

Development at West Kowloon Cultural District

Monthly Environmental Monitoring and Audit (EM&A) Report for February 2017

March 2017

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This Monthly EM&A Report has been reviewed and certified by the Environmental Team Leader (ETL) and verified by the Independent Environmental Checker (IEC).

| Certified | by: |
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Date

13 Mar 2017

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Executive Summary

Mott MacDonald Hong Kong Limited (MMHK) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction of M+ Museum Main Works (Contract No.: CC/2015/3A/022) and Lyric Theatre Complex Foundation Works (Contract No.: CC/2015/3A/014) at West Kowloon Cultural District (WKCD) (The Project) as part of the WKCD development. The Project Proponent is the West Kowloon Cultural District Authority (WKCDA). The construction works and EM&A programme for M+ Museum and Lyric Theatre Complex commenced on 31 October 2015 and 1 March 2016 respectively.

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The overall works for the WKCD fall under two separate categories of Designated Project (DP) of the Environmental Impact Assessment Ordinance (EIAO), namely an "engineering feasibility study of urban development projects with a study area covering more than 20 ha or involving a total population of more than 100 000" (Item 3 of Schedule 3) and "an underpass more than 100m in length under the built areas" (Item A.9, Part I, Schedule 2). An Environmental Permit No. EP-453/2013/B (EP) was issued with respect to the "Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District" which specifically includes the abovementioned category of DP under Item A.9, Part I. Schedule 2 of the EIAO.

This Monthly EM&A Report presents the monitoring works at both the main works of M+ Museum and foundation works of Lyric Theatre Complex conducted from 1 February to 28 February 2017.

Exceedance of Action and Limit Levels

There was no breach of Action or Limit levels for Air Quality (1-hour TSP and 24-hour TSP) and Noise in this reporting month.

Implementation of Mitigation Measures

Construction phase weekly site inspections were carried out on 2, 9, 16 and 23 February 2017 for M+ Museum and 1, 8, 17 and 22 February 2017 for Lyric Theatre Complex to confirm the implementation measures undertaken by the Contractors in the reporting month The outcomes are presented in Section 4 and the status of implementation of mitigation measures in the site is shown in **Appendix J**.

Landscape and visual impact inspections were conducted as part of the abovementioned weekly site inspections during the reporting month. No adverse comment on landscape and visual aspects was made during these inspections.

EPD site inspection with Contractor was conducted on 28 February 2017 at Lyric Theatre Complex. No adverse comments received.

Record of Complaints

No environmental complaint was recorded in the reporting month.

Record of Notification of Summons and Successful Prosecutions

Regarding the notification of summons received by the contractor of M+ Museum, Hsin Chong Construction Company Limited, in December 2016, the prosecution case for the muddy water discharge on 2 July 2016 was found not guilty after the trial hearing on 8 February 2017.

No notification of summons and successful prosecution were recorded in the reporting month.

Future Key Issues

The major site works at M+ Museum scheduled to be commissioned in the coming month include:

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- Construction of G/F, LGF, B1 and B2 slab
- Construction of column from B2 to B1, B1 to LGF and LGF to GF
- Installation of megastruss
- Construction of DCS structure from B1 to LGF
- Pile cap and sump pit construction at B2 and ICP
- Construction of B1 slab and beam at ICP
- Sheet Pile Installation for seawater outfall pipe between Ch0+66 to Ch0+108
- Storm Drainage at Portion M45

The major site works at Lyric Theatre Complex scheduled to be commissioned in the coming month include:

- Pipe Pile Construction
- Socket-H Pile Construction
- **Bored Pile Construction**
- **Sheet Pile Construction**

Potential environmental impacts due to the construction activities, including air quality, noise, water quality, waste, landscape and visual, will be monitored or reviewed. The recommended environmental mitigation measures shall be implemented on site and regular inspections as required will be carried out to ensure that the environmental conditions are acceptable.

1 Introduction

1.1 Background

Mott MacDonald Hong Kong Limited (MMHK) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction of M+ Museum Main Works (Contract No.: CC/2015/3A/022) and Lyric Theatre Complex Foundation Works (Contract No.: CC/2015/3A/014) at West Kowloon Cultural District (WKCD) (The Project) as part of the WKCD development. The Project Proponent is the West Kowloon Cultural District Authority (WKCDA). The construction works and EM&A programme for M+ Museum and Lyric Theatre Complex commenced on 31 October 2015 and 1 March 2016 respectively.

The overall works for the WKCD fall under two separate categories of Designated Project (DP) of the Environmental Impact Assessment Ordinance (EIAO), namely an "engineering feasibility study of urban development projects with a study area covering more than 20 ha or involving a total population of more than 100 000" (Item 3 of Schedule 3) and "an underpass more than 100m in length under the built areas" (Item A.9, Part I, Schedule 2). An Environmental Permit No. EP-453/2013/B (EP) was issued with respect to the "Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District" which specifically includes the abovementioned category of DP under Item A.9, Part I, Schedule 2 of the EIAO. The captioned projects include part of the abovementioned underpass road located within the site boundary also falls under this same category.

The M+ museum development aims to provide an iconic presence for the M+ museum, semi-transparent vertical plane, housing education facilities, a public restaurant and museum offices. At ground and lower levels, generous access will be provided to the park and other West Kowloon Cultural District facilities, alongside a public resource centre, theatres, retail and dining, and back-of-house functions.

The 1,200-seat Lyric Theatre Complex will be Hong Kong's first world-class facility for dance performances, including ballet, contemporary and Chinese dance forms. In the run up to the opening of further major performing arts venues in the WKCD, it will also be used for a wide variety of performing arts events including drama, opera and musical performances. The Lyric Theatre Complex will act as a platform for Hong Kong's leading arts organisations, and be a new major venue to show programmes from Asia and worldwide.

The Monthly EM&A Report is prepared in accordance with the Condition 3.4 of the Environmental Permit No. EP-453/2013/B. This Monthly EM&A Report presents the monitoring works at both the main works of M+ Museum and foundation works of Lyric Theatre Complex conducted from 1 February to 28 February 2017. The purpose of this report is to summarise the findings in the EM&A of the project over the reporting period.

1.2 Project Organisation

The organisation chart and lines of communication with respect to the on-site environmental management structure together with the contact information of the key personnel are shown in **Appendix A**.

1.3 Environmental Status in the Reporting Period

During the reporting period, construction works at M+ Museum undertaken include:

Construction of G/F, LGF, B1 and B2 slab

- Construction of column from B2 to B1, B1 to LGF and LGF to GF
- Pile cap and sump pit construction at B2 and ICP
- Installation of megastruss
- Construction of B1 Beam and slab at ICP
- Sheet Pile Installation for seawater outfall pipe between Ch0+66 to Ch0+108
- Storm Drainage at Portion M45

During the reporting period, construction works at Lyric Theatre Complex undertaken include:

- Installation of Monitoring Instrumentation
- Pre-grouting adjacent to Seawall
- Pipe Pile Construction
- Socket-H Pile Construction
- Bored Pile Construction
- Sheet Pile Construction

The Construction Works Programmes of M+ Museum and Lyric Theatre Complex are provided in **Appendix B**. A layout plan of the Project is provided in **Figure 1**. Please refer to **Table 4.3** on the status of the environmental licenses.

1.4 Summary of EM&A Requirements

The EM&A programme requires environmental monitoring of air quality, noise, landscape and visual as specified in the approved EM&A Manual.

A summary of impact EM&A requirements is presented in Table 1.1.

Table 1.1: Summary of Impact EM&A Requirements

| Parameters | Descriptions | Locations | Frequencies |
|-----------------------|--|---|-------------------------------|
| Air Quality | 24-Hour TSP | AM1 - International Commerce Centre | At least once every 6 days |
| | 1-Hour TSP | AM1 - International Commerce Centre | At least 3 times every 6 days |
| | 24-Hour TSP | AM2A – Austin Road West opposite to The Harbourside Tower 1 | At least once every 6 days |
| | 1-Hour TSP | AM2A – Austin Road West opposite to The Harbourside Tower 1 | At least 3 times every 6 days |
| Noise | Leq, 30 minutes | NM1A- Podium level of The Harbourside Tower 1 | Weekly |
| Landscape & Visual | Monitor implementation of proposed mitigation measures during the construction stage | As described in Table 9.1 and 9.2 of the EM&A Manual | Bi-weekly |

Given that the Project covers only a small part of the whole WKCD area (i.e. M+ Museum, Lyric Theatre Complex and respective portions of underpass road), it was proposed that the EM&A programme for the Project should only require 1 noise monitoring station and 2 air quality monitoring stations located closest to the Project area. Currently, the works under the captioned project are confined in the western part of the WKCD site. Therefore, only the monitoring stations AM1, AM2 and NM1 were set up. Other monitoring locations are too far away (i.e. AM3 to AM5 and NM2 to NM5) are not included in this EM&A programme until the construction of the corresponding area commences.

The Harbourside management office formally rejected our proposal of setting up air quality and noise monitoring equipment on its premises at the podium level of Tower 1 (AM2/NM1) on 10 November 2015. Alternative noise monitoring location was identified at The Arch (NM2), however The Arch management office formally rejected our proposal of setting up noise monitoring equipment on its premises on 23 November 2015. Nevertheless, suitable air quality monitoring location at AM2 was identified on the ground floor in front of The Harbourside Tower 1, which is at the same location as

that of baseline monitoring for consistency. No management approval is required at the ground floor for conducting the air monitoring. However, the electricity supply at AM2 was suspended from 31 August 2016 and was no longer available. In order to have a more secure electricity supply, an alternative air monitoring location (AM2A) was identified at Austin Road West opposite to The Harbourside Tower 1, which is close to Lyric Theatre Complex site entrance. This alternative air monitoring location was approved by EPD on 28 September 2016. Noise monitoring at G/F of Harbourside will not be representative. Approval from the management office of the International Commerce Centre has been granted on 29 February 2016 for conducting noise monitoring at the alternative noise monitoring location identified at the podium floor (NM1A) which is free from screening to the construction activities. Therefore, 2 air quality monitoring stations and 1 noise impact monitoring station were confirmed for the impact monitoring.

The Environmental Quality Performance Limits for air quality and noise are shown in **Appendix C**.

The Event and Action Plan for air quality, construction noise. landscape and visual are shown in **Appendix D**.

The EM&A programme followed the recommended mitigation measures in the EM&A Manual. The EM&A requirements as well as the summary of implementation status of the environmental mitigation measures are provided in **Appendix J**.

2 Impact Monitoring Methodology

2.1 Introduction

For air quality and noise, the monitoring methodology, including the monitoring locations, monitoring equipment used, monitoring parameters, and frequency and duration etc., for air quality and noise are detailed in this Section. The environmental monitoring schedules for the reporting period and the tentative monitoring Schedule for the coming month are provided in **Appendix E**.

For landscape and audit impact, the relevant EM&A monitoring requirements and details are also presented in this Section.

2.2 Air Quality

2.2.1 Monitoring Parameters, Frequency and Duration

Table 2.1 summarizes the monitoring parameters, frequency and duration of the TSP monitoring.

Table 2.1: Air Quality Monitoring Parameters, Frequency and Duration

| Parameter | Frequency | Duration |
|-------------|---------------------------------|------------|
| 24-hour TSP | At least once in every six-days | 24 hours |
| 1-hour TSP | At least 3 times every six-days | 60 minutes |

2.2.2 Monitoring Locations

Currently, the works under the captioned project are confined in the western part of the WKCD site. Therefore, only the monitoring stations AM1 and AM2A were set up at the proposed locations in accordance with updated EM&A Manual. Location of the monitoring station is given in **Table 2.2** and shown in **Figure 1**.

Table 2.2: Air Quality Monitoring Station

| Monitoring Station | Location |
|--------------------|--|
| AM1 | International Commerce Centre (ICC) |
| AM2A | Austin Road West opposite to The Harbourside Tower 1 |

2.2.3 Monitoring Equipment

Continuous 24-hour TSP air quality monitoring was conducted using High Volume Sampler (HVS) (Model: TE-5170) located at the designated monitoring station. The HVS meets all the requirements stated in of the EM&A Manual. Portable direct reading dust meter was used to carry out the 1-hour TSP monitoring. **Table 2.3** summarizes the equipment used in the impact air quality monitoring. Copies of the calibration certificates for the HVS, calibration kit and portable dust meters are attached in **Appendix F**.

Table 2.3: TSP Monitoring Equipment

| Equipment Model | |
|---|--|
| 24-hour TSP monitoring | |
| High Volume Sampler TE-5170 (Serial No.: 0767 and 8919) | |
| Calibrator TE-5025A (Orifice I.D.: 2454) | |
| 1-hour TSP monitoring | |
| Portable direct reading dust meter Sibata LD-5R (Serial No.: 276020 and 2Z6240) | |

Calibration of the HVS (five point calibration) using Calibration Kit was carried out every two months. The HVS calibration orifice will be calibrated annually. Calibration certificate of the TE-5025A Calibration Kit and the HVS are provided in **Appendix F**

The 1-hour TSP monitoring should be determined periodically (e.g. annually) by the HVS to check the validity and accuracy of the results measured by direct reading method.

2.2.4 Monitoring Methodology

24-hour TSP Monitoring

Installation

The HVS was installed at the site boundary. The following criteria were considered in the installation of the HVS.

- A horizontal platform with appropriate support to secure the sampler against gusty wind was provided.
- The distance between the HVS and any obstacles, such as buildings, was at least twice the height that the obstacle protrudes above the HVS.
- A minimum of 2 metres separation from walls, parapets and penthouse was required for rooftop sampler.
- A minimum of 2 metres separation from any supporting structure, measured horizontally was required.
- No furnace or incinerator flues or building vent were nearby.
- Airflow around the sampler was unrestricted.
- The sampler has been more than 20 metres from any drip line.
- Permission was obtained to set up the sampler and to obtain access to the monitoring station.
- A secured supply of electricity is needed to operate the sampler.

Preparation of Filter Papers

- Glass fibre filters were labelled and sufficient filters that were clean and without pinholes were selected.
- The filters used are specified to have a minimum collection efficiency of 99 percent for 0.3 μm (DOP) particles.
- All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than ±3 °C with relative humidity (RH) < 50% and was not variable by more than ±5 %. A convenient working RH was 40%. All preparation of filters was done by Hong Kong Laboratory Accreditation Scheme (HOKLAS) accredited laboratory.</p>

Field Monitoring Procedures

- The power supply was checked to ensure the HVS works properly.
- The filter holder and the area surrounding the filter were cleaned.
- The filter holder was removed by loosening the four bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully.
- The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter.
- The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied should be sufficient to avoid air leakage at the edges.
- The shelter lid was closed and was secured with the aluminium strip.
- The HVS was warmed-up for about 5 minutes to establish run-temperature conditions.
- A new flow rate record sheet was set into the flow recorder.
- The flow rate of the HVS was checked and adjusted at around 1.3 m³/min. The range specified in the EM&A Manual was between 0.6-1.7 m³/min.

