14 A	100%								ment by E		RC and (GED								
																		,				ļ				
3840-ED-270	Design re-submission (DDA)		18d			08-Aug-14 A	100%				-				on (DDA)											
3840-ED-280	Design review & approve by Eng/MTRC	2	28d	0d 09-Au	ig-14 A	13-Aug-14 A	100%						esign rev	iew & a	pprove by	Eng/M	TRC									
840-ED-300	Design submission for BD approval		1d	0d 13-Au	g-14 A	13-Aug-14 A	100%					ID	esign sub	mission	for BD ap	proval										
40-ED-310	BD & GEO review and approval	6	60d	0d 14-Au	ig-14 A	28-Oct-14 A	100%						В	D & GE	O review a	and ap	oroval									
840-ED-315	BA 8/ BA10 submission for ground treatment and GI field works		1d	0d 05-Fe	b-15 A	05-Feb-15 A	100%								IBA 8/B/	A10 su	bmission	for gro	und trea	itment a	and GI fie	ld works				
840-ED-320	BA8 submission for BD consent for HPP works		1d	0d 23-Ma	ar-15 A	23-Mar-15 A	100%				+				I B/	A 8 sub	mission f	or BD (consent f	for HPF	P works					
3840-ED-330	BD process BA 8/BA10 submission & BD issue consent		28d	0d 24-Ma	ar-15 A	02-Jun-15 A	100%								-		BD proce	ssBA≀	8/BA10 s	submiss	ion & BD	issuje cor	nsent			
S Design for Subwa	ay and D2 (C&C)	3	32d	0d 18-De	ec-13 A	23-Jun-14 A																				
C3840-ED-340	Prepare ELS Design	2	24d	0d 18-De	ec-13 A	09-Jan-14 A	100%			Prepare El	LS Desi	gn														
C3840-ED-350	Design review & endorse by ICE		40d	0d 27-Ma	ar-14 A	11-Jun-14 A	100%			-		Design re	eview & ei	ndorse l	by ICE											
C3840-ED-360	Design review & comment by Eng/MTRC, GEO and BD consultation	2	28d	0d 10-Jar	n-14 A	27-Jan-14 A	100%			🗖 Design r	eview 8	commer	nt by Eng/	MTRC,	GEO and	BD co	nsultation									
C3840-ED-370	Design re-submission		12d	0d 26-Ma	ar-14 A	12-Jun-14 A	100%					Design r	e-submiss	sion												
C3840-ED-380	Design review & approve by Eng/MTRC, GEO and BD consultation		28d	0d 27-Ma	ar-14 A	23-Jun-14 A	100%					Design	review &	approve	by Eng/M	NTRC,	GEO and	d BD cc	nsultatio	on						
C3840-ED-410	Obtain Final Approval		0d	Od		23-Jun-14 A	100%					-	Final App		, ,											
	agement Schemes (TTMs) for Carnarvon Road Closure & Piling works		48d			13-Jun-14 A	10070					Cistant	i indi i ipp													-
							1000/				Į			ļ								ļ				
C3840-TTM-100	Appoint Traffic Consultant		0d			16-Oct-13 A	100%			t Traffic Const																
C3840-TTM-110	Pepare & submit review by Eng Outline TTM Schemes as per PS P20.4		6d	0d 17-Oc	x-13 A	23-Oct-13 A	100%		Pepan	e & submit rev	view by	Eng Outl	ne TTM S	Scheme	s as per P	\$ P20.	4									
C3840-TTM-120	Eng review Outline TTM Schemes		4d	0d 24-Oc	x-13 A	28-Oct-13 A	100%		Eng n	eview Outline	TTM S	hemes														
C3840-TTM-130	Prepare Detailed TTMS		5d	0d 24-Oc	x-13 A	30-Oct-13 A	100%		Prepa	are Detailed T	TMS															
C3840-TTM-140	Discussion and agree in priniciple at TMLG Meeting		1d	0d 30-Oc	x-13 A	30-Oct-13 A	100%		Discu	ssion and agr	ee in pr	niciple at	tmlg m	leeting												
Current Bar	Critical Remaining Work	Data Date: 01-	Jun	-18				L	<u> </u>								<u> </u>	i	<u> </u>			<u></u>	<u> </u>	<u> </u>		<u> </u>
Actual Work	♦ Milestone	Page 5 of	26						Μ	aster P	rog	ram	me R	Revis	sion F	RM	PRS	A1						ľ	01	D nul
Remaining Wo	ork																							I	01-0	<u></u>

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y ID		Activity Name	Orig Dur		Finish	% Complete	Total Float		J	F M A		14 Jul A	S O	ND)]	FM	AM	2015 I J Jul		sor	N D	JF	MA		016 Jul A	S O	N D	JF	1
	C3840-TTM-150	Final TTMS Drawings	4d	0d 31-Oc	ct-13 A 04-Nov-13	A 100%				1S Draw																		_	Ţ
	C3840-TTM-160	Eng endorse TTMS Drawings	2d	0d 05-No	ov-13 A 06-Nov-13	A 100%		1 Eng	gende	rse TTN	IS Drawi	ngs																	
	C3840-TTM-170	TTMs endorse by HKP & TD and obtain road work addvice from RMO	18d	0d 07-No	ov-13 A 24-Nov-13	A 100%		т	TMs	endorse l	у НКР (& TD ar	d obtai	nroac	lwork	addvic	æ fror	n RMO											
	C3840-TTM-180	Obtain Gazette Notice	18d	0d 07-No	ov-13 A 14-Nov-13	A 100%		I 0	otain (azette N	lotice																		
	C3840-TTM-190	Notification to Bus Company	28d	0d 07-No	ov-13A 04-Dec-13	A 100%			Notific	ation to I	Bus Con	npany																	
	C3840-TTM-210	Relocate bus stop, trial run & TTMs implementation (road closure)	5d	0d 05-De	ec-13A 10-Dec-13	A 100%		•	Relo	ate bus	stop, tria	l run &	TTMs ir	nplem	entatio	on (roa	id clos	sure)											
	C3840-TTM-220	Application & Approval of TTM Schemes for Piling work for TS and C&C	42d	0d 24-Ja	n-14 A 13-Jun-14	A 100%					-	Applica	tion:&A	pprov	al of T	TM Sc	heme	s for Pilir	ng wa	rk for T	"S and	3&C							
	Excavation Permit (XP)		1581d	175d 15-Oc	ct-13 A 30-Dec-18		Od																						
	C3840-XP-100	XP in hand of MTR	0d	Od	15-Oct-13	A 100%	•	XP in	hand	of MTR																			
	C3840-XP-110	Transfer XP permit holder from MTR to Maeda & XP payment arrangement	15d	0d 15-Oc	ct-13A 31-Oct-13	A 100%		Tra	nsfer)	(Ppermi	holder f	rom M1	R to M	aeda	& XP r	baymer	nt arra	angemer	ət										
	C3840-XP-130	Implement 1st XP	0d	0d 01-Nc	ov-13 A	100%		♦ Imp	lemen	t 1st XP														(
	C3840-XP-140	Implement Period 1st XP	1422d	0d 01-Nc	ov-13 A 22-Sep-17	A 100%													_			_		-		_			-
	C3840-XP-150	Re-application and issue 2nd XP	180d	0d 20-Ap	or-17 A 09-Aug-17	A 100%																							
	C3840-XP-160	Implement 2nd XP	0d	0d 23-Se	ep-17 A	100%																							
	C3840-XP-170	Implement Period for 2nd XP	464d	213d 23-Se	ep-17 A 30-Dec-18	40.95%	0d																						
	Milestones for Cost Ce	entre A - Preliminaries	1525d	45d 29-Au	ug-14 A 03-Oct-18		88d -																						
	 C3840-MS-A01	A1-Approval of PMP, S. P., ICE, ELS design for Cofferdam & temp decking	0d	Od	29-Aug-14	A 100%						•	A1-A	oprova	l of Pl	VIP, S.	P., IC	E, ELS d	lesign	for Cof	lferda	m & ter	mp deck	ling					
	C3840-MS-A02	A2-Approval of ELS design of mined tunnel & Eng's confirmation of satisfactory implem.of P. M.Syt.	0d	0d	28-Oct-14	A 100%							٠	A2-4	pprov	al of E	LS de	sign of n	nined	tunnel {	& Eng	j's conf	irmation	of sati	isfactory	implem	.of P. M.	.Syt.	
	C3840-MS-A03	A3-Approval for mehod for demolition of K11 Diag. Wall & Eng's confirmation of satisf. implem. of S P.	. 0d	0d	13-Nov-14	A 100%								♦ A3	-Appr	oval fo	r meh	iod for de	emolit	ion of K	(11 Di	ag. Wa	∦l & Eng	's conf	firmation	of satis	ł. impler	n. of S	5. F
	C3840-MS-A04	A4- Eng's confirmation of satisfactory implementation of Programming Management System	0d	0d	30-Nov-14	A 100%								•	44- Er	ıg's cor	nfirma	ition of s	atisfar	ctory imp	pleme	entatior	of Proc	ıramm	ning Man	agemer	ıt Syster	m	
	C3840-MS-A05	A5- Eng's confirmation of satisfactory implementation of Specified Plans	0d	0d	16-Mar-15	A 100%										•	A5- E	ng's cont	firmat	ion of sa	atisfac	story im	plemen	tation (of Specif	ied Plat	IS		
	C3840-MS-A06	A6- Eng's confirmation of satisfactory implementation of Programming Management System	0d	0d	19-May-15	A 100%											•	A6- En	ig's co	onfirmati	tion of	satisfa	tory im	pleme	entation o	f Progr	amming	Mana	зġе
	C3840-MS-A07	A7- Eng's confirmation of satisfactory implementation of Specified Plans	0d	0d	12-Aug-15	A 100%													♦ A ²	7- Eng's	s confi	rmatior	n of satis	sfactor	y implen	entatio	n of Spe	cified	Pla
	C3840-MS-A08	A8- Eng's confirmation of satisfactory implementation of Programming Management System	0d	0d	04-Jan-16	A 100%															•	♦ A8-	Eng's co	onfirme	ation of s	atisfact	əry imple	ementr	.atir
	C3840-MS-A09	A9- Eng's confirmation of satisfactory implementation of Specified Plans	0d	0d	15-Mar-16	A 100%																	♦ A9-	Eng's	confirma	ition of	satisfact	tory im	nple
	C3840-MS-A10	A10- Eng's confirmation of satisfactory implementation of Programming Management System	0d	Od	29-May-16	A 100%																		♠ A	410- Eng	's confi	mation	of satir	sfa
	C3840-MS-A11	A11- Eng's conf. of satisf. implem. of S. P. and approval of all procedures for T&C of BS & ABWF works	0d	Od	26-May-17	A 100%																							
	C3840-MS-A12	A12- Eng's confirmation of satisfactory implementation of Programming Management System	0d	Od	27-Nov-16	A 100%																					◆ A1	2- Eng	g's
	C3840-MS-A13	A13- Eng's confirmation of satisfactory implementation of Specified Plans	0d	Od	26-Feb-17	A 100%																						•	•
	C3840-MS-A14	A14- Eng's confirmation of satisfactory implementation of Programming Management System	0d	0d	28-May-17	A 100%																							
	C3840-MS-A15	A15- Approval in principle of draft O&M Manuals and draft As-built Drwgs. for Whole of the Works	0d	0d	19-Aug-18	0%	133d																						
	C3840-MS-A16	A16- Approval in principle of O&M Manuals and As-built Drwgs. for Whole of the Works	0d	0d	03-Oct-18	0%	88d																						
Car	rnarvon Road Sub	way and Entrances	1352d	122d 14-Oc	ct-13 A 26-Oct-18		53d																						
In	nstrumentation		52d	0d 16-De	ec-13 A 02-Apr-14	4																							
	 Current Bar 	Critical Remaining Work Data Date	e: 01-Ju	ın-18				<u>i i</u>	<u>. i</u>	<u> i i </u>	. : :				<u>i i</u>	<u> </u>		<u>. i i</u>	<u> </u>	<u> </u>		<u> </u>	<u>. i i</u>	<u> </u>	<u></u>		Ē		<u>-</u>
	Actual Work		6 of 26	5				N	las	ter P	rog	ram	me	Re	vis	ion	RI	MPR	RS/	\1							01	E 1-Jur	Da n-
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	Activity Name	Orig Dur	Rem Start Dur	Finish	% Complete	Total 2014 2015 Float O N D J F M A M J Jul A S O N D J F M A M J Jul A S O N	2016 D J F M A M J Jul A S O N	DJFM
C3840-INS-10	Prepare & submit instrumentation/monitoring plan for approval of Eng	28d	0d 16-Dec-1	3 A 28-Jan-14 A	100%	Prepare & submit instrumentation/monitoring plan for approval of Eng		
C3840-INS-20	Eng approve instrumentation/monitoring plan	7d	0d 29-Jan-14	4A 05-Feb-14A	100%	Englapprove instrumentation/monitoring plan		
C3840-INS-30	Installation of instrumentations	12d	0d 07-Jan-14	4 A 25-Feb-14 A	100%	Installation of instrumentations		
C3840-INS-40	Initial reading and agreement with Eng	14d	0d 24-Feb-1	4 A 30-Mar-14 A	100%	Initiali reading and agreement with Eng		
C3840-INS-50	Commence regular monitoring	Od	0d 02-Apr-14	4 A	100%	♦ Commerce regular monitoring;		
Utility Diversion		1292d		3A 12-Dec-15A				
C3840-UTD-010	Utility Detection Survey incl. prepare survey report	12d	0d 02-Nov-1	3 A 11-Dec-13 A	100%	Utility Detection Survey incl. prepare survey report		
C3840-UTD-030	Notification to Utility Companies and 1st ULG meeting	46d	0d 14-Oct-1:	3 A 28-Nov-13 A	100%	Notification to Utility Companies and 1st ULG meeting		
C3840-UTD-040	Relocation of mail box	8d	0d 29-Nov-1	3 A 06-Dec-13 A	100%	Relocation of mail box		
C3840-UTD-110	Relocation of Telephone Kiosk by PCCW	40d	0d 23-Dec-1	3 A 08-Jan-14 A	100%	Relocation of Telephone Kiosk by PCCW		
C3840-UTD-290	Diversion of Gasmain crossing tunnel shaft	57d	0d 13-Feb-1	4 A 26-Mar-14 A	100%	Diversion of Casmain crossing unnel shaft		
C3840-UTD-295	Exposure & temporary support to underground gasmain and cable duct at TS	64d	0d 11-Mar-1	5 A 30-Jun-15 A	100%	Exposure & tem	porary support to underground gasmain and	cable duct at T
C3840-UTD-320	Exposure & slewing of underground utilities for driving pipe piles execept D2 area	57d	0d 13-Feb-1	4A 31-Oct-14A	100%	Exposure & slewing of underground utilities for	r driving pipe piles execept D2 area	
C3840-UTD-335	Temporary Diversion of existing watermain that clash with temp. staircase	40d	0d 28-May-1	5 A 17-Jul-15 A	100%	Temporary Di	ersion of existing watermain that clash with t	temp. staircase
C3840-UTD-360	Removal of Street Lighting Post near D2	57d		4 A 23-May-14 A	100%	Removal of Street Lighting Post near D2		
C3840-UTD-455	Exposure & slewing of underground utilities for driving pipe piles at D2 area	51d		5A 12-Dec-15A	100%		Exposure & slewing of underground utility	ies tor driving pi
Remove Existing Escala	ator by Specialist Contractor	109d	0d 01-Mar-1	6 A 05-Aug-16 A				
C3840-ESC-110	Appoint Specialist Contractor	Od	0d	11-Mar-16 A	100%		Appoint Specialist Contractor	
C3840-ESC-120	Prepare method statement & delivery route for removal of exist. Escalator	6d	0d 01-Mar-1	6 A 11-Mar-16 A	100%		Prepare method statement &	delivery route fo
C3840-ESC-130	Eng review and approve method statement & delivery route for removal of exist.	Escalator 21d	0d 12-Mar-1	6 A 02-Jun-16 A	100%		Eng review and app	rove method sta
C3840-ESC-140	Liaise with maintenance Contractor via. Eng and submit Form EL3 to EMSD	6d	0d 06-Apr-16	6 A 06-Jul-16 A	100%		Liaise with maint	tenance Contra
C3840-ESC-150	EMSD/MTRC decommission exisiting escalator	3d	0d 06-Jul-16	A 06-Jul-16 A	100%		I EMSD/MTRC d	ecommission ex
C3840-ESC-152	MTR's testing on Existing Escalator	2d	0d 07-Jul-16	A 08-Jul-16 A	100%		I MTR's testing o	n Existing Escal
C3840-ESC-160	Remove existing escalator	14d	0d 11-Jul-16	A 05-Aug-16 A	100%		📫 Remove exis	sting escalator
	Advance Ground Works & Piling Works)			3 A 30-Sep-16 A				÷
Advance Ground Works				3 A 24-Jul-14 A				
C3840-AGW-010	Site clearance	24d	0d 13-Nov-1	3 A 10-Dec-13 A	100%	Site;clearance		
C3840-AGW-020	Trial Pit/trench excavation	69d	0d 14-Nov-1	3 A 31-Mar-14 A	100%	Trial Pit/french excavation		
C3840-AGW-030	Temporary Hoarding Erection	15d	0d 11-Dec-1	3 A 30-Dec-13 A	100%	Temporary Hoarding Erection		
C3840-AGW-040	Pre-drilling works	24d	0d 30-Dec-1	3 A 24-Jan-14 A	100%	Pře-dřiling works		
C3840-AGW-050	Permanent Hoarding Erection	25d	0d 28-Feb-1	4 A 08-Apr-14 A	100%	Permanent Hoarding Erection		
C3840-AGW-070	Joint Survey & Remove existing BS & ABWF Services	6d	0d 01-Feb-1	4A 22-Feb-14A	100%	Joint Survey & Remove existing;BS;& ABW;F Services;		
C3840-AGW-080	Close D1 & Construct Flood Barrier at D1	9d	0d 23-Feb-1	4A 27-Feb-14A	100%	I Close D1 & Construct Flood Barrier at D1		
C3840-AGW-100	Demolish D1 above GL	12d	0d 18-Mar-1	4 A 24-Apr-14 A	100%	Demolish D1 above GL		
Current Bar	Critical Remaining Work	Data Date: 01-Jun	-18			Master Programme Revision RMPRSA1		Date
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	Activity Name	Orig Rem Start Dur Dur			Total ^T loat O N	IDJF	2014 - M A M J Jul A			MAM		DJ	FMA	2016 M J Ju			JFM		2017 J Jul A	SON	D J F	MAM	2018 JJJA	SON	N
C3840-AGW-120	Install temporary steel deck platform in D1 opening	9d 0d 25-Apr-14 A	22-May-14 A	100%			install tem	oorary steel	deck plat	form in D1 of	pening														
C3840-AGW-130	Relocate hoarding along south footpath	4d 0d 08-May-14 A	A 13-May-14 A	100%			Relbcate ho	arding alon	ig south fo	otpath															
C3840-AGW-140	Implement TTA stg 1 to expose utilities/left-in piles & slewing cables as necessary along sout	th footpath 1d 0d 23-May-14 A	A 23-May-14 A	100%			I Implement	TTA stg 1 t	o expose	utilities/left-in	piles & slewing cabl	es as neo	cessary al	ong south	footpath										
C3840-AGW-150	Complete expose utilities/left-in piles & cable slewing as necessary	0d 0d	21-Jul-14 A	100%			♦ Cor	nplete expo	ose utilities	/left-in piles &	& cable slewing as ne	cessary													
C3840-AGW-160	Implement TTA stg 2 (diversion of pedestrain route)	1d 0d 22-Jul-14 A	22-Jul-14 A	100%			I Imp	ernent TTA	Astg 2 (di	ersion of peo	destrain route)														
C3840-AGW-170	Relocate hoarding to suit pipe piling	4d 0d 23-Jul-14 A	24-Jul-14 A	100%			I Re	locate hoard	ding to su	t pipe piling															
Piles & Grouting for	r Vertical Shaft	113d 0d 08-Apr-14 A	18-Oct-14 A																						
C3840-EVS-010	Mobilization for Piling Rig and Setup	4d 0d 08-Apr-14 A		100%			Mobilization fo	or Pilina Ria	and Setu	D															
C3840-EVS-015	1 no. test pile & 3 nos. performance piles	6d 0d 08-May-14 A		100%			1 no. test p																		
										nice plies															
C3840-EVS-020	39 nos. pipe piles	35d 0d 23-May-14 A	A 09-Aug-14 A	100%				9 nos. pipe																	
C3840-EVS-040	Curtain Grouting at vertical shaft	18d 0d 25-Aug-14 A	A 18-Oct-14 A	100%				Curt	tain Grout	ing at vertica	ll shaft														
Piles & Grouting for	r Temporary Staricase & C&C Subway	685d 0d 14-Jun-14 A	24-Sep-16 A																						
C3840-ETS-020	79 nos. pipe piles along Grid Line A	47d 0d 15-Jul-14 A	05-Feb-15 A	100%						9 nos. pipe p	piles along Grid Line	A													
C3840-ETS-028	Curtain Grouting for C&C, stage 1	24d 0d 23-Dec-14 A	A 13-Mar-15 A	100%					-	Curtain C	Grouting for C&C, st	age 1													
C3840-ETS-029	Curtain Grouting for C&C, stage 2	30d 0d 09-Aug-16 A	A 24-Sep-16 A	100%												Curtain (Grouting for	r C&C, sta	ge 2						
C3840-ETS-032	3 nos. pipe piles between Grids 1 & 2	6d 0d 13-Oct-14 A	05-Nov-14 A	100%				– 31	nos. pipe	piles betweer	n Grids 1 & 2														
C3840-ETS-042	Drill for H4 & H5 (exclude drilling for rock socket)	6d 0d 21-Oct-14 A	24-Oct-14 A	100%				I Drill	l for H4 &	H5 (exclude	drilling for rock sock	et)													
C3840-ETS-044	Drill for H5 (rock socket), H6, H7 & H8 and Install/grout for H4 to H8	17d 0d 02-Feb-15A	A 25-Feb-15 A	100%						Drill for H5	(rock socket), H6, H	17 & H8 :	and Instal	l/grout for	H4 to H8										
C3840-ETS-052	Implement TTM 803	6d 0d 21-Oct-14 A	22-Oct-14 A	100%				I Imp	lement T					-											
C3840-ETS-053	Relocation of hoarding & Implement TTM 804	6d 0d 20-Nov-14 A		100%							g & Implement TTM	904													
C3840-ETS-054	Trial trench excavation for driving sheet pile along Nathan Road	12d 0d 23-Oct-14A		100%							or driving sheet pile a	Ţ	than Road	3											
C3840-ETS-060	Type III Sheet Pile, 102m along Nathan Road	6d 0d 05-Nov-14 A	A 21-Nov-14 A	100%					Type III S	heet Pile, 102	2m along Nathan Ro	ad													
C3840-ETS-070	Type III Sheet Pile along Carnarvon Road	12d 0d 14-Jun-14A	25-Jun-14 A	100%			Type I	I Sheet Pile	along Ca	rnarvon Roa	ad														-
C3840-ETS-075	Toe Grouting (only install grout pipe) along Carnarvon Road	8d 0d 27-Jun-14 A	07-Jul-14 A	100%			📮 Toe (Grouting (or	nly install g	rout pipe) al	ong Carnarvon Roa	d													
C3840-ETS-080	Toe Grouting for sheet piles along Nathan Road & Carnarvon Road	8d 0d 20-Nov-14 A	A 03-Dec-14 A	100%				•	Toe Gro	uting for she	et piles along Nathai	n Road &	& Carnarv	on Road											
C3840-ETS-090	Mobilization; 2nd Piling Rig and Setup	4d 0d 05-Jul-14 A	14-Jul-14 A	100%			🔳 Mob	ilization; 2nd	d Piling Ri	g and Setup															
C3840-ETS-091	Demobilization; 2nd Piling Rig	1d 0d 20-Sep-14 A	A 20-Sep-14 A	100%				l Demobi	ilization; 2	nd Piling Rig															
C3840-ETS-092	Mobilization; Drilling Rig for Curtain Grouting for TM800	1d 0d 26-Sep-14 A	A 26-Sep-14 A	100%				l Mobiliza	ation; Dril	ing 'Rig' for 'C	urtain Grouting for T	M800													
C3840-ETS-093	Demobilization; Drilling Rig for Curtain Grouting	1d 0d 16-Oct-14A	16-Oct-14 A	100%				I Dem	nobilizatior	; Drilling Rig	for Curtain Grouting	1													
C3840-ETS-094	Mobilization; Drilling Rig for Curtain Grouting for TM803	1d 0d 22-Oct-14A		100%							r Curtain Grouting fo		3												
C3840-ETS-095		1d 0d 12-Nov-14 A		100%										ing Pic											
	Demobilization for Drilling Rig & Mobilization for Curtain Grouting Rig										ng Rig & Mobilization		an Giput	in di Uni											
C3840-ETS-096	Demobilization: Curtain Grouting Rig	1d 0d 28-Nov-14 A		100%							in Grouting Rig														
C3840-ETS-097	Mobilization: Drilling Rig	1d 0d 29-Nov-14 A	A 29-Nov-14 A	100%				I	Mobilizat	ion: Drilling R	lig														
C3840-ETS-098	Demobilization: Drilling Rig	1d 0d 12-Dec-14 A	A 12-Dec-14 A	100%					I Demot	ilization: Drilli	ing Rig														
 Current Bar 	Critical Remaining Work Data	a Date: 01-Jun-18			<u>L i</u>	<u> i</u>	<u> i i i</u>	<u> i</u>	<u> i i </u>	<u> </u>	<u> i i</u>	<u> i</u>	<u> i i </u>	<u> i</u>	<u> i</u>	<u> </u>	<u> i</u>	<u> i</u>	<u> </u>	R	MPSA	1		<u> </u>	=
Actual Work		Page 8 of 26				Mast	er Program	me Ro	evisi	on RM	IPRSA1					Ļ	Da		R	evision		Checke		Appro	10
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C3840-ETS-099	Mobilization: Curtain Grouting Rig	Dur 1d	Dur		13-Dec-14 A	Complete 100%		N D J F M A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Lul A S O N D J F M A	
C3840-ETS-101	Demobilization: Curtain Grouting Rig	1d	0d 1	4-Dec-14 A	14-Dec-14 A	100%		I Demobilization: Curtain Grouting Rig	
C3840-ETS-102	Demobilization: Piling Rig	1d	0d 2	25-Feb-15 A	25-Feb-15 A	100%		l' Demóbilizatión: Pilinġ Rig	
C3840-ETS-110	56 nos. pipe piels along Grid Line B	25d	0d 2	24-Jul-14 A	11-Dec-14 A	100%		56 nos. pipe piels along Girld Line B	
C3840-ETS-120	Curtain Grouting along Grid Line B	13d	0d 3	80-Sep-14 A	26-Jan-15 A	100%		Curtain Grouting along Grid Line B	
Piles & Grouting for R	Remaining Section of Cofferdam at D2	63d	0d 1	7-Aug-16 A	30-Sep-16 A				
C3840-ECD-010	Mobilization for Piling Rig and Setup	4d	0d 1	7-Aug-16 A	18-Aug-16 A	100%			I Mobilizatio
C3840-ECD-012	Construct 2 nos. king posts	2d	0d 1	9-Aug-16 A	23-Aug-16 A	100%			Construct
C3840-ECD-020	Construct 22 nos. pipe piles at D2	22d	0d 2	25-Aug-16 A	17-Sep-16 A	100%			E Cohstri
C3840-ECD-021	Construct 5 nos. pipe piles between Grids 1 & 2	7d	0d 1	9-Sen-16 A	26-Sep-16 A	100%			Const
C3840-ECD-022	Demobilize piling rig and mobilize & setup curtan grouting rig	2d	00 1	19-Sep-16 A	20-Sep-16 A	100%			I Demot
C3840-ECD-030	Curtain Grouting along Grid Line B at D2	8d	0d 2	21-Sep-16 A	30-Sep-16 A	100%			Curta
Open Cut Sequence 2 (Excavation for Temporary Staricase)	1281d	0d 2	26-Jan-14 A	01-Aug-18		124d		
Excavation		209d	0d 1	2-Feb-15 A	02-Nov-15 A				
C3840-EXC-100	Pump test prior to excavate for temporary staricase	24d	0d 1	2-Feb-15 A	18-Feb-15 A	100%		Pump test prior to excavate for temporary starica	se
C3840-TSE-10	Demolish temporary D1 & investigation of extent and nature of artificial obstruction	66d	0d 2	26-Feb-15 A	19-May-15 A	100%		Demolish temporary D1 & investigatio	n of extent and nature of an
C3840-TSE-12	Excavate (+5.5mPD to +4.7mPD), install waling/strut (L1), traffic deck & partially remove unl	known 35d	0d 2	26-Feb-15 A	11-Apr-15 A	100%		⋿xcavate (∔5.5mPD td +4;7mPD), instaltw	aling/strut (L1), traffic deck
C3840-TSE-14	obstruction Excavate 2nd layer (+4.7mPD to +1.7mPD) install waling L1A/L1B & partially remove unknow	wn 23d	0d 1	3-Apr-15 A	09-May-15 A	100%		Excavate 2nd layer (+4.7mPDi to +1.7m	IPD) install waling L1A/L1B
C3840-TSE-16	obstruction Flame cut existing encasing sheetpiles up to +1.7mPD	16d	0 b0)6-May-15 A	23-May-15 A	100%		🔳 : Flårme cut existing encasing pheetpile:	suin to +1 7mPD
C3840-TSE-18					05-Jun-15 A				
	Lagging between pipe piles and preparation works for waterproofing to +1.7mPD	18d						📕 Lagging;between pipe piles and pre	
C3840-TSE-20	Existing concrete infill removal up to +1.7mPD	12d	0d 2	21-May-15 A	04-Jun-15 A	100%		Existing concrete infill removal up to	+1.7mPD
C3840-TSE-22	Waling & strut installation L2	9d	0d 0)1-Jun-15 A	10-Jun-15 A	100%		Walling & strut installation L2	
C3840-TSE-24	Excavation from +1.7mPD to -0.87mPD	13d	0d 0)5-Jun-15 A	19-Jun-15 A	100%		Excavation from +1.7mPD to -0.8	mPD
C3840-TSE-26	Flame cut existing encasing sheetpiles up to -0.87mPD	7d	0d 0)9-Jun-15 A	16-Jun-15 A	100%		 Flame cut existing encasing sheets 	iles up to -0.87mPD
C3840-TSE-28	Existing concrete infill & RC wall removal up to -0.87mPD	13d	0d 1	2-Jun-15 A	27-Jun-15 A	100%		📕 Existing concrete infil & RC wall r	ernoval up to -0.87mPD
C3840-TSE-30	Lagging between pipe piles and preparation works for waterproofing to -0.87mPD	23d	0d 1	6-Jun-15 A	14-Jul-15 A	100%		Lagging between pipe piles and	I preparation works for wat
C3840-TSE-31	Excavate up to +4.2mPD at C&C (grid 2-4) & install traffic deck	34d	0d 2	2-Jun-15 A	31-Jul-15 A	100%		Excavate/up/to +4.2mPD at C	&C (grid 2-4) & install traffi
C3840-TSE-32	Excavation from -0.87mPD to -2.2mPD	18d	0d 1	6lul-15 A	05-Aug-15 A	100%		Excavation from -0.87mPD t	n - 2 2mPD
C3840-TSE-34									
	Flame cut existing encasing sheetpiles up to -3.3mPD	15d			05-Aug-15 A			Flamie cut existing encasing :	
C3840-TSE-36	Existing concrete infill & RC wall removal up to -3.3mPD	12d						Exişting concrete infill & RC	
C3840-TSE-38	Lagging between pipe piles and preparation works for waterproofing to -3.3mPD	9d	0d 1	0-Aug-15 A	19-Aug-15 A	100%		🔳 Lagging between pipe pile:	and preparation works for
C3840-TSE-40	Waling & strut installation L3	6d	0d 1	3-Aug-15 A	19-Aug-15 A	100%		I Waling & strut installation L	3
C3840-TSE-42	Excavation (grid 1-2) up to -3.3mPD	8d	0d 2	25-Aug-15 A	02-Sep-15 A	100%		Excalvati\u00f3n (grid 1-2) ub 1	o-3.3mPD
C3840-TSE-44	Flame cut existing encasing sheetpiles up to -3.3mPD	6d	0d 2	28-Aug-15 A	04-Sep-15 A	100%		Flame cut existing encasion	ng sheetpiles up to -3.3mPl
	Data	Date: 01-Ju	n-18						
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Remaining Wo	r i i i i i i i i i i i i i i i i i i i	Page 9 of 26						-	