- The programmable timer was set for a sampling period of 24 hours, and the starting time, weather condition and the filter number were recorded.
- The initial elapsed time was recorded.
- At the end of sampling, the sampled filter was removed carefully and folded in half length so
 that only surfaces with collected particulate matter were in contact.
- It was then placed in a clean plastic envelope and sealed.
- All monitoring information was recorded on a standard data sheet.
- Filters were sent to a Hong Kong Laboratory Accreditation Scheme (HOKLAS) accredited laboratory for analysis.

Maintenance and Calibration

- The HVS and its accessories are maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
- HVSs were calibrated upon installation and thereafter at bi-monthly intervals. The calibration kits were calibrated annually.
- Calibration records for HVS and calibration kit are shown in Appendix F.

1-hour TSP Monitoring

Field Monitoring

The measuring procedures of the 1-hour dust meter are in accordance with the Manufacturer's Instruction Manual as follows:

- Turn the power on.
- Close the air collecting opening cover.
- Push the "TIME SETTING" switch to [BG].
- Push "START/STOP" switch to perform background measurement for 6 seconds.
- Turn the knob at SENSI ADJ position to insert the light scattering plate.
- Leave the equipment for 1 minute upon "SPAN CHECK" is indicated in the display.
- Push "START/STOP" switch to perform automatic sensitivity adjustment. This measurement takes 1 minute.
- Pull out the knob and return it to MEASURE position.
- Setting time period of 1 hour for the 1-hour TSP measurement.
- Push "START/STOP" to start the 1-hour TSP measurement.
- Regular checking of the time period setting to ensure monitoring time of 1 hour.

Maintenance and Calibration

- The 1-hour dust meter would be checked at 3-month intervals and calibrated at 1-year intervals throughout all stages of the air quality monitoring.
- Calibration records for direct dust meters are shown in Appendix F.

Weather Condition

 Meteorological data extracted from Hong Kong Observatory for the reporting month is provided in **Appendix H**.

2.3 Noise

2.3.1 Monitoring Parameters, Frequency and Duration

Table 2.4 summarizes the monitoring parameters, frequency and duration of noise monitoring. The noise in A-weighted levels L_{eq} , L_{10} and L_{90} are recorded in a 30-minute interval between 0700 and 1900 hours.

Table 2.4: Noise Monitoring Parameters, Period and Frequency

| Time Period | Parameters | Frequency |
|----------------------------|---|-----------------|
| Daytime on normal weekdays | L _{eq} (30 min), L ₉₀ (30 min) & L ₁₀ (30 min) | Once every week |
| (0700-1900 hours) | | |

2.3.2 Monitoring Location

Currently, the works under the captioned project are confined in the western part of the WKCD site. Therefore, only the monitoring station NM1A was set up at the proposed location in accordance with updated EM&A Manual. Location of the monitoring station is given in **Table 2.5** and shown in **Figure 1**.

Table 2.5: Noise Monitoring Station

| Monitoring Station | Location |
|--------------------|---|
| NM1A | Podium floor of International Commerce Centre (ICC) |

2.3.3 Monitoring Equipment

Integrating Sound Level Meter was used for noise monitoring. It was a Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{Aeq}) and percentile sound pressure level (L_x). They comply with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). **Table 2.6** summarizes the noise monitoring equipment model being used.

Table 2.6: Noise Monitoring Equipments

| Monitoring Station | Equipment Model | | | |
|--------------------|---------------------------------|---------------------------------|--|--|
| | Integrating Sound Level Meter | Calibrator | | |
| NM1A | Rion NL-18 (Serial No.00360030) | Rion NC-73 (Serial No.10997142) | | |

2.3.4 Monitoring Methodology

Field Monitoring

- The microphone of the Sound Level Meter was set at least 1.2 m above the ground.
- Free Field measurement was made at the monitoring locations.
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - frequency weighting: A
 - time weighting: Fast
 - time measurement: 30 minutes intervals (between 0700-1900 on normal weekdays)
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94 dB at 1 kHz. If the difference in the calibration level before and after measurement was more than 1 dB, the measurement would be considered invalid and has to be repeated after recalibration or repair of the equipment.
- During the monitoring period, the L_{eq}, L₁₀ and L₉₀ were recorded. In addition, any site observations and noise sources were recorded on a standard record sheet.
- A correction of +3dB(A) was made to the free field measurements.

Maintenance and Calibration

 The microphone head of the sound level meter and calibrator is cleaned with soft cloth at quarterly intervals.

- The sound level meter and calibrator are sent to the supplier or HOKLAS laboratory to check and calibrate at yearly intervals.
- Calibration records are shown in Appendix F.

Weather Condition

 Meteorological data extracted from Hong Kong Observatory for the reporting month is provided in **Appendix H**.

2.4 Landscape and Visual

2.4.1 Monitoring Program

Table 2.7 details the monitoring program (as proposed in the WKCD EIA report) for landscape and visual impact during the construction phase.

Table 2.7: Monitoring Program for Landscape and Visual Impact during Construction Phase

| Stage | Monitoring Task | Frequency | Report | Approval |
|--------------|---|-----------|---|-----------------------|
| Construction | Monitor implementation of proposed mitigation measures during the construction stage. | Bi-weekly | ET to report on Contractor's compliance | Counter-signed by IEC |

During the landscape and visual impact monitoring, any changes in relation to the landscape and visual amenity should be monitored with reference to the baseline conditions of the site. In addition, mitigation measures were proposed in the WKCD EIA report to minimise the landscape and visual impacts during the construction phase. The proposed mitigation measures as shown in Table 9.1 and Table 9.2 of the EM&A Manual should be checked for proper implementation.

3 Monitoring Results

3.1 Impact Monitoring

Construction impact monitoring for air quality, noise and landscape and visual impact was undertaken in compliance with the EM&A Manual during the reporting month.

3.2 Air Quality Monitoring

3.2.1 1-hour TSP

Results of 1-hour TSP at the monitoring location AM1 and AM2A are summarised in **Table 3.1**. Graphical plots of the monitoring results are shown in **Appendix G**.

Table 3.1: Summary of 1-hour TSP monitoring results

| Monitoring Station | Monitoring | Start Time | 1-hour TSP (µg/m³) | | | Range | Action | Limit |
|-----------------------|------------|---------------|--------------------|---------------|---------------|---------------|------------------|------------------|
| | Date | | 1st Result | 2nd Result | 3rd Result | (μg/m³) | Level (µg/m³) | Level (µg/m³) |
| | 1-Feb-17 | 10:50 | 45 | 52 | 56 | | | |
| | 6-Feb-17 | 10:42 | 84 | 91 | 97 | | 273.7 | 500 |
| AM1 | 10-Feb-17 | 8:02 | 54 | 51 | 60 | - - 45-100 | | |
| AIVII | 16-Feb-17 | 10:48 | 64 | 70 | 79 | - 43-100 - | | |
| | 22-Feb-17 | 10:47 | 100 | 82 | 76 | | | |
| | 28-Feb-17 | 10:40 | 63 | 69 | 77 | | | |
| | 1-Feb-17 | 11:02 | 75 | 59 | 62 | _ | 074.0 | 500 |
| | 6-Feb-17 | 10:55 | 85 | 93 | 99 | | | |
| AM2A | 10-Feb-17 | 8:14 | 59 | 61 | 65 | - - 59-133 | | |
| AIVIZA | 16-Feb-17 | 11:02 | 86 | 90 | 76 | _ 59-133 | 274.2 | |
| | 22-Feb-17 | 11:00 | 112 | 119 | 133 | | | |
| | 28-Feb-17 | 10:54 | 82 | 71 | 89 | _ | | |

3.2.2 24-hour TSP

Results of 24-hour TSP at the monitoring location AM1 and AM2A are summarised in **Table 3.2**. Graphical plots of the monitoring results are shown in **Appendix G**.

Table 3.2: Summary of 24-hour TSP monitoring results

| Monitoring Station | Monitoring Date | Start Time | Monitoring Results (μg/m3) | Range (µg/m3) | Action Level (μg/m3) | Limit Level (μg/m3) |
|-----------------------|--------------------|------------|----------------------------------|------------------|----------------------|---------------------|
| | 1-Feb-17 | 10:52 | 37 | | | |
| | 6-Feb-17 | 10:40 | 45 | _ | | |
| AM1 | 10-Feb-17 | 8:00 | 44 | 37-50 | 143.6 | 260 |
| | 16-Feb-17 | 10:50 | 46 | 37-30 | | |
| | 22-Feb-16 | 10:45 | 50 | _ | | |
| | 28-Feb-17 | 10:42 | 47 | _ | | |
| | 1-Feb-17 | 11:04 | 62 | | | |
| AM2A | 6-Feb-17 | 10:52 | 59 | 59-80 | 151.1 | 260 |
| | 10-Feb-17 | 8:12 | 80 | _ | | |

| Monitoring Station | Monitoring Date | Start Time | Monitoring Results (μg/m3) | Range (µg/m3) | Action Level (µg/m3) | Limit Level (µg/m3) |
|-----------------------|--------------------|------------|----------------------------------|------------------|----------------------|------------------------|
| | 16-Feb-17 | 11:00 | 63 | | | _ |
| | 22-Feb-17 | 10:57 | 72 | _ | | |
| | 28-Feb-17 | 10:52 | 61 | - | | |

No exceedance of 1-hour and 24-hour TSP (Action or Limit Level) was recorded in the reporting period.

3.3 Noise Monitoring

The construction noise monitoring results at the monitoring location NM1A are summarized in **Table 3.3**. Graphical plots of the monitoring data and the station set-up of a free-field measurement are shown in **Appendix G**.

Table 3.3: Summary of noise monitoring results during normal weekdays

| Monitoring Date | Start Time | End Time | Leq (30 mins), dB(A) | Limit Level for Leq (dB(A)) |
|-----------------|------------|----------|----------------------|--------------------------------|
| 1-Feb-17 | 14:00 | 14:30 | 68 | |
| 6-Feb-17 | 14:00 | 14:30 | 69 | - |
| 16-Feb-17 | 14:00 | 14:30 | 69 | 75 |
| 22-Feb-17 | 14:00 | 14:30 | 69 | |
| 28-Feb-17 | 14:00 | 14:30 | 69 | |

Remarks:

No exceedance (Action/Limit Level) of construction noise was recorded in the reporting period as no noise related environmental complaint was received during the reporting period and noise levels recorded during the monitoring period were below 75 dB(A).

3.4 Landscape and Visual Impact

Landscape and visual impact inspections were conducted as part of the weekly site inspections on 2 and 16 February 2017 for M+ Museum and 1 and 17 February 2017 for Lyric Theatre Complex during the reporting month. As reviewed by the registered Landscape Architect, no adverse comment on landscape and visual aspects was made during these inspections.

The landscape and visual mitigation measures were implemented during the reporting period. The summary of implementation status of the environmental mitigation measures are provided in Appendix J.

⁺³dB (A) correction was applied to free-field measurement.

4 Environmental Site Inspection

4.1 Site Inspection

4.1.1 M+ Museum

Construction phase weekly site inspections were carried out on 2, 9, 16 and 23 February 2017. The joint site inspection with IEC, ET, ER and Contractor was held on 9 February 2017. All observations have been recorded in the site inspection checklist and passed to the Contractor together with the appropriate recommended mitigation measures where necessary. The key observations from the site inspections and associated recommendations are summarized in **Table 4.1**.

Table 4.1: Summary of Site Inspections and Recommendations for M+ Museum

| Inspection Date | Parameter | Observation / Recommendation | Contactor's Responses / Action(s) Undertaken | Close-out (Date) |
|-----------------|---------------------|--|--|---------------------|
| 26 Jan 2017 | Waste management | Chemical container was found without drip tray near Gate 3. The contractor was reminded to provide drip tray for all chemicals. | The contractor has removed the chemical container previously observed without drip tray. | 1 Feb 2017 |
| 26 Jan 2017 | Air quality | Cement bag was found left open at B2. The contractor was reminded to cover the cement bag with impervious sheet to reduce dust impact. | The contractor has removed the uncovered cement bag previously found at B2. | 1 Feb 2017 |
| 2 Feb 2017 | Waste management | Construction waste was found accumulated in the site. The contractor was reminded to remove the construction waste regularly. | The contractor has removed the construction waste previously observed. | 8 Feb 2017 |
| 2 Feb 2017 | Air quality | Haul road was observed dry and dusty. The contractor was reminded to enhance water spraying to reduce dust impact. | The contractor has enhanced water spraying in site. | 8 Feb 2017 |
| 2 Feb 2017 | Waste management | Chemical waste was found in the drip tray of the generator near Gate 1. The contractor was reminded to clean up the drip tray more frequently. | The contractor has cleaned up the drip tray of the generator near Gate 1. | 8 Feb 2017 |
| 2 Feb 2017 | Waste management | Chemical constainers and drums at NK11 were found without drip trays. The contractor was reminded to provide sufficient drip trays for the chemicals. | The contractor has removed the chemical containers and drums previously observed without drip tray. | 8 Feb 2017 |
| 2 Feb 2017 | Water quality | Algae was found accumulated in wetsep no.1. The contractor was reminded to clean up the wetsep and also check the chemical dosage to ensure the preformance of the wetsep. | The contractor has cleaned up the wetsep to remove algae and checked the chemical dosage to ensure the performance of the wetsep no.1. | 8 Feb 2017 |
| 2 Feb 2017 | Water quality | Effluent quality at ICP sampling point and M+ wetseps was checked. They were all visually clear when comparing with standard solution and within proper pH range. | N/A | N/A |
| 9 Feb 2017 | Waste management | Mixture of waste was found in the drip tray of generator near Gate 1. The contractor was reminded to clean up the drip tray regularly. | The contractor has arranged clean- up of the drip tray. | 15 Feb 2017 |

| Inspection Date | Parameter | Observation / Recommendation | Contactor's Responses / Action(s) Undertaken | Close-out (Date) |
|-----------------|---------------------|--|---|------------------|
| 9 Feb 2017 | Waste management | Chemicals were found without drip trays in different areas of the site. The contractor was reminded to ensure sufficient drip trays are provided for the chemicals. | The contractor has removed the chemicals previously observed without drip trays. | 13 Feb 2017 |
| 9 Feb 2017 | Air quality | Overloaded truck was observed leaving the site. The contractor was reminded to ensure the truck are properly loaded and well covered. | The truck was observed properly loaded and covered. | 16 Feb 2017 |
| 9 Feb 2017 | Water quality | Effluent quality at ICP sampling point and M+ wetseps was checked. They were all visually clear when comparing with standard solution and within proper pH range. | N/A | N/A |
| 16 Feb 2017 | Air quality | Stockpile was found uncovered. The contractor was reminded to cover the stockpile with impervious sheet to reduce dust impact. | The contractor has removed the stockpile that previously uncovered. | 23 Feb 2017 |
| 16 Feb 2017 | Waste management | Chemicals were found without drip trays. The contractor was reminded to provide drip trays for the chemicals. | The contractor has removed the chemicals that previously observed without drip trays. | 23 Feb 2017 |
| 16 Feb 2017 | Waste management | Construction waste was observed uncovered and accumulated in B2. The contractor was reminded to either remove it or well cover it. | The contractor has well covered the construction waste. | 23 Feb 2017 |
| 16 Feb 2017 | Waste management | Oil stain was found next to the generator and mixture of chemcial waste was observed in drip trays. The contractor was reminded to rectify it and treat it as chemical waste. | The contractor has cleaned the drip tray and oil stain. | 23 Feb 2017 |
| 16 Feb 2017 | Water quality | Effluent quality at ICP sampling point and M+ wetseps was checked. They were all visually clear and within proper pH range. | N/A | N/A |
| 23 Feb 2017 | Water quality | The contractor was reminded to provide sufficient pumps at B2 to remove the stagnant water. | Follow-up status will be provided in the next reporting month | On-going |
| 23 Feb 2017 | Waste management | The drip tray of the generator near Gate 1 was observed without plug and mixture of chemical waste. The contractor was reminded to provide plug and clean up the drip tray more frequently. | Follow-up status will be provided in the next reporting month | On-going |
| 23 Feb 2017 | Waste management | Chemicals without drip tray were found at ground level and gridline 4G. The contractor was reminded to provide sufficient drip trays for the chemicals. | Follow-up status will be provided in the next reporting month | On-going |
| 23 Feb 2017 | Waste management | Oil stain was found near gridline 4G. The contractor was reminded to rectify it as chemical waste. | Follow-up status will be provided in the next reporting month | On-going |
| 23 Feb 2017 | Water quality | Effluent quality at ICP sampling point and M+ wetseps was checked. They were all visually clear when comparing with standard solution and within proper pH range. Algae was found in wetsep no.1. The contractor was reminded to remove the algae more | Follow-up status will be provided in the next reporting month | On-going |

| Inspection Date | Parameter | Observation / Recommendation | Contactor's Responses / Action(s) Undertaken | Close-out (Date) |
|--------------------|-----------|------------------------------|--|---------------------|
| | | frequently. | | |

4.1.2 Lyric Theatre Complex

Construction phase weekly site inspections were carried out on 1, 8, 17 and 22 February 2017. The joint site inspection with IEC, ET, ER and Contractor was held on 17 February 2017. EPD site inspection was conducted on 28 February 2017. Chemical waste store and wastewater treatment facilities were inspected and photos at sea-front area were taken. No adverse comments received. All observations have been recorded in the site inspection checklist and passed to the Contractor together with the appropriate recommended mitigation measures where necessary. The key observations from the site inspections and associated recommendations are summarized in **Table 4.2**.

Table 4.2: Summary of Site Inspections and Recommendations for Lyric Theatre Complex

| Inspection Date | Parameter | Observation / Recommendation | Contactor's Responses / Action(s) Undertaken | Close-out (Date) |
|-----------------|---------------------|---|---|---------------------|
| 1 Feb 2017 | Air quality | The ground was observed dry and dusty. The contractor was reminded to enhance water spraying to reduce dust impact. | Water spraying on main site haul road was conducted regularly. | 3 Feb 2017 |
| 1 Feb 2017 | Waste management | Chemical containers were found without drip trays. The contractor was reminded to provide drip trays for all chemicals. | The contractor has removed the chemicals and placed in drip tray. | 3 Feb 2017 |
| 1 Feb 2017 | Waste management | Construction waste was found accumulated. The contractor was reminded to remove the construction waste regularly. | General refuse was cleared off site. | 3 Feb 2017 |
| 8 Feb 2017 | Waste management | The drip trays of air-compressor and welding machine at Area L06 was observed full of mud and water. The contractor was reminded to remove the mud and water and treated as chemical waste. | Mud was cleared from the drip tray of construction plant at Area L06. | 13 Feb 2017 |
| 17 Feb 2017 | Water quality | While no discharge was observed from Wetsep No. 2, the pH meter reading appeared to be abnormal. The Contractor should ensure that wastewater is properly treated by the Wetsep prior to discharge from the site. | Wastewater was filled into the Wetsep and value of pH sensor resumed to normal range. | 22 Feb 2017 |
| 17 Feb 2017 | Waste management | Drip tray for a site plant was filled with stagnant water. The Contractor should clear the stagnant water to prevent overspill. | The stagnant water inside drip tray was cleared. | 22 Feb 2017 |
| 17 Feb 2017 | Noise | The engine door of a powerpack was not closed. The Contractor should ensure that it is properly closed at all times while in operation. | The panel of powerpack was properly closed. | 22 Feb 2017 |
| 22 Feb 2017 | Water quality | Turbid wastewater was observed at the Wetsep No.2. The Contractor was remined to ensure the discharge wastewater has good standard. | Wetsep No. 2 was maintained and de-sludged. | 25 Feb 2017 |
| 22 Feb 2017 | Waste management | A hole was observed at the drip tray of generator. The Contractor was reminded to prevent leakage of stagnant water from drip tray. | Drip tray of generator was plugged to prevent leakage of stagnant water. | 25 Feb 2017 |

4.2 Advice on the Solid and Liquid Waste Management Status

The Contractors have been registered as a chemical waste producer for the Project. Construction and demolition (C&D) material sorting will be carried out on site. A sufficient number of receptacles were available for general refuse collection.

4.2.1 M+ Museum

As advised by the Contractor, 15.52 ton and 110.12 ton of inert C&D material were disposed of as public fill to Tuen Mun Area 38 and Tseung Kwan O Area 137 Public Fill respectively, while 81.4 ton of general refuse was disposed of at SENT landfill. 70.5 ton of metals, 0.6 ton of paper/cardboard packaging, 0 ton of plastic and 84.0 ton of timber were collected by recycling contractors in the reporting month. 0 ton of inert C&D materials was reused on site. 768.0 ton of inert C&D materials were reused in other projects and 34.0 ton of inert C&D materials were disposed to sorting facility. 0 ton of chemical waste was collected by licensed contractors in the reporting period.

The actual amounts of different types of waste generated by the activities of construction works at M+ Museum in the reporting month are shown in **Appendix I**.

4.2.2 Lyric Theatre Complex

As advised by the Contractor, 1,142.06 ton and 7,966.1 ton of inert C&D material were disposed of as public fill to Tuen Mun Area 38 and Tseung Kwan O Area 137 respectively, while 9.8 ton of general refuse was disposed of at SENT landfill. 50.2 ton of metals, 0.2 ton of paper/cardboard packaging, 0 ton of plastic and 0 ton of timber were collected by recycling contractors in the reporting month. 0 ton of inert C&D materials was reused on site. 0 ton of inert C&D materials was reused in other projects. 0.7 ton of chemical wastes was collected by licensed contractors in the reporting period.

The actual amounts of different types of waste generated by the activities of construction works at Lyric Theatre Complex in the reporting month are shown in **Appendix I**.

4.3 Status of Environmental Licenses and Permits

The environmental permits, licenses, and/or notifications on environmental protection for this Project which were valid during the period are summarised in **Table 4.3** and **Table 4.4**.

4.3.1 M+ Museum

Table 4.3: Status of Environmental Submissions, Licenses and Permits for M+ Museum

| Permit / License | Valid | Valid Period | | Remarks | |
|------------------------------------|-----------------------|-----------------------|----------------|---------|--|
| No. / Notification / Reference No. | From | From To | | | |
| Chemical Waste Produ | cer Registration | | | | |
| 5213-217-H2913-45 | 05-Nov-15 | | Valid | | |
| Billing Account Constr | ruction Waste Dispos | al | | | |
| 7023393 | 13-Oct-15 | | Account Active | | |
| Construction Noise Pe | rmit | | | | |
| GW-RE1058-16 | 4-Nov-16 | 3-May-17 | Valid | | |
| Wastewater Discharge | License | | | | |
| WT00023633-2016 | 4-Mar-16 | 31-Mar-21 | Valid | | |
| Notification under Air I | Pollution Control (Co | nstruction Dust) Regu | ılation | | |
| 394083 | 7-Oct-15 | | Notified | | |

4.3.2 Lyric Theatre Complex

Table 4.4: Status of Environmental Submissions, Licenses and Permits for Lyric Theatre Complex

| Permit / License | Valid | Valid Period | | Remarks | | | | |
|------------------------------------|---|--------------|----------------|---------|--|--|--|--|
| No. / Notification / Reference No. | From | То | _ | | | | | |
| Chemical Waste Produ | cer Registration | | | | | | | |
| 5213-217-G2347-39 | 17-Feb-16 | | Valid | | | | | |
| Billing Account Constr | uction Waste Dispos | al | | | | | | |
| 7024189 | 25-Jan-16 | | Account Active | | | | | |
| Construction Noise Per | rmit | | | | | | | |
| GW-RE1113-16 | 23-Nov-16 | 20-May-17 | Valid | | | | | |
| Wastewater Discharge | License | | | | | | | |
| WT00023648-2016 | 9-Mar-16 | 31-Mar-21 | Valid | | | | | |
| Notification under Air F | Notification under Air Pollution Control (Construction Dust) Regulation | | | | | | | |
| 398075 | 18-Jan-16 | | Notified | | | | | |

4.4 Recommended Mitigation Measures

The EM&A programme followed the recommended mitigation measures in the EM&A Manual. The EM&A requirements as well as the summary of implementation status of the environmental mitigation measures are provided in **Appendix J**. In particular, the following mitigation measures were brought to attention during the site inspections:

4.4.1 M+ Museum

Chemical and Waste Management

- All chemical drum/ containers stored on site should be provided with drip trays.
- Construction waste generated on site should be regularly removed.
- Maintain good condition of drip tray, such as plugs should be provided or ensure no leaks of drip trays to avoid leakage of chemical waste.
- Any oil leakage or stain should be properly rectified and treat it as chemical waste.

Air Quality

- Enhance water spraying for haul roads to reduce dust impact.
- Maintain high standard of housekeeping to prevent emission of fugitive dust.
- Dusty materials stored on site should be well covered to reduce dust impact.
- Trucks should be properly loaded and well covered to reduce dust impact.

Water Quality

- Wetsep units should be regularly checked and maintained to ensure proper function of the system to treat wastewater or runoff before discharge.
- Sufficient pumps should be provided to avoid stagnant water, especially in rainy season.

4.4.2 Lyric Theatre Complex

Chemical and Waste Management

- All chemical drum/ containers stored on site should be provided with drip trays.
- Drip trays should be regularly cleaned up to avoid accumulation of chemical waste.
- Maintain good condition of drip tray, such as plugs should be provided or ensure no leaks of drip trays to avoid leakage of chemical waste.
- Construction waste generated on site should be regularly removed.

Air Quality

Enhance water spraying for haul roads to reduce dust impact.

Water Quality

 Wetsep units should be regularly checked and maintained to ensure proper function to treat wastewater or runoff before discharge.

Noise

The engine door of the powerpack of the plants should be closed to reduce noise.

Compliance with Environmental Permit

The status of the required submission under the EP during the reporting period is summarized in Table 5.1.

Table 5.1: Status of Submissions under the Environmental Permit

| EP Condition | Submission | Submission Date |
|---------------|--------------------------------------|------------------|
| Condition 3.4 | Monthly EM&A Report for January 2017 | 14 February 2017 |

6 Report in Non-compliance, Complaints, Notification of Summons and Successful Prosecutions

6.1 Record on Non-compliance of Action and Limit Levels

There was no breach of Action or Limit Levels for Air Quality and Noise monitoring in the reporting month.

6.2 Record on Environmental Complaints Received

No environmental complaint was received this month. The cumulative statistics on complaints were provided in **Appendix K**.

6.3 Record on Notifications of Summons and Successful Prosecution

Regarding the notification of summons received by the contractor of M+ Museum, Hsin Chong Construction Company Limited, in December 2016, the prosecution case for the muddy water discharge on 2 July 2016 was found not guilty after the trial hearing on 8 February 2017.

No notifications of summons or successful prosecution were received this month. The cumulative statistics on notifications of summons and successful prosecutions were provided in **Appendix K**.

7 Future Key Issues

7.1 Construction Works for the Coming Month(s)

7.1.1 M+ Museum

The major site works scheduled to be commissioned in the coming month include:

- Construction of G/F, LGF, B1 and B2 slab
- Construction of column from B2 to B1, B1 to LGF and LGF to GF
- Installation of megastruss
- Construction of DCS structure from B1 to LGF
- Pile cap and sump pit construction at B2 and ICP
- Construction of B1 slab and beam at ICP
- Sheet Pile Installation for seawater outfall pipe between Ch0+66 to Ch0+108
- Storm Drainage at Portion M45

7.1.2 Lyric Theatre Complex

The major site works scheduled to be commissioned in the coming month include:

- Pipe Pile Construction
- Socket-H Pile Construction
- Bored Pile Construction
- Sheet Pile Construction

7.2 Key Issues for the Coming Month

7.2.1 M+ Museum

Key issues to be considered in the coming month include:

- Generation of dust from construction works:
- Noise impact from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Management of stockpiles and slopes, particularly on rainy days;
- Sorting, recycling, storage and disposal of general refuse and construction waste; and
- Management of chemicals and avoidance of oil spillage on-site.

7.2.2 Lyric Theatre Complex

Key issues to be considered in the coming month include:

- Generation of dust from construction works;
- Noise impact from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Management of stockpiles and slopes, particularly on rainy days;
- Sorting, recycling, storage and disposal of general refuse and construction waste; and
- Management of chemicals and avoidance of oil spillage on-site.

7.3 Monitoring Schedule for the Coming Month

The environmental site inspection and environmental monitoring will be continued in the coming month. Impact monitoring for air quality and noise in accordance with the approved EM&A Manual has commenced since 31 October 2015 and 5 March 2016 respectively. The tentative monitoring schedule for the coming month is shown in the **Appendix E**.

8 Conclusions and Recommendations

8.1 Conclusions

The EM&A programme as recommended in the EM&A Manual has been undertaken since the construction of M+ Museum main works commenced on 31 October 2015, and the construction of Lyric Theatre Complex foundation works commenced on 1 March 2016.

Monitoring of air quality and noise with respect to the Projects is underway. In particular, the 1-hour TSP, 24-hour TSP, noise level (as Leq, 30 minutes) under monitoring have been checked against established Action and Limit levels. There was no breach of Action and Limit Levels for 1-hour TSP, 24-hour TSP and noise in the reporting month.