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C3840-TSE-48	Lagging between pipe piles and preparation works for waterproofing to -	-3.3mPD	3d	0d	05-Sep-15 A	08-Sep-15 A	100%								agging betw	een pipe pil	es and p	preparat	ion works	for water	orpofin
C3840-TSE-50	Waling & strut installation L4		6d	0d	09-Sep-15 A	15-Sep-15 A	100%							۵	Waling & stri	ut installatio	n L4				
C3840-TSE-52	Excavation up to formation at grid 1-2 & up to +3.75mPD at grid 2-4		18d	0d	09-Sep-15 A	30-Sep-15 A	100%								Excavation	up to forma	ation at ç	grid 1-2	& up to +3	3.75mPD a	it grid 2
C3840-TSE-58	Lagging between pipe piles and preparation works for waterproofing to f	formation level	4d	0d	26-Oct-15 A	02-Nov-15 A	100%								Laggin	g between p	pipe pile	es and pr	eparation	works for	water
C3840-TSE-60	Formation & place mass concrete foundation stage 1		2d	0d	24-Sep-15 A	26-Sep-15 A	100%							1	Formation	& place mas	ss concre	rete foun	dation sta	ge 1	
C3840-TSE-62	Place mass concrete formation (remaining)		3d	0d	28-Oct-15 A	02-Nov-15 A	100%								Place r	nass concre	əte form:	nation (re	maining)		
Additional Unforseen	Obstruction		66d	0d	03-Jul-15 A	27-Oct-15 A															
C3840-AOB-100	Prepare MS and carryout trial for trimming bulged section of existing TST	T Stn wall	1d	0d	03-Jul-15 A	07-Jul-15 A	100%							Prepare	MS and carr	yout trial for	ur trimmir	ing bulge	d section	of existing	TST S
C3840-AOB-102	Investigation, prepare MS and trimming to expose rebar at exising TST S	Stn wall	21d	0d	11-Jul-15 A	04-Aua-15 A	100%							Inves	tigation, prer	are MS an	ıd trimmi	nina to ex	bose reba	ur at exisiho	a TST
C3840-AOB-104	Remove overpour section of TST Stn wall from +1.0mPD to -1.0mPD		4d		07-Aug-15 A		100%								iove overpou						
	Prepare MS and trimming to expose rebar at existing subway wall		5d		07-Aug-15 A		100%								are MS and						
C3840-AOB-108	Remove overpour section of wall at existing subway from -1.0mPD to -2.	.0mPD	2d	0d	14-Aug-15 A	15-Aug-15 A	100%							l Ren	nove overpo	ur section of	f wall at	t existing	subway fr	dm -1.0ml	°D to -
C3840-AOB-110	Remove overpour section of wall at existing subway from -2.0mPD to -3.	.5mPD	30d	0d	15-Aug-15 A	19-Sep-15 A	100%							-	Remove ove	rpour sectio	on of wa	all at exis	ting subw	ay from -2	.0mPD
C3840-AOB-112	Remove overpour section of RC structure at TST Station from -3.5mPD	to for mation level	29d	0d	21-Sep-15 A	27-Oct-15 A	100%							•	Remov	e overpour :	section c	of RC st	ructure at	TST Static	n fron
emoval of ACM by Oth	ler		31d	0d	08-Oct-14 A	16-Nov-14 A															
C3840-ACM-100	Diversion of existing BS & MCB at the breakthrogh location		6d	0d	08-Oct-14 A	18-Oct-14 A	100%				Diversion	of existing	BS & MC	B at the br	eakthrogh lo	cation					
C3840-ACM-105	Relocation of existing EIB at Entrance D, Concourse Level (additional wo	prk)	9d	0d	08-Oct-14 A	24-Oct-14 A	100%				Relocation	n of existi	ng EIB at	Entrance D	, Concourse	Level (add	litional w	vork)			
C3840-ACM-110	Removal of ACM by other		6d	0d	16-Nov-14 A	16-Nov-14 A	100%				I Remov	al of ACN	l by other								
C Structure (Temporary	y Staricase)		160d	0d	19-Aug-15 A	12-Mar-16 A															
Section between Grid			94d	0d	19-Aug-15 A	20-Nov-15 A															
Bay 1 (Base Slab at						31-Aug-15 A															
	Falsework & soffit fwk		4d		19-Aug-15 A	-	100%								sework & so	πατωκ					
C3840-TSR-105	Rebar fixing		4d	0d	25-Aug-15 A	28-Aug-15 A	100%								bar fixing						
C3840-TSR-110	Water proofing system, erect fwk & concreting (13.5m3)		10d	0d	20-Aug-15 A	31-Aug-15 A	100%							∎ w	ater proofing) system, er	ect fwk	& concre	eting (13.	ōm3)	
Bay 2 (Walls from -	0.36mPD to +2.2mPD)		6d	0d	01-Sep-15 A	08-Sep-15 A					+										
C3840-TSR-120	Rebar fixing for sidewall and end wall		2d	0d	01-Sep-15 A	02-Sep-15 A	100%							IR	ebar fixing fo	r sidewall a	ınd end ۱	wall			
C3840-TSR-125	Install water proofing membrane, fwk erection & concreting (5.0m3)		4d	0d	03-Sep-15 A	08-Sep-15 A	100%							a tı	nstall water p	roofing mei	mbrane,	e, fwk ere	ctidn & co	oncreting (5.0m3
Bay 3 (Staircase at	from +2.2 to +4.2mPD)		7d	0d	09-Sep-15 A	16-Sep-15 A															
C3840-TSR-135	Falsework & soffit fwk		2d	0d	09-Sep-15 A	10-Sep-15 A	100%							1	alsework &	soffit fwk					
C3840-TSR-140	Rebar fixing		3d	0d	11-Sep-15 A	14-Sep-15 A	100%								Rebar fixing						
C3840-TSR-145	Water proofing, fwk and concreting (6.0m3)		3d	0d	14-Sep-15 A	16-Sep-15 A	100%							1	Water proofi	na, fwk and	d concre	eting (6.0	0m3)		
	om +4.2 to +6.1mPD)				17-Sep-15 A																
							10001							_							
C3840-TSR-185			4d		17-Sep-15 A		100%								Rebar fixing						
C3840-TSR-190	Fwk & concreting (14.5m3)		3d	0d	21-Sep-15 A	23-Sep-15 A	100%							1	Fwk & conc	reting (14.5	m3)				
Current Bar	Critical Remaining Work	Data Date: 01	-Jun	n-18				•	_	<u>· · · · · · · · · · · · · · · · · ·</u>				-	<u> </u>					· · · ·	
Actual Work	♦ Milestone	Page 10 o	of 26						N	laster Programn	ne Revis	sion	KMP	'RSA	1					01-Ju	Date n-18
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Activity ID		Activity Name	Dur		Finish	% Complete	Total Float	N D	JF	MA	2014 M J Jul	ASO	N D	JFM	2 1 A M J	2015 J Jul A :	s o r	N D	JFN	ЛАМ	2016	so	ND,	JFM
	Bay 5 (Staircase fr	om +0.33 to 2.2mPD)	10d	0d 24-Sep-15	A 29-Sep-15 A																			
	C3840-TSR-200	Soffit fwk	2d	0d 24-Sep-15	A 25-Sep-15 A	100%											I Soff	fit fwk						
	C3840-TSR-210	Rebar fixing, fwk for risers & concreting (2.0m3)	2d	0d 26-Sep-15	A 29-Sep-15 A	100%											Rel	əar fixin	ng, fwk fo	or risers	& concretir	ng (2.0m	3)	
	Bay 6 (walls & roo	f from 2.2mPD to 4mPD)	12d	0d 02-Oct-15	A 12-Oct-15 A																			
	C3840-TSR-150	Strike fwk, form cj, install waterproofing membrane & rebar fixing	4d	0d 02-Oct-15	A 06-Oct-15 A	100%											Sti	rike fwł	k, form c	j, install ι	waterproof	ing mem	orane &	rebar fixin
	C3840-TSR-165	Erect fwk/working platform & concreting (16.0m3)	5d	0d 07-Oct-15	A 12-Oct-15 A	100%											I E	rect fwl	κ/workin	g platfori	m & concre	eting (16	0m3)	
	Bay 7 (walls & roo	f from +4mPD to +5.7mPD)	6d	0d 13-Oct-15	A 19-Oct-15 A																			
	C3840-TSR-215	Strike fwk, remove working platform, form cj & rebar fixing	2d	0d 13-Oct-15	A 14-Oct-15 A	100%											IS	trike fw	/k, renho	ve worki	ing platform	n, form ợ	& rebar	fixing
	C3840-TSR-225	Falsework, fwk, working platform & concreting (13.5m3)	4d	0d 15-Oct-15 A	A 19-Oct-15A	100%											1 F	alsewo	ork, fwk,	working	platform 8	& concret	ing (13.5	m3)
	Bay 8 (walls & roo		45d	0d 20-Oct-15 /	20-Nov-15A																			
						100%												Otriko	full ran		rking platfo			
		Strike fwk, remove working platform, form cj , erect fwk & rebar fixing	10d																					
		Falsework, fwk, working platform & concreting (33.5m3)	10d																		ng platform			5m3)
	C3840-TSR-236	Erect fwk and concreting (2m3) for upstand wall	2d	0d 03-Nov-15	A 05-Nov-15 A	100%												Erect	fwk and	concretii	ing (2m3) f	or upstan	id wall	
	C3840-TSR-237	Concrete curing and remove fwk/falsework	15d	0d 03-Nov-15	A 20-Nov-15 A	100%												Con	crete cur	ring and	remove fw	k/falsew	ork	
	Section between Grie	d 1 and 2	111d	0d 28-Oct-157	A 12-Mar-16 A																			
	Bay 9 (Collar Fram	ne up to -4.3mPD)	35d	0d 28-Oct-15	A 16-Nov-15 A																			
	C3840-TSR-500	Coring dowel bars holes & form groove/cj	12d	0d 28-Oct-15	A 11-Nov-15 A	100%											•	Corin	ıg dowel	bars hol	les & form	groove/c		
	C3840-TSR-505	Install waterproofing membrane/dowel bars	5d	0d 04-Nov-15	A 09-Nov-15 A	100%												Install	l waterpr	roofing m	nembrane/	dowel ba	rs	
	C3840-TSR-510	Rebar fixing	2d	0d 11-Nov-15	A 12-Nov-15 A	100%											1	Reba	ar fixing					
	C3840-TSR-515	End fwk shuttering & concreting collar to slab (2.5m3)	3d	0d 13-Nov-15	A 16-Nov-15 A	100%												End	fwk shut	ttering &	concreting) collar to	slab (2.5	m3)
	Bay 12 (Base Slab	at -4.32mPD)	13d	0d 04-Nov-15	A 19-Nov-15 A																			
	C3840-TSR-540	Construct base slab (20.0m3)	13d	0d 04-Nov-15	A 19-Nov-15 A	100%												Con	istruct be	ase slab	(20.0m3)			
	Bay 10 (Collar Fra		9d		A 27-Nov-15 A																			
		Erect working platform, install waterproofing membrane & rebar fixing	3d		A 24-Nov-15 A																rm, install v		ning mer	norane &
		Fwk & concreting to -2.2mPD (1.5m3)	4d															I Fwl	k & conci	reting to	-2.2mPD	(1.5m3)		
	Bay 13 (Walls up to	o -3.2mPD)	7d	0d 27-Nov-15	A 07-Dec-15 A																			
	C3840-TSR-550	Install water proofing system, rebar fixing for W1, W2, W3 & 250 mm partition	on wall 3d	0d 27-Nov-15	A 30-Nov-15 A	100%												Ins	tall water	r proofin	ng system, i	ebar fixir	ng for W	I, W2, W
	C3840-TSR-555	Erect working platform, fwk shuttering & concreting (9.0m3)	4d	0d 01-Dec-15	A 07-Dec-15 A	100%												Er Er	ect work	king platf	form, fwk s	huttering	& concr	∍ting (9.0i
	Bay 11 (Collar Fran	ne up to +1.2mPD)	12d	0d 30-Nov-15	A 07-Dec-15 A																			
	C3840-TSR-530	Erect working platform, Install waterproofing membranne & rebar fixing	5d	0d 30-Nov-15	A 03-Dec-15 A	100%												Er:	ect work	ing platfo	orm, Install	waterpr	oofing m	əmbranne
	C3840-TSR-535	Fwk & concreting to collar (4.0m3)	7d	0d 01-Dec-15	A 07-Dec-15 A	100%												Fv	wk & con	rcreting t	to collar (4.	0m3)		
	Bay 14 (Walls up to	o -0.96mPD) and Bay 18a (Stair)	6d	0d 08-Dec-15	A 28-Dec-15 A																			
	C3840-TSR-560	Construct bay 14 (18.5m3)	6d	0d 08-Dec-15	A 15-Dec-15 A	100%												∎ C	Construct	t bay 14	(18.5m3)			
	C3840-TSR-602	Construct bay 18a (3.5m3)	5d	0d 19-Dec-15	A 28-Dec-15 A	100%													Constru	uot bay 1	8a (3.5m3))		
			Data Data: 01 Jun	n 19														<u> </u>	<u> </u>					
	Current BarActual Work	 Critical Remaining Work Milestone 	Data Date: 01-Ju					M	aste	r Pı	rogra	mme	Rev	visior	n RM	PRS	A1						\vdash	Date
	 Actual Work Remaining Work 		Page 11 of 26	₿							0					~							01·	-Jun-18

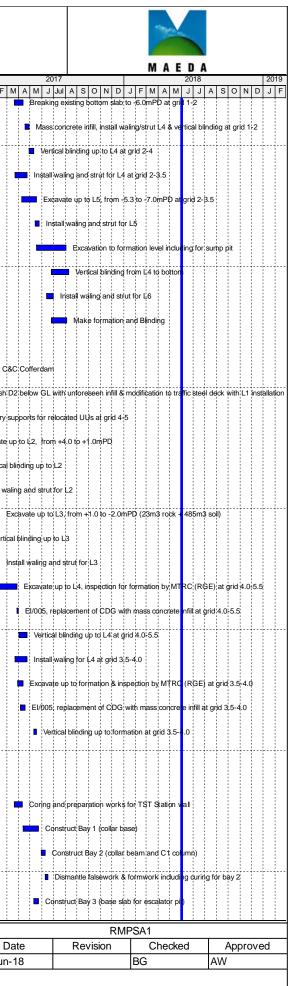
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Activity ID	D. 45 (1) 1	Activity Name	Dur [Dur Start		Complete	Float O	N D J	2014 F M A M J Jul A S O	N D J		2015 J Jul A S O N I	D J F	20 ²		DND	JFMA	2017 M J Ju		DJFN		JAS	
	Bay 15 (Walls up				5A 07-Jan-16A																		
	C3840-TSR-58	Remove platform & strike fwk, propping, water proofing, re-bar fixing, fwk suttering & concreting (20m3)	13d	0d 23-Dec-15	5A 07-Jan-16A	100%							Ren	hové platform &	strike fwk, j	oropping,	water proofin	g, re-bar fi	xing, fwk suttering	& cohcreti	nġ (20m3)		
	Bay 16 (Walls & R	loof Slab)	32d	0d 08-Jan-16	A 13-Feb-16 A	A																	
	C3840-TSR-590	D Remove fwk, form cj. install WPS, remove L2, re-propping & erect falsework	5d	0d 08-Jan-16	A 16-Jan-16 A	100%							Re	move fwk, form	cj, install W	P\$, remo	ve L2, re-pror	oping & ere	edt falsework				
	C3840-TSR-59	5 Construct wall & roof slab (31.5m3)	14d	0d 18-Jan-16	A 23-Jan-16 A	100%							I C	onstruct wall & r	oof slab (31	.5m3)							
	C3840-TSR-600	O Concrete curing, coring, saw cut & breakthrough, removal of scaffold/falsework/fwk, repropping	13d	0d 25-Jan-16	A 13-Feb-16 A	A 100%								Concrete curin	, coring, sa	w cut & b	reakthrough,	nemoval of	scaffold/falseworl	<td>opping</td> <td></td> <td></td>	opping		
	Bays 17 and 18b	Stairs up to 2nd Landing)	7d	0d 15-Feb-16	6A 20-Feb-16A	A																	
	C3840-TSR-58	5 Construct staircase (8.0m3)	7d	0d 15-Feb-16	A 20-Feb-16	A 100%								Construct stair	case (8.0m	3)							
	Construction of I	Refuse Bin	7d	0d 03-Mar-16	6A 12-Mar-16A	A																	
	C3840-TSR-604	4 Construct Refuse Bin	7d	0d 03-Mar-16	6A 12-Mar-16A	A 100%								Construct R	efuse Bin								
		entre D - Temporary Entrance			A 01-Aug-18		151d																
	C3840-MS-D01	D1 - Comp. removal of all overhead signs affecting Works for the Temp. Entrance	0d		26-Jan-14 A				D1 - Comp. removal of all overt														
	C3840-MS-D02	D2-Comp. 20% of cofferdam for T. E. and all U/G UU diversion/protection for T.E. cofferdam	0d	0d	06-Sep-14 /	A 100%			◆ D2-0	omp. 20%	of cofferdam fo	r T. E. and all U/G UU	diversior	/protection for	.E. cofferda	im							
	C3840-MS-D03	D3 - Comp. temp. cofferdam and grouting (excl. satisf. comp. of pump test)	0d	0d	18-Feb-15 A	A 100%					◆ D3 - Comp.	temp. cofferdam and	grouting	(excl. satisf con	np. of pump	test)							
	C3840-MS-D04	D4-Comp. 66% const. of temp. stair measured by vol. of conc. poured & comp. form. open. into TST Stn	0d	0d	13-Feb-16 <i>F</i>	A 100%							•	D4-Comp. 66%	const. of te	mp. stair	measured by	vol. of con	c; poured & comp	. form. ope	n. into TST S	n	
	C3840-MS-D05	D5-Open Temporary Entrance for use	0d	0d	06-Jul-16 A	100%								•	• D5-Open	Tempora	ry Entrance fo	or use					
	C3840-MS-D06	D6-Comp. demolition of Temp. Entrance and disposal of all C&D waste arising there from	0d	0d	01-Aug-18	0%	151d															♦ D6-Cr	omp. demolition (
Ope	n Cut Sequence 3 (/	Advance Ground Works at D2 & in front of D1)	178d	0d 17-Nov-15	A 17-Sep-167																		
C	3840-ELS-400	Expose underground UUs and provide support to UUs; at grid 1-4	132d	0d 17-Nov-15	5A 30-Apr-16A	. 100%								Expos	e undergrou	ınd UUs i	and provide su	ipport to U	Us; at grid 1-4				
C	3840-ELS-410	Expose existing sewer & strom drainage/trim concrete surround for PCCW cable ducts & 1st lift of	36d	0d 03-May-16	A 16-Jun-16A	100%									Expose exist	ing sewe	& strom drai	nage/trim c	concrete surround	for PCCW	cable ducts	4 1st lift of F	PC¢W cable dur
C	3840-ELS-420	PCCW cable ducts Re-arrange existing sewer & strom drainage/ 2nd lift of PCCW cable ducts & provide support to cable	e 50d	0d 17-Jun-16	A 09-Sep-16 A	A 100%								_	R	arrange	existing sewe	er & strom	drainage/ 2nd lift	of PCCW o	able ducts &	provide sup	port to cable dur
	3840-ELS-430	ducts																	ab and coring thro				
		Partial demolition of existing subway slab and coring through for two nos. king posts			A 18-Aug-16 A																		
	3840-ELS-450	Partial demolition of existing subway slab and coring through existing subway for piling PP175 to PP179	12d	0d 12-Sep-16	6A 17-Sep-16A	A 100%										artial der	nolition of exis	ting subwa	y slab and coring	through ex	sting subway	or piling PI	P175 to PP179
C:	3840-ELS-510	Joint Survey & Remove existing BS & ABWF Services at D2	6d	0d 07-Jul-16	A 16-Jul-16 A	100%									Joint Sur	vey & Re	move existing	BS & ABW	/F Services at D2				
C	3840-ELS-520	Erect FRP hoarding and flood gate/scaffolding platform for demolish D2	9d	0d 12-Jul-16	A 26-Jul-16 A	100%									Erect F	RP hoard	ing and flood	gate/scaff c	olding platform for	d emolish D	2		
C	3840-ELS-530	Demolish D2 above GL	12d	0d 14-Jul-16	A 09-Aug-16 A	A 100%									🗖 Demo	llish D2 a	pove GL						
C	3840-ELS-540	Erect piling platform and shift hoarding	6d	0d 10-Aug-16	6A 20-Aug-16A	A 100%									Erec	t piling pl	atform and shi	ift hoarding	,				
Ope	n Cut Sequence 4 (I	Excavation for Subway in front of D1)	249d	0d 31-Jul-16	A 09-Aug-17 A																		
C	3840-ELSD1-102	Install support beam, load transfer & remove concrete support at grid 2	8d	0d 31-Jul-16	A 14-Sep-16 A	A 100%)r	istall supp	ort beam, loa	d transfer a	& remove concret	e support a	t grid 2		
C	3840-ELSD1-115	Complete excavation up to +1.0mPD including vertical blinding/install L2 & struts	74d	0d 03-Oct-16	A 11-Jan-17 A	100%											Complete	excavation	up to +1.0mPD in	ncluding ve	tical blinding/	nstall L2 &	struts
C	3840-ELSD1-145	Remove existing subway 7.5m below G.L. and excavate to L3 (-2.0mPD) with unforeseen infill	29d	0d 28-Dec-16	6A 04-Mar-17 A	A 100%											Ren	nove existir	ng subway 7,5m b	elow G.L.	and excavate	to L3 (-2.0r	mPD) with unfor
	3840-ELSD1-155	Vertical blinding up to L3			A 27-Feb-17												Verti						
C:	3840-ELSD1-165	Install waling and strut for L3	6d	0d 25-Jan-17	A 17-Mar-17 A	A 100%												stall waling	and strut for L3				
C	3840-ELSD1-175	Remove existing subway 10.6m below G.L. and excavate to L4 (-5.3mPD) with unforeseen infill	29d	0d 14-Feb-17	'A 31-Mar-17 A	A 100%											F	i i i	isting subway 10.	6m below C	.L. and exca	ate to L4 (-	-5.3mPD) with u
	Current Bar	Critical Remaining Work Data Date:	01-Jun-1	18	I		<u>L</u> `						<u></u>	<u> </u>	<u> </u>			· · ·		MPSA1			
	Actual Work	 ♦ Milestone Page 12 	2 of 26					Mas	ster Programme	Revis	ion RM	PRSA1				0	Date 1-Jun-18		Revision	BG	Checked	A AW	Approved
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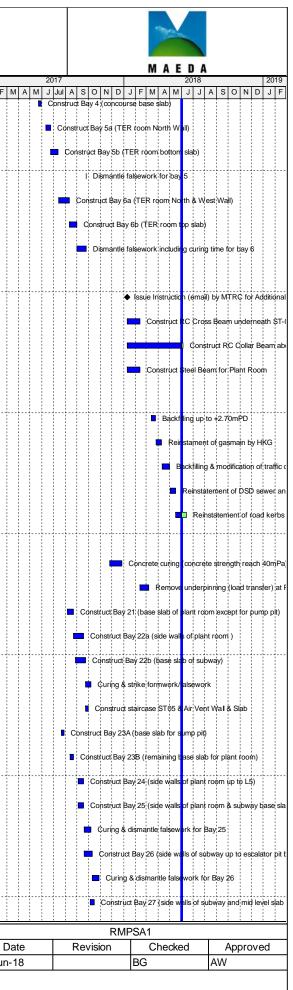