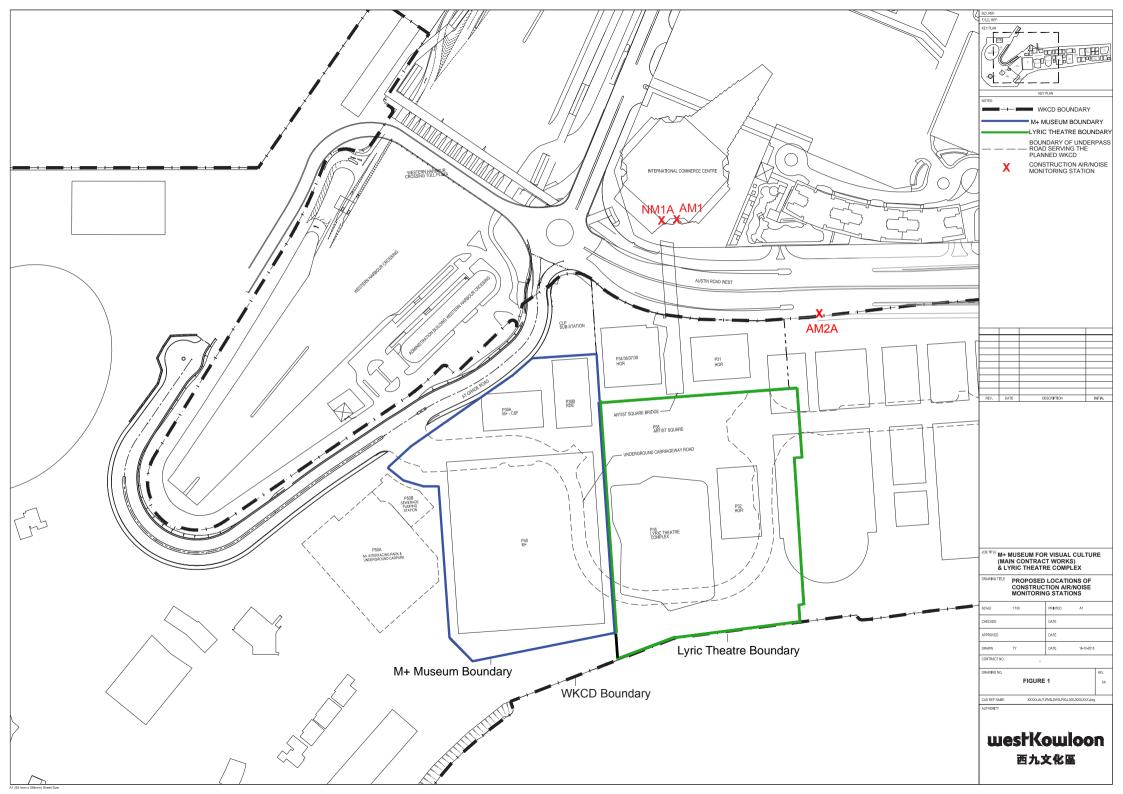
No environmental complaint and no notifications of summons or successful prosecution were received during the reporting month.

Weekly construction phase site inspections and bi-weekly landscape and visual impact inspections were conducted during the reporting month as required. It was observed that the Contractors had implemented all possible and feasible mitigation measures to mitigate the potential environmental impacts during construction phase works.

8.2 Recommendations

Potential environmental impacts due to the construction activities, including air quality, noise, water quality, waste, landscape and visual, will be monitored or reviewed. The recommended environmental mitigation measures shall be implemented on site and regular inspections as required will be carried out to ensure that the environmental conditions are acceptable.

Figure 1 Site Layout Plan and Monitoring Stations



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A. Project Organisation

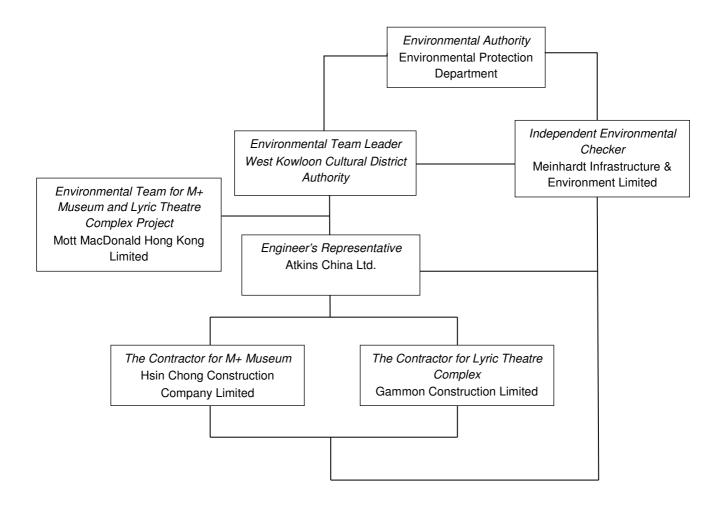
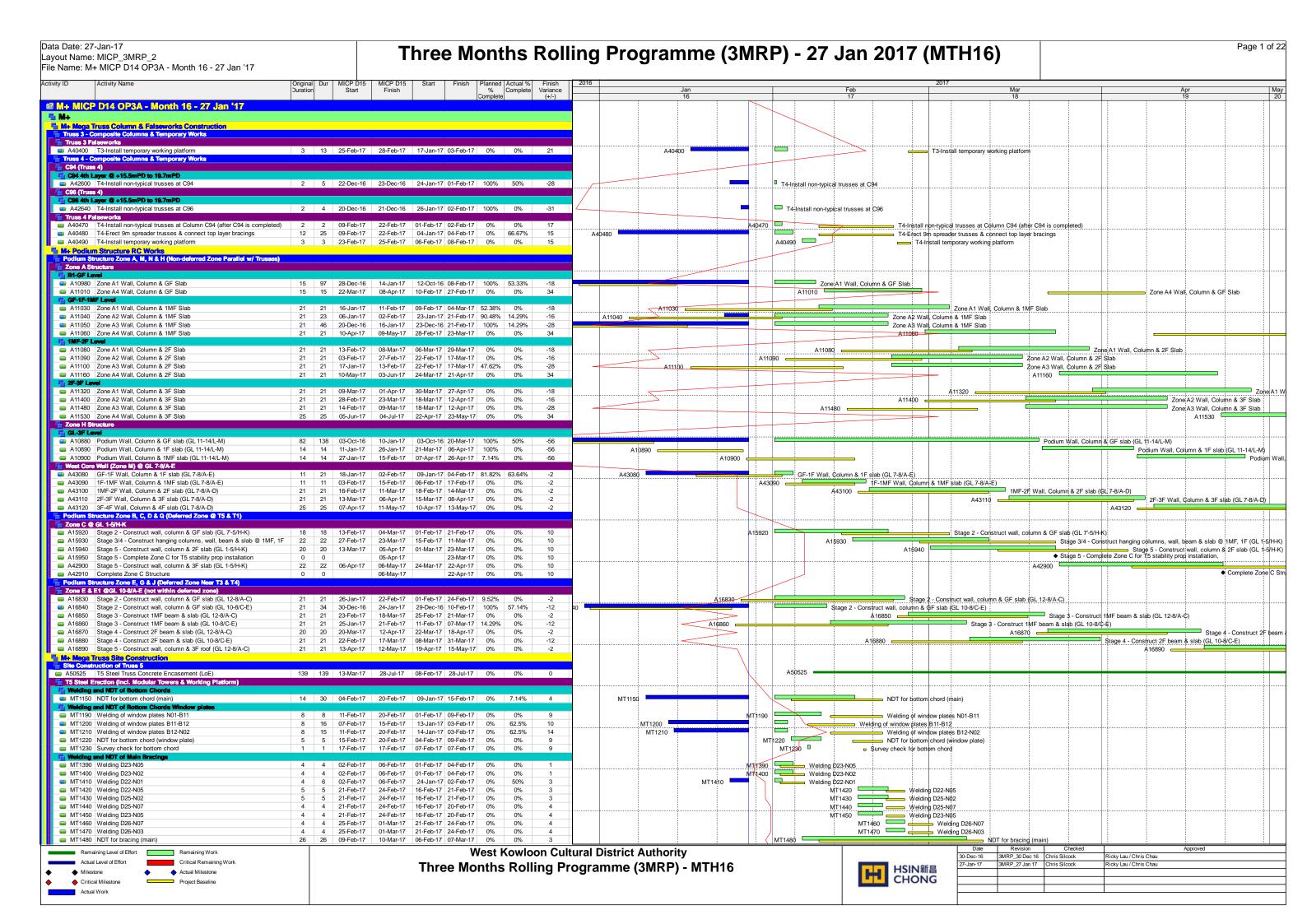


Table A-1: Contact information

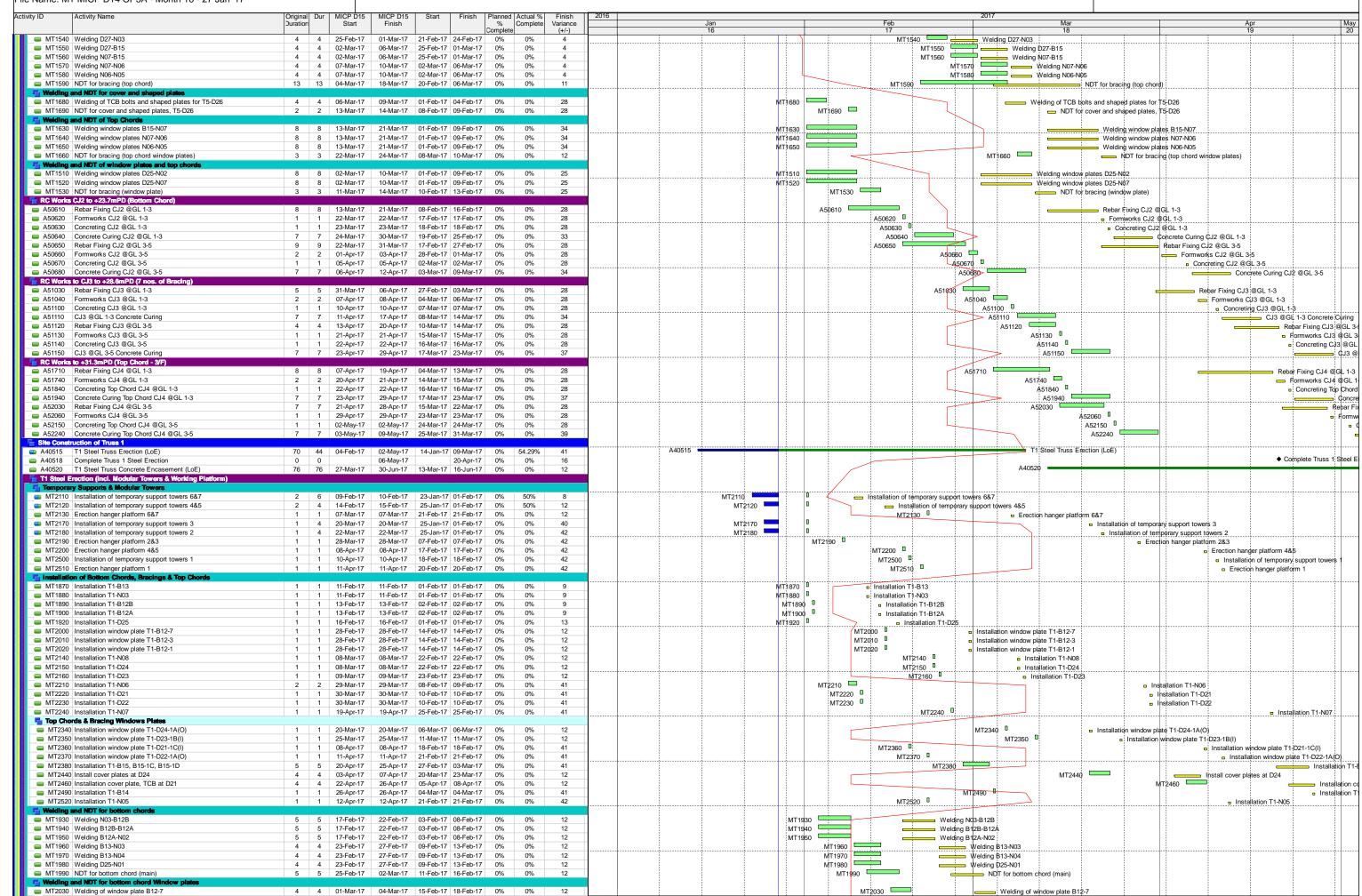
| Role | Name | Telephone |
|---|---|--|
| Resident Engineer | Mr. Benny Ip | 9379 5614 |
| Independent Environmental Checker | Mr. Fredrick Leong | 2859 1739 |
| Environmental Manager | Mr. Leo Chow | 9266 6855 |
| Environmental Manager | Ms. Michelle Tang | 9267 8866 |
| Contractor's Environmental Team Leader | Mr Brandon Wong | 2828 5875 |
| Senior Environmental Specialist | Mr. Brian Tam | 2200 0059 |
| | Resident Engineer Independent Environmental Checker Environmental Manager Environmental Manager Contractor's Environmental Team Leader Senior Environmental | Resident Engineer Mr. Benny Ip Independent Environmental Checker Environmental Manager Mr. Leo Chow Environmental Manager Ms. Michelle Tang Contractor's Environmental Team Leader Senior Environmental Mr. Brian Tam |

B. Tentative Construction Programme





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Lavout Name: MICP 3MRP 2

File Name: M+ MICP D14 OP3A - Month 16 - 27 Jan '17

Three Months Rolling Programme (3MRP) - 27 Jan 2017 (MTH16)

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Planned Actual % Finish Complete Variance IICP D15 Finish Start MT2040 Welding of window plate B12-1 04-Mar-17 15-Feb-17 18-Feb-17 4 01-Mar-17 4 01-Mar-17 Welding of window plate B12-1 ■ MT2050 Welding of window plate B12-3

Welding and NDT for bottom chords-1 04-Mar-17 15-Feb-17 18-Feb-17 0% MT2050 Welding of window plate B12-3 10-Mar-17 14-Mar-17 02-Feb-17 06-Feb-17 MT2070 MT2080 Welding B11-N01 10-Mar-17 14-Mar-17 02-Feb-17 06-Feb-17 0% 0% Welding B11-N01 0% MT2090 NDT for bottom chord (window plate) 17-Mar-17 22-Feb-17 03-Mar-17 0% 08-Mar-17 MT2090 NDT for bottom chord (window plate) MT2100 Survey check for bottom chord 15-Mar-17 07-Feb-17 07-Feb-17 MT2100 Survey check for bottom chord Welding and NDT for Main b MT2250 Welding D24-N04 10-Mar-17 14-Mar-17 24-Feb-17 28-Feb-17 MT2250 Welding D24-N04 MT2260 Welding D23-N03 MT2260 Welding D23-N03 MT2270 Welding D24-N08 10-Mar-17 15-Mar-17 24-Feb-17 01-Mar-17 MT2270 Welding D24-N08 MT2280 Welding D23-N08 16-Mar-17 21-Mar-17 02-Mar-17 07-Mar-17 MT2280 Welding D23-N08 MT2290 Welding D22-N06 11-Feb-17 15-Feb-17 31-Mar-17 05-Apr-17 MT2290 Welding D22-N06 MT2300 11-Feb-17 15-Feb-17 MT2300 Welding D22-N02 31-Mar-17 Welding D22-N02 MT2310 Welding D21-N06 31-Mar-17 06-Apr-17 11-Feb-17 16-Feb-17 MT2310 = Welding D21-N06 MT2320 Welding D21-N01 31-Mar-17 05-Apr-17 11-Feb-17 15-Feb-17 MT2320 Welding D21-N01 MT2330 NDT for bracing (main) MT2330 NDT for bracing (main Welding and NDT for cover pla MT2450 Welding cover plates at D24 MT2450 08-Apr-17 11-Apr-17 24-Mar-17 27-Mar-17 0% 0% Welding cover plates at D24 MT2470 Welding cover plate at D21 MT2480 NDT for cover plates 10-Apr-17 05-May-17 25-Mar-17 19-Apr-17 0% MT2480 Welding and NDT for Win MT2390 Welding of D24-1A(O) 24-Mar-17 28-Mar-17 10-Mar-17 14-Mar-17 MT2390 = Welding of D24-1A(O) MT2400 Welding of D23-1B(I) 27-Mar-17 31-Mar-17 13-Mar-17 17-Mar-17 MT2400 Welding of D23-1B(I) MT2410 MT2410 Welding of D22-1A(O) 12-Apr-17 19-Apr-17 22-Feb-17 25-Feb-17 0% Welding of D22-1A(O MT2420 Welding of D21-1C(I) MT2420 == -----10-Apr-17 13-Apr-17 20-Feb-17 23-Feb-17 Welding of D21-1C(I) ■ MT2430 NDT for bracing (window plate 17-Mar-17 03-Apr-17 12 MT2430 ₩elding and NDT for Top Chords

MT2530 Welding N08-B15-1C/1D MT2530 25-Apr-17 02-Mar-17 03-Mar-17 24-Apr-17 ── Welding N08-E MT2540 Welding B15-N07 02-Mar-17 06-Mar-17 MT2540 Welding B MT2550 Welding N07-B14 24-Apr-17 27-Apr-17 02-Mar-17 06-Mar-17 MT2560 Welding B15-B15-1C/1D 27-Feb-17 07-Mar-17 MT2560 20-Apr-17 28-Apr-17 ____ Welding 02-May-17 MT2570 = MT2580 Welding N06-N05 13-Apr-17 22-Feb-17 22-Feb-17 MT2580 Welding N06-N05 MT2590 /= MT2590 NDT for top chord (main) 04-May-17 05-May-17 10-Mar-17 11-Mar-17 Completion of T1 Installation

MT2600 Survey check for overall truss T1 1 1 06-May-17 06-May-17 20-Apr-17 20-Apr-17 0% 0% 12 MT2600 RC Works East Core Wall (Incl. to +28.3mPD for T5-N A37510 Construct +20.45mPD to 23.7mPD 10-Apr-17 29-Apr-17 10-Apr-17* 29-Apr-17 A37510 = A49410 Rebar Fixing to +28.3mPD @GL K-M A49410 Rebar Fixing to +28,3mPD ■ A49500 Formworks +28.3mPD @GL K-M 20-Apr-17 20-Apr-17 01-Apr-17 01-Apr-17 0% A49500 A49590 I A49590 Concreting +28.3mPD @GL K-M 03-Apr-17 03-Apr-17 21-Apr-17 21-Apr-17 Concreting +28,3mPD A49680 Concrete Curing +28.3mPD @GL K-M A49680 RC Works CJ2 to +23.7mPD (Bottom Cho
A40570 Rebar Fixing CJ2 @GL M-K 27-Mar-17 13-Mar-17 21-Mar-17 05-Apr-17 A40570 Rebar Fixing CJ2 @GL M-K A40580 A40580 Formworks CJ2 @GL M-K 06-Apr-17 06-Apr-17 22-Mar-17 22-Mar-17 Formworks CJ2 @GL M-K A40590 Concreting CJ2 @GL M-K 07-Apr-17 23-Mar-17 23-Mar-17 Å40590 Concreting CJ2 @GL M-K A40600 == A40600 Concrete Curing CJ2 @GL M-K 08-Apr-17 14-Apr-17 24-Mar-17 30-Mar-17 Concrete Curing CJ2 @GL M-K A40610 Rebar Fixing CJ2 @GL K-H 19-Apr-17 22-Mar-17 31-Mar-17 A40610 06-Apr-17 Rebair Fixing CJ2 @GL K-A40620 A40620 Formworks CJ2 @GL A40630 A40630 Concreting CJ2 @GL K-H 22-Apr-17 22-Apr-17 05-Apr-17 05-Apr-17 ■ Concreting CJ2 @GI A40640 == A40640 Concrete Curing CJ2 @GL K-H 06-Apr-17 12-Apr-17 23-Apr-17 29-Apr-17 ■ A40650 A40660 Formworks CJ2 @GL H-F 04-May-17 04-May-17 18-Apr-17 18-Apr-17 0% 0% A44330 II A44330 Concreting CJ2 @GL H-E 05-May-17 05-May-17 19-Apr-17 19-Apr-17 0% A44440 06-May-17 11-May-17 20-Apr-17 25-Apr-17 RC Works to CJ3 to +29.3mPD (7 nos. of B

A40670 Rebar Fixing CJ3 @GL M-K 04-May-17 09-May-17 31-Mar-17 06-Apr-17 A40670 A40680 A40680 Formworks CJ3 @GL M-K 11-May-17 07-Apr-17 08-Apr-17 A40700 Concrete Curing C.13 @GL M-K 13-May-17 19-May-17 11-Apr-17 17-Apr-17 32 A40700 Å40710 = 10-May-17 A40710 Rebar Fixing CJ3 @GL K-H 13-May-17 13-Apr-17 20-Apr-17 A40730 Concreting CJ3 @GL K-H 16-May-17 16-May-17 22-Apr-17 22-Apr-17 A40730 A40740 A40740 Concrete Curing CJ3 @GL K-H 17-May-17 23-May-17 23-Apr-17 29-Apr-17 0% A40750 A40750 Rebar Fixing CJ3 @GL H-E 26-Apr-17 02-May-17 RC Works to CJ4 to 34.75mPD (7 nos. of A40770 Rebar Fixing CJ4 @GL M-K 25-May-17 18-Apr-17 22-Apr-17 A40770 A40780 Formworks CJ4 @GL M-K A40780 📟 26-May-17 27-May-17 24-Apr-17 25-Apr-17 A40790 Concreting CJ4 @GL M-K 29-May-17 29-May-17 26-Apr-17 26-Apr-17 0% A40790 I ◆ Commencement of Truss 2 Steel Works Erection, 16-Feb-17 Commencement of Truss 2 Steel Works Erection 22-Feb-17 16-Feb-17 A46665 T2 Steel Truss Erection (LoE) A46715 T2 Steel Truss Concrete Encasement (LoE) 79 79 20-Apr-17 24-Jul-17 11-Apr-17 19-Jul-17 0% 0% RC Works for CJ1 to +20.45mPD (Prior to Bottom Chord E A46890 Rebar Fixing T1 Bottom 750mm CJ1 (+20.45 mPD) Rebar Fixing T1 Bottom 750mm CJ1 (+20.45 mPD) A46990 Concreting CJ1 14-Feb-17 14-Feb-17 08-Feb-17 08-Feb-17 Å47000 = A47000 Concrete curing CJ1 7 15-Feb-17 21-Feb-17 09-Feb-17 15-Feb-17 0% Concrete curing C.11 T2 Steel Erection (incl. Modular Towers & Working Platform) Temporary Supports & Modular Towers

MT2650 Complete Truss 2 Bottom 750mm Bedding (RC strength reach 45MPa) ◆ Complete Truss 2 Bottom 750mm Bedding (RC strength reach 45MPa), 21-Feb-17 15-Feb-17 MT2660 Temporary support of bottom chord MT2670 Installation of temporary support towers 6&7 MT2660 Temporary support of bottom chord 28-Feb-17 16-Feb-17 22-Feb-17 2670 Installation of temporary support towers 6&7 MT2670 Installation of temporary support towers 6&7 23-Feb-17 24-Feb-17 17-Feb-17 18-Feb-17 Installation of temporary support towers 4&5 MT2680 Installation of temporary support towers 4&5 25-Feb-17 27-Feb-17 20-Feb-17 21-Feb-17 T2890 Installation of temporary support towers 3 MT2890 I MT2890 Installation of temporary support towers 3 20-Mar-17 20-Mar-17 14-Mar-17 14-Mar-17 ■ MT2900 Installation of temporary support towers 2 22-Mar-17 16-Mar-17 16-Mar-17 Installation of temporary support towers 2 MT2910 ■ MT2910 Installation of hanger platform 6&7 08-Mar-17 08-Mar-17 02-Mar-17 02-Mar-17 Installation of hanger platform 6&7 MT2970 MT2970 Installation of hanger platform 2&3 21-Apr-17 21-Apr-17 12-Apr-17 12-Apr-17 Installation of hanger ■ MT3010 Installation of hanger platform 4&5 25-Apr-17 19-Apr-17 19-Apr-17 25-Apr-17 Installation of MT2690 Installation T2-B13 28-Feb-17 28-Feb-17 22-Feb-17 22-Feb-17 MT2690 1 Installation T2-B13 MT2700 MT2700 Installation T2-N03 28-Feb-17 22-Feb-17 22-Feb-17 28-Feb-17 Installation T2-N03 MT2710 Installation T2-B12 01-Mar-17 23-Feb-17 23-Feb-17 MT2710 Installation T2-B12 Installation T2-N02 MT2720 Installation T2-N02 01-Mar-17 01-Mar-17 23-Feb-17 23-Feb-17 MT2720 □ MT2780 Installation window plate T2-B12-1 13-Mar-17 07-Mar-17 07-Mar-17 13-Mar-17 Installation window plate T2-B12-1 MT2780 MT2790 Installation window plate T2-B12-4 1 1 13-Mar-17 13-Mar-17 07-Mar-17 07-Mar-17 Installation window plate T2-B12-4

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lanned Actual % Complete Finish ■ MT2800 Installation window plate T2-B12-5 13-Mar-17 13-Mar-17 07-Mar-17 07-Mar-17 Installation window plate T2-B12-5 MT2840 MT2840 Installation T2-B11 14-Mar-17 14-Mar-17 08-Mar-17 08-Mar-17 0% Installation T2-B11 09-Mar-17 03-Mar-17 03-Mar-17 MT2920 Installation T2-N08 09-Mar-17 MT2920 Installation T2-N08 MT2930 Installation T2-D25 09-Mar-17 09-Mar-17 03-Mar-17 03-Mar-17 ■ Installation T2-D25 MT2940 Installation T2-D24 10-Mar-17 10-Mar-17 04-Mar-17 04-Mar-17 MT2950 Installation T2-D23 10-Apr-17 03-Apr-17 03-Apr-17 MT2950 10-Apr-17 Installation T2-D23 MT2960 Installation T2-D26 MT2960 ^{II} Installation T2-D26 MT2980 Installation T2-N06 22-Apr-17 22-Apr-17 13-Apr-17 13-Apr-17 MT2980 Installation T2-N06 MT2990 □ Installation T2-D21 MT2990 Installation T2-D21 22-Apr-17 22-Apr-17 13-Apr-17 13-Apr-17 MT3000 0 Installation T2-D3 MT3020 MT3020 Installation T2-N07 26-Apr-17 26-Apr-17 20-Apr-17 20-Apr-17 Top Chords & Bracing Windows Plates Installation T2-D25-1A(Q) MT3140 MT3140 Installation T2-D25-1A(O) 20-Mar-17 20-Mar-17 14-Mar-17 14-Mar-17 25-Mar-17 MT3150 Installation T2-D24-1C(I) 25-Mar-17 20-Mar-17 20-Mar-17 Installation T2-D24-1C(I) MT3230 Installation of cover plate for T2-D25 Installation of cover plate for T2-D25 05-Apr-17 07-Apr-17 29-Mar-17 31-Mar-17 0% MT3280 Installation T2-B15 and 4 pcs 1A,1B,1E,1F 02-May-17 24-Apr-17 25-Apr-17 29-Apr-17 MT3280 02-Mar-17 06-Mar-17 24-Feb-17 28-Feb-17 MT2730 Welding N04-B13 MT2740 MT2740 Welding B13-N03 Welding B13-N03 02-Mar-17 06-Mar-17 24-Feb-17 28-Feb-17 MT2750 Welding N03-B12 MT2750 MT2760 MT2760 Welding B12-N02 02-Mar-17 06-Mar-17 24-Feb-17 28-Feb-17 Welding B12-N02 MT2770 0 MT2770 NDT for bottom chord (main) 09-Mar-17 09-Mar-17 03-Mar-17 03-Mar-17 NDT for bottom chord (main) ding and NDT for Bottom chords MT2810 Welding of window plate B12-4

MT2820 Welding of window plate B Welding of window plate B12-4 16-Mar-17 20-Mar-17 10-Mar-17 14-Mar-17 MT2820 Welding of window plate B12-5 18-Mar-17 22-Mar-17 13-Mar-17 16-Mar-17 T2820 Welding of window plate B12-5
MT2830 Welding of window plate B12-1 MT2830 Welding of window plate B12-24-Mar-17 15-Mar-17 18-Mar-17 MT2850 Welding N02-B11 MT2850 Welding N02-B11 29-Mar-17 01-Apr-17 23-Mar-17 27-Mar-17 0% MT2860 Welding B11-N01 MT2860 Welding B11-N01 01-Apr-17 22-Mar-17 27-Mar-17 5 28-Mar-17 17-Mar-17 30-Mar-17 MT2870 NDT for bottom chord (window plate) MT2880 Survey check for bottom chord 1 1 03-Apr-17 03-Apr-17 28-Mar-17 28-Mar-17 0% ling and NDT for Main I MT3030 Welding D25-N04 Welding D25-N04 MTB030 Welding D25-N08 MT3040 Welding D25-N08 10-Mar-17 15-Mar-17 04-Mar-17 09-Mar-17 0% MT3050 Welding D24-N03
MT3060 Welding D24-N08 MT3050 Welding D24-N03 16-Mar-17 20-Mar-17 10-Mar-17 14-Mar-17 MT3050 MT3060 Welding D24-N08 16-Mar-17 10-Mar-17 15-Mar-17 21-Mar-17 MT3070 Welding D23-N02 MT3070 -11-Apr-17 05-Apr-17 08-Apr-17 мтзово MT3080 Welding D26-N01 11-Apr-17 18-Apr-17 05-Apr-17 08-Apr-17 Welding D26-N01 MT3090 Welding D21-N06 19-Apr-17 24-Apr-17 25-Apr-17 29-Apr-17 MT3090 MT3100 Welding D21-N01 MT3110 Welding D22-N02 26-Apr-17 29-Apr-17 20-Apr-17 24-Apr-17 MT3110 MT3120 MT3120 Welding D22-N06 26-Apr-17 02-May-17 20-Apr-17 25-Apr-17 MT3130 NDT for bracing (mair MT3130 = Welding D25-1A(O) MT3160 MT3160 Welding D25-1A(O) 22-Mar-17 25-Mar-17 16-Mar-17 20-Mar-17 Welding D24-1C(I) MT3240 MT3170 Welding D24-1C(I) 27-Mar-17 30-Mar-17 21-Mar-17 24-Mar-17 MT3240 Welding of cover for T2-D25 07-Apr-17 11-Apr-17 31-Mar-17 05-Apr-17 Welding of cover for T2-D25 RC Works CJ2 to +23.7mPD (Bottom (
A47240 Rebar Fixing CJ2 @GL M-K A47240 = 20-Apr-17 28-Apr-17 11-Apr-17 22-Apr-17 A47250 A47250 Formworks CJ2 @GL M-K 24-Apr-17 24-Apr-17 29-Apr-17 29-Apr-17 □ Form A47260 II A47260 Concreting CJ2 @GL M-K A47270 = A47270 Concrete Curing CJ2 @GL M-K 03-May-17 09-May-17 26-Apr-17 02-May-17 11-May-17 A47280 Rebar Fixing CJ2 @GL K-H 29-Apr-17 24-Apr-17 05-May-17 0% A47280 ■ A12360 Commencement of Truss 3 Construction ◆ Commencement of Truss 3 Construction, 04-Feb-17 01-Mar-17 04-Feb-17 0% 25 ◆ Commencement of Truss 3 Steel Works Erection, 23-Feb-17 A12430 Commencement of Truss 3 Steel Works Erection 20-Mar-17 23-Feb-17 T3 Steel Truss Erection (LoE) 20-Mar-17 10-Jun-17 23-Feb-17 16-May-17 A13190 A13190 T3 Steel Truss Concrete Encas 64 23-May-17 05-Aug-17 26-Apr-17 13-Jul-17 0% RC Works for CJ1 to +20.45mPD (Prior to Bottom Chord E
A12580 Formworks T3 Bottom 450mm CJ1 (+20.45 mPD) A12580 Formworks T3 Bottom 450mm CJ1 (+20.45 mPD) ■ A12680 Rebar Fixing T3 Bottom 450mm CJ1 (+20.45 mPD) A12680 10-Mar-17 11-Feb-17 14-Feb-17 0% Rebar Fixing T3 Bottom 450mm CJ1 (+20.45 mPD) A12760 A12760 Concreting CJ1 11-Mar-17 11-Mar-17 15-Feb-17 15-Feb-17 0% 0% Concreting CJ1 A12850 A12850 Concrete curing CJ1 7 12-Mar-17 18-Mar-17 16-Feb-17 22-Feb-17 0% Concrete curing CJ1 🔁 T3 Steel Erection (incl. Modular Towers & Working Platform Temporary Supports & Modular Towers