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	C3840-ELSD1-177	Breaking existing bottom slab to -6.0mPD at grid 1-2		1d	0d 20-M	lar-17 A	13-Apr-17 A	100%																						T
	C3840-ELSD1-179	Mass concrete infill, install waling/strut L4 & vertical blinding at grid 1-2		1d	0d 18-Aj	pr-17 A	28-Apr-17 A	100%																						
	C3840-ELSD1-185	Vertical blinding up to L4 at grid 2-4		8d	0d 29-Aj	pr-17 A	10-May-17 A	100%																						
	C3840-ELSD1-195	Install waling and strut for L4 at grid 2-3.5		6d	0d 23-M	lar-17 A	22-Apr-17 A	100%																						
	C3840-ELSD1-205	Excavate up to L5, from -5.3 to -7.0mPD at grid 2-3.5		27d	0d 10-Aj	pr-17 A	17-May-17 A	100%																						
	C3840-ELSD1-225	Install waling and strut for L5		6d	0d 15-M	lay-17 A	25-May-17 A	100%																						
	C3840-ELSD1-235	Excavation to formation level including for sump pit		48d	0d 18-M	lay-17 A	02-Aug-17 A	100%																						
	C3840-ELSD1-245	Vertical blinding from L4 to bottom		8d	0d 26-Ju	un-17 A	09-Aug-17 A	100%																						
	C3840-ELSD1-255	Install waling and strut for L6		6d	0d 13-Ju	un-17 A	30-Jun-17 A	100%																						
	C3840-ELSD1-330	Make formation and Blinding		4d	0d 26-Ju	un-17 A	05-Aug-17 A	100%																						
c	Open Cut Sequence 4 (E	xcavation for D2 & Subway in front of D2)		201d	0d 26-S	ep-16 A	18-May-17 A																							
	C3840-ELSD2-100	Pump test at C&C Cofferdam		24d	0d 26-Se	ep-16 A	11-Oct-16 A	100%																				Pump t	est at (2&(
	C3840-ELSD2-115	Demolish D2 below GL with unforeseen infill & modification to traffic steel of	deck with L1 installation	40d	0d 04-0	oct-16 A	25-Nov-16 A	100%																				De	ėmolisi	n D
	C3840-ELSD2-122	Temporary supports for relocated UUs at grid 4-5		15d	0d 05-O	oct-16 A	09-Nov-16 A	100%																			_	Terr	porar	y sl
	C3840-ELSD2-145	Excavate up to L2, from +4.0 to +1.0mPD		13d	0d 29-0	oct-16 A	28-Nov-16 A	100%																				E	xcavat	e u
	C3840-ELSD2-155	Vertical blinding up to L2		8d	0d 01-D	ec-16 A	15-Dec-16 A	100%																					Vertica	a b
	C3840-ELSD2-165	Install waling and strut for L2		6d	0d 22-N	ov-16 A	07-Dec-16 A	100%																				– 1	Install v	wali
	C3840-ELSD2-175	Excavate up to L3, from +1.0 to -2.0mPD (23m3 rock + 485m3 soil)		28d	0d 13-D	ec-16 A	10-Feb-17 A	100%																				-		Ex
	C3840-ELSD2-185	Vertical blinding up to L3		8d	0d 22-D	ec-16 A	04-Jan-17 A	100%																					Vert	tica
	C3840-ELSD2-195	Install waling and strut for L3		6d	0d 19-D	ec-16 A	10-Feb-17 A	100%																				-		In:
	C3840-ELSD2-205	Excavate up to L4, inspection for formation by MTRC (RGE) at grid 4.0-5.	.5	40d	0d 11-Fe	eb-17 A	27-Mar-17 A	100%																						÷
	C3840-ELSD2-207	EI/005, replacement of CDG with mass concrete infill at grid 4.0-5.5		4d	0d 28-M	lar-17 A	31-Mar-17 A	100%																						
	C3840-ELSD2-215	Vertical blinding up to L4 at grid 4.0-5.5		10d	0d 03-Aj	pr-17 A	22-Apr-17 A	100%																						
	C3840-ELSD2-225	Install waling for L4 at grid 3.5-4.0		6d	0d 23-M	lar-17 A	22-Apr-17 A	100%																						
-	C3840-ELSD2-235	Excavate up to formation & inspection by MTRC (RGE) at grid 3.5-4.0		12d	0d 29-M	lar-17 A	13-Apr-17 A	100%																						
	C3840-ELSD2-237	EI/005, replacement of CDG with mass concrete infill at grid 3.5-4.0		5d	0d 06-Aj	pr-17 A	18-Apr-17 A	100%																						
	C3840-ELSD2-240	Vertical blinding up to formation at grid 3.5-4.0		8d	0d 11-M	ay-17 A	18-May-17 A	100%																						
c	Open Cut Sequence 5 (C	construction of Subway & D2)		366d	12d 21-M	lar-17 A	14-Jun-18		163d														+							
	RC Structure at D1 Side	e (Between Grids 1 and 1.8)		162d	0d 21-M	lar-17 A	26-Sep-17 A																							
	C3840-STR-D1-001	Coring and preparation works for TST Station wal		16d	0d 21-M	lar-17 A	11-Apr-17 A	100%																						
_	C3840-STR-D1-100	Construct Bay 1 (collar base)		22d	0d 12-Aj	pr-17 A	22-May-17 A	100%																						
	C3840-STR-D1-110	Construct Bay 2 (collar beam and C1 column)		9d	0d 31-M	lay-17 A	09-Jun-17 A	100%																						
	C3840-STR-D1-112	Dismantle falsework & formwork including curing for bay 2		8d	0d 10-Ju	un-17 A	17-Jun-17 A	100%																						
-	C3840-STR-D1-120	Construct Bay 3 (base slab for escalator pit)		13d	0d 10-M	lay-17 A	22-May-17 A	100%																						
			Data Date: 0'	-Jun	-18																								<u> </u>	
	 Current Bar Actual Work 	Critical Remaining Work Milestone								Ι	Mas	ster	Pro	gran	ıme	Re	visi	on	RM	1PF	RSA	1								Da
	Remaining Work Page 13 of																											0	1-Ju	n_



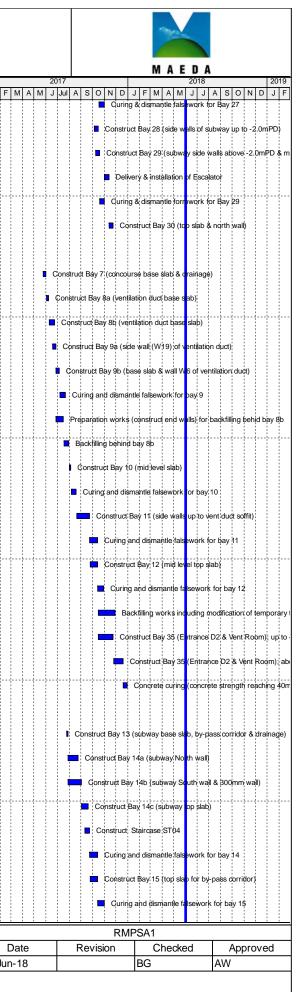


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ID		Activity Name	Orig Dur	Du		Finish	% Complete	Total Float	0 N I	D J I	FM	A M	2014 J Jul	A S	0	N D	JF	M	: A M A	2015 J Jul	A S	0	N D J	J F I	M A	2 M ,	2016 J Jul	A S	O N	DJ	FN
	C3840-STR-D1-130	Construct Bay 4 (concourse base slab)	12d	0	0d 23-May-17 A	29-May-17 A	100%																								
	C3840-STR-D1-132	Construct Bay 5a (TER room North Wall)	10d	0	d 12-Jun-17 A	23-Jun-17 A	100%																								
	C3840-STR-D1-132b	Construct Bay 5b (TER room bottom slab)	10d	0	d 24-Jun-17 A	13-Jul-17 A	100%																								
	C3840-STR-D1-133	Dismantle falsework for bay 5	2d	0	d 25-Sep-17 A	26-Sep-17 A	100%																								
	C3840-STR-D1-134	Construct Bay 6a (TER room North & West Wall)	12d	0	d 14-Jul-17 A	11-Aug-17 A	100%																								
	C3840-STR-D1-135	Construct Bay 6b (TER room top slab)	17d	0	d 12-Aug-17 A	31-Aug-17 A	100%																								
	C3840-STR-D1-136	Dismantle falsework including curing time for bay 6	16d	0	0d 01-Sep-17 A	25-Sep-17 A	100%																								
	Additional Remedial Wo	rks for Permanent Structures	30d	4	d 09-Jan-18 A	05-Jun-18		171d																							
Г	C3840-RMD-100	Issue Instruction (email) by MTRC for Additional Remedial Works for Permanent Structures	0d	0)d	09-Jan-18 A	100%																								
	C3840-RMD-110	Construct RC Cross Beam underneath ST-01	30d	0	0d 10-Jan-18 A	12-Feb-18 A	100%																								
	C3840-RMD-120	Construct RC Collar Beam above +3.6mPD	30d	4	ld 10-Jan-18 A	05-Jun-18	63.3%	171d																							
-	C3840-RMD-130	Construct Steel Beam for Plant Room	30d	0	d 10-Jan-18 A	12-Feb-18 A	100%																								
	Reinstament Works in F	ront of Entrance D2	84d	12	2d 15-Mar-18 A	14-Jun-18		12d																							
	C3840-STR-300	Backfilling up to +2.70mPD	76d	0	0d 15-Mar-18 A	24-Mar-18 A	100%																								
	C3840-STR-302	Reinstament of gasmain by HKG	8d	0	d 26-Mar-18 A	10-Apr-18 A	100%																								
	C3840-STR-304	Backfilling & modification of traffic deck	12d	0	d 11-Apr-18 A	30-Apr-18 A	100%																								
_	C3840-STR-306	Reinstatement of DSD sewer and storm pipe & U/U reinstatement	12d	0	d 02-May-18 A	16-May-18 A	100%																								
	C3840-STR-308	Reinstatement of road kerbs and paving block	24d	12	2d 17-May-18 A	. 14-Jun-18	50%	12d																							
	RC Structure at D1 Side	(Between Grids 1.8 and 3.3)	209d	0)d 22-Jul-17 A	07-Mar-18 A																									
-	C3840-STR-290	Concrete curing (concrete strength reach 40mPa) & removal of falsework/lwk for bay 30	9d	0	d 25-Nov-17 A	27-Dec-17 A	100%																								
_	C3840-STR-310	Remove underpinning (load transfer) at Plant Room	25d			07-Mar-18 A	100%																								
_	C3840-STR-D1-140	Construct Bay 21 (base slab of plant room except for pump pit)				22-Aug-17 A																									
_		Construct Bay 21 (base also of plant room)	21d			18-Sep-17 A																									
_		Construct Bay 22a (side waiis or plain room) Construct Bay 22b (base slab of subway)																													
						22-Sep-17 A																									
		Curing & strike formwork/falsework	14d			07-Oct-17 A	100%																								
		Construct staircase ST05 & Air Vent Wal & Slab	13d			30-Sep-17 A																									
		Construct Bay 23A (base slab for sump pit)	3d)d 22-Jul-17 A		100%																								
	C3840-STR-D1-210	Construct Bay 23B (remaining base slab for plant room)	6d	0)d 14-Aug-17 A	22-Aug-17 A	100%																								
	C3840-STR-D1-212	Construct Bay 24 (side walls of plant room up to L5)	10d			18-Sep-17 A																									
						18-Sep-17 A																									
	C3840-STR-D1-212	Construct Bay 24 (side walls of plant room up to L5)	10d	0	0d 04-Sep-17 A																										
	C3840-STR-D1-212 C3840-STR-D1-214	Construct Bay 24 (side walls of plant room up to L5) Construct Bay 25 (side walls of plant room & subway base slab)	10d 9d	0	0d 04-Sep-17 A	18-Sep-17 A	100%																								
	C3840-STR-D1-212 C3840-STR-D1-214 C3840-STR-D1-215	Construct Bay 24 (side walls of plant room up to L5) Construct Bay 25 (side walls of plant room & subway base slab) Curing & dismantle falsework for Bay 25	10d 9d 14d	0	0d 04-Sep-17 A 0d 19-Sep-17 A	18-Sep-17 A 07-Oct-17 A 10-Oct-17 A	100%																								
	C3840-STR-D1-212 C3840-STR-D1-214 C3840-STR-D1-215 C3840-STR-D1-216	Construct Bay 24 (side walls of plant room up to L5) Construct Bay 25 (side walls of plant room & subway base slab) Curing & dismantle falsework for Bay 25 Construct Bay 26 (side walls of subway up to escalator pit base slab)	10d 9d 14d 9d	0	0d 04-Sep-17 A 0d 19-Sep-17 A 0d 19-Sep-17 A	18-Sep-17 A 07-Oct-17 A 10-Oct-17 A 28-Oct-17 A	100% 100% 100%																								
	C3840-STR-D1-212 C3840-STR-D1-214 C3840-STR-D1-215 C3840-STR-D1-216 C3840-STR-D1-217	Construct Bay 24 (side walls of plant room up to L5) Construct Bay 25 (side walls of plant room & subway base slab) Curing & dismantle falsework for Bay 25 Construct Bay 26 (side walls of subway up to escalator pit base slab) Curing & dismantle falsework for Bay 26	10d 9d 14d 9d 14d 9d	0	d 04-Sep-17 A d 19-Sep-17 A d 19-Sep-17 A d 11-Oct-17 A d 05-Oct-17 A	18-Sep-17 A 07-Oct-17 A 10-Oct-17 A 28-Oct-17 A	100% 100% 100% 100%																								
	C3840-STR-D1-212 C3840-STR-D1-214 C3840-STR-D1-215 C3840-STR-D1-216 C3840-STR-D1-217 C3840-STR-D1-222	Construct Bay 24 (side walls of plant room up to L5) Construct Bay 25 (side walls of plant room & subway base slab) Curing & dismantle falsework for Bay 25 Construct Bay 26 (side walls of subway up to escalator pit base slab) Curing & dismantle falsework for Bay 26 Construct Bay 27 (side walls of subway and mid level slab @0.18mPD) Curitical Remaining Work Data Date	10d 9d 14d 9d 14d 9d	0 0 0 0 0	d 04-Sep-17 A d 19-Sep-17 A d 19-Sep-17 A d 11-Oct-17 A d 05-Oct-17 A	18-Sep-17 A 07-Oct-17 A 10-Oct-17 A 28-Oct-17 A	100% 100% 100% 100%		N	1ası	ter	Pro	ogra	mn	ne]	Rev	visio	D n	RM	(PR	RSA									01	Da

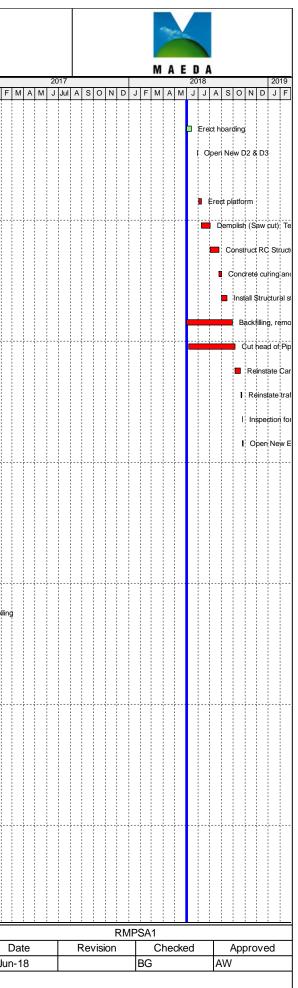




	Activity Name	Dur	Du		Finish	% Complete	Total Float	D N D	JF	MAN	2014 V J Jul	A S C	N D	JF	M		:015 Jul <i>A</i>	ASC	N D	J F M	I A M	2016 J Jul	A S	ONC	JFN
C3840-STR-D1-223	Curing & dismantle falsework for Bay 27	14d	0	d 17-Oct-17 A	31-Oct-17 A	100%																			
C3840-STR-D1-230	Construct Bay 28 (side walls of subway up to -2.0mPD)	8d	0	d 05-Oct-17 A	16-Oct-17 A	100%																			
C3840-STR-D1-240	Construct Bay 29 (subway side walls above -2.0mPD & mid level lab)	4d	0	d 09-Oct-17A	19-Oct-17 A	100%																			
C3840-STR-D1-242	Delivery & installation of Escalator	11d	0	d 01-Nov-17 A	13-Nov-17 A	100%																			
C3840-STR-D1-245	Curing & dismantle formwork for Bay 29	14d	0	d 20-Oct-17 A	31-Oct-17 A	100%																			+
C3840-STR-D1-255	Construct Bay 30 (top slab & north wall)	10d	0	d 14-Nov-17 A	24-Nov-17 A	100%																			
RC Structure at D2 Sid	e (Between Grids 3.3 and 4.5)	179d	0	d 25-May-17 A	30-Dec-17 A																				
C3840-STR-D2-100	Construct Bay 7 (concourse base slab & drainage)	6d	0	d 25-May-17 A	01-Jun-17 A	100%																			
C3840-STR-D2-110	Construct Bay 8a (ventilation duct base slab)	10d	0	d 02-Jun-17A	08-Jun-17 A	100%																			
	Construct Bay 8b (ventilation duct base slab)	10d		d 09-Jun-17A		100%							ļ												
	Construct Bay 9a (side wall (W19) of ventilation duct)	10d			27-Jun-17 A																				
C3840-STR-D2-120b	Construct Bay 9b (base slab & wall W6 of ventilation duct)	10d	0	d 28-Jun-17 A	05-Jul-17 A	100%																			
C3840-STR-D2-122	Curing and dismantle falsework for bay 9	14d	0	d 07-Jul-17 A	22-Jul-17 A	100%																			
C3840-STR-D2-125	Preparation works (construct end walls) for backfilling behid bay 8b	1d	0	d 27-Jun-17 A	17-Jul-17 A	100%																			
C3840-STR-D2-126	Backfilling behind bay 8b	11d	0	d 18-Jul-17 A	31-Jul-17 A	100%																			
C3840-STR-D2-130	Construct Bay 10 (mid level slab)	5d	0	d 01-Aug-17 A	05-Aug-17 A	100%																			
C3840-STR-D2-132	Curing and dismantle falsework for bay 10	16d	0	d 06-Aug-17 A	19-Aug-17 A	100%																			
C3840-STR-D2-140	Construct Bay 11 (side walls up to vent duct soffit)	20d	0	d 21-Aug-17 A	22-Sep-17 A	100%																			
C3840-STR-D2-142	Curing and dismantle falsework for bay 11	16d	0	d 23-Sep-17A	13-Oct-17A	100%																			
C3840-STR-D2-150	Construct Bay 12 (mid level top slab)	16d	0	d 25-Sep-17A	13-Oct-17 A	100%																			÷
C3840-STR-D2-152	Curing and dismantle falsework for bay 12	15d		d 14-Oct-17A		100%																			
C3840-STR-D2-160	-				29-Nov-17 A																				
	Backfilling works including modification of temporary traffic deck	23d																							
C3840-STR-D2-165	Construct Bay 35 (Entrance D2 & Vent Room); up to +4.3mPD	12d			24-Nov-17 A																				
C3840-STR-D2-170	Construct Bay 35 (Entrance D2 & Vent Room); above +4.3mPD	21d	0	d 25-Nov-17 A	19-Dec-17 A	100%																			
C3840-STR-D2-180	Concrete curing (concrete strength reaching 40mPa) and removal of falses	work/fwk 9d	0	d 20-Dec-17 A	30-Dec-17 A	100%																			
RC Structure at D2 Sid	e (Between Grids 4.5 and 5.9)	95d	0	d 25-Jul-17 A	31-Oct-17 A																				
C3840-STR-D2-200	Construct Bay 13 (subway base slab, by-pass corridor & drainage)	9d	0	d 25-Jul-17 A	28-Jul-17 A	100%																			
C3840-STR-D2-210	Construct Bay 14a (subway North wall)	14d	0	d 29-Jul-17 A	24-Aug-17 A	100%																			
C3840-STR-D2-211	Construct Bay 14b (subway South wall & 300mm wall)	14d	0	d 29-Jul-17 A	01-Sep-17 A	100%																			
C3840-STR-D2-212	Construct Bay 14c (subway top slab)	13d	0	d 02-Sep-17A	20-Sep-17 A	100%																			
C3840-STR-D2-213	Construct Staircase ST04	7d	0	d 11-Sep-17 A	22-Sep-17 A	100%																			
C3840-STR-D2-215	Curing and dismantle falsework for bay 14	17d	0	d 23-Sep-17A	14-Oct-17A	100%																			
C3840-STR-D2-220	Construct Bay 15 (top slab for by-pass corridor)	16d			13-Oct-17 A																				
C3840-STR-D2-222	Curing and dismantle falsework for bay 15	15d			31-Oct-17 A																				
000 1 0-01 N-D2-222					ST OUT A	100 //																			
Current Bar	Critical Remaining Work	Data Date: 01-Jur	า-18	3				N /	acto	r D-	0.0780	mm	De	viai	on	DN/	DD	G A 1						-	Da
Actual Work	♦ Milestone	Page 15 of 26						IVI	aste	ı rf	ogra		r ne	v 151	UII		L KY	JAI)1-Jun-
Remaining Wo	-l-	·																							