MT3470 Complete Truss 3 Bottom 450mm Bedding (RC strength reach 45MPa) ◆ Complete Truss 3 Bottom 450mm Bedding (RC strength reach 45MPa), 18-Mar-17 22-Feb-17 0% ■ MT3480 Temporary support of bottom chord Temporary support of bottom chord MT3760 MT3760 Installation of temporary support towers (G12) 05-Apr-17 10-Apr-17 10-Mar-17 15-Mar-17 MT3790 Installation of temporary support towers (G11) 13-Apr-17 13-Apr-17 18-Mar-17 18-Mar-17 MT3790 [Installation of temporary support towers 25-Apr-17 27-Mar-17 27-Mar-17 MT3820 Installation of temporary support towers (G10) MT3820 I 25-Apr-17 ■ MT3880 Installation of temporary support towers (G8 & G9) 05-May-17 05-May-17 05-Apr-17 05-Apr-17 MT3880 Installation of Bottom Chords, Bracings & Top Che MT3490 Installation T3-B11 MT3490 27-Mar-17 27-Mar-17 02-Mar-17 02-Mar-17 n Installation T3-B11 MT3500 Installation T3-N02 28-Mar-17 03-Mar-17 03-Mar-17 MT3500 ^{II} ■ Installation T3-N02 Installation T3-B12 MT3510 Installation T3-B12 29-Mar-17 29-Mar-17 04-Mar-17 04-Mar-17 MT3510 MT3520 MT3520 Installation T3-N03 30-Mar-17 06-Mar-17 06-Mar-17 30-Mar-17 Installation T3-N03 MT3530 MT3530 Installation T3-B13 Installation T3-B13 MT3540 Installation T3-B14 01-Apr-17 08-Mar-17 08-Mar-17 MT3540 Installation T3-B14 MT3550 Installation T3-N04 03-Apr-17 03-Apr-17 09-Mar-17 09-Mar-17 MT3550 n Installation T3-N04 ■ MT3640 Installation window plate B14-N04 18-Apr-17 18-Apr-17 MT3640 II Installation window plate B14 MT3650 MT3650 Installation window plate B13-B14 21-Mar-17 21-Mar-17 MT3660 I MT3660 Installation window plate N03-B13 20-Apr-17 20-Apr-17 22-Mar-17 22-Mar-17 Installation window plate MT3670 □ MT3670 Installation window plate B12-N03 23-Mar-17 23-Mar-17 21-Apr-17 21-Apr-17 Installation window plat ■ MT3680 Installation window plates N02-B12 24-Mar-17 24-Mar-17 MT3680 ¹ Installation window r □ Installation T3-D27 MT3770 Installation T3-D27 11-Apr-17 11-Apr-17 16-Mar-17 16-Mar-17 MT3770 I MT3780 MT3780 Installation T3-N08 17-Mar-17 17-Mar-17 12-Apr-17 12-Apr-17 Installation T3-N08 MT3800 Installation T3-D26 22-Apr-17 24-Mar-17 24-Mar-17 MT3800 MT3810 Installation T3-D25 24-Apr-17 24-Apr-17 25-Mar-17 25-Mar-17 MT3810 Installation T3-D MT3830 Installation MT3830 Installation T3-N07 26-Apr-17 26-Apr-17 28-Mar-17 28-Mar-17 MT3840 MT3840 Installation T3-B18 30-Mar-17 30-Mar-17 28-Apr-17 28-Apr-17 MT3860 Installation T3-D23 02-May-17 02-May-17 01-Apr-17 01-Apr-17 MT3860 MT3870 MT3870 Installation T3-D24 04-May-17 04-May-17 03-Apr-17 03-Apr-17 MT3890 Installation T3-N06 MT3890 06-May-17 06-Apr-17 06-Apr-17 06-May-17 MT3910 Installation T3-D21 09-May-17 09-May-17 MT3910 MT3920 MT3920 Installation T3-D22 10-May-17 10-May-17 10-Apr-17 10-Apr-17 MT39/30 11-May-17 11-Apr-17 11-Apr-17 MT3930 Installation T3-N05 11-May-17 🛓 Top Chords & Bracing Windows Plates

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IICP D1: Finish lanned Actual % Complete MT3850 Installation T3-B17 31-Mar-17 31-Mar-17 MT3850 MT3900 0% MT3900 Installation T3-B16 08-May-17 08-May-17 07-Apr-17 07-Apr-17 12-Apr-17 12-Apr-17 MT3940 MT3940 Installation T3-B15 12-May-17 12-May-17 ■ MT4180 Installation window plate D27-N04 29-Mar-17 29-Mar-17 MT4180 MT4190 Installation window plate D27-N08 28-Apr-17 28-Apr-17 30-Mar-17 30-Mar-17 MT4190 MT4200 Installation window plate B18-N08 17-May-17 17-May-17 20-Apr-17 20-Apr-17 MT4200 MT4210 MT4210 Installation window plate B17-B18 21-Apr-17 21-Apr-17 MT4220 Installation window plate N07-B17 19-May-17 19-May-17 22-Apr-17 22-Apr-17 0% MT4220 MT4230 Installation window plate B16-N07 22-May-17 22-May-17 25-Apr-17 25-Apr-17 MT4230 05-Apr-17 10-Apr-17 10-Mar-17 15-Mar-17 0% 21 MT3570 MT3570 Welding N03-B13 05-Apr-17 10-Apr-17 10-Mar-17 15-Mar-17 Welding N03-B13 MT3580 Welding B13-B14 10-Mar-17 15-Mar-17 05-Apr-17 10-Apr-17 Welding B13-B14 MT3580 MT3590 Welding B14-N04 10-Mar-17 15-Mar-17 Welding B14-N04 MT3600 MT3600 Welding N02-B12 10-Apr-17 13-Apr-17 15-Mar-17 18-Mar-17 0% Welding N02-B12 MT3610 MT3610 Welding N01-B11 16-Mar-17 20-Mar-17 0% 11-Apr-17 18-Apr-17 Welding N01-B11 MT3620 16-Mar-17 20-Mar-17 Welding B11-N02 MT3630 NDT for bottom chord (main) 13-Apr-17 21-Apr-17 18-Mar-17 23-Mar-17 MT3630 19-Apr-17 27-Apr-17 MT3700 MT3700 Welding of window plates B13-B14 20-Apr-17 28-Apr-17 22-Mar-17 30-Mar-17 MT3710 MT3710 Welding of window plates N03-B13 21-Apr-17 29-Apr-17 23-Mar-17 31-Mar-17 — Weldi MT3720 Welding of window plates B12-N03 22-Apr-17 02-May-17 24-Mar-17 01-Apr-17 MT3720 MT3730 Welding of window plates N02-B12 04-May-17 25-Mar-17 03-Apr-17 MT3740 MT3740 NDT for bottom chord (window plate) 02-May-17 08-May-17 01-Apr-17 07-Apr-17 0% MT3750 Survey check for bottom chord 05-Apr-17 05-Apr-17 MT3750 MT3950 MT3950 Welding N08-N09 13-Apr-17 20-Apr-17 18-Mar-17 22-Mar-17 0% 21 Welding N08-N09 MT3960 MT3960 Welding D27-N08 18-Apr-17 22-Apr-17 20-Mar-17 24-Mar-17 Welding D27-N08 MT3970 MT3970 Welding D27-N04 Welding D27-N04 MT3980 Welding D26-N04 29-Apr-17 05-May-17 31-Mar-17 05-Apr-17 MT3980 MT3990 MT3990 Welding D26-N07 02-May-17 06-May-17 01-Apr-17 06-Apr-17 MT4000 MT4000 Welding N08-B18 03-Apr-17 07-Apr-17 MT4010 Welding D25-N03 04-May-17 08-May-17 03-Apr-17 07-Apr-17 MT4020 MT4020 Welding N07-B17 06-May-17 10-May-17 06-Apr-17 10-Apr-17 MT4030 MT4030 Welding D25-N07 08-May-17 11-May-17 07-Apr-17 11-Apr-17 MT4040 Welding B17-B18 09-May-17 12-May-17 08-Apr-17 12-Apr-17 MT4050 Welding D23-N02 13-May-17 17-May-17 13-Apr-17 20-Apr-17 0% MT4050 MT4060 Welding D24-N03 MT4060 10-May-17 13-May-17 10-Apr-17 13-Apr-17 MT4070 MT4070 Welding D23-N06 MT4080 MT4080 Welding N07-B16 12-May-17 16-May-17 12-Apr-17 19-Apr-17 MT4090 MT4090 Welding N06-B16 13-May-17 18-May-17 13-Apr-17 21-Apr-17 MT4100 Welding D22-N02 21-Apr-17 25-Apr-17 MT4100 MT4110 Welding D24-N06 16-May-17 19-May-17 19-Apr-17 22-Apr-17 MT4120 MT4120 Welding B15-N06 17-May-17 20-May-17 20-Apr-17 24-Apr-17 MT4130 Welding D22-N05 26-May-17 MT4130 = 22-May-17 25-Apr-17 29-Apr-17 MT4140 Welding D21-N01 19-May-17 23-May-17 MT4140 MT4150 MT4150 Welding D21-N05 20-May-17 24-May-17 24-Apr-17 27-Apr-17 MT4160 MT4160 Welding B15-N05 26-May-17 26-Apr-17 29-Apr-17 23-May-17 MT4170 NDT for bracing (main) 22-Apr-17 31-May-17 24-Mar-17 05-May-17 ₩elding and NDT of top Chords

MT4270 Welding window plates D27-N04 MT4270 28-Apr-17 09-May-17 30-Mar-17 08-Apr-17 MT4280 Welding window plates D27-N08 10-May-17 31-Mar-17 10-Apr-17 MT4280 MT4290 Welding window plates B18-N08 16-May-17 24-May-17 19-Apr-17 27-Apr-17 0% 8 23-May-17 01-Jun-17 26-Apr-17 06-May-17 0% 29 10-May-17 13-Jun-17 10-Apr-17 18-May-17 0% MT4300 Welding window plates B17-B18 MT4300 ■ MT4360 NDT for bracing and top chord (window plate) MT4360 RC Works CJ2 to +23.7mPD (Bottom (

A13210 Rebar Fixing CJ2 @GL H-F 9 9 23-May-17 02-Jun-17 26-Apr-17 08-May-17 0% 0% 21 A13210 ◆ Commencement of Truss 4 Construction, 09-Feb-17 ◆ Commencement of Truss 4 Steel Works Erection, 28-Feb-17 A15440 Commencement of Truss 4 Steel Works Erection 20-Mar-17 28-Feb-17 0% 0% A15490 65 65 20-Mar-17 10-Jun-17 28-Feb-17 20-May-17 0% A15490 T4 Steel Truss Erection (LoE) RC Works for CJ1 to +20.45mPD (Prior to Bottom Chord E A15450 Formworks T4 Bottom 450mm CJ1 (+20.45 mPD) A15450 Formworks T4 Bottom 450mm CJ1 (+20.45 mPE Å15460 ■ A15460 Rebar Fixing T4 Bottom 450mm CJ1 (+20.45 mPD) 08-Mar-17 10-Mar-17 16-Feb-17 18-Feb-17 0% Rebar Fixing T4 Bottom 450mm CJ1 (+20.45 mPD) A15470 Concreting CJ1 A15470 0 □ Concreting CJ1 A15480 Concrete curing CJ1 12-Mar-17 18-Mar-17 21-Feb-17 27-Feb-17 0% Concrete curing CJ1 Complete Truss 4 Bottom 450mm Bedding (RC strength reach 45MPa). Complete Truss 4 Bottom 450mm Bedding (RC strength reach 45MPa) 18-Mar-17 27-Feb-17 0% MT4510 🖶 MT4510 Temporary support of bottom chord 20-Mar-17 21-Mar-17 28-Feb-17 01-Mar-17 0% Temporary support of bottom chord MT4660 -MT4660 Installation of temporary support towers 25-Mar-17 28-Mar-17 06-Mar-17 08-Mar-17 Installation of temporary support towers Installation of temporary support towers 11-Mar-17 13-Mar-17 MT4670 🚃 MT4670 Installation of temporary support towers MT4690 Installation of temporary support towers 26-Apr-17 26-Apr-17 01-Apr-17 01-Apr-17 0% MT4690 MT4750 Installation of temporary support towers 05-May-17 05-May-17 10-Apr-17 10-Apr-17 0% MT4750 0 MT4780 Installation of temporary support towers 22-Apr-17 22-Apr-17 MT4780 MT4810 Installation of temporary support towers 18-May-17 18-May-17 26-Apr-17 26-Apr-17 MT4810 [MT4520 Installation T4-B13 MT4520 ■ Installation T4-B13 MT4530 Installation T4-N04 23-Mar-17 23-Mar-17 03-Mar-17 03-Mar-17 MT4530 ^{II} Installation T4-N04 Installation T4-B12 MT4540 Installation T4-B12 24-Mar-17 24-Mar-17 04-Mar-17 04-Mar-17 MT4540 MT4550 Installation T4-N03 27-Mar-17 27-Mar-17 07-Mar-17 07-Mar-17 MT4550 Installation T4-N03 MT4560 Installation T4-B11 31-Mar-17 11-Mar-17 11-Mar-17 MT4560 □ Installation T4-B11 MT4570 0 MT4570 Installation T4-N02 01-Apr-17 01-Apr-17 13-Mar-17 13-Mar-17 Installation T4-N02 MT4680 Installation T4-D27 31-Mar-17 31-Mar-17 MT4680 0 25-Apr-17 25-Apr-17 Installation T4 MT4700 Installation T4-N09 05-Apr-17 05-Apr-17 MT4700 MT4720 Installation T4-D26 29-Apr-17 29-Apr-17 06-Apr-17 06-Apr-17 MT4720 MT4730 MT4730 Installation T4-D25 02-May-17 02-May-17 07-Apr-17 07-Apr-17 MT4740 Installation T4-D24 04-May-17 08-Apr-17 08-Apr-17 MT4740 MT4760 Installation T4-N08 06-May-17 06-May-17 11-Apr-17 11-Apr-17 MT4760 MT4770 0 MT4770 Installation T4-D23 13-May-17 13-May-17 21-Apr-17 21-Apr-17 MT4800 Installation T4-N06 MT4800 17-May-17 17-May-17 25-Apr-17 25-Apr-17 0% MT4710 = MT4710 Installation T4-B15 (Part 1&2) MT4790 Installation T4-B14 16-May-17 16-May-17 24-Apr-17 24-Apr-17 MT4790 II

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/ICP D15 Finish Planned Actual % Complete MT4580 Welding N05-B13 16-Mar-17 20-Mar-17 MT4580 Welding N05-B13 MT4590 Welding N04-B13 19-Apr-17 22-Apr-17 25-Mar-17 29-Mar-17 0% MT4590 = ■ Welding N04-B13 MT4600 MT4600 Welding N04-B12 27-Mar-17 30-Mar-17 20-Apr-17 24-Apr-17 Welding N04-B1 MT4610 Welding N03-B12 30-Mar-17 03-Apr-17 MT4610 MT4620 = MT4620 Welding B11-N03 06-May-17 10-May-17 11-Apr-17 18-Apr-17 MT4630 MT4630 Welding B11-N02 13-Apr-17 20-Apr-17 09-May-17 12-May-17 MT4640 NDT for bottom chord (main) MT4640 MT4650 Survey check for bottom chord 1 13-May-17 13-May-17 21-Apr-17 21-Apr-17 MT4650 Welding and NDT of main E
■ MT4850 Welding D24-N03 MT4850 20-Apr-17 24-Apr-17 MT4860 Welding N06-N02 17-May-17 22-May-17 25-Apr-17 29-Apr-17 0% MT4860 MT4920 Welding D26-N08 13-May-17 18-May-17 21-Apr-17 26-Apr-17 MT4920 MT5000 Welding N05-N09 11-May-17 15-May-17 19-Apr-17 22-Apr-17 MT5000 MT5010 MT5010 Welding D26-N04 16-May-17 19-May-17 24-Apr-17 27-Apr-17 MT5090 NDT for bracing and top chord (main) 20 18-May-17 10-Jun-17 26-Apr-17 20-May-17 0% MT5090 = M+ Podium & Tower FACADE Preliminaries 18 18 17-Dec-16 03-Jan-17 28-Jan-17 14-Feb-17 100% 0% A51160 6th Shopdrawing Submission 6th Shoodrawing Submission A51170 6th Shopdrawing Submission - Review & Approval 21 21 04-Jan-17 24-Jan-17 15-Feb-17 07-Mar-17 100% 0% A51170 r 6th Shopdrawing Submission - Review & Approva VMU SAMPLE SUBMISSION & APPROVALS A18510 Prodcution of Terracotta for Tower VMU 48 17-Dec-16 17-Feb-17 01-Feb-17 28-Mar-17 68.75% Production of Terracotta for Tower VMU A18520 Delivery of Terracotta to precast Factory from Italy (by air) VMU 01 18-Feb-17 28-Feb-17 29-Mar-17 08-Apr-17 0% -33 A18520 Delivery of Terracotta to precast Factory from Italy 01-Mar-17 A18530 Precast Delivery Panel Concreting 11-Mar-17 10-Apr-17 24-Apr-17 A18530 Precast Deliver A18540 Delivery of Precast to Inspection Area (in Factory) 13-Mar-17 13-Mar-17 25-Apr-17 25-Apr-17 A18540 = Delivery of Pr A18550 Installation of Mock Up, Inspection & Approval of VMU-Tower (in Facto 5 5 14-Mar-17 18-Mar-17 26-Apr-17 02-May-17 0% -33 Concrete Shell - VMU A18560 Production of Terracotta for Podium VMU 54 54 17-Dec-16 24-Feb-17 01-Feb-17 05-Apr-17 61,11% 0% -33 Prodution of Terracotta for Podium VMU 9 9 25-Feb-17 07-Mar-17 06-Apr-17 19-Apr-17 0% A18570 Delivery of Terracotta to precast Factory from Italy (by air) VMU 02 A18570 📥 Delivery of Terracotta to p 18-Apr-17 20-Apr-17 29-May-17 0% A18580 ____ GF Ceramic Cladding, GW with Ceramic Mul Aluminium Perforated Panel Fabrication A18610 Aluminium Perforated Panel Fabrication 17-Dec-16 20-Jan-17 01-Feb-17 03-Mar-17 100% -33 A18620 Production of Terracotta 17-Dec-16 01-Feb-17 23-Feb-17 100% Production of Terracotta 12-Jan-17 A18630 Delivery of Terracotta to Precast Factory from Italy (by air) VMU 03 23-Jan-17 24-Feb-17 06-Mar-17 100% 13-Jan-17 Delivery of Terracotta to Precast Factory from Italy (by air) VMU 03 A18640 Casting Ceramic Mullion 24-Jan-17 03-Feb-17 07-Mar-17 14-Mar-17 57.14% -33 Δ18640 Casting Ceramic Mullion A18650 Delivery and Installation of Ceramic Mullion & Tube Mock Up 11-Feb-17 15-Mar-17 22-Mar-17 Delivery and Installation of Ceramic Mullion & Tube Mock Up. 04-Feb-17 -33 A18650 Glazing & Sealant Application A18660 Glazing & Sealant Application 14-Feb-17 23-Mar-17 24-Mar-17 A18660 -A18670 Inspection & Approval of Visual Mock Up 15-Feb-17 17-Feb-17 25-Mar-17 28-Mar-17 -33 Inspection & Approval of Visual Mock Up A18670 ____ Podium Facade -VMU-1

A18680 Inspection & Approval of VMU 3 3 17-Dec-16 20-Dec-16 01-Feb-17 03-Feb-17 100% 0% -33 Inspection & Approval of VMU Hybrid with GW - VMU 08-Feb-17 01-Feb-17 18-Mar-17 82.5% A18690 Glass Door Frame Fabrication 17-Dec-16 Glass Door Frame Fabrication A18700 Installaiton of Glass Dor 3 09-Feb-17 11-Feb-17 20-Mar-17 2∠-war-17 0% 13-Feb-17 20-Feb-17 23-Mar-17 30-Mar-17 0% 11-Feb-17 20-Mar-17 22-Mar-17 Å18700 📥 Installation of Glass Dorr Inspection & Approval of VMU A18710 Inspection & Approval of VMU 17-Dec-16 24-Feb-17 01-Feb-17 05-Apr-17 61.11% Prodution of Terracotta A18730 Delivery of Terracotta to Site from Italy (by air) VMU 08 25-Feb-17 07-Mar-17 06-Apr-17 19-Apr-17 0% A18730 Delivery of Terracotta to Sit A18740 📥 08-Mar-17 13-Mar-17 20-Apr-17 25-Apr-17 0% A18740 Installation of Terracotta Mock Up Installation of EMBED - B1 Glass Wall with T Mullion A51460 4th Shopdrawing Submission 88 02-Nov-16 17-Dec-16 02-Nov-16 28-Jan-17 100% 97.83% 4th Shopdrawing Submissio ■ A51470 4th Shopdrawing Submission - Review & Approval 18-Dec-16 07-Jan-17 29-Jan-17 18-Feb-17 100% 4th Shopdrawing Submission - Review & Abproval A51480 5th Shopdrawing Submission 08-Jan-17 21-Jan-17 19-Feb-17 04-Mar-17 100% 5th Shopdrawing Submissio A51480 A51490 5th Shopdrawing Submission - Review & Approva 21 22-Jan-17 11-Feb-17 05-Mar-17 25-Mar-17 28.57% A51490 5th Shopdrawing Submission - Review & Approval SHOP DRAWING SUBMISSIONS FACADE SYSTEM & EMBED SHOP DRAWING - Tower Facade Panel A51230 Concept - 3rd Shopdrawing Submission - Review & Approval
 SHOP DRAWING - Podium Facade Panel 14 14 17-Dec-16 30-Dec-16 28-Jan-17 10-Feb-17 100% 0% -42 Concept - 3rd Shopdrawing Submission - Review & Appro Concept - 2nd Shopdrawing Submission - Review & Approval SHOP DRAWING - Glass Wall with T Mullion ■ A51280 Concept - 2nd Shopdrawing Submission - Review & Approval 21 21 31-Dec-16 20-Jan-17 11-Feb-17 03-Mar-17 100% 0% Concept - 2nd Shopdrawing Submission - Review & Approva 30-Dec-16 07-Dec-16 10-Feb-17 100% 41.67% A51310 Concept - 1st Shopdrawing Submission - Review & Approval 21 21 31-Dec-16 20-Jan-17 11-Feb-17 03-Mar-17 100% 0% Concept - 1st Shopdrawing Submission - Review & Approva SHOP DRAWING - Strip Glazing at Skylight Gallery 118 05-Oct-16 19-Dec-16 05-Oct-16 30-Jan-17 100% 96.05% Concept - 2nd Shopdrawing Submission A51330 Concept - 2nd Shopdrawing Submission - Review & Approval 21 21 20-Dec-16 09-Jan-17 31-Jan-17 20-Feb-17 100% 0% Concept - 2nd \$hopdrawing Submission - Review & Approval SHOP DRAWING - Plaza Skylight at L3 Concept - 2nd Shopdrawing Submission 125 28-Sep-16 19-Dec-16 28-Sep-16 30-Jan-17 100% 96.39% A51350 Concept - 2nd Shopdrawing Submission - Review & Approval 21 21 20-Dec-16 09-Jan-17 31-Jan-17 20-Feb-17 100% 0% Concept - 2nd \$hopdrawing Submission - Review & Approval SHOP DRAWING - L3 Storefront A51360 Concept - 3rd Shopdrawing Submission 17-Dec-16 08-Nov-16 28-Jan-17 Concept - 3rd Shopdrawing Submission 21 21 18-Dec-16 07-Jan-17 29-Jan-17 18-Feb-17 100% 0% Concept - 3rd Shopdrawing Submission - Review & Approval A51380 Concept - 2nd Shopdrawing Submission 22-Dec-16 05-Oct-16 02-Feb-17 Concept - 2nd Shopdrawing Submission ■ A51390 Concept - 2nd Shopdrawing Submission - Review & Approval 21 21 23-Dec-16 12-Jan-17 03-Feb-17 23-Feb-17 100% 0% Concept 2nd Shopdrawing Submission - Review & Approve 두 SHOP DRAWING - Metal Cladding FAC-LV-01a/FAC-LV-01b (Additional : ■ A51400 Concept - 1st Shopdrawing Submission 17-Jan-17 28-Jan-17 28-Feb-17 100% Concept - 1st Shopdrawing Submission ■ A51410 Concept - 1st Shopdrawing Submission - Review & Approva 18-Jan-17 07-Feb-17 01-Mar-17 21-Mar-17 47.62% 0% A51420 Concept - 2nd Shopdrawing Submission 14 14 08-Feb-17 21-Feb-17 22-Mar-17 04-Apr-17 0% -42 A51420 Concept - 2nd Shopdrawing Submission Concept 2nd A51430 Concept - 2nd Shopdrawing Submission - Review & Approval 21 21 22-Feb-17 14-Mar-17 05-Apr-17 25-Apr-17 0% 0% A51430 -AS1450 Concept - 210 Shopdrawing Submission - Review & Approval

SHOP DRAWING - Tower Facade Lighting
SHOP DRAWING - Tower Facade Lighting, Electrical Works
A39330 Concept - 1st Shopdrawing Submission - Review & Approval 31 73 30-Nov-16 30-Dec-16 30-Nov-16 10-Feb-17 100% 54.84% -42 Concept - 3rd Shopdrawing Submission - Review & Approva 49 91 12-Nov-16 30-Dec-16 12-Nov-16 10-Feb-17 100% 71.43% -42 Concept - 1st Shopdrawing Submission - Review & Approva BD SUBMISSIONS FACADE SYSTEM & EMBEDS BD Submission - L3 Storefront A51520 2nd Submission 26-Nov-16 23-Dec-16 26-Nov-16 03-Feb-17 ■ A51530 2nd Submission - Review & Approval by MJV (w/ RSE Endosement) 14 14 24-Dec-16 06-Jan-17 04-Feb-17 17-Feb-17 100% -42 2nd Submission - Review & Approval by MJŸ (w/ RSE Endosement)

◆ L3 Storefront Embeds - Submission to BD, A51540 L3 Storefront Embeds - Submission to BD 09-Jan-17 20-Feb-17 100% -33 60 60 10-Jan-17 10-Mar-17 21-Feb-17 21-Apr-17 30% A51550 L3 Storefront Embeds - BD Approval L3 Storefront Embeds A51550 -A51560 L3 Storefront Embeds - Concent 30 30 11-Mar-17 09-Apr-17 22-Apr-17 21-May-17 0%

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MICP D15 Finish Planned Actual % Finish
Complete Variance BD Submission - Tower Pre 17-Dec-16 23-Dec-16 28-Jan-17 03-Feb-17 100% 2nd Submission ■ A51600 2nd Submission - Review & Approval by MJV (w/ RSE Endosement) 14 14 24-Dec-16 06-Jan-17 04-Feb-17 17-Feb-17 100% 2nd Submission - Review & Approval by MJV (w/ RSE Endosement) BD Submission - Podium Pr 17-Dec-16 23-Dec-16 28-Jan-17 03-Feb-17 2nd Submission A51670 2nd Submission - Review & Approval by MJV (w/ RSE Endosement) 14 24-Dec-16 06-Jan-17 04-Feb-17 17-Feb-17 100% 2nd Submission - Review & Approval by MJV (w/ RSE Endosement)
◆ Prodium Precast Facade Embeds - Submission to BD. A51680 Podium Precast Facade Embeds - Submission to BD 60 07-Jan-17 07-Mar-17 18-Feb-17 18-Apr-17 35% A51690 Podium Precast Facade Embeds - BD Approval -42 A51690 Podium Precast Facade Emi A51700 Podium Precast Facade Embeds - Concent 30 30 08-Mar-17 06-Apr-17 19-Apr-17 18-May-17 0% -42 A51700 -A51750 2nd Submission 7 17-Dec-16 23-Dec-16 28-Jan-17 03-Feb-17 100% -42 A51760 2nd Submission - Review & Approval by MJV (w/ RSE Endosement) 14 14 24-Dec-16 06-Jan-17 04-Feb-17 17-Feb-17 100% 2nd Submission - Review & Approval by MJ∜ (w/ RSE Endosement)