	XMTR											Co	ntra	ct C3	3840-	-13C										
								Т	sim	Sha	Tsเ	i Sta	tion	, Cai	rnarv	on R	oad	l Su	bwa	y						
	Activity Name	Dur	Rem S Dur		Finish	% Complete	Total Float	D N [) J F	MA)14 Jul A	S O	N D	JFN	I A M	2015 J Jul	A S	O N	D J	FM	1 A M	2016 // J Ju		3 0 N	I D
Open Cut Sequence 6		25d	25d (01-Jun-18	30-Jun-18		Od																			
C3840-D1-100	Erect hoarding	12d	12d (01-Jun-18	14-Jun-18	0%	12d																			
3840-D1-110	Open New D2 & D3	1d	1d 3	30-Jun-18	30-Jun-18	0%	0d																			
en Cut Sequence 7 (D1)	121d	121d (02-Jun-18	26-Oct-18		Od																			
C3840-D1-120	Erect platform	6d	6d (03-Jul-18	09-Jul-18	0%	0d																			
3840-D1-130	Demolish (Saw cut) Temporary Staircase	20d	20d 1	10-Jul-18	01-Aug-18	0%	0d																			+-
3840-D1-150	Construct RC Structure at D1 Entrance	20d	20d (02-Aug-18	24-Aug-18	0%	0d																			
8840-D1-160	Concrete curing and removal of falsework/fwk	6d	6d 2	25-Aug-18	31-Aug-18	0%	0d																			
3840-D1-170	Install Structural steel	12d	12d (01-Sep-18	14-Sep-18	0%	0d																			
3840-D1-190	Backfilling, removal of temporary decking & reinstate UUs	100d	100d (02-Jun-18	29-Sep-18	0%	0d																			
3840-D1-200	Cut head of Pipe Pile 2m	100d	100d (07-Jun-18	05-Oct-18	0%	0d																			-
3840-D1-210	Reinstate Carnarvon Road	12d	12d (06-Oct-18	20-Oct-18	0%	0d																			
3840-D1-220	Reinstate traffic sign and shop sign	3d	3d 2	22-Oct-18	24-Oct-18	0%	0d																			
3840-D1-225	Inspection for acceptance by relevant authorities	1d	1d 2	25-Oct-18	25-Oct-18	0%	0d																			
3840-D1-230	Open New Entrache D1	1d	1d 2	26-Oct-18	26-Oct-18	0%	0d																			
		814d			07-Aug-17 A		04									÷										-
cavation for Shaft an																										
Additional G.I. (ABH1)		203d			02-Jun-15 A																					
C3840-ABH1-10	Submission for BD consent	Od		26-Nov-14 A		100%								Sút		for BD o										
C3840-ABH1-20	Obtain consent from BD	65d	0d 2	27-Nov-14 A	31-Jan-15 A	100%									Obt	ain oonse	ent from	n BD								
C3840-ABH1-30	Site preparation, mobilization, set up and drilling hole for ABH1	6d	0d (02-Feb-15 A	06-Feb-15 A	100%										e prepara	11		1 1 1							
C3840-ABH1-40	Prepare & submit assessment report to for ABH1 to MTRC for submission to BD	9d	0d (07-Feb-15 A	17-Feb-15 A	100%									Pi	epare &	submit	assess	sment re	port to	for AB	H1 to I	MTRC I	or subn	nission tr	Ċ
C3840-ABH1-50	BD review assessment report for ABH1 & issue consent for horizontal piling	62d	0d 1	18-Feb-15 A	02-Jun-15 A	100%									-		BD re	eview a	ssessm	ənt rep	ort for	ABH1	& issue	consen	t for hor	ſ
Shaft Excavation, Tuni	nel Grouting and HPP Works	569d	0d 1	13-Oct-14 A	12-Sep-16 A																					
C3840-SH-100	Pump Test	13d	0d 1	13-Oct-14A	27-Oct-14 A	100%								Pump 1	Test											
C3840-SH-110	Expose utilities, excavatefrom +5.5 to +0.2mPD (496.8m3), install 1st waling and traffic dec	king 17d	0d 2	28-Oct-14 A	15-Nov-14 A	100%							•	Expo	ose utilitie	s, excav	atefrom	1 +5.5 t	o +0.2m	PD (49	96.8m3	8), insta	all 1st w	aling an	d traffic	: (
C3840-SH-120	Utilities protection and temporary diversion and install lagging wall	18d	0d 1	17-Nov-14 A	06-Dec-14 A	100%								🗖 Vt	ilities pro	tection a	nd temp	porary	diversiq	n and i	install la	agging	wall			• •
C3840-SH-130	Install steel plate lagging and 2nd layer waling & strut	13d	0d (08-Dec-14 A	27-Dec-14 A	100%									Install st	eel plate	lagging	anıd 2	nd layer	waling	stru	t				
C3840-SH-140	Forming platform for tunnel works	15d	0d 2	29-Dec-14 A	12-Jan-15 A	100%								-	Formi	ng platfoi	rm for tu	unnel v	works							
C3840-SH-150	Regrouting for curtain grouting & pumping test (re-test)	24d	0d 1	12-Jan-15 A	07-Feb-15A	100%									🗖 Re	grouting	for curte	ain gro	outing &	pumpir	ng test ((re-tes	t)			
C3840-SH-160	Mobilization & set up for tunnel grouting works (Simon & Son)	4d	0d 0	09-Feb-15A	12-Feb-15A	100%									I Mo	bilization	& set u	up for t	unnel gr	outing	works	(Simoi	n & Spn)		
C3840-SH-170	Trial grouting	7d	0d 1	13-Feb-15 A	24-Feb-15 A	100%									т	rial grou	ting									-
C3840-SH-180	Horizontal grouting for top section (44 nos. holes)	23d	0d 2	25-Feb-15 A	23-Mar-15 A	100%										Horizo		outina f	or top se	ection (44 nos	s holes	.)			
C3840-SH-190	Excavation of tunnel shaft from 0.2mPD to -0.5mPD (67m3)	2d			09-Mar-15 A	100%										Excavati								3)		
C3840-SH-200	Demobilize plants for tunnelling works	2d			25-Mar-15 A											l Demo										
03040-311-200		20	00 2	24-1Mai - 15 A	25-IVIAI - 15 A	100 %										Denio	ulize pie	anisio	luinei	ng woi	145					
 Current Bar 	Critical Remaining Work Data	a Date: 01-Jun	า-18					N	loct	om D	m 00	n o m	mo	Dov	icio	• D1	1DD	DC A	1							
Actual Work	♦ ♦ Milestone	Page 16 of 26		1				IV	iaste	er P	r02	ram	me	ĸev	isior	i KIV	ırK	SA								





	Activity Name	Orig Dur	Rem Dur	Start	Finish	% Complete	Total Float		,] =		201-				EMA		15 101 A S			M	2016			
C3840-SH-210	Excavate tunnel shaft from -0.5mPD to -1.7mPD (soil 79m3, rock 34m3)	26d		25-Mar-15 A	28-Apr-15 A	100%	(JF	MA	IVI J JI	A	5 U N	υJ				O N D shaft from						
C3840-SH-220	Install waling/strut/lagging	8d	0d	20-Apr-15 A	28-Apr-15 A	100%										Instal	waling/str	ut/lagging						
C3840-SH-230	Mobilize & set up tunnel plants/erect platform at -0.5mPD	3d	0d	29-Apr-15 A	02-May-15 A	100%										Mobil	ze & set u	p tunnel pla	ants/ere	ct platfo	rm at -0.5	mPD		
C3840-SH-240	Obtain consent from MTR/BD for test boring	28d	0d	24-Mar-15 A	02-May-15 A	100%										Obta	n consent	from MTR/	BD for t	est bori	ng			
C3840-SH-250	Test boring for horizontal pipe piling (HPP53 incl. BD inspection)	3d	0d	04-Mav-15 A	06-May-15 A	100%										Test	oorina for	horizontal p	oipe pilir	a (HPP	53 incl. BI) inspec	tion)	
C3840-SH-260	Install HPP16	7d		03-Jun-15 A		100%											nstall HPP			5				
C3840-SH-270	Extract misaligned HPP53	2d		11-Jun-15 A		100%												aligned HP						
C3840-SH-280	Make good extracted casing, reinstall HPP53 & check alignment	8d	0d	13-Jun-15 A	23-Jun-15 A	100%											Make go	d extracted	d casing	,reihsta	I HPP53 8	& check	alighme	nt
C3840-SH-290	Preparation work for drilling HPP54, drill HPP54 & drilling aborted due to problem detected with interlocking	6d	0d	24-Jun-15 A	30-Jun-15 A	100%											Prepara	ion work fo	or drilling) HPP54	I, drill HPF	P54 & dr	illing ab	orted du
C3840-SH-300	Demobilization HPP rig off site & remove platform at -0.5mPD	3d	0d	02-Jul-15 A	04-Jul-15 A	100%											Demobi	zation HPF	rig off	site & re	move pla	tform at	-0.5m P	D
C3840-SH-310	Mobilization for excavation plant & excavate tunnel shaft from -1.7mPD to -2.8mPD (113.1m3)	39d	0d	06-Jul-15 A	20-Aug-15 A	100%											M	bilization fo	or excav	ation pla	ant & exca	wate tun	inel sha	ft from -1
C3840-SH-320	Demobilzation of excavation plants and setting up for drilling platform	2d	0d	21-Aug-15 A	22-Aug-15 A	100%											l D	mobilzation	n of exc	avation	plants and	setting	up for d	trilling pla
C3840-SH-330	Mobilization for drilling rig & site set up	2d	0d	24-Aug-15 A	25-Aug-15 A	100%											IM	obilization f	ior drillir	g rig & s	site set up			
C3840-SH-340	Extraction of HPP16	1d	0d	26-Aug-15 A	26-Aug-15 A	100%											ΙE	tracction o	f HPP1	ò				
C3840-SH-350	Site preparation for drilling works	4d	0d	27-Aug-15 A	31-Aug-15 A	100%											1 5	ite prepara	ation for	drilling	vorks			
C3840-SH-360	Horizontal pipe piling; 3 nos. (HPP16 to HPP18)	7d	0d	31-Aug-15 A	08-Sep-15 A	100%												Horizontal (pipe pilir	ng; 3 na	s. (HPP16	to HPP	18)	
C3840-SH-370	Extraction of HPP53 & HPP54	2d	0d	09-Sep-15A	10-Sep-15 A	100%												Extraction of	of HPP	3 & HP	P54			
C3840-SH-380	Horizontal pipe piling; 4 nos. (HPP19, HPP53 to HPP55)	8d			19-Sep-15 A													Horizontal					53 th H	PD55)
C3840-SH-390	Demobilization for drilling rig & setting up for horizontal grouting	3d			23-Sep-15 A													Demobiliz						intal gro
C3840-SH-400	Drilling and horizontal grouting (19 nos.)	17d	0d	24-Sep-15 A	15-Oct-15 A	100%											1	Drilling	and ho	rizontal	grouting (19 nos.)		
C3840-SH-410	Demobilize grouting plants, remove rock fill, & mobilize & set up for rock excavation	17d	0d	16-Oct-15 A	23-Oct-15 A	100%												Demo	obilize gr	outing p	lants, ren	nove roc	k fill, &	nobilize
C3840-SH-420	Installation of waling L2A, installation of steel plate and prepartion works for removal of vertical pipe piles	8d	0d	24-Oct-15 A	28-Oct-15 A	100%												Instal	llation of	waling	L2A, insta	Illation of	t steel p	late and
C3840-SH-430	Removal of vertical pipe pile PP84 ~ PP89a (7 numbers) & grouting for the gaps	9d	0d	29-Oct-15 A	07-Nov-15 A	100%												Ren	noval of	vertical	pipe pile F	PP84 ~ F	P89a (7 numbe
C3840-SH-440	Removal of temporary platform	1d	0d	09-Nov-15 A	09-Nov-15 A	100%												l Ren	noval of	tempor	ary platfor	rm		
C3840-SH-450	Shaft excavation;-2.8mPD ~ -3.5mPD (65.6m ³)	31d	0d	24-Oct-15 A	28-Nov-15 A	100%												🗖 s	haft exc	avation	-2.8mPD	~ -3.5m	PD (65	6m³)
C3840-SH-460	Shaft excavation;-3.5mPD ~ -4.8mPD (122m ³)	46d	0d	30-Nov-15 A	25-Jan-16 A	100%													SI	aft exc	vation:-3.	5mPD ~	-4.8m	PD (122
C3840-SH-470	Installation of additional waling L3A	2d	0d	23-Jan-16 A	27-Jan-16 A	100%													In In	stallatio	n of additio	onal wali	ng L3A	
C3840-SH-490	Shaft excavation;-4.8mPD ~ -6.0mPD (115m ³)	36d	0d	18-Jul-16 A	11-Aug-16 A	100%																S ha	ft excav	vation;-4
C3840-SH-500	Reinstall drilling platform	2d	0d	28-Jan-16 A	28-Jan-16 A	100%													I R	einstall c	Irilling plat	form		
C3840-SH-510	Mobilization & setup for drilling rig	4d			02-Feb-16A	100%															on & setu		lina ria	
C3840-SH-520	Installation of HPP roof (31 nos.)	30d			22-Mar-16 A	100%															allation of			
C3840-SH-530	Modification of working platform for drilling rig	1d		23-Mar-16 A		100%															dification			
C3840-SH-540	Dismantling of waling L2B	1d	0d	29-Mar-16 A	30-Mar-16 A	100%														Di	smantling	of walin	g L2B	
C3840-SH-550	Installation of HPP wall (10 nos.)	10d	0d	30-Mar-16 A	18-Apr-16 A	100%															Installatio	n of HPF	^{>} wall (0 nos.)
Current Bar	Critical Remaining Work Data Date	: 01-Ju	in-18					1 1																
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		Activity Name	Orig Dur	Rem Dur	Start	Finish	% Complete	Total Float	N D	JF	M		2014 J Jul	AS	0 N	D J	FM	A M	201: J J		S O	NC)]	FM	AN	201 NJ		S O	ND	D J F	= M
C3	840-SH-560	Modification of drilling platform	2d	0d	19-Apr-16 A	21-Apr-16 A	100%																						g platfo		1
C3	840-SH-570	Installation of HPP wall (3 numbers)	8d	0d	18-Apr-16 A	25-Apr-16 A	100%																			Installa	ition of	HPP w	iall (3 r	number	s)
C3	840-SH-572	Drilling for HPP64 & HPP25, cease drilling due to obstruction & extract HPP64	8d	0d	26-Apr-16 A	04-May-16 A	100%																			Drillin	g for H	PP64 8	& HPP2	25, cea	se
C3	840-SH-620	Demobilize HPP rig, dismantle drilling platform, mobilization & setup for Horizontal Grouting	works 2d	0d	05-May-16 A	16-May-16 A	100%																			Dem	nobilize	HPP ri	ig, disn	mantle c	lliħk
C3	840-SH-630	Drilling for horizontal grout hoels (13 nos.)	5d	0d	16-May-16 A	26-May-16 A	100%																			Dri	lling for	horizo	ontal gr	rout hoe	əls
C3	840-SH-632	Grouting for horizontal grout holes (13 nos.)	4d	0d	25-May-16 A	14-Jul-16 A	100%																			-	Gro	uting fo	or horiz	izontal g	ırp
C3	840-SH-640	Modification of drilling rig for HPP works & mobilization and set up HPP works	1d	0d	27-May-16 A	30-May-16 A	100%																			I Mo	odificati	on of d	Jrilling r	riġ for H	IPI
C3	840-SH-642	Extract HPP25	2d	0d	30-May-16 A	31-May-16 A	100%																			I Ex	tract H	PP25			
C3	840-SH-644	Drilling for HPP wall (5 nos.) including extraction of casing for HPP64	5d	0d	01-Jun-16 A	10-Jun-16 A	100%)rilling f	or HPF	P wall ((5 nos.)	ih
C3	840-SH-646	Demolize drilling rig	3d	0d	13-Jun-16 A	13-Jun-16 A	100%																			10	Demoliz	e drillin	ng rig		
C3	840-SH-648	Modification of waling L3 & L3A/setting up drilling rig platform/mobilize & set up drilling rig	2d	0d	14-Jun-16 A	16-Jun-16 A	100%																			1	Modific	ation o	f waling	g L3 & I	
	840-SH-650	Drilling for HPP wall (8 nos.)	23d		17-Jun-16 A		100%																							wall (8 n	
	840-SH-660					16-Jul-16 A	100%																								
		Demobilize drilling rig/Dismantle drilling platform	2d		15-Jul-16 A																									ıg rig/Di	
C3	840-SH-665	Removal of vertical pipe piles PP89b	2d	0d	12-Aug-16 A	13-Aug-16 A	100%																				1	₹emov	al of ve	ertical p	ipe
C3	840-SH-668	Assembly of drilling platform for HPP rig	2d	0d	12-Aug-16 A	13-Aug-16 A	100%																				1	۱ssemt	əly of d	drilling p	lạt
С3	840-SH-670	Drilling and horizontal grouting (13 nos.)	18d	0d	13-Aug-16 A	24-Aug-16 A	100%																					Drilling	g and h	horizon	a
СЗ	840-SH-680	Modification of drilling rig	2d	0d	24-Aug-16 A	25-Aug-16 A	100%																				1	Modifi	ication	of drillir	١ġ
C3	840-SH-690	Drilling for HPP wall (8 nos.)	8d	0d	25-Aug-16 A	10-Sep-16 A	100%																					Drill	ing for	HPP w	al
23	840-SH-740	Modification of drilling rig	2d	0d	10-Sep-16 A	12-Sep-16 A	100%																					I Mod	dificatic	on of dr	ilļir
e-fa	brication and Del	ivery of Remaining Interlocking HPP Casing	87d	0d	07-Sep-15 A	12-Jan-16 A																									
C3	840-CF-100	Fabrication for remaining casing (Roof); 1st batch	20d	0d	07-Sep-15 A	30-Sep-15 A	100%														– 1	abrica	ition f	or rem	aining	casing	(Roof); 1st b	atch		
C3	840-CF-102	Delivery of casing (Roof); 1st batch	7d	0d	02-Oct-15 A	15-Oct-15 A	100%															Delive	ery of	casing	(Roof	f); 1st l	batch				
C3	840-CF-104	Fabrication for remaining casing (Roof); 2nd batch	20d	0d	05-Oct-15 A	31-Oct-15 A	100%				+											Fab	oricati	on for	emain	ning ca	sing (R	.oof); 2	2nd bat	tch	
C3	840-CF-106	Delivery of casing (roof); 2nd batch	7d	0d	02-Nov-15 A	09-Nov-15 A	100%															🛾 De	elivery	ofcas	ng (ro	oof); 2	nd bat	h			
C3	840-CF-108	Fabrication for remaining casing; 3rd batch	20d	0d	21-Nov-15 A	17-Dec-15 A	100%																l Fat	oricatio	n for re	emain	ing cas	ing; 3r	d batch	'n	
C3	840-CF-110	Delivery of casing (Wall); 3rd batch	7d	0d	18-Dec-15 A	24-Dec-15 A	100%															1	De	elivery	of casir	ng (W	all); 3rc	l batch	1		
C3	840-CF-112	Fabrication for remaining casing (wall); 4th batch	12d	0d	18-Dec-15 A	02-Jan-16 A	100%															1	E F	abrica	on for	r rema	ining c	asing (1	wall); 4	4th batc	:h
C3	840-CF-114	Delivery of casing (Wall); 4th batch	7d	0d	04-Jan-16 A	12-Jan-16 A	100%																-	Deliver	y of ca	asing (\	Wall); 4	4th bate	.ch		
) S	ubmissions Prior	to Tunnel Excavation	403d	0d	23-Nov-15 A	20-Jan-17 A																									
C3	840-BD-100	Submit piling record for phase 1 HPP			02-Jul-16 A		100%																				Sub	mit pilir	na recc	ord for (ρh
	840-BD-102	Submit grouting record for pahse 1 grouting work	5d			28-Nov-15 A	100%																Subm	it grou	ing re				outing v		
	840-BD-106	BA8 for phase 1 tunnel excavation	28d			27-Sep-16 A	100%																							phase	19
	840-BD-108	BA10 for pahse 1 tunnel excavation	7d		19-Sep-16 A	27-Sep-16 A	100%																							or pahse	
C3	840-BD-109	Obtain consent from BD for commencing phase 1 tunnel excavation	Od	0d		28-Sep-16 A	100%																					• 0	btain c	consent	fr
С	urrent Bar		Date: 01-Jun	-18					7			<u> </u>				_ •		D ²		D									_		
	ctual Work		age 18 of 26						M	ast	er l	ro	gra	mm	e K	evi	sion	Kľ	viP.	KS	AI								C	01-Ju	Da In-
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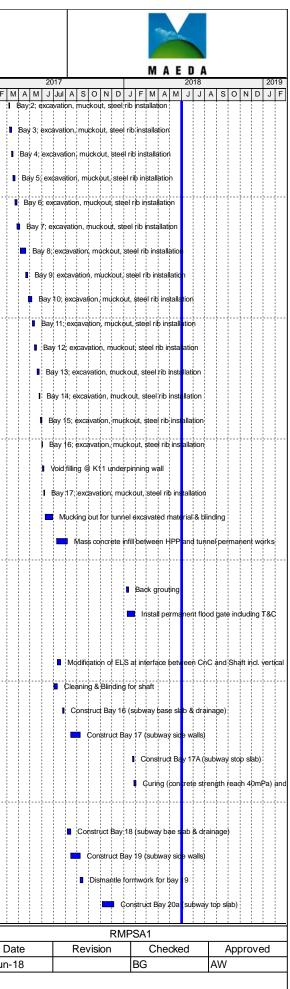
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	Activity Name	Orig Rem Start Dur Dur	Finish		Total ⁼ loat O N D	2014 2015 2016 2017 2018 2 D J F M A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J J A S O N D J 2 <
C3840-BD-110	Submit piling record for panse 2 HPP	3d 0d 30-Nov-1	6 A 30-Nov-16 A	100%		Submit piling record for pathse 2 HPP
C3840-BD-112	Submit grouting record for pahse 2 grouting work	5d 0d 30-Nov-1	6 A 30-Nov-16 A	100%		Submit grouting;record;for pahse 2 grouting work
C3840-BD-114	BA14 for HPP works	1d 0d 15-Nov-1	6A 15-Nov-16A	100%		I BA14 for HPP works
C3840-BD-118	BA10 for pahse 2 tunnel excavation	7d 0d 20-Jan-1	7 A 20-Jan-17 A	100%		I BA(10 for pahse 2) tunnel(exclavation
Stage 1, Tunnel Exc	cavation	205d 0d 11-Jun-10	6 A 28-Feb-17 A			
C3840-SE-640	Additional grouting for Probe Hole	3d 0d 11-Jun-10	6 A 11-Jun-16 A	100%		I Additional grouting for Probe/Hole
C3840-SE-650	Horizontal Probe Hole for Water Inflow Determination	1d 0d 11-Jun-10				I Horizontal Probe Hole;for Water Inflow Determination
C3840-SE-651	Demobilize HPP plants, remove HPP spoils	1d 0d 14-Sep-1				■ De/mobilizé HPP plants, remove: HPP spoils
C3840-SE-652	Install working platform for tunnel excavation at -2.15mPD & additional poratal frame	4d 0d 20-Sep-1	6 A 28-Sep-16 A	100%		∎ Install working platførm∛for tun≜el excavation åt -2.15mPD & ad¢litional poråtal ≹rame
C3840-SE-660	Removal of vertical pipe pile PP84 - PP89a (7 nos.)	9d 0d 29-Sep-1	6 A 05-Oct-16 A	100%		🛢 Removal of vertical pipe pile PP84 - PP89a (? nos.)
C3840-TE1-100	Bay 1; excavation, muckout, steel rib installation	9d 0d 29-Sep-1	6 A 15-Oct-16 A	100%		Bay 1; excevation; muckqut, steel riti; installation
C3840-TE1-102	Bay 2; excavation, muckout, steel rib installation	4d 0d 17-Oct-1	6 A 22-Oct-16 A	100%		∎ Bay 2; exclavation, muckbut, steel rib installation
C3840-TE1-104	Bay 3; excavation, muckout, steel rib installation	4d 0d 24-Oct-1	6 A 28-Oct-16 A	100%		II: Bay 3; exclavation, muckout, stéel rib installation
C3840-TE1-106	Bay 4; excavation, muckout, steel rib installation	5d 0d 29-Oct-1	6 A 04-Nov-16 A	100%		I Bay 4; e∤cavatión, muckout, steel rib installation
C3840-TE1-108	Bay 5; excavation, muckout, steel rib installation	5d 0d 05-Nov-1	6 A 09-Nov-16 A	100%	_	I Bay;5; excevation, muckout, stee∤ rib installation
C3840-TE1-110	Bay 6; excavation, muckout, steel rib installation	5d 0d 10-Nov-1	6A 14-Nov-16A	100%		I Bay 6; excavation; muckqut, steel rib installation;
C3840-TE1-112	Bay 7; excavation, muckout, steel rib installation		6A 18-Nov-16A			Bay 7; excavation, múckout, steel rib installation
C3840-TE1-114	Bay 8; excavation, muckout, steel rib installation	6d 0d 19-Nov-1	6 A 24-Nov-16 A	100%		Bay 8; excavation, muckout; stelel rib installation
C3840-TE1-116	Bay 9; excavation, muckout, steel rib installation	6d 0d 25-Nov-1	6 A 30-Nov-16 A	100%		Bay 9: excavatión, muckout, steel rib installatión
C3840-TE1-118	Bay 10; excavation, muckout, steel rib installation	6d 0d 01-Dec-1	6 A 08-Dec-16 A	100%		Bay 10; excavation, muckout, steel rib installation
C3840-TE1-120	Bay 11; excavation, muckout, steel rib installation	6d 0d 09-Dec-1	6A 13-Dec-16A	100%		Bay 11; excavation, muckput, steel rib installation
C3840-TE1-122	Bay 12; excavation, muckout, steel rib installation	6d 0d 12-Dec-1	6A 17-Dec-16A	100%		∎ Bay 12; excavation, muckout, stéel rib installation
C3840-TE1-124	Bay 13; excavation, muckout, steel rib installation	6d 0d 19-Dec-1	6A 23-Dec-16A	100%		I. Bajv 13; ekcavatión, muckout, steel his installation
C3840-TE1-126	Bay 14; excavation, muckout, steel rib installation	6d 0d 24-Dec-1	6 A 30-Dec-16 A	100%		📕 Bậy 14; ệxcậvation, /muệkoụt, şteef rib installation;
C3840-TE1-128	Bay 15; excavation, muckout, steel rib installation	4d 0d 31-Dec-1	6A 05-Jan-17A	100%		■ Bay/15; excavaţion, muckout, steel rib installation
C3840-TE1-130	Bay 16; excavation, muckout, steel rib installation	4d 0d 05-Jan-1	7 A 09-Jan-17 A	100%		■ Bay 16; excavațion, muckout, steel no installation
	-					
C3840-TE1-132	-	4d 0d 09-Jan-1				Bay 17; excavátion, muckout; stelel rib installation
C3840-TE1-133	Removal of unforeseen concrete pile	1d 0d 04-Jan-1	7 A 12-Jan-17 A	100%		Removal of unforeiseein concrete; pile
C3840-TE1-134	Remove excavated material & working platform	10d 0d 09-Jan-1	7 A 28-Feb-17 A	100%		Remove excavated materia) & working platform
C3840-TE1-136	Mass concrete infill in between steel ribs (roof) & back grouting	10d 0d 13-Jan-1	7A 15-Feb-17A	100%		Mass concrete infil in between steel ribs (roof) & back grouting
Stage 2, Tunnel Exc	cavation	245d 0d 13-Sep-1	6 A 07-Aug-17 A			
C3840-SE-800	Probe hole for phase 2, tunnel excavation	1d 0d 13-Sep-1	6A 13-Sep-16A	100%		I Probe hole for phase 2, tunriel excavation
C3840-SE-802	Removal of vertical pipe piles PP84 ~PP89a (7 nos.)	5d 0d 24-Feb-1	7 A 27-Feb-17 A	100%		I Removal of vertical pipe piles PP84PP89a (7 nos.)
C3840-TE2-100	Bay 1; excavation, muckout, steel rib installation	5d 0d 28-Feb-1	7A 07-Mar-17A	100%		Bay 1; excavatión, muckout, steel rib installation
Current Bar	Critical Remaining Work	a Date: 01-Jun-18				RMPSA1
Actual Work		Page 19 of 26			N	Master Programme Revision RMPRSA1 Date Revision Checked Approve
Remaining V		Page 19 of 26				01-Jun-18 BG AW

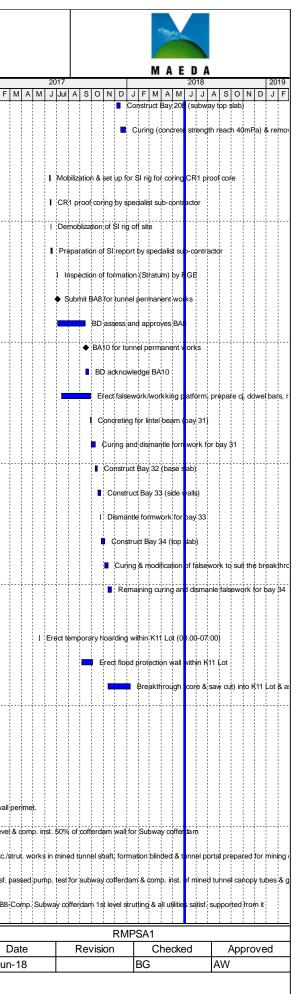


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y ID		Activity Name		Orig Dur	Rem Dur	Start	Finish	% Complete	Total Float	O N D) J F	F M A	A M	2014 J Jul 1	AS	O N	D J	FM	AN	201 1 J J	5 Jul A	S O	N D	JFI	MA	20 M J	16 Jul A	s o	N D	JF	Ŧ
	C3840-TE2-110	Bay 2; excavation, muckout, steel rib installation		5d	0d	06-Mar-17 A	09-Mar-17 A	100%																							Ī
	C3840-TE2-120	Bay 3; excavation, muckout, steel rib installation		6d	0d	09-Mar-17 A	13-Mar-17 A	100%																							•
	C3840-TE2-130	Bay 4; excavation, muckout, steel rib installation		6d	0d	13-Mar-17 A	17-Mar-17 A	100%																							1
	C3840-TE2-140	Bay 5; excavation, muckout, steel rib installation		6d	0d	17-Mar-17 A	22-Mar-17 A	100%																							
	C3840-TE2-150	Bay 6; excavation, muckout, steel rib installation		6d	0d	23-Mar-17 A	28-Mar-17 A	100%																							
	C3840-TE2-160	Bay 7; excavation, muckout, steel rib installation		6d	0d	28-Mar-17 A	03-Apr-17 A	100%																							
	C3840-TE2-170	Bay 8; excavation, muckout, steel rib installation		5d	0d	05-Apr-17 A	19-Apr-17 A	100%																							
	C3840-TE2-180	Bay 9; excavation, muckout, steel rib installation		5d	0d	20-Apr-17 A	25-Apr-17 A	100%																							
	C3840-TE2-190	Bay 10; excavation, muckout, steel rib installation		6d	0d	26-Apr-17 A	06-May-17 A	100%																							
	C3840-TE2-200	Bay 11; excavation, muckout, steel rib installation		6d	0d	08-May-17 A	12-May-17 A	100%																							
	C3840-TE2-210	Bay 12; excavation, muckout, steel rib installation		6d	0d	13-May-17 A	18-May-17 A	100%																							
	C3840-TE2-220	Bay 13; excavation, muckout, steel rib installation		6d	0d	I 19-May-17 A	24-May-17 A	100%																							
-	C3840-TE2-230	Bay 14; excavation, muckout, steel rib installation		6d	0d	25-May-17 A	27-May-17 A	100%																							
	C3840-TE2-240	Bay 15; excavation, muckout, steel rib installation		6d	0d	29-May-17 A	31-May-17 A	100%																							
	C3840-TE2-250	Bay 16; excavation, muckout, steel rib installation		2d	0d	01-Jun-17 A	02-Jun-17 A	100%																							
	C3840-TE2-251	Void filling @ K11 underpinning wall		1d	0d	02-Jun-17 A	05-Jun-17 A	100%																							
	C3840-TE2-252	Bay 17; excavation, muckout, steel rib installation		6d	0d	06-Jun-17 A	08-Jun-17 A	100%																							
	C3840-TE2-254	Mucking out for tunnel excavated material & blinding		4d	0d	09-Jun-17 A	28-Jun-17 A	100%																							
	C3840-TE2-256	Mass concrete infill between HPP and tunnel permanent works		15d	0d	I 10-Jul-17 A	07-Aug-17 A	100%																							
Tu	nnel RC Works includi	ing Breakthrough to K11 Diaphragm Wall		224d	Od	17-May-17 A	01-Feb-18A																								
	C3840-TU-260	Back grouting		6d	0d	08-Jan-18 A	13-Jan-18 A	100%																							
	C3840-TU-262	Install permanent flood gate including T&C		6d	0d	I 11-Jan-18 A	29-Jan-18 A	100%																							
	RC Works Between Grid	ds 5.9 and 6.2		185d	0d	03-Jul-17 A	01-Feb-18 A																								
Г	C3840-TU-165	Modification of ELS at interface between CnC and Shaft incl. vertical blin	nding at shaft	11d	0d	12-Jul-17 A	19-Jul-17 A	100%																							
	C3840-TU-170	Cleaning & Blinding for shaft		2d	0d	03-Jul-17 A	11-Jul-17 A	100%																							
	C3840-TU-180	Construct Bay 16 (subway base slab & drainage)		9d	0d	25-Jul-17 A	28-Jul-17 A	100%																							
	C3840-TU-185	Construct Bay 17 (subway side walls)		21d	0d	I 16-Aug-17 A	08-Sep-17 A	100%																							
_	C3840-TU-248	Construct Bay 17A (subway stop slab)		6d	0d	24-Jan-18 A	27-Jan-18 A	100%																							
	C3840-TU-250	Curing (concrete strength reach 40mPa) and remove falsework for bay	17A	5d	0d	28-Jan-18 A	01-Feb-18 A	100%																							
	RC Works Between Grid	ds 6.2 and 8.5		125d	0d	07-Aug-17 A	28-Dec-17 A																								
Г	C3840-TU-282	Construct Bay 18 (subway bae slab & drainage)		9d	0d	07-Aug-17 A	15-Aug-17 A	100%																							
	C3840-TU-284	Construct Bay 19 (subway side walls)		15d	0d	I 16-Aug-17 A	08-Sep-17 A	100%																							
	C3840-TU-285	Dismantle formwork for bay 19		3d	0d	09-Sep-17 A	16-Sep-17 A	100%																							
	C3840-TU-286	Construct Bay 20a (subway top slab)		26d	0d	06-Nov-17 A	05-Dec-17 A	100%																							
_	Current Bar	Critical Remaining Work	Data Date: 01	I-Jur	า-18						<u>; ;</u>		<u> </u>	<u> </u>	<u> </u>			<u>; </u>	<u>i </u>	<u> </u>	<u> </u>			<u> </u>				<u> </u>		<u> </u>	<u> </u>
		 Milestone 								\mathbf{M}	last	tor I	Pro	orai	nm	e R	evi	sion	n RI	мр	RS	A1									Da
	Actual Work		Page 20 d	of 26						141	Lusi		10	51 ai		•	• • -													1-Jur	





	Activity Name		Orig Dur	Dur		Finish	% Complete	Total Float	O N D	JF	M	2 \ M J	Jul A	s o	N D	JF	MA	20 M J	015 Jul	A S	O N	D J	FM	AM	2016 J Jul	ASO	NDJF
C3840-TU-28	7 Construct Bay 20b (subway top slab)		9d	0d	d 06-Dec-17 A	15-Dec-17 A	100%																				
C3840-TU-28	8 Curing (concrete strength reach 40mPa) & remove falsework for bay	20	9d	0d	16-Dec-17 A	28-Dec-17 A	100%																				
RC Works Betw	een Grids 8.5 and 9 (BD Full Approval Zone)		133d	0d	d 14-Jun-17 A	21-Nov-17 A																					
C3840-TU-29	0 Mobilization & set up for SI rig for coring CR1 proof core		2d	0d	d 14-Jun-17 A	14-Jun-17 A	100%																				
C3840-TU-29	2 CR1 proof coring by specialist sub-contractor		4d	0d	d 15-Jun-17 A	16-Jun-17 A	100%																				
C3840-TU-29	4 Demoblization of SI rig off site		1d	0d	d 17-Jun-17 A	17-Jun-17 A	100%				++-									+							
C3840-TU-29	6 Preparation of SI report by specialist sub-contractor		6d	0d	d 17-Jun-17 A	19-Jun-17 A	100%																				
C3840-TU-29	8 Inspection of formation (Stratum) by RGE		1d	0d	d 04-Jul-17 A	04-Jul-17 A	100%																				
C3840-TU-30	0 Submit BA8 for tunnel permanent works		0d	0d	ł	04-Jul-17 A	100%																				
C3840-TU-30	2 BD assess and approves BA8		28d	0d	d 05-Jul-17 A	14-Sep-17 A	100%																				
C3840-TU-30	4 BA10 for tunnel permanent works		0d	0d	Ŀ	15-Sep-17 A	100%				+																
C3840-TU-30	6 BD acknowledge BA10		7d	0d	d 16-Sep-17A	23-Sep-17 A	100%																				
C3840-TU-30	8 Erect falsework/workking platform, prepare cj, dowel bars, rebar fixin	g and fwk for lintel beam	11d	0d	d 15-Jul-17 A	28-Sep-17 A	100%																				
C3840-TU-31	0 Concreting for lintel beam (bay 31)		1d	0d	d 29-Sep-17A	29-Sep-17 A	100%																				
C3840-TU-31	2 Curing and dismantle formwork for bay 31		11d	0d	d 30-Sep-17 A	10-Oct-17 A	100%																				
C3840-TU-31	6 Construct Bay 32 (base slab)		4d	0d	d 11-Oct-17 A	16-Oct-17 A	100%																				
C3840-TU-31	8 Construct Bay 33 (side walls)		8d	0d	d 17-Oct-17 A	24-Oct-17 A	100%																				
C3840-TU-31	9 Dismantle formwork for bay 33		1d	0d	d 25-Oct-17 A	25-Oct-17 A	100%																				
C3840-TU-32	0 Construct Bay 34 (top slab)		8d	0d	d 26-Oct-17 A	04-Nov-17 A	100%																				
C3840-TU-33	0 Curing & modification of falsework to suit the breakthrough work		5d	0d	d 05-Nov-17 A	12-Nov-17 A	100%																				
C3840-TU-34	0 Remaining curing and dismanle falsework for bay 34		8d	0d	d 13-Nov-17 A	21-Nov-17 A	100%				÷																
K11 Breakthrou	9		203d	0d	d 17-May-17 A	09-Jan-18 A																					
C3840-TU-19	0 Erect temporary hoarding within K11 Lot (00.00-07:00)		1d	0d	d 17-May-17 A	17-May-17 A	100%																				
C3840-TU-20	0 Erect flood protection wall within K11 Lot		6d	0d	d 06-Sep-17A	04-Oct-17 A	100%																				
C3840-TU-21	0 Breakthrough (core & saw cut) into K11 Lot & associated works		40d	0d	d 13-Nov-17A	09-Jan-18 A	100%																				
Milestones for C	ost Centre B - Carnarvon Road Subway and Entrances		1668d	133d	d 30-Apr-14 A	24-Oct-18		67d																			
C3840-MS-B01	B1-Complete all U/G UU identif. & cables in north & south foot paths i	n Carn. Rd. exposed	0d	0d	Ł	30-Apr-14 A	100%					♦ B1-0	omplete :	all U/G	UU ide	entif. &	cables	in nortl	h & so	outh fo	ot path	s in Ca	rn. Rd. (exposed	4		
C3840-MS-B02	B2-Close CR, hoarding erected, all pipes & UU diverted and all O/H s	igns removed	0d	0d	Ł	01-Jun-14 A	100%					•	2-Close	CR, hb	arding	erected	l, all pip	bes&l	JU div	rented	and all	O/H si	ons rem	oved			
C3840-MS-B03	B3-All underground utilities affecting the Works satisfactorily removed	or protected	0d	0d	Ł	31-Aug-14 A	100%						•	B3-Al	underg	round	utilities	affecti	ng the	Worl	s satis	fa ctor ily	remove	ed or pr	otected		
C3840-MS-B04	B4-Comp. inst. of 75% of cofferdam wall for mined tunnel shaft installe perimet.	ed, measure as a % of wall	0d	0d	t	30-Nov-14 A	100%								♦ В4	-Com	o. inst. c	of 75%	of col	fferda	n wall	for min	ed tynne	el shaft	installed	measure	as a % of wall p
C3840-MS-B05	B5-Exc. of mined tunnel shaft reached -3.0mPD level & comp. inst. 50 Subway cofferdam	% of cofferdam wall for	0d	0d	t t	28-Nov-15 A	100%														•	● B5-E	xc. of m	ined tur	nnel sha	t reached	d -3.0mPD level 8
C3840-MS-B06	B6-Comp. exc./strut. works in mined tunnel shaft, formation blinded & mining exc.	tunnel portal prepared for	0d	0d	ł	30-Sep-16 A	100%																			♦ E	36-Comp. exc./sti
C3840-MS-B07	B7-Satisf. passed pump. test for subway cofferdam & comp. inst. of m grouted	nined tunnel canopy tubes &	0d	0d	ł	14-Nov-16 A	100%																				♦ B7-Satisf. þá
C3840-MS-B08	B8-Comp. Subway cofferdam 1st level strutting & all utilities satisf. sup	pported from it	0d	0d	ł	16-Jan-17 A	100%																				♦ B8-C
Current E	Bar Critical Remaining Work	Data Date: 0)1-Ju	n-18						<u> </u>	<u>; ;</u>								<u> </u>			<u> </u>					
Actual W		Page 21	of 26	3					Μ	ast	er I	Prog	ram	me	Rev	visio	on R	RM]	PR	SA	1						D
	g Work	Page 21	01 20	J																							01-Jun-

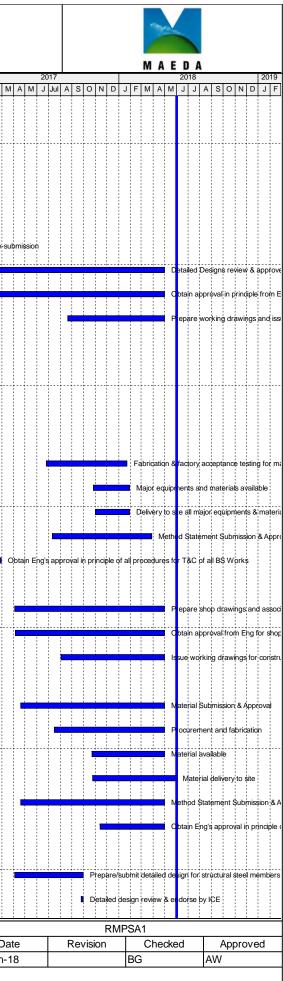


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tivity ID		Activity Name	Orig Dur	Re	em Start ur	Finish	% Complete	Total Float	0 N	D J	FM		2014	AS	οΝ		FМ		2015 J Jul		0 N	DJ	FM	1 A N	2016 MJJJu		SON	DJ	F
	C3840-MS-B09	B9-Exc. of Subway reached -5.5mPD, grids 4-5 blinded, comp. exc, for tunnel & 50% removal of K11 D. wall	0d	1 (0d	30-Nov-17 A	100%																					_	
	C3840-MS-B10	B10-Comp. all Subway RC structures fr. grids 1 to 4+3m,	0d	1 (0d	28-Dec-17 A	100%																						
	C3840-MS-B11	B11-Comp. all RC structures betn TST Stn wall & grid 4+3m & mined tunnel	0d	1 (0d	29-Jan-18 A	100%																						
	C3840-MS-B12	B12-Comp. all ABWF works to Deg. 1 except for works assoc. with new entrance D1	0d	(0d	26-Feb-18 A	100%																						
	C3840-MS-B13	B13-Comp. all ABWF works to Deg. 3 except for works assoc. with new entrance D1	0d	1 (0d	13-Jun-18	0%	200d																					
	C3840-MS-B14	B14-Complete all works in this Cost Centre	0d	1 (0d	24-Oct-18	0%	67d																					
Bı	ilding Services & A	ABWF Works	1445d	12 [.]	1d 01-Feb-14	A 25-Oct-18		54d																					
	Site Validation		228d	(0d 01-Feb-14/	A 31-Dec-14 A																							
	C3840-SV-100	Carry out detailed site survey	6d	1 (0d 01-Feb-14	A 28-Feb-14A	100%					arry o	ut detaile	d site si	rvey														
	C3840-SV-110	Prepare Implementation Programme/Method Statement with detailed Phasing/Sequence	90d	1 0	0d 01-Aug-14	A 29-Sep-14A	100%								Prepar	e Imple	menta	tion Pro	ogramr	ne/Met	nod Sta	atement	with d	etailed	Phasing	a/Sequr	ence		
_	C3840-SV-120	Obtain Eng's approval for Implementation Programme/Method Statement for modification & diversion	60d			A 31-Dec-14 A													-								t for modi	ification	8.0
		works	646d			15-Dec-15 A																							
		Works at Temporary Staircase											_																
	C3840-TSD-100	Prepare and submit detailed designs for BS works	49d			11-Aug-14 A								Prep															
	C3840-TSD-110	Obtain approval detailed designs for BS works from Eng	50d		0d 12-Aug-14	A 05-Sep-14 A	100%							• 0	otain ap	proval	detaile	d desigr	ns for E	3S worl	cs from	Eng							
	C3840-TSD-120	Issue working drawings of BS works for construction	60d	1 (0d 06-Sep-14	A 05-Nov-14 A	100%							-	🗖 ls:	ue wor	king di	rawings	of BS	works	for con	structior	n						
	C3840-TSD-160	Prepare and submit detailed designs for ABWF works	6d	(0d 17-Nov-15	A 24-Nov-15 A	100%															Prepa	are and	l submi	t detaile	d desig	gns for AB	3WF wo	rks
	C3840-TSD-170	Obtain approval detailed designs for ABWF works from Eng	30d		0d 25-Nov-15	A 14-Dec-15 A	100%															Db	tain ap	proval	detailed	design	ns for ABV	NF wor	ks f
	C3840-TSD-180	Issue working drawings of ABWF works for construction	0d	1 (0d	15-Dec-15 A	100%															 Issu 	ue worl	King dr	awings [,]	of ABW	/F works	for con	stru
	Material Submission & M	Material Procurement/Delivery for Temporary Staircase	535d		0d 09-Apr-14 A	05-Mar-16 A																							
	C3840-TSD-130	Material submission	21d	1 (0d 09-Apr-14 A	A 05-Feb-16 A	100%					-			-	-							Mat	terial su	ubmissio	'n			
	C3840-TSD-140	Obtain approval of material submission from MTR	56d	(0d 22-May-14	A 22-Feb-16A	100%								+ +								_ 0)btain a	approval	l of mat	terial subr	mission	fror
	C3840-TSD-150	Procurement & delivery of materials	10d	1 (0d 12-Jan-16 A	A 05-Mar-16 A	100%																	Procur	ement δ	\$ delive	ery of mat	terials	
	3S & ABWF Works at Te	mporary Staircase	200d		0d 20-Nov-15/	A 06-Jul-16 A																							
	C3840-TSBA-100	Complete RC works for grid 2-4	0d	1 (0d	20-Nov-15 A	100%														•	Comp	lete RC	C work	s for grid	d 2-4			
	C3840-TSBA-105	Complete RC works for grid 1-2	0d	1 (0d	20-Feb-16 A	100%																♦ C	omplet	e RO w	orksfo	or grid 1-2	2	
	C3840-TSBA-110	Installation of BS and ABWF works for grid 2-4	59d	1 (0d 12-Jan-16 A	A 23-Mar-16 A	100%																	Insta	allation c	of BS ar	nd ABWF	works	for
	C3840-TSBA-115	Installation of BS and ABWF work for grid 1-2	33d	(0d 15-Feb-16	A 23-Mar-16 A	100%																	l Insta	allation c	of BS ar	nd ABWF	work f	or g
	C3840-TSBA-117	CN&SE Works by others	2d	1 (0d 14-Mar-16	A 15-Mar-16 A	100%																I	CN&S	SE Work	ks by of	thers		
	C3840-TSBA-130	T&C	4d	(0d 14-Mar-16	A 17-Mar-16A	100%																1	T&C					
	C3840-TSBA-140	Inspection prior to open for public use	83d		0d 22-Mar-167	A 22-Jun-16A	100%																			nspectic	on prior to	open	ior r
	C3840-TSBA-150	Open for public use	0d		0d	06-Jul-16 A	100%																				for public		
			85d			05-Nov-14 A	10070																						
	Scheme Designs for BS						1000/						_																
	C3840-SD-100	Prepare a scheme designs	60d			15-Aug-14 A								Prec															
	C3840-SD-120	Scheme design review & comment by Eng/MTRC & FSD	28d		0d 16-Aug-14	A 15-Sep-14A	100%								Scheme	design	review	& com	ment b	by Eng/l	MTRC	& F\$D							
	 Current Bar 	Critical Remaining Work Data Date: 0)1-Ju	ın-1	8							_			-			_											_
	Actual Work	Milestone Page 22	of 20	6						Ma	ster	Pro	ogra	mm	e Ro	evisi	ion	κN	1PF	KSA	1							01-J	D Jun
	Remaining Wor	rk																										<u> </u>	

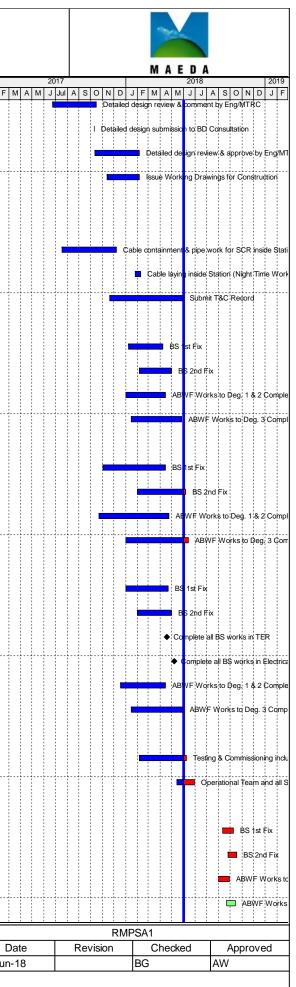
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	17 Jul A S		JFM	A M J J	2019 A S O N D J F							
		◆ B	9-Exc. pf S	ubway reached	-5;5mPD, grids 4-5 blinc							
		•	B10-Com	p. all Subway F	C structures fr. grids 1 to							
			♦ B11-0	omp. all RC str	ructures betn TST Stn w							
					WF works to Deg. 1 exc							
			▼ D									
				♦ B13-	Comp. all ABWF works I							
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2	Activity Name		Orig Dur	Rem Start Dur	Finish	% Complete	Total		Sha Ts	2014				2015	5		-			2016		_
C3840-SD-130	Scheme designs re-submission		24d		06-Oct-14 A			I D J F	MAM	J Jul A	S 0 N	D J F eme; desig	M A	M J Ju mission	I A S	ON	DJ	FN	<u>1 A N</u>	1 J Jul	AS	5
C3840-SD-140	Scheme design review & approve by Eng/MTRC & FSD		28d	0d 07-Oct-14 A	05-Nov-14 A	100%						Scheme de	esign revi	ew:& app	prove by	Eng/M	TRC &	FSD				
C3840-SD-150	Obtain approval of scheme design		0d	0d	05-Nov-14 A	100%						Obtain app	oroval of	scheme d	lesian							
						10070						o o com a cop			looigi							
etailed Designs for B	dis Works	12	273d	0d 03-Oct-14A	30-Apr-18 A																	
C3840-DD-100	Prepare a detailed designs		40d	0d 03-Oct-14 A	04-Dec-14 A	100%						Prepar	e a detail	ed desigr	าร							
C3840-DD-120	Detailed Designs review & comment by MTRC		28d	0d 05-Dec-14A	07-Jan-15 A	100%						💻 De	tailed De	signs revi	iew & co	omment	by MTI	RC				
C3840-DD-130	Detailed designs re-submission		7d	0d 26-Aug-16 A	03-Sep-16 A	100%															•	0
C3840-DD-140	Detailed Designs review & approve by MTRC	4	464d	0d 26-Oct-16 A	30-Apr-18 A	100%																-
C3840-DD-150	Obtain approval in principle from Eng for All Detailed Designs	4	142d	0d 27-Sep-16A	30-Apr-18 A	100%																
C3840-DD-160	Prepare working drawings and issue for construction	1	114d	0d 21-Aug-17 A	30-Apr-18 A	100%																
aterial Submission/P	Procurement/Delivery & Method Statement Submission for BS Wo	rks 10)51d	0d 08-Jul-14 A	29-Mar-18 A																	
														-								
C3840-BSP-100	Submit proposal on supplier & model types of all major BS equip. & mater	rials	60d	0d 08-Jul-14 A	07-Oct-14 A	100%						mit propos										
C3840-BSP-110	Approval of proposal on supplier & model types of all major BS equip. & n	materials	48d	0d 08-Oct-14 A	05-Nov-14 A	100%						Approval o	f proposa	al on sup	plier & r	nodel ty	pes of a	all majo	or BS eo	ip. & n پاپاد	laterial	k
C3840-BSP-130	Material Submission & Approval		90d	0d 11-Aug-14 A	28-Feb-15 A	100%				-			Mater	ial Submi	ission &	Approva	ai					
C3840-BSP-140	Placing order for major equipments and materials		36d	0d 02-Mar-15 A	16-Mar-15 A	100%							Place	cing order	r for ma	jor equi	pments	and m	naterials			
C3840-BSP-150	Fabrication & factory acceptance testing for major equipments and mater	ials 1	178d	0d 26-Jun-17 A	22-Jan-18 A	100%																
C3840-BSP-160	Major equipments and materials available		65d	0d 27-Oct-17 A	29-Jan-18 A	100%																
C3840-BSP-170	Delivery to site all major equipments & materials		59d	0d 01-Nov-17 A	29-Jan-18 A	100%											+					-
C3840-BSP-190	Method Statement Submission & Approval	1	176d	0d 12-Jul-17 A	29-Mar-18 A	100%																
C3840-BSP-200	Obtain Eng's approval in principle of all procedures for T&C of all BS Wor	rks	32d	0d 28-Dec-16 A	28-Feb-17A	100%																
esign for ABWF Work	ks	3	302d	0d 04-Apr-17 A	30-Apr-18 A																	
C3840-DABWF-100	Prepare shop drawings and associated temporary works design submiss	ion 2	207d	0d 04-Apr-17 A	30-Apr-18 A	100%																
C3840-DABWF-110	Obtain approval from Eng for shop drawings & associated temp. works d	esigns 2	212d	0d 05-Apr-17 A	30-Apr-18 A	100%																-
C3840-DABWF-120	Issue working drawings for construction	1	117d	0d 03-Aug-17 A	30-Apr-18 A	100%																
aterial Submission/N	Aterial Procurement/Delivery & Method Statement Submission for	or ABWF Works 3	345d	0d 19-Apr-17 A	31-May-18 A																	
C3840-ABWP-100	Material Submission & Approval	2	243d	0d 20-Apr-17 A	30-Apr-18 A	100%																
C3840-ABWP-110	Procurement and fabrication	1	157d	0d 17-Jul-17 A	30-Apr-18 A	100%																
C3840-ABWP-120	Material available		65d	0d 23-Oct-17 A		100%			+													-
C3840-ABWP-130	Material delivery to site		51d	0d 25-Oct-17 A																		
C3840-ABWP-140	Method Statement Submission & Approval	2	250d	0d 19-Apr-17 A	30-Apr-18 A	100%																
C3840-BSP-180	Obtain Eng's approval in principle of all acceptance procedures for ABWF	Works	44d	0d 13-Nov-17 A	30-Apr-18 A	100%																
etailed Design for Ca	anopies on Above Ground Structures (PS CI. P43.3)	2	212d	0d 04-Apr-17 A	05-Feb-18 A																	
C3840-PWDC-210	Prepare/submit detailed design for structural steel members & connection	n details & Glazing	24d	0d 04-Apr-17 A	30-Sep-17 A	100%															<u> </u>	-
C3840-PWDC-220	Detailed design review & endorse by ICE		7d	0d 25-Sep-17A	30-Sep-17 A	100%																
- 0		Data Date: 01	-Jun	-18											<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	=
Current BarActual Work	Critical Remaining Work Milestone							Mast	er Pro	gram	me R	Revisi	on R	MP	RSA	1						
	ork	Page 23 o	f 26						-	5	_			_								

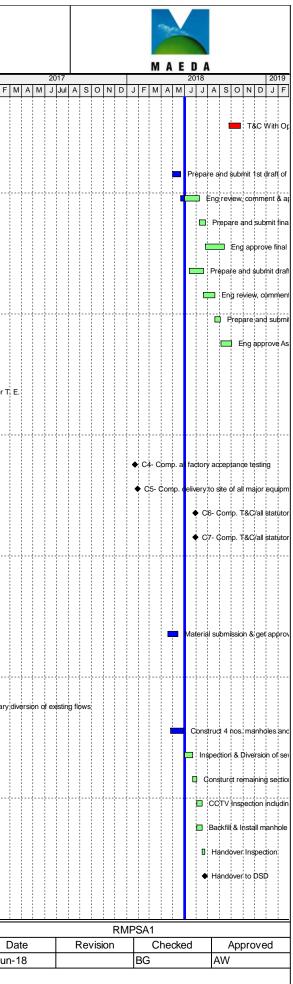




	Activity Name		Drig	Rem	Start	Finish	%	Total					2014						2015						2016	;			
C3840-PWDC-230	Detailed design review & comment by Eng/MTRC		Dur 28d	Dur 0d	23-Jun-17 A	16-Oct-17 A	Complete 100%	Float	O N	DJ	FΜ	A M	J Jul /	ASC	NC	DJ	FM	I A M	J Ju	I A S	s o	ND.	FM	AN	I J Ju	I A S	SON	1 D J	FN
C3840-PWDC-240	Detailed design submission to BD Consultation		6d	D0	11-Oct-17 A	11-Oct-17 A	100%																						
C3840-PWDC-250	Detailed design review & approve by Eng/MTRC/BD		44d		12-Oct-17 A		100%																						
																													ļ
C3840-PWDC-270	Issue Working Drawings for Construction		6d		13-Nov-17 A		100%																						
BS Works at TST Statio			34d			31-May-18 A																							
C3840-BST-140	Cable containment work for Substation #4 inside TST Station (Night Time)	Work)	7d	0d	19-Dec-14 A	30-Dec-14 A	100%									C	Cable α	ontainme	ent wo	rk for S	Substa	ation #4 ir	side TS	† Statin	on (Nig	htTime	Work)		
C3840-BST-150	Cable containment & pipe work for SCR inside Station (Night Time Work)	1	14d	0d	18-Jul-17 A	08-Dec-17 A	100%																						
C3840-BST-180	Cable laying inside Station (Night Time Work)		24d	0d	26-Jan-18 A	09-Feb-18 A	100%																						
C3840-BST200	Submit T&C Record		2d	0d	20-Nov-17 A	31-May-18 A	100%																						
BS & ABWF Works at D	2 Entrance including at By Pass Corridor		47d	0d	02-Jan-18 A	26-May-18 A																							
C3840-BSD2-110	BS 1st Fix		24d	0d	08-Jan-18 A	07-Apr-18 A	100%																						
C3840-BSD2-120	BS 2nd Fix		24d	0d	05-Feb-18 A	30-Apr-18 A	100%																						
C3840-BSD2-130	ABWF Works to Deg. 1 & 2 Completion including installation for SS steelw	ork	24d	0d	02-Jan-18 A	14-Apr-18 A	100%																						
C3840-BSD2-135	ABWF Works to Deg. 3 Completion		24d	0d	15-Jan-18 A	26-May-18 A	100%																						
BS & ABWF Works at S	ubway Conc. Level, including at Plant Room & D3	1	80d	11d	23-Oct-17 A	13-Jun-18		2d																					
C3840-BSS-100	BS 1st Fix		90d	0d	02-Nov-17 A	14-Apr-18 A	100%																						
C3840-BSS-110	BS 2nd Fix		40d	5d	01-Feb-18 A	06-Jun-18	99%	5d																					
C3840-BSS-120	ABWF Works to Deg. 1 & 2 Completion		80d	0d	23-Oct-17 A	24-Apr-18 A	100%																						
C3840-BSS-125	ABWF Works to Deg. 3 Completion		40d	11d	02-Jan-18 A	13-Jun-18	98%	2d																					ļ
BS & ABWE Works at M	id Landing Level including TER Rooms	1	20d			31-May-18 A																							
C3840-BSM-100	BS 1st Fix		56d		02-Jan-18 A		100%																						
C3840-BSM-110	BS 2nd Fix		40d		01-Feb-18A		100%																						
C3840-BSM-120	Complete all BS works in TER		0d	0d		18-Apr-18 A	100%																						ļ
C3840-BSM-130	Complete all BS works in Electrical Room & Power On for New MCB Board			0d		08-May-18 A																							
C3840-BSM-140	ABWF Works to Deg. 1 & 2 Completion		40d		18-Dec-17 A		100%																						
C3840-BSM-150	ABWF Works to Deg. 3 Completion		40d	0d	15-Jan-18 A	31-May-18 A	100%																						
T&C and Statutory Insp	ections Prior to Open Entrances D2/D3 for Public Use		25d	24d	05-Feb-18 A	29-Jun-18		Od																					
C3840-BSM-160	Testing & Commissioning including issuance of FSD Form 501 for completi	on of FSD works	24d	8d	05-Feb-18 A	09-Jun-18	50%	4d																					
C3840-BSM-170	Operational Team and all Statutory inspections / obtain compliance certifica	ites	24d	24d	15-May-18 A	29-Jun-18	20%	0d																					
BS & ABWF Works at D	1 Entrance		38d	38d	01-Sep-18	18-Oct-18		60d																					
C3840-BSD1-130	BS 1st Fix		24d	24d	11-Sep-18	10-Oct-18	0%	0d																					
C3840-BSD1-140	BS 2nd Fix		18d	18d	26-Sep-18	18-Oct-18	0%	0d																					
C3840-BSD1-150	ABWF Works to Deg. 1 & 2 Completion including installation of SS steelwo	rk	24d	24d	01-Sep-18	29-Sep-18	0%	0d																					
C3840-BSD1-155	ABWF Works to Deg. 3 Completion		18d	18d	22-Sep-18	15-Oct-18	0%	62d																					
Current Der		Data Date: 01-	Jun	-18														<u> </u>						<u> </u>					<u> </u>
Current Bar Actual Work	Critical Remaining Work Milestone								N	Aas	ster	Pro	grai	nm	e R	evis	sior	ı RN	ЛРI	RSA	41								Da
		Page 24 of	26		1																							01	Jun-



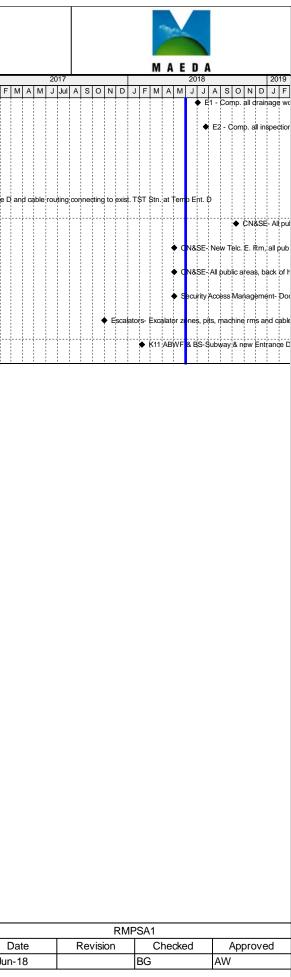
	MTR						т	sim	Sha		Cont Stati					nad	Sub	way						
	Activity Name	Orig	Rem Start Dur	Finish	% Complete	Total Float				201	1					2015		-		-1.41.4)16		
T&C and Statutory	Inspection Prior to Open Entrance D1 for Public Use		24d 26-Sep-18	25-Oct-18		0d) J F	MA	MJJ			DJ		<u> </u>	J Jul 1	ASC		JF	MA	MJ	JULA	50	1
C3840-BSD1-170	T&C With Operation Inspection	24d	24d 26-Sep-18	25-Oct-18	0%	0d																		
Operational & Main	tenance Manuals, As-built Drawings, Design Data	114d	103d 02-May-18	A 03-Oct-18		19d																		
C3840-OD-1000	Prepare and submit 1st draft of O&M Manuals as per PS 18	30d	0d 02-May-18	A 22-May-18 A	100%																			
C3840-OD-1010	Eng review, comment & approve draft O&M Manuals as per PS 18	56d	40d 23-May-18	Δ 10- Jul-18	20%	43d																		
C3840-OD-1020	Prepare and submit final version of O&M Manuals as per PS 18	15d		25-Jul-18	0%	43d																		
C3840-OD-1030	Eng approve final version of O&M Manuals as per PS 18	50d	50d 26-Jul-18	13-Sep-18	0%	43d																		
C3840-OD-1040	Prepare and submit draft as-built Drawings as per PS 18	30d	30d 14-Jun-18	20-Jul-18	0%	19d																		
C3840-OD-1050	Eng review, comment & approve draft as-built Drawings as per PS 18	30d	30d 21-Jul-18	19-Aug-18	0%	23d																		
C3840-OD-1060	Prepare and submit final as-built Drawings as per PS 18	15d	15d 20-Aug-18	03-Sep-18	0%	23d																	[÷
C3840-OD-1070	Eng approve As-built Drawings as per PS 18	30d	30d 04-Sep-18	03-Oct-18	0%	23d																		
Milestones for Cos	t Centre C - Building Services	1304d	0d 10-Nov-147	A 29-Jun-18		184d																		
C3840-MS-C01	C1- Approval of detailed designs for BS works, suppliers/models/types of BS equip./mat. & SD fo	or T. Od	Od	10-Nov-14 A	100%							♦ C	1- Appr	oval of c	detailer	d design:	is for B	S works,	, supplie	ers/model	s/types	of BS e	aquiþ./r	/m
C3840-MS-C02	E. C2- Approval in principe of all BS Shop Drwgs	0d	Od	10-Nov-14 A	100%							•	2- Appr	ovalin p	orincipe	e of all B	S Shor	Drwgs						
C3840-MS-C03	C3- Comp. placing all orders for all major BS equipment & materials	0d		16-Mar-15 A	100%															jor BS eq		at 8 mot	loriale.	-
														• 0	3-001	np: piaci	ing an o	Tuersion	ali maj	U DO EU	upmen	it or man	enais	
C3840-MS-C04	C4- Comp. all factory acceptance testing	0d	Od	22-Jan-18 A	100%																			
C3840-MS-C05	C5- Comp. delivery to site of all major equipment for the basement E&M plant room	0d	0d	29-Jan-18 A	100%																			
C3840-MS-C06	C6- Comp. T&C/all statutory & operational team inspections for New Entrance D2	0d	0d	29-Jun-18	0%	184d																		
C3840-MS-C07	C7- Comp. T&C/all statutory & operanal team inspection for new Entrance D3 and Subway	0d	0d	29-Jun-18	0%	184d																		
DSD Entrusted D	rainage Works - Option	1119d	44d 20-Dec-13	A 24-Jul-18		131d																		
Submissions		1368d	0d 20-Dec-13/	A 14-May-18 A																				
C3840-ENT-010	Engineer Exercise Option 1 (Assume 1 year after Contract Commence)	0d	Od	08-Oct-14 A	100%							🔶 Engir	neer Exe	ercise (O	ption 1	(Assum	ne 1 ye:	ar after C	Contrac	t Comme	ence)			
C3840-ENT-020	Material submission & get approval from MTRC	60d	0d 18-Apr-18 A	A 14-May-18 A	100%																			
C3840-ENT-030	Proposed procedures for diversion agreed during meeting held on 20 Dec 13	0d	Od	20-Dec-13 A	100%			Propo	sed pro	cedures	or diversi	on agre	ed durin	a meetir	ina hek	1 on 20 I	Dec 13							
		604d			10070	704			, ocu pro					9									ļ	
DSD Entrusted Sev						78d																		
C3840-ENT-070	Temporary diversion of existing flows	18d	0d 26-Jul-16 A	09-Nov-16 A	100%																			-
C3840-ENT-080	Construct 4 nos. manholes and pipe laying in between 4 nos. manholes (85%)	13d	0d 26-Apr-18 A	A 31-May-18 A	100%																			
C3840-ENT-082	Inspection & Diversion of sewer flow from temporary sewer pipeline to newly constructed sewer pipeline	18d	18d 01-Jun-18 A	A 22-Jun-18	0%	78d																		
C3840-ENT-090	Consturct remaining section of entrusted sewage works (15%)	8d	8d 23-Jun-18	03-Jul-18	0%	78d																		
C3840-ENT-160	CCTV Inspection including report	12d	12d 04-Jul-18	17-Jul-18	0%	78d																	[+
C3840-ENT-170	Backfill & Install manhole cover	12d	12d 04-Jul-18	17-Jul-18	0%	78d																		
C3840-ENT-180	Handover Inspection	6d	6d 18-Jul-18	24-Jul-18	0%	78d																		
C3840-ENT-190	Handover to DSD	0d	Od	24-Jul-18	0%	78d																		
			21d 03-Jul-18	24-Jul-18		159d																		
MILESCORES TOF COS	t Centre E - DSD Entrusted Drainage Works - Option			24-00-10		1390																		
Current Ba	r Critical Remaining Work Data Da	ate: 01-Ju	in-18	_	_		ĸ	T = =+	n			n	•		D N-	IPR	G A 1	•	_	_	_	_	_	-
	k 🔶 Milestone																							





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Activity ID		Activity Name	Dur	Rem Start Dur	Finish	% Complete	Total Float		<u> </u>		20	014			4		 	015						201	10			+
			Dui	Dui		Complete	Float	ON	DJF	MA	MJ	Jul A	SO	NC) l	FM	MJ	Jul	A S	ON	DJ	FM		И J.	Jul A	S O	ND	JF
	C3840-MS-E01	E1 - Comp. all drainage works incl. pipes, manholes, bedding and etc.	0d	0d	03-Jul-18	0%	180d																					
	C3840-MS-E02	E2 - Comp. all inspection works and handed over to DSD	0d	0d	24-Jul-18	0%	159d																					
	nterface Requirem	ents Associated with Designated Contracts	893d	0d 14-Mar-16 A	11-Oct-18		81d																					
	Access Dates for Des	signated Contractors As PS Appendix B	893d	0d 14-Mar-16 A	11-Oct-18		81d																					
	C3840-DC-10	CN&SE- Temp. stairs, temp. Entrance D and cable routing connecting to exist. TST Stn. at Temp Ent. D	0d	0d 14-Mar-16A		100%																•	CN&	SE- Te	mp. st	tairs, te	mp. En	trance D
	C3840-DC-20	CN&SE- All public areas, back of house areas and cable routings at New Entrance D1	0d	0d 11-Oct-18		0%	81d										 											
	C3840-DC-30	CN&SE- New Telc. E. Rm, all pub. areas, back of house areas and cab. rout. at B. P. Rm, m.l., Subw& N.E. D2	0d	0d 02-May-18 A		100%																						
	C3840-DC-40	CN&SE- All public areas, back of house areas & cable routings at Subway & new Ent. D3	0d	0d 02-May-18 A		100%																						
	C3840-DC-50	Security Access Management- Doors requiring security protection or door contacts at Basement P. Rm.	0d	0d 02-May-18 A		100%																						
	C3840-DC-60	Escalators- Excalator zones, pits, machine rms and cable routes at Subway IvI to mid-landing	0d	0d 01-Nov-17 A		100%																						
	C3840-DC-70	K11 ABWF & BS-Subway & new Entrance D3 within K11 Lot Boundary at Subway within K11 Lot B.	0d	0d 08-Feb-18 A		100%											 	++		++								********

Current Bar Actual Work Remaining Work	Data Date: 01-Jun-18 Page 26 of 26	Master Programme Revision RMPRSA1	Date 01-Jun-18
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APPENDIX D IMPLEMENTATION SCHEDULE

Project Profile	Recommended Mitigation Measures	Objectives of the	Implementation	Location	When to	Relevant
Ret.		Recommended Measures & Main Concerns to address	Partles	of the measure	Implement the measure	requirements or standards for the measure to achieve
	Noise Impact	autress		C. 2010		BUILDAR
S.3.1	Use of quieter plant	To minimise construction noise emissions	Contractor	Work site	Construction Stage	ProPECC PN2/93 and Noise Control Ordinance
S.3.1	 Use of noise enclosure and movable barrier movable barrier can achieve a 5 dB(A) reduction for movable PME and 10 dB(A) reduction for stationary PME; noise enclosure can achieve 15dB(A) reduction for PME; A typical design barrier with a steel frame of vertical / cantilever type would be adopted and located close to the noise generating part of PME; Barrier material of surface mass in excess of 7kg/m² shall be required to achieve the maximum screening effect (and minimum 10kg/m² for noise enclosure); The length of barrier should generally be at least five times greater than its height and the minimum height of a barrier should be such that no part of the noise source will be visible from the noise sensitive receiver being protected. 	To minimize construction noise emissions	Contractor	Work site	Construction Stage	ProPECC PN2/93, Noise Control Ordinance and EIAO Guidance Note NO. 9/2010
S.3.1	General Construction Noise Control Measures The Code of Practice on Good Management Practice	To minimize construction noise	Contractor	Work site	Construction Stage	ProPECC PN2/93 and Noise Control
	 to Prevent Violation of the Noise Control Ordinance (Chapter 400) (for Construction Industry) published by EPD shall be adopted; The statutory and non-statutory requirements and guidelines shall be complied with; Approval for the method of working, equipment and noise mitigation measures intended to be used at the site shall be granted from the Project Engineer before commencing any work; Working methods to minimize the noise impact on the surrounding NSRs shall be formulated and executed, and the implementation of these methods shall be monitored by experienced personnel with suitable training; Noisy equipment and noisy activities shall be located as far away from the NSRs as is practical; Unused equipment shall be turned off; PME should be kept to a minimum and the parallel use of noisy equipment / machinery should be avoided; All plant and equipment shall be maintained regularly; and Material stockpiles and other structures shall be effectively utilized as noise barriers, whenever practicable. 					Ordinance
	Air Quality Impact			-		
S.3.2	Construction Dust Control Measures • Decking will be provided subsequent to the completion of surface excavation works. The duration		Contractor	Work site	Construction Stage	Air Pollution Control (Construction
	of decking is around 13 months after surface excavation works; Regular watering to reduce dust emissions from all exposed site surface, particularly during dry weather; Frequent watering for particularly dusty construction areas and areas close to air sensitive receivers; Cover all excavated or stockpile of dusty material by impervious sheeting or spraying with water to maintain the entire surface wet; Provision of vehicle washing facilities at the exit points of the site; and Provision of tarpaulin covering of any dusty materials on a vehicle leaving the site.	construction works				Dust) Regulation

APPENDIX D IMPLEMENTATION SCHEDULE

Project Profile Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Parties	Location of the measure	When to implement the measure	Relevant requirements or standards for the measure to achieve
S.3.3	 Water Quality Impact Construction Water Quality Impact Measures The Contractor should design and implement all the mitigation measures and practices specified in the ProPECC PN 1/94 "Construction Site Drainage" and "Recommended Pollution Control Clauses for Construction Contracts" issued by EPD. All runoffs arising from the construction site should be properly collected and treated to ensure the discharge standards as stipulated in WPCO are met. Silt trap and oil interceptor should be provided to remove the oil, lubricants, grease, silt, grit and debris from the wastewater before being pumped to the public stormwater drainage system. The silt traps and oil interceptor should be cleaned and maintained regularly. 	To reduce water quality impact induced by the construction work	Contractor	Work Site	Construction Stage	ProPECC PN1/94; Water Pollution Control Ordinance
	 Any foul effluent should not be discharged into any public sewer and stormwater drain, unless an effluent discharge permit is obtained under the WPCQ by the Contractor. Site toilet facilities, if needed, should be chemical toilets or should have the foul water effluent directed to a foul sewer. 					
S.3.4	 Waste Management Construction Waste Management Measures Excavated material should be reused on site as far as possible to minimise off-site disposal. Scrap metals or abandoned equipment should be recycled if possible. Waste arising should be kept to a minimum and be handled, transported and disposed of in a suitable manner. The Contractor should adopt a trip ticket system for the disposal of C&D materials to any designated public filling facility and/or landfill. Independent audits of the Contractor and resident site staff will be undertaken to ensure that the correct procedures are being followed. Chemical waste shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes. All general refuse should be segregated and stored in enclosed bins or compaction units and waste separation facilities for paper, aluminium cans, plastic bottles etc. should be provided to facilitate reuse or 	To adopt waste management measures in the way of avoiding, minimising, reusing and recycling so as to reduce waste generation	Contractor	Work Site	Construction Stage	Waste Disposal Ordinance (Cap. 54); Waste Disposal (Chemical Waste (General) Regulation; ETWB TCW No. 31/2004; ETWB TCW No. 19/2005.
	recycling of materials and their proper disposal. Landscape and Visual Impact			(1		
S.3.5	 Landscape and Visual Impact Landscape and Visual Measures Screening of construction works by hoardings/noise barriers around works area with visually unobtrusive colours 	To reduce visual impact by construction works.	Contractor	Temporary Storage Area at Salisbury Road	Construction Stage	EIAO
S.3.5	 Reinstating the affected amenity planting area at Salisbury Road after the completion of works 	To prevent loss of planter after construction	Contractor	Temporary Storage Area at Salisbury Road	Operation Stage	ETWB TCW No. 2/2004



Maeda Corporation

Contract No. C3840-13C Tsim Sha Tsui Station Carnarvon Road Subway

Last Update: 07-May-2018

Licence Summary

		1			1	1		1	
Remarks		Change of anticipated date of completion is notified	Change of anticipated date of completion is notified	Change of anticipated date of completion is notified	Change of anticipated date of completion is notified	Application No. WFG12765			Working Area includes the underground area
Description	Baseline, Air & Noise Impact Monitoring	Demolition of a Building	Work carried out in any part of a Change of anticipated tunnel that is within 100m of date of completion is any exit to the open air notified	Construction of the Superstructure of a Building	Road Construction Work	Disposal of C&D Waste	Quarterly Report FlowRate 25m3/d, pH 6-9, SS 30mg/L, COD 80mg/L	Surplus paint, spent lubrucating oil, spent battery	4nos Submersible Water pump (Electric) or 1 drill for 24-hr; 4 drill & 4 grinder for 07:00-23:00
Date of Expiry Date of Expiry (DD-MM-YYYY) GORMA-YYYY) Green = expire extr mty; Description Yellow = expire this wf; Red = Expired	N/A	30 - 09 - 2018	31 - 08 - 2018	31 - 12 - 2018	28 - 02 - 2019	N/A	31 - 03 - 2019	N/A	30 - 09 - 2018
Date of Activation (DD-MM-YYY)	18 - 07 - 2012	01 - 02 - 2014	01 - 08 - 2014	01 - 01 - 2016	01 - 11 - 2016	25 - 10 - 2013	01 - 09 - 2014	04 - 03 - 2014	01 - 04 - 2018
Date of Approval / Receipt (from EPD) (DD-MM-YYYY)	∀/N	07 - 05 - 2018	02 - 06 - 2016	07 - 05 - 2018	02 - 06 - 2016	25 - 10 - 2013	01 - 09 - 2014	04 - 03 - 2014	12 - 03 - 2018
Date of Submission (to EPD) (DD-MM-YYY)	N/A	04 - 05 - 2018	27 - 05 - 2016	04 - 05 - 2018	27 - 05 - 2016	18 - 10 - 2013	24 - 07 - 2014	15 - 01 - 2014	26 - 02 - 2018
Ref. No	AEP-440/2012	433242	of 403252	433242	403252	7018523	WT00019722-2014	5213-2214-M2446-16	on OSS Ref: 002069312 nit Permit: GW-RE0158-18
Submission	N/A	Form NB – Notification S3(3) of APCO (Construction Dust)	Form NB – Notification S3(3) of APCO (Construction Dust)	Form NB – Notification S3(3) of APCO (Construction Dust)	Form NB – Notification S3(3) of APCO (Construction Dust)	EPD-211 (Form 1) Application for a Billing Account for Disposal of Construction Waste	EPD-117 (Form A) Application for a Licence of Water Discharge	EPD-129 Application for Registration as a Chemical Waste Producer	EPD74A(s) Form 1 - Application OSS Ref: 002069312 for a Construction Noise Permit Permit: GW-RE0158.
Description	Environmental Permit N/A	Construction Dust Notification	Construction Dust Notification	Construction Dust Notification	Construction Dust Notification	Construction Waste Billing Account	Water Discharge Licence	Chemical Waste Producer	Construction Noise Permit
Type? (License / Permit / Account / Notification / Registration & etc.)	Permit	Notification	Notification	Notification	Notification	Account	Licence	Registration	Permit
Govt. Ord.	EIAO	APCO	APCO	APCO	APCO	MDO	WPCO	MDO	NCO
Our Ref.	000	APCO #004	APCO #002	APCO #004	APCO #002	APCO #002	WPCO #002	CWP #001	CNP#010
ltem No.	000	001	001	001	001	002	003	004	005

APPENDIX F EVENT AND ACTION PLAN

vent and	d Action Plan for Const	ruction Noise		
Event_	ET	IEC	ER	Action Contractor
Action	 Notify IEC and Contractor. Carry out investigation. Report the results of investigation to the IEC and Contractor. Discuss with the Contractor and formulate remedial measures Increase monitoring frequency to check mitigation 	 Review the analyzed result submitted by ET. Review the proposed remedial measures by the Contractor and advise the ER accordingly. Supervise the implementation of remedial measures. 	 Confirm receipt of notification of exceedance Notify Contractor Require Contractor to propose remedial measures for the analysed noise problem Ensure remedial measures are properly implemented. 	 Submit noise mitigation proposals to IEC Implement noise mitigation proposals
Limit Level	effectiveness. 1. Notify IEC, ER, EPD and Contractor, and follow other actions 2. Identify source 3. Repeat measurement to confirm findings 4. Increase monitoring frequency 5. Check Contractor's working procedures to determine possible mitigation to be implemented 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD,	 Discuss amongst ER, ET and Contractor on the potential remedial actions Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ET accordingly Supervise the implementation of remedial measures 	 Confirm receipt of notification of exceedances Notify Contractor Require Contractor to propose remedial measures Ensure remedial measures are properly implemented If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is 	 Take immediate action to avoid further exceedance Submit proposals for remedial actions to IEC within 3 working days of notifications Implement the agreed proposals Revise and resubmit proposals if problem still not under control Stop the relevant portion of works as determined by the ER until the exceedance is abated
	ER informed of the results 8. If exceedance stops, cease additional monitoring		abated.	
Action Le Exceeda for one sample	1979	 Check monitoring data submitted by ET; Check 	1. Notify Contractor	 Rectify any unacceptable practice; Amend working methods if appropriate

APPENDIX F EVENT AND ACTION PLAN

Exceedance for two or more consecutive samples	 Identify source; Inform IEC and EPD; Repeat measurements to confirm findings; Increase monitoring frequency to daily; Discuss with IEC and Contractor on remedial action required; If exceedance continues, arrange meeting with IEC and ER; If exceedance stops, cease additional monitoring. 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ER on the effectiveness of the proposed remedial measures; Supervisor implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measure properly implemented. 	 Submit proposals for remedial action to IEC within 3 working days of notification; Implement the agreed proposals; Amend proposal if appropriate.
	t Identify courses	1 Obeek merilieri	t. Orafirm reacht	4. Taka increation
Exceedance for one sample	 Identify source; Inform ER and EPD; Repeat measurement to confirm finding; Increase monitoring frequency to daily; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and the Contractor on possible remedial measures; Advise the ER on the effectiveness of the proposed remedial measures; Supervise implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures properly implemented. 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Amend proposal if appropriate.
Exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify sources; 3. Repeat measurement to confirm findings; 4. Increase monitoring	I. Discuss amongst ER, ET and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever	 Confirm receipt of notification of failure in writing; Notify Contractor; In consultation with IEC, agree with the Contractor on 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of
	frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	necessary to assure their effectiveness and advise the ET accordingly. 3. Supervise the implementation of remedial measures.	 the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. 	notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

APPENDIX G

ENVIRONMENTAL MONITORING SCHEDULE

		Environmen	August 201	8		
			August 201			
Sunday	Monday	Tuesday	Wednesday 1	Thursday 2	Friday 3	Saturday 4
			L '	2	3	4
-	6	7			10	44
5	6	7	8	9	10	11
	24-hr TSP	Noise				
		Weekly Site Audit			17	10
12	13	14	15	16	17	18
	24-hr TSP	Noise				
		Weekly Site Audit				
19	20	21	22	23	24	25
	24-hr TSP	Noise				
		Weekly Site Audit				
26	27	28	29	30	31	
	24-hr TSP	Maine				
	24-rir 15P	Noise Weekly Site Audit				
s schedule may be su	bject to change due to unexp		dverse weather)			
		Environmen	tal Monitoring & At	udit Schedule		
Sunday	Monday		ital Monitoring & Ar eptember 20 Wednesday		Friday	Saturday
Sunday	Monday	S	eptember 20	18	Friday	Saturday 1
Sunday	Monday	S	eptember 20	18	Friday	
Sunday	Monday	S	eptember 20	18	Friday	
Sunday	Monday	S	eptember 20	18	Friday	
	3	S Tuesday 4	eptember 20 ^{Wednesday}	18 Thursday		1
		S Tuesday 4 Noise	eptember 20 ^{Wednesday}	18 Thursday		1
	3	S Tuesday 4	eptember 20 ^{Wednesday}	18 Thursday		1
2	3 24-hr TSP 10	S Tuesday 4 Noise Weekly Site Audit 11	eptember 20 Wednesday	18 Thursday 6	7	8
2	3 24-hr TSP	S Tuesday 4 Noise Weekly Site Audit 11 Noise	eptember 20 Wednesday	18 Thursday 6	7	8
2	3 24-hr TSP 10 24-hr TSP	S Tuesday 4 Noise Weekly Site Audit 11	eptember 20 Wednesday	18 Thursday 6	7	8
9	3 24-hr TSP 10 24-hr TSP 17	S Tuesday 4 Noise Weekly Site Audit 11 Noise Weekly Site Audit 18	eptember 20 Wednesday 5	18 Thursday 6 13	7	1 8 15
9	3 24-hr TSP 10 24-hr TSP	S Tuesday Unite Audit A Noise Weekly Site Audit 11 Noise Weekly Site Audit 18 Noise	eptember 20 Wednesday 5	18 Thursday 6 13	7	1 8 15
2 9 16	3 24-hr TSP 10 24-hr TSP 17 24-hr TSP	S Tuesday United States Audit A Noise Weekly Site Audit 11 Noise Weekly Site Audit 18 Noise Weekly Site Audit	eptember 20 Wednesday 5 12 19	18 Thursday 6 13 20	7 14 21	1 8 15 22
9	3 24-hr TSP 10 24-hr TSP 17	S Tuesday Unite Audit A Noise Weekly Site Audit 11 Noise Weekly Site Audit 18 Noise	eptember 20 Wednesday 5	18 Thursday 6 13	7	1 8 15
2 9 16	3 24-hr TSP 10 24-hr TSP 17 24-hr TSP	S Tuesday United States Audit A Noise Weekly Site Audit 11 Noise Weekly Site Audit 18 Noise Weekly Site Audit	eptember 20 Wednesday 5 12 19 26	18 Thursday 6 13 20	7 14 21	1 8 15 22
2 9 16 23	3 24-hr TSP 10 24-hr TSP 17 24-hr TSP	S Tuesday United States Audit A Noise Weekly Site Audit 11 Noise Weekly Site Audit 18 Noise Weekly Site Audit	eptember 20 Wednesday 5 12 19 26 24-hr TSP	18 Thursday 6 13 20 27	7 14 21	1 8 15 22
2 9 16	3 24-hr TSP 10 24-hr TSP 17 24-hr TSP	S Tuesday United States Audit A Noise Weekly Site Audit 11 Noise Weekly Site Audit 18 Noise Weekly Site Audit	eptember 20 Wednesday 5 12 19 26 24-hr TSP	18 Thursday 6 13 20 27	7 14 21	1 8 15 22
2 9 16 23	3 24-hr TSP 10 24-hr TSP 17 24-hr TSP	S Tuesday United States Audit A Noise Weekly Site Audit 11 Noise Weekly Site Audit 18 Noise Weekly Site Audit	eptember 20 Wednesday 5 12 19 26 24-hr TSP	18 Thursday 6 13 20 27	7 14 21	1 8 15 22
2 9 16 23 30	3 24-hr TSP 10 24-hr TSP 17 24-hr TSP	S Tuesday 4 Noise Weekly Site Audit 11 Noise Weekly Site Audit 18 Noise Weekly Site Audit 25	eptember 20 Wednesday 5 12 19 26 24-hr TSP Weekly Site Audit	18 Thursday 6 13 20 27	7 14 21	1 8 15 22

APPENDIX H

WEATHER INFORMATION EXTRACTED FROM HK OBSERVATORY

Day	Total Rainfall, mm	24-hr TSP	Noise	Remarks
1	2.7			
2	6.1			
3	Trace			
4	5			
5	0.5			
6	0	√		
7	0		✓	No significant rainfall during noise measurement
8	0.5			
9	Trace			
10	47.9			
11	51.9			
12	18.9			
13	0.1	√		
14	32.9		√	No significant rainfall during noise measurement
15	2.2			
16	3.2			
17	36.1			
18	21.8			
19	31.2			
20	61.1	✓		
21	25.7		√	No significant rainfall during noise measurement
22	26.4			
23	24.9			
24	0.1			
25	0			
26	80.2			
27	27.3	✓		
28	71.6		√	No significant rainfall during noise measurement
29	23.3			
30	6.3			
31	7.2			
an/Total	615.1			
ormal	432.2			

King's Park Weather Station – 06 August 2018

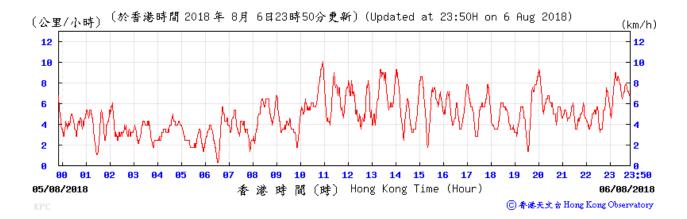
Temperature/Humidity:



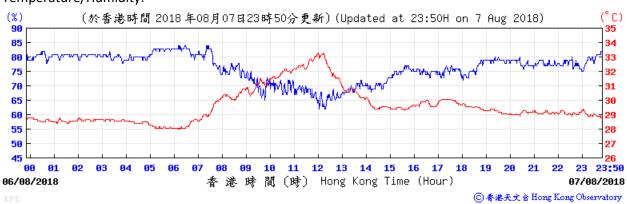
Wind Direction:



Wind Speed:

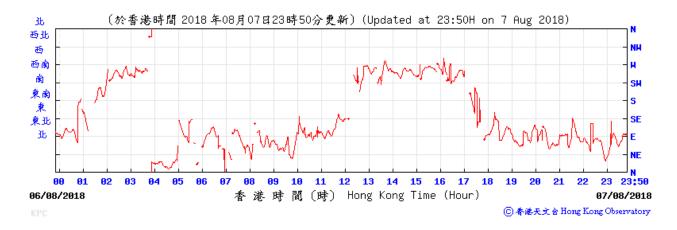


King's Park Weather Station – 07 August 2018

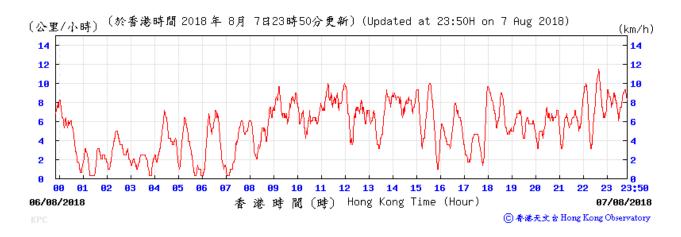


Temperature/Humidity:

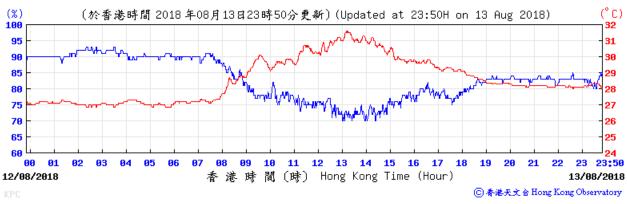
Wind Direction:



Wind Speed:



King's Park Weather Station – 13 August 2018

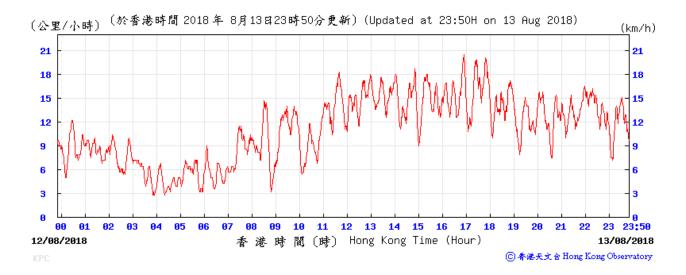


Temperature/Humidity:

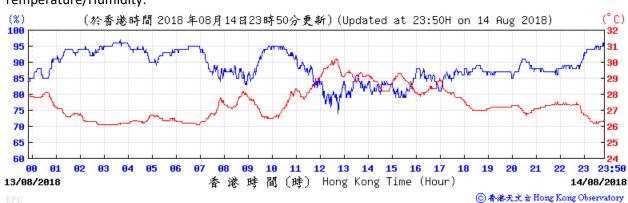
Wind Direction:



Wind Speed:

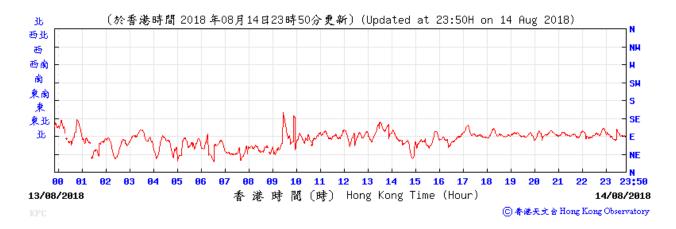


King's Park Weather Station – 14 August 2018



Temperature/Humidity:

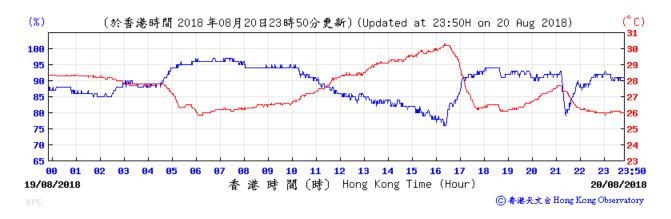
Wind Direction:



Wind Speed:

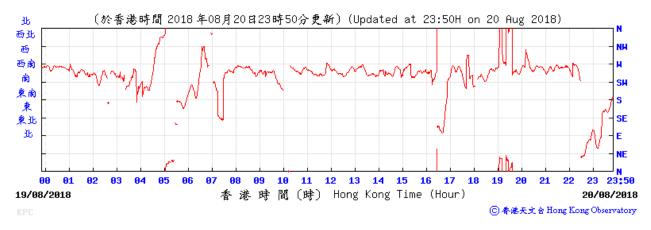


King's Park Weather Station – 20 August 2018

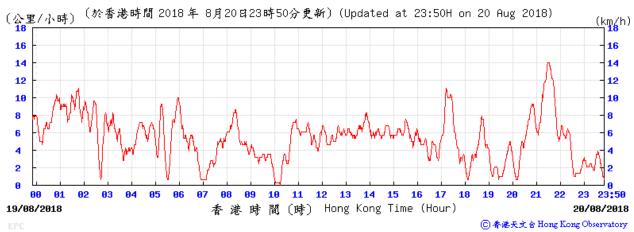


Temperature/Humidity:

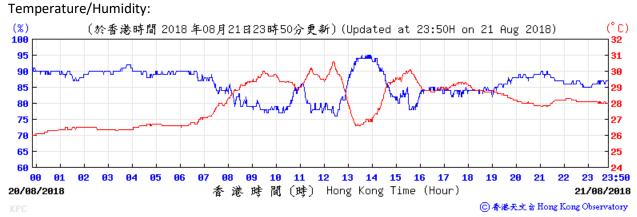
Wind Direction:



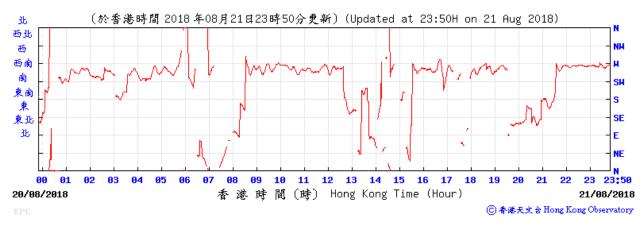




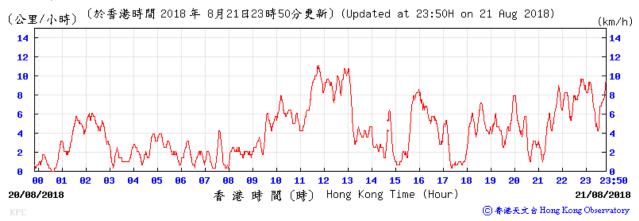
King's Park Weather Station – 21 August 2018



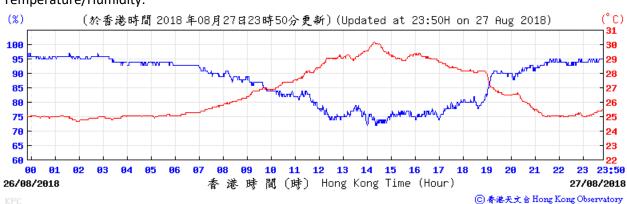
Wind Direction:



Wind Speed:

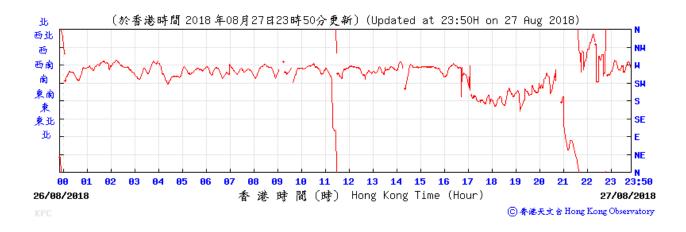


King's Park Weather Station – 27 August 2018



Temperature/Humidity:

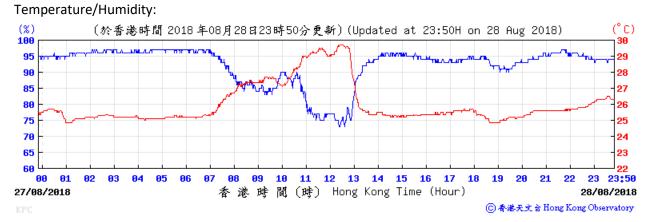
Wind Direction:



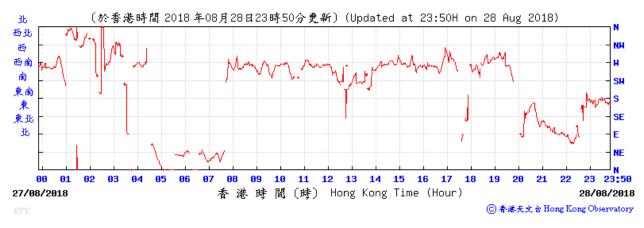




King's Park Weather Station – 28 August 2018



Wind Direction:



Wind Speed:



APPENDIX I

CERTIFICATE OF LABORATORY AND EQUIPMENT CALIBRATION



TE-5025A

RECALIBRATION DUE DATE:

May 1, 2019

°K

mm Hg

Ta: 294 Pa: 755.7

ertificate of alibration

Calibration Certification Information

Cal. Date: May 1, 2018 Operator: Jim Tisch

Calibration Model #:

Calibrator S/N: 1785

Rootsmeter S/N: 438320

Run	Vol. Init (m3)	Vol. Final (m3)	∆Vol. (m3)	∆Time (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.3980	3.2	2.00
2	3	4	1	0.9880	6.4	4.00
3	5	6	1	0.8830	8.0	5.00
4	7	8	1	0.8410	8.8	5.50
5	9	10	1	0.6930	12.7	8.00
		D	ata Tabulat	ion		
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right)}$)(<u>Tstd</u>)		Qa	$\sqrt{\Delta H(Ta/Pa)}$
(m3)	(x-axis)	(y-axis	s)	Va	(x-axis)	(y-axis)
1.0035	0.7178	1.419	7	0.9958	0.7123	0.8821
0.9993	1.0114	2.007	8	0.9915	1.0036	1.2475
0.9971	1.1293	2.244	8	0.9894	1.1205	1.3948
0.9961	1.1844	2.354	3	0.9884	1.1752	1.4628
0.9909	1.4298	2.839	4	0.9832	1.4187	1.7642
	m=	1.9952	24		m=	1.24939
JSTD	b=	-0.01066		QA [b=	-0.00662
	r=	0.9999	99		r=	0.99999
			Calculation	S		
Vstd=	∆Vol((Pa-∆P)	/Pstd)(Tstd/Ta))		∆Vol((Pa-∆l	P)/Pa)
Qstd=	Vstd/∆Time			Qa=	Va/∆Time	
		For subseque	ent flow rat	e calculation	ns:	
Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$				Qa=	$1/m \left(\sqrt{\Delta F} \right)$	l(Ta/Pa))-b)
Standard	Conditions					
298.15			Г		RECA	LIBRATION

	Standard Conditions	
Tstd:	298.15 °K	
Pstd:	760 mm Hg	
	Кеу	
ΔH: calibrator	manometer reading (in H2O)	
ΔP: rootsmete	er manometer reading (mm Hg)	
Ta: actual abs	olute temperature (°K)	
Pa: actual bar	ometric pressure (mm Hg)	
b: intercept		
m: slope		

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

ch Environmental, Inc.

5 South Miami Avenue

age of Cleves, OH 45002

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

ARCADISDesign & Consultancy for natural and built assets

Location :	4/F Roof top, K11 Commercial Complex
Sampler and Serial No.	TE-5170 MFC (0462)
Calibration Date & Time :	7/18/2018, 9:30
	TE FOOSA
Model :	TE-5025A
Calibrator Orifice no.:	1785
Slope (m):	1.99524
Intercept (b):	-0.01066
Date Certified :	1-May-18
Standard Temperature (Tstd)	298.00 K
Ambient Temperature (Ta)	301.50 K
Standard Pressure (Pstd)	760.00 mmHg
Ambient Pressure (Pa)	754.50 mmHg

Sample no.	H ₂ O (in)	Qstd (m ³ /min)	I (Flow Chat)	IC (corrected)
1	11.4	1.682	59.0	58.44
2	8.8	1.478	53.0	52.50
3	6.8	1.300	45.2	44.77
4	4.5	1.059	40.0	39.62
5	2.6	0.806	30.1	29.82

Linear Regression	
Slope (m) =	32.246
Intercept (b) =	4.246
Correlation Coefficient =	0.9919

Calibrations

Qstd = 1/m(Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b) IC = I[Sqrt((Pa/Pstd)(Tstd/Ta)))

Qstd = actual flow rate as indicticated by the calibrator orifice

H2O = orifice manometer reading during calibration

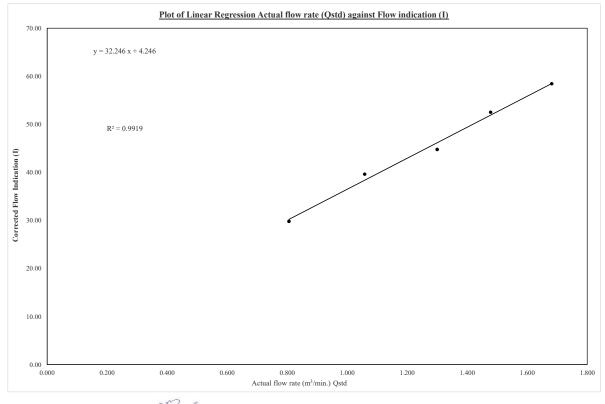
Ta = ambient temperature during calibration, K = $273 + ^{\circ}C$ Tstd = standard temperature, a constant that never changes, 298 K

Pa = ambient barometric pressure during calibration, mmHg Pstd = standard barometric pressure, a constant that never changes, 760 mm Hg

m = Qstandard slope of orifice calibrator relationship

b = Qstandard intercept of orifice calibrator relationship IC = continuous flow recorder readings corrected to current Ta and Pa

I = continuous flow recorder readings during calibration



Calibrated by : WONG Fu Nam

Checked by : Bonnie Ng



Date : 18 July 2018

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

(ALS)

			111/4045570
CONTACT	FU NAM WONG	WORK ORDER	HK1815579
CLIENT	ARCADIS DESIGN & ENGINEERING LIMITED		
ADDRESS	20/F AXA TOWER, LANDMARK EAST, 100 HOW MING STREET,	SUB-BATCH	: 1
	KWUN TONG	DATE RECEIVED	: 5-FEB-2018
	HONG KONG	DATE OF ISSUE	: 14-FEB-2018
PROJECT		NO. OF SAMPLES	: 4
		CLIENT ORDER	:

General Comments

- Sample(s) were received in ambient condition.
- Sample(s) analysed and reported on an as received basis.
- Calibration was subcontracted to and analysed by Action United Enviro Services.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories	117 Position	
Richard Fung	Killing General Manager	

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd Part of the ALS Laboratory Group

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong Tel. +852 2610 1044 Fax. +852 2610 2021 www.alsglobal.com WORK ORDER SUB-BATCH

CLIENT

PROJECT

: HK1815579

ARCADIS DESIGN & ENGINEERING LIMITED



ALS Lab	Client's Sample ID	Sample	Sample Date	External Lab Report No.
ID		Туре		
HK1815579-001	S/N: 456677	Equipments	05-Feb-2018	S/N: 456677
HK1815579-002	061929	FILTER (TSP/RSF	05-Feb-2018	S/N: 456677
HK1815579-003	061930	FILTER (TSP/RSF	05-Feb-2018	S/N: 456677
HK1815579-004	061931	FILTER (TSP/RSF	05-Feb-2018	S/N: 456677

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	456677
Equipment Ref:	Nil
Job Order	HK1815579

Standard Equipment:

Higher Volume Sampler
AUES office (calibration room)
HVS 018
1 December 2017

Equipment Verification Results:

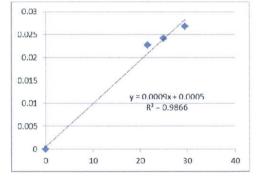
Testing Date:

8 & 12 February 2018

Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in mg/m ³ (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
2hr05min	12:25 ~ 14:30	14.0	1018.8	0.023	2705	21.6
2hr07min	9:45 ~ 11:52	14.9	1026.4	0.027	3740	29.5
2hr32min	12:00 ~ 14:32	14.9	1026.4	0.024	3804	25.1

Linear Regression of Y or X

Slope (K-factor):	0.0009
Correlation Coefficient	0.9933
Date of Issue	14 February 2018



Remarks:

1. **Strong** Correlation (R>0.8)

2. Factor 0.0009 should be applied for TSP monitoring

*If R<0.5, repair or re-verification is required for the equipment





Calibration Certificate

Certificate No.	804231		Page	1 of 3 Pages	
Customer :	Arcadis Design & Engineering	Limited		G Contraction of the second	
Address :	20/F, AXA Tower, Landmark E	ast, 100 How Ming S	treet, Kwun Tong	, Kowloon, Hong Kong.	
Order No. :	Q81642		Date of receipt	t : 26-Apr-18	
Item Tested				1	
Description	: Sound Level Meter				
Manufacturer			I.D.	:	
Model :	2238		Serial No.	: 2562782	
Test Condit	ions				
Date of Test :	30-Apr-18		Supply Voltage	e :	
Ambient Temp	a second second		Relative Humidity : (50 ± 25) %		
Test Specifi	cations				
Calibration cheo Ref. Document	ck. /Procedure: Z01, IEC 60651, IE	C 60804.			
Test Results	S				
All results were	within the IEC 60651 Type1 and	IEC 60804 Type1 s	pecification.		
	shown in the attached page(s).	ne en el ser se			
Main Test equip	oment used:				
Equipment No.		Cert. No.		Traceable to	
S017	Multi-Function Generator	C170120		SCL-HKSAR	
S240	Sound Level Calibrator	803357		NIM-PRC & SCL-HKSAR	
will not include allow overloading, mis-ha	this Calibration Certificate only relate to wance for the equipment long term drift, andling, or the capability of any other lab age resulting from the use of the equipr	variations with environme oratory to repeat the mea	ental changes, vibrati	on and shock during transportation,	
	t used for calibration are traceable to Int oly to the above Unit-Under-Test only	ernational System of Unit	s (SI), or by reference	∍ to a natural constant.	
	×4			NP	
Calibrated by		App	proved by :	Hen	
	Elva Chong		184 J	Alan Chu	

Elva Chong

Date: 30-Apr-18

This Certificate is issued by: Hong Kong Calibration Ltd.

Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street, Kwai Chung, NT, Hong Kong, Tel: 2425 8801 Fax: 2425 8646



Certificate No. 804231

Page 2 of 3 Pages

Results :

1. SPL Accuracy

UUT Setting				Applied Value	UUT Reading
Range	Freq. Wgt.	Bandwith	Center Freq.	(dB)	(dB)
28~108	A	BB/F	11	94.0	94.0
	A	BB/S			94.0
	C	BB/F			94.0
48~128	A	BB/F		94.0	94.0
	A	BB/F		114.0	114.1

IEC 60651 Type 1 Spec. : \pm 0.7 dB Uncertainty : \pm 0.1 dB

 Level Stability : 0.0 dB IEC 60651 Type 1 Spec. : ± 0.3 dB Uncertainty : ± 0.1 dB

3. Linearity

3.1 Level Linearity

UUT Range (dB)	Applied Value (dB)	UUT Reading (dB)	Variation (dB)	IEC 60651 Type 1 Spec. (Primary Indicator Range)
140	114.0	114.0	0.0	$\pm 0.7 \text{ dB}$
130	104.0	104.0	0.0	
120	94.0	94.0 (Ref.)	82	
110	84.0	84.0	0.0	
100	74.0	74.1	+0.1	
90	64.0	64.0	0.0	
80	54.0	54.0	0.0	

Uncertainty : $\pm 0.1 \text{ dB}$



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3.2 Differential level linearity

UUT Range (dB)	Applied Value (dB)	UUT Reading (dB)	Variation (dB)	IEC 60651 Type 1 Spec.
120	84.0	84.0	0.0	± 0.4 dB
	94.0	94.0 (Ref.)		
	95.0	95.0	0.0	$\pm 0.2 \text{ dB}$

Uncertainty : $\pm 0.1 \text{ dB}$

4. Frequency Weighting

A weighting

Frequency	Attenuation (dB)	IEC 60651 Type 1 Spec.
31.5 Hz	-39.3	- 39.4 dB, ± 1.5 dB
63 Hz	-26.3	- 26.2 dB, ± 1.5 dB
125 Hz	-16.2	- 16.1 dB, ± 1 dB
250 Hz	-8.7	- 8.6 dB, ± 1 dB
500 Hz	-3.3	- 3.2 dB, ± 1 dB
1 kHz	0.0 (Ref)	$0 \text{ dB}, \pm 1 \text{ dB}$
2 kHz	+1.2	+ 1.2 dB, ± 1 dB
4 kHz	+0.9	$+ 1.0 \text{ dB}, \pm 1 \text{ dB}$
8 kHz	-1.2	- 1.1 dB, + 1.5 dB ~ -3 dB
16 kHz	-6.7	- $6.6 dB, + 3 dB \sim -\infty$

Uncertainty : $\pm 0.1 \text{ dB}$

5. Time Averaging

Applied Burst duty Factor	Applied Leq Value (dB)	UUT Reading (dB)	IEC 60804 Type 1 Spec.
continuous	40.0	40.0	
1/10	40.0	40.0	± 0.5 dB
$1/10^{2}$	40.0	40.0	
$1/10^{3}$	40.0	40.0	\pm 1.0 dB
$1/10^{4}$	40.0	40.0	

Uncertainty : $\pm 0.1 \text{ dB}$

Remarks : 1. UUT : Unit-Under-Test

- 2. The uncertainty claimed is for a confidence probability of not less than 95%.
- 3. Atmospheric pressure : 1 014 hPa.
- 4. The UUT was adjusted with the laboratory's sound calibrator at the reference sound pressure level before the calibration.

----- END -----

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Certificate N	o. 803788		Pa	age 1 of 2	Pages
Customer	: Arcadis Design & Engineer	ing Limited			
Address :	20/F, AXA Tower, Landman	rk East, 100 How Mi	ng Street, Kwun T	ong, Kowloon, Ho	ng Kong.
Order No.			Date of rec	12	18-Apr-18
Item Teste	d				
Description	: Precision Acoustic Calibrat	or			
Manufacture	r : Larson Davis		I.D.	:	
Model	: CAL200		Serial No.	: 10929	
Test Condi	itions				
Date of Test :	: 26-Apr-18		Supply Vol	tage :	
Ambient Tem	perature : (23 ± 3)°C			midity : (50 ± 25)	%
Test Specif	fications			, (<u></u>
Calibration che	eck				
	nt/Procedure : IEC 60942, F20	702			
		, 202.			
Test Result	ts				
All results wer	o within the IEC 60042 Class	()			
	e within the IEC 60942 Class · e shown in the attached page(- As here a three three to solve the			
The results are	e shown in the attached page(5).			
Main Test equ	ipment used:				
Equipment No	. Description	Cert. No.		Traceable to	
S014	Spectrum Analyzer	707126		NIM-PRC & SO	CL-HKSAR
S240	Sound Level Calibrator	803357		NIM-PRC & SO	
S041	Universal Counter	802061		SCL-HKSAR	
S206	Sound Level Meter	707129		SCL-HKSAR	
The values given i	n this Calibration Certificate only rela	to to the values messure			2.2
will not include allo	owance for the equipment long term of	rift, variations with enviro	nmental changes, vib	ration and shock during	a transportation
overloading, mis-n or any loss or dan	andling, or the capability of any other nage resulting from the use of the equ	laboratory to repeat the upment.	measurement. Hong	Kong Calibration Ltd. s	hall not be liable
The test equipmen The test results ap	nt used for calibration are traceable to oply to the above Unit-Under-Test only	International System of	Jnits (SI), or by refere	ence to a natural consta	ant.
	Sec. T.				
	XA			X /	
Calibrated by		Δ	pproved by : _	SA	
	Elva Chong			Kin Wong	
his Certificate is issued long Kong Calibration Lt		D	ate: 26-Apr-18		
	g Industrial Centre, No. 58-76, Ta Chuen Ping Str	eet Kwai Chung, NT Hong Koog			

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Certificate No. 803788

Page 2 of 2 Pages

Results :

1. Generated Sound Pressure Level

UUT Nominal Value (dB)	Measured Value (dB)	IEC 60942 Class 1 Spec.
94.0	93.7	± 0.4 dB
114.0	113.8	

Uncertainty : $\pm 0.2 \text{ dB}$

 Short-term Level Fluctuation : 0.0 dB IEC 60942 Class 1 Spec. : ± 0.1 dB Uncertainty : ± 0.01 dB

3. Frequency

UUT Nominal Value (kHz)	Measured Value (kHz)	IEC 60942 Class 1 Spec.
1	0.999	± 1 %

Uncertainty : \pm 3.6 x 10 ⁻⁶

4. Total Distortion : < 0.4% IEC 60942 Class 1 Spec. : < 4 % Uncertainty : ± 2.3 % of reading

Remark : 1. UUT : Unit-Under-Test

- 2. The uncertainty claimed is for a confidence probability of not less than 95%.
- 3. Atmospheric Pressure : 1 015 hPa.

----- END -----

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APPENDIX J

SAMPLE DATA RECORD SHEET

Monitoring Location	4/F Roof top, K11	
Sampler Identification	TE-5170 MFC	
Start date & time of sampling		2018/08/06, 10:00
Weather Conditions		Sunny
Abnormal Site Conditions		Nil
Elanced time Motor Reading	Start (Hours)	9786.92
Elapsed-time Meter Reading	Stop (Hours)	9812.22
Total Sampling Time (hrs.)		25.30
Total Sampling Time (min.)		1518.00
	Pi (mm Hg)	754.6
Initial Flow Poto Opi	Ti (°C)	30.5
Initial Flow Rate, Qsi	Hi (cfm)	37
	Qsi (Std. m ³)	1.279
	Pi (mm Hg)	753.9
Final Flaw Data Oaf	Ti (°C)	32.0
Final Flow Rate, Qsf	Hf (cfm)	37
	Qsf (Std. m ³)	1.279
Average Flow Rate (Std. m ³)		1.279
Total Volume (Std. m ³)		1941.52
Initial Weight of Filter (g)		2.6386
Final Weight of Filter (g)		2.7199
Different Weight of Filter (g)		0.0813
Measured TSP Level (µg/m ³)		41.9
Action Level (µg/m ³)		221.6
Limit Level (µg/m³)		260.0
Name & Designation	Date	<u>Signature</u>
Record by: Bonnie Ng	2018/08/17	Re-NJ.
Checked by: Wong Fu Nam	2018/08/17	222

Monitoring Location	4/F Roof top, K11	
Sampler Identification	TE-5170 MFC	
Start date & time of sampling	2018/08/13, 10:00	
Elanged time Motor Reading	Start (Hours)	9812.22
Elapsed-time Meter Reading	Stop (Hours)	9836.54
Total Sampling Time (hrs.)		24.32
Total Sampling Time (min.)		1459.20
Weather Conditions		Overcast
Abnormal Site Conditions		Nil
	Pi (mm Hg)	747.6
Initial Flow Poter Oci	Ti (°C)	29.0
Initial Flow Rate, Qsi	Hi (cfm)	38
	Qsi (Std. m³)	1.310
	Pi (mm Hg)	747.7
Final Flaw Data Oaf	Ti (°C)	26.5
Final Flow Rate, Qsf	Hf (cfm)	38
	Qsf (Std. m ³)	1.310
Average Flow Rate (Std. m ³)		1.310
Total Volume (Std. m ³)		1911.55
Initial Weight of Filter (g)		2.6449
Final Weight of Filter (g)		2.7028
Different Weight of Filter (g)		0.0579
Measured TSP Level (µg/m ³)		30.3
Action Level (µg/m ³)		221.6
Limit Level (µg/m³)		260.0
Name & Designation	Date	<u>Signature</u>
Record by: Bonnie Ng	2018/08/17	Rie Ny.
Checked by: Wong Fu Nam	2018/08/17	M2

Monitoring Location	4/F Roof top, K11	
Sampler Identification	TE-5170 MFC	
Start date & time of sampling		2018/08/20, 10:00
Elenand time Mater Deading	Start (Hours)	9836.54
Elapsed-time Meter Reading	Stop (Hours)	9860.84
Total Sampling Time (hrs.)		24.30
Total Sampling Time (min.)		1458.00
Weather Conditions		Overcast
Abnormal Site Conditions		Nil
	Pi (mm Hg)	753.1
Initial Flaw Data Oai	Ti (°C)	26.8
Initial Flow Rate, Qsi	Hi (cfm)	39
	Qsi (Std. m ³)	1.341
	Pi (mm Hg)	751.0
	Ti (°C)	29.5
Final Flow Rate, Qsf	Hf (cfm)	38
	Qsf (Std. m ³)	1.310
Average Flow Rate (Std. m ³)		1.326
Total Volume (Std. m ³)		1933.31
Initial Weight of Filter (g)		2.6443
Final Weight of Filter (g)		2.7264
Different Weight of Filter (g)		0.0821
Measured TSP Level (µg/m ³)		42.5
Action Level (µg/m³)		221.6
Limit Level (µg/m³)		260.0
Name & Designation	Date	<u>Signature</u>
Record by: Bonnie Ng	2018/08/31	Ree NJ.
Checked by: Wong Fu Nam	2018/08/31	and a

Monitoring Location	4/F Roof top, K11	
Sampler Identification	TE-5170 MFC	
Start date & time of sampling	2018/08/27, 10:00	
Elenand time Mater Deading	Start (Hours)	9860.84
Elapsed-time Meter Reading	Stop (Hours)	9885.14
Total Sampling Time (hrs.)		24.30
Total Sampling Time (min.)		1458.0
Weather Conditions		Rainy
Abnormal Site Conditions		Nil
	Pi (mm Hg)	751.9
Initial Flow Pata Oai	Ti (°C)	27.0
Initial Flow Rate, Qsi	Hi (cfm)	34
	Qsi (Std. m ³)	1.186
	Pi (mm Hg)	751.9
Final Flow Data Oaf	Ti (°C)	27.2
Final Flow Rate, Qsf	Hf (cfm)	36
	Qsf (Std. m ³)	1.248
Average Flow Rate (Std. m ³)		1.217
Total Volume (Std. m ³)		1774.39
Initial Weight of Filter (g)		2.6547
Final Weight of Filter (g)		2.7239
Different Weight of Filter (g)		0.0692
Measured TSP Level (µg/m ³)		39.0
Action Level (µg/m ³)		221.6
Limit Level (µg/m³)		260.0
Name & Designation	Date	<u>Signature</u>
Record by: Bonnie Ng	2018/08/31	B-e-NJ.
Checked by: Wong Fu Nam	2018/08/31	of the second se

Monitoring Location		4/F Roof top, K11
Date of Monitoring		07 August 2018
Monitoring Start Time		9:14
Monitoring Stop Time		9:44
Measurement Time Length		30 mins
Weather Condition		Sunny
Wind Speed		1.2 m/s
Noise Meter Model (Serial Number)	BK-2238 (2562783)
Calibrator Model (Serial Number)		CAL-200 (10929)
	Leq	68.7 dB(A)
Measurement Results	L10	71.5 dB(A)
	L ₉₀	64.0 dB(A)
Limit Level		75.0 dB(A)
Major Construction Noise Source(s	s) During Monitoring	On-site powered mechanical equipment
Other Noise Source(s) During Mon	itoring	Traffic
Name & Designation	Date	<u>Signature</u>
Record by: Wong Fu Nam	07 August 2018	S. P.
Checked by: Bonnie Ng	07 August 2018	R-e-NJ.

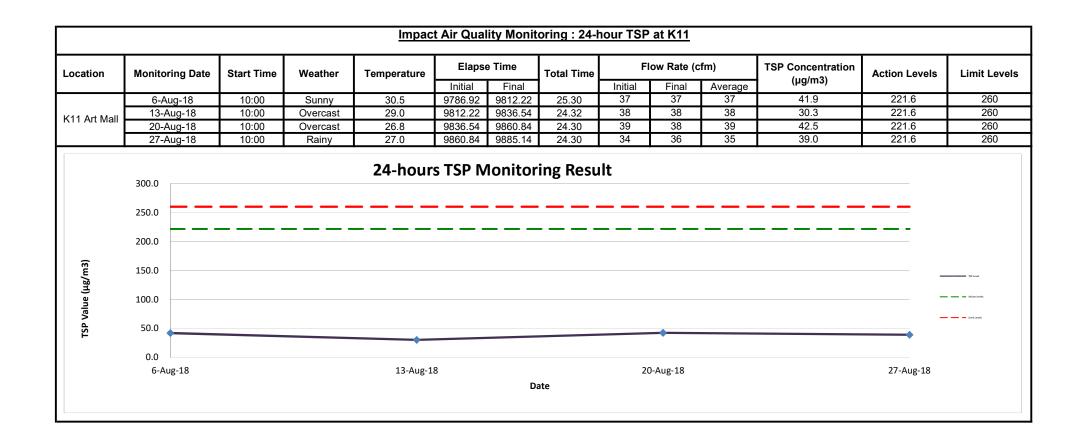
Monitoring Location		4/F Roof top, K11
Date of Monitoring		14 August 2018
Monitoring Start Time		9:40
Monitoring Stop Time		10:10
Measurement Time Length		30 mins
Weather Condition		Overcast
Wind Speed		2.7 m/s
Noise Meter Model (Serial Number)	BK-2238 (2562783)
Calibrator Model (Serial Number)		CAL-200 (10929)
	Leq	68.3 dB(A)
Measurement Results	L ₁₀	68.0 dB(A)
	L ₉₀	63.5 dB(A)
Limit Level		75.0 dB(A)
Major Construction Noise Source(s	s) During Monitoring	On-site powered mechanical equipment
Other Noise Source(s) During Mon	itoring	Traffic
Name & Designation	Date	<u>Signature</u>
Record by: Wong Fu Nam	14 August 2018	and a
Checked by: Bonnie Ng	14 August 2018	Rie Ng.

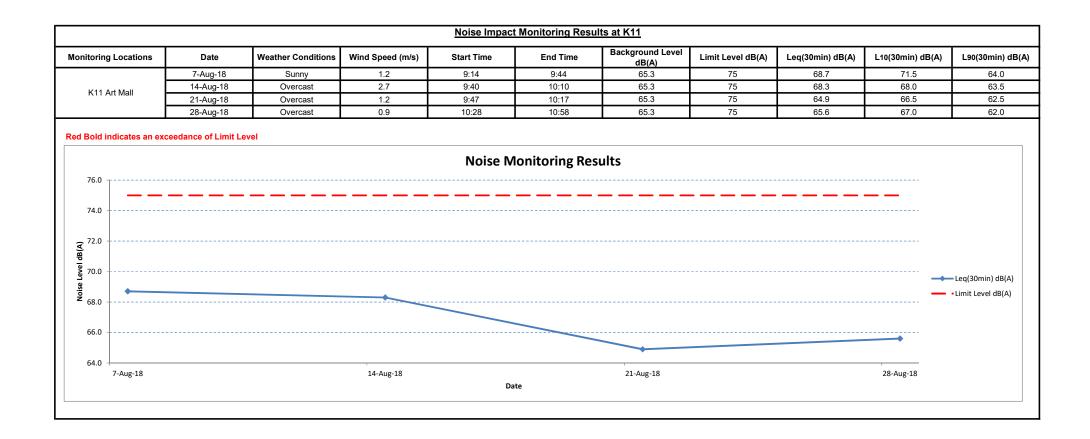
Monitoring Location		4/F Roof top, K11
Date of Monitoring		21 August 2018
Monitoring Start Time		9:47
Monitoring Stop Time		10:17
Measurement Time Length		30 mins
Weather Condition		Overcast
Wind Speed		1.2 m/s
Noise Meter Model (Serial Number	·)	BK-2238 (2562783)
Calibrator Model (Serial Number)		CAL-200 (10929)
	Leq	64.9 dB(A)
Measurement Results	L ₁₀	66.5 dB(A)
	L ₉₀	62.5 dB(A)
Limit Level		75.0 dB(A)
Major Construction Noise Source(s	s) During Monitoring	On-site powered mechanical equipment
Other Noise Source(s) During Mon	itoring	Traffic
Name & Designation	Date	Signature
Record by: Wong Fu Nam	21 August 2018	and a
Checked by: Bonnie Ng	21 August 2018	Rie Ny.

Monitoring Location		4/F Roof top, K11
Date of Monitoring		28 August 2018
Monitoring Start Time		10:28
Monitoring Stop Time		10:58
Measurement Time Length		30 mins
Weather Condition		Overcast
Wind Speed		0.9 m/s
Noise Meter Model (Serial Number)	BK-2238 (2562783)
Calibrator Model (Serial Number)		CAL-200 (10929)
	Leq	65.6 dB(A)
Measurement Results	L ₁₀	67.0 dB(A)
	L90	62.0 dB(A)
Limit Level		75.0 dB(A)
Major Construction Noise Source(s) During Monitoring	On-site powered mechanical equipment
Other Noise Source(s) During Mon	itoring	Traffic
Name & Designation	Date	<u>Signature</u>
Record by: Wong Fu Nam	28 August 2018	M Company
Checked by: Bonnie Ng	28 August 2018	Bee Ng.

APPENDIX K

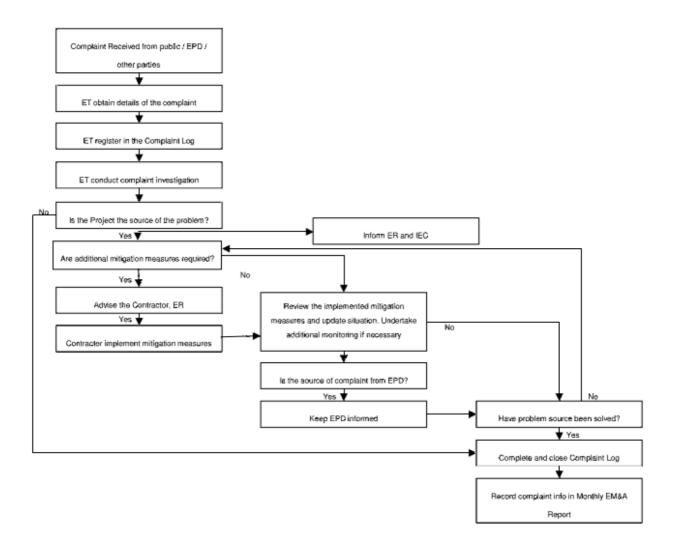
MONITORING RESULTS AND PLOTS





APPENDIX L

Complaint Response Procedure



APPENDIX M WASTE MANAGEMENT RECORDS

Monthly Summary Waste Flow Table for 2018 (year)

Date Reported: Contract No:

C3840-13C Tsim Sha Tsui Station Carnarvon Road Subway

1-September-2018

		Actual Q	uantities of Inert C&i	Actual Quantities of Inert C&D Materials Generated Monthly	d Monthly			Actual Quantities of Non-inert C&D Wastes Generated Monthly	Non-inert C&D Wast	es Generated Monthly	
Month	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	Others, e.g. general refuse
		(See Note 3)							(see Note 2)		
	(in '000m ³)	$({}_{\epsilon}\mathrm{m}_{000},\mathrm{ui})$	(in '000m ³)	(in '000m ³)	(in '000m ³)	(_ɛ m000, ui)	(in '000kg)	(in '000kg)	(in '000kg)	(in'000kg)	(in '000m ³ /tonne)
Carried from Project Start	9.6228				9.6228	,		,			0.1930
Jan	0.0212		-	•	0.0212				-	-	8610.0
Feb	0.0033	-	-	-	0.0033		-			-	0600.0
Mar	0.0072	-	-	-	0.0072		-	-	-	-	6800.0
Apr	0.0024	-	-	-	0.0024		-	-	-	-	0.0048
May	0.0022	-	1	ı	0.0022		-	I	-	-	0.0065
June	0.0000	-	•		0.0000		I	I	-	-	0.0192
Sub-total	0.0363	-	-	-	0.0363	-	-	•	-	-	0.0682
July	0.0540	-	-	-	0.0540			-	-	-	0.0081
Aug	0.0410	-	-		0.0410		-	I	-	-	0.0092
Sept	-	-	-				-	I	-	-	1
Oct		-	-				-	-	-	-	
Nov		-	-	-				1	-	-	
Dec	-	-	-	-	-		-	-	-	-	
Total	0.1313	-			0.1313		-	1	•	•	0.0855
Acc. Total	9.7541	(accumulated quanti	ity of the project = ca	(accumulated quantity of the project = carried amount + this year amount)	ear amount)						0.2785

Notes:

The performance targets are given below: Ξ

All excavated materials to be sorted for recovering the inert portion of C&D materials, e.g. hard rocks, soil and broken concrete, for reuse on the Site or disposal to designated outlets;

All metallic waste to be recovered for collection by recycling contractors; All cardboard and paper packaging (for plant, equipment and materials) to be recovered, properly stockpiled in dry and covered condition to prevent cross contamination;

All chemical wastes to be collected and properly disposed of by specialist contractors; and ı

All demolition debris to be stored to recover broken concrete, reinforcement bars, mechanical and electrical fittings, hardware as well as other fitting / materials that have established recycling outlets.

Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material. $\mathfrak{G} \mathfrak{G} \mathfrak{F}$

Broken concrete for recycling into aggregates. The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.