◆ Garden Gallery Ceramic - Submission to BD, A51770 Garden Gallery Ceramic - Submission to BD 12-Jan-17 23-Feb-17 100% A51780 Garden Gallery Ceramic - BD Approval 13-Jan-17 13-Mar-17 24-Feb-17 24-Apr-17 25% A51780 A51790 Garden Gallery Ceramic - Concent 30 14-Mar-17 12-Apr-17 25-Apr-17 24-May-17 0% -42 BD Submission - Glass Wall with T Mullion 17-Dec-16 22-Dec-16 28-Jan-17 02-Feb-17 100% 1st Submission ■ A51810 1st Submission - Review & Approval by MJV 14 14 23-Dec-16 05-Jan-17 03-Feb-17 16-Feb-17 100% -42 1st Submission - Review & Approval by MJV 12-Jan-17 17-Feb-17 23-Feb-17 100% A51820 2nd Submission A51820 2nd Submission 06-Jan-17 2nd Submission Review & Approval by MJV (w/ RSE Endosement)

Glass Wall with T Mullion - Submission to BD, ■ A51830 2nd Submission - Review & Approval by MJV (w/ RSE Endosement) 14 13-Jan-17 26-Jan-17 24-Feb-17 09-Mar-17 100% A51830 = ■ A51850 Glass Wall with T Mullion - Submission to BD 26-Jan-17 09-Mar-17 100% 60 60 27-Jan-17 27-Mar-17 10-Mar-17 08-May-17 1.67% 0% A51860 Glass Wall with T Mullion - BD Approval A51860 sion - Strip Glazing at Skylight Gallery & Plaza Skylight at L3 A51910 2nd Submission - Review & Approval by MJV (w/ RSE Endosement) 14 14 24-Dec-16 06-Jan-17 04-Feb-17 17-Feb-17 100% -42 d Submission - Review & Approval by MJ∜ (w/ RSE Endosement) ◆ Strip Glażing at Skylight Gallery & Plaża Skylight - Submission to BD, ■ A51920 Strip Glazing at Skylight Gallery & Plaza Skylight - Submission to BD 09-Jan-17 20-Feb-17 100% 60 10-Jan-17 10-Mar-17 21-Feb-17 21-Apr-17 30% ■ A51930 Strip Glazing at Skylight Gallery & Plaza Skylight - BD Approval A51930 = Strip Glazing at Skyligh ■ A51950 Strip Glazing at Skylight Gallery & Plaza Skylight - Concent 30 11-Mar-17 09-Apr-17 22-Apr-17 21-May-17 0% 0% 📑 BD Submis 17-Dec-16 A51970 1st Submission - Review & Approval by MJV 14 14 29-Dec-16 11-Jan-17 09-Feb-17 22-Feb-17 100% -42 1st \$ubmission - Review & Approval by MJV 18-Jan-17 23-Feb-17 01-Mar-17 100% A51980 2nd Submission 12-Jan-17 A51980 -2nd Submission ■ A51990 2nd Submission - Review & Approval by MJV (w/ RSE Endosement) 14 14 19-Jan-17 01-Feb-17 02-Mar-17 15-Mar-17 64.29% Å51990 **⊏** 2nd Submission - Review & Approval by MJV (w. RSE Endosement)

Glass Wall with Ceramic & Precast Concrete Mullion - Submission to BD, A52000 Glass Wall with Ceramic & Precast Concrete Mullion - Submission to BL 0 01-Feb-17 15-Mar-17 0% ■ A52010 Glass Wall with Ceramic & Precast Concrete Mullion - BD Approval 60 60 02-Feb-17 02-Apr-17 16-Mar-17 14-May-17 0% -42 A52010 BD Submission - Metal Cladding FAC-LV-01a/FAC-LV-01b (North Perimeter Rd) 17-Dec-16 ■ A52050 1st Submission - Review & Approval by MJV 14 14 26-Jan-17 08-Feb-17 09-Mar-17 22-Mar-17 14.29% 0% -42 A52050 1st \$ubmission - Review & Approval by MJV 15-Feb-17 23-Mar-17 29-Mar-17 A52070 2nd Submission 09-Feb-17 A52070 -2nd Submission ■ A52080 2nd Submission - Review & Approval by MJV (w/ RSE Endosement) 01-Mar-17 30-Mar-17 12-Apr-17 ew & Approval by ■ A52090 Metal Cladding (North Perimeter Rd) - Submission to BD 14-Mar-17 25-Apr-17 0% -32 ◆ Metal Cladding 60 60 15-Mar-17 13-May-17 26-Apr-17 24-Jun-17 0% A52100 Metal Cladding (North Perimeter Rd) - BD Approval A52100 -SHOPDRAWING SUBMISSIONS - FACADE DOORS Facade Doors Package #1 - Glazed door between Co 67 17-Dec-16 21-Feb-17 28-Jan-17* 04-Apr-17 62.69% 0% A52120 1st Shopdrawing Submission 1st Shondrawing Submission ■ A52130 1st Shopdrawing Submission - Review & Approval 21 22-Feb-17 14-Mar-17 05-Apr-17 25-Apr-17 1st Shopdra A52130 14 14 15-Mar-17 28-Mar-17 26-Apr-17 09-May-17 0% Facade Doors Package #2 - Sliding door at L3 Storefront - Total No. of D A52170 1st Shopdrawing Submission 17-Dec-16 21-Feb-17 28-Jan-17* 04-Apr-17 62.69% 1st Shoodrawing Submission ■ A52180 1st Shopdrawing Submission - Review & Approva 1st Shopdra A52180 A52190 2nd Shondrawing Submission 14 14 15-Mar-17 28-Mar-17 26-Apr-17 09-May-17 0% 0% A52190 = 🔁 Facade Doors Package #3 - Swing Door at L3 Cafe- Total No. of D 1st Shopdrawing Submission 1st Shopdrawing Submission A52220 1st Shopdrawing Submission - Review & Approva 21 21 01-Mar-17 21-Mar-17 12-Apr-17 02-May-17 0% 0% 🕇 Facade Doors Package #4 - Swing Door mounted in GW with 1 lo. of Doors = 29 A52260 1st Shopdrawing Submission 17-Dec-16 28-Feb-17 28-Jan-17* 11-Apr-17 56.76% 1st Shopdrawing Submission A52270 1st Shopdrawing Submission - Review & Approval
 Facade Doors Package #5 - Large double door at B1 Transf 21 21 01-Mar-17 21-Mar-17 12-Apr-17 02-May-17 0% 0% A52300 1st Shopdrawing Submission 17-Dec-16 07-Mar-17 28-Jan-17* 18-Apr-17 51.85% 1st Shoodrawing Submission 21 21 08-Mar-17 28-Mar-17 19-Apr-17 09-May-17 0% 0% Facade Doors Package #6 - B1 Exit Door - Total No. of Doors = 7 (7 ■ A52350 1st Shopdrawing Submission 81 17-Dec-16 07-Mar-17 28-Jan-17* 18-Apr-17 51.85% 1st Shopdrawing Submissio A52360 1st Shopdrawing Submission - Review & Approx 21 21 08-Mar-17 28-Mar-17 19-Apr-17 09-May-17 0% 0% A52360 🖶 Facade Doors Package #7 - Garden Gallery Door - Total No.of D A52390 1st Shopdrawing Submission 88 88 17-Dec-16 14-Mar-17 28-Jan-17* 25-Apr-17 47.73% 0% 1st Shopdra ■ A52400 1st Shopdrawing Submission - Review & Approva 21 15-Mar-17 04-Apr-17 26-Apr-17 16-May-17 0% 0% A52400 E Facade Doors Package #8 - Doors located in Metal Cladding -A52440 1st Shopdrawing Submission 88 17-Dec-16 14-Mar-17 28-Jan-17* 25-Apr-17 47.73% 1st Shondray 21 21 15-Mar-17 04-Apr-17 26-Apr-17 16-May-17 0% 0% A52450 1st Shopdrawing Submission - Review & Approva A52450 -Facade Doors Package #9 - GF Lobby Access Door In Cera Facade Doors Package #9 - GF Lobby A

A52480 1st Shopdrawing Submission 88 88 17-Dec-16 14-Mar-17 28-Jan-17* 25-Apr-17 47.73% 0% 21 21 15-Mar-17 04-Apr-17 26-Apr-17 16-May-17 0% 0% 1st Shopdra A52490 1st Shopdrawing Submission - Review & Approva A52490 -Facade Doors Package #10 - B1 Carriageway Access Panel & D A52530 1st Shopdrawing Submission 95 95 17-Dec-16 21-Mar-17 28-Jan-17* 02-May-17 44.21% 0% -42 🖷 Facade Doors Package #12 - B1 Smoke Vent Panel - Total No. of I A52580 1st Shopdrawing Submission 96 96 17-Dec-16 22-Mar-17 28-Jan-17* 03-May-17 43.75% 0% -42 PMU SHOPDRAWING SUBMISSION & TEST - Tower Facade Precast Panel Perf MU - 2nd Shopdrawing Submission 05-Dec-16 29-Jan-17 Perf MU - 2nd Shopdrawing Submission A52630 Perf MU - 2nd Shopdrawing Submission - Review & Approval 21 63 07-Dec-16 27-Dec-16 07-Dec-16 07-Feb-17 100% 14 14 28-Dec-16 10-Jan-17 08-Feb-17 21-Feb-17 100% 63 07-Dec-16 27-Dec-16 07-Dec-16 07-Feb-17 100% 47.62% -42 A52650 Perf MU - 3rd Shopdrawing Submission Perf MU - 3rd Shopdrawing Submission A52660 Perf MU - 3rd Shopdrawing Submission - Review & Approval 31-Jan-17 22-Feb-17 14-Mar-17 80.95% Perf MU - 3rd Shopdrawing Submission - Review & Approval 11-Jan-17 A52660 A54620 Perf MU - Precast Concrete Facade Ordering & Production 173 215 07-Dec-16 28-May-17 07-Dec-16 09-Jul-17 30.06% 5.78% PMU SHOPDRAWING SUBMISSION & TEST - Podium Facade Precast ■ A52680 | Perf MU - 1st Shopdrawing Submission - Review & Approval 64 06-Dec-16 27-Dec-16 06-Dec-16 07-Feb-17 100% 50% Perf MU - 1st Shopdrawing Submission - Review & Approval ■ A52690 Perf MU - 2nd Shopdrawing Submission 14 14 28-Dec-16 10-Jan-17 08-Feb-17 21-Feb-17 100% Perf MU - 2nd Shopdrawing Submission ■ A52700 Perf MU - 2nd Shopdrawing Submission - Review & Approval 21 11-Jan-17 31-Jan-17 22-Feb-17 14-Mar-17 80.95% A52700 Perf MU - 2nd Shopdrawing Submission - Review & Approval A54650 Perf MU - Podium Facade Precast Concrete + Curtain Wall Ordering & 187 17-Dec-16 21-Jun-17 28-Jan-17 02-Aug-17 22-46% 0% PMU SHOPDRAWING SUBMISSION & TEST - Kinked Glass with T Mullid A52710 Perf MU - 1st Shopdrawing Submission 17-Dec-16 Perf MU - 1st Shopdrawing Submission A52720 Perf MU - 1st Shopdrawing Submission - Review & Approval -42 19-Jan-17 08-Feb-17 02-Mar-17 22-Mar-17 42.86% 0% Á52720 Perf MU - 1st Shopdrawing Submission - Review & Approval ■ A52730 Perf MU - 2nd Shopdrawing Submission 14 09-Feb-17 22-Feb-17 23-Mar-17 05-Apr-17 0% A52730 = Perf MU - 2nd Shopdrawing Submission ■ A52740 Perf MU - 2nd Shopdrawing Submission - Review & Approval 21 23-Feb-17 15-Mar-17 06-Apr-17 26-Apr-17 A54700 Perf MU - GW with T Mullion + Reflective Glass Ordering & Production 123 123 19-Jan-17 21-May-17 02-Mar-17 02-Jul-17 7.32% 0%

PMU SHOPDRAWING SUBMISSION & TEST - Glass Wall with Ceramic Mullions at GF A54700 -A52750 Perf MU - 1st Shopdrawing Submissi 33 33 17-Dec-16 18-Jan-17 28-Jan-17* 01-Mar-17 100% 0% Perf MU - 1st Shopdrawing Submission

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A52830 Perf MU - 1st Shopdrawing Submission 28-Dec-16 28-Jan-17* 08-Feb-17 100% Perf MU - 1st Shopdrawing Submission ■ A52840 Perf MU - 1st Shopdrawing Submission - Review & Approval 29-Dec-16 18-Jan-17 09-Feb-17 01-Mar-17 100% -42 Perf MU - 1st Shopdrawing Submission - Review & Approval ■ A52850 Perf MU - 2nd Shopdrawing Submission 01-Feb-17 02-Mar-17 15-Mar-17 64.29% Á52850 Perf MU - 2nd Shopdrawing Submission A52860 Perf MU - 2nd Shopdrawing Submission - Review & Approval 02-Feb-17 22-Feb-17 16-Mar-17 05-Apr-17 A52860 Perf MU - 2nd Shopdrawing Submission - Review & A A54780 Perf MU - Plaza Skylight 3/F Terrace Production & Fabrication 117 117 19-Jan-17 15-May-17 02-Mar-17 26-Jun-17 7.69% A54780 = ► PMU SHOPDRAWING SUBMISSION & TEST - Acoustic Mock up

■ A52870 Perf MU - 2nd Shopdrawing Submission 17-Dec-16 28-Dec-16 28-Jan-17* 08-Feb-17 100% Perf MU - 2nd Shopdrawing Submission A52880 Perf MU - 2nd Shopdrawing Submission - Review & Approval 29-Dec-16 18-Jan-17 09-Feb-17 01-Mar-17 100% -42 Perf MU - 2nd Shoridrawing Submission - Review & Approval A52890 Perf MU - 3rd Shopdrawing Submission 01-Feb-17 02-Mar-17 15-Mar-17 64.29% A52890 Perf MU - 3rd Shopdrawing Submission ■ A52900 Perf MU - 3rd Shopdrawing Submission - Review & Approval 21 21 02-Feb-17 22-Feb-17 16-Mar-17 05-Apr-17 0% A52900 Perf MU - 3rd Shopdrawing Submission - Review & Ap BIM MODEL SUBMISSION BIM MODEL SUBMISSION - Tower Facade Precast Panel (MPLUS-BIM-D003 A52920 5th BIM Model Submission 15-Feb-17 20-Sep-16 29-Mar-17 87.25% 59.06% 5th BIM Model Submission A52930 5th BIM Model Submission - Review & Approval 16-Feb-17 08-Mar-17 30-Mar-17 19-Apr-17 A52930 5th BIM Model Submission A52940 6th BIM Model Submission 14 14 09-Mar-17 22-Mar-17 20-Apr-17 03-May-17 0% A52940 BIM MODEL SUBMISSION - Podium Facade Panel (MPLUS-BIN 209 251 15-Jul-16 08-Feb-17 15-Jul-16 22-Mar-17 94 26% 74 16% -42 3rd BIM Model Submission A52970 3rd BIM Model Submission - Review & Approval 21 21 09-Feb-17 01-Mar-17 23-Mar-17 12-Apr-17 0% 3rd BIM Model Submission - Review & Ar A52970 -4th BIM Model Submission A52980 BIM MODEL SUBMISSION - Glass Wall with T Mullion

A53000 1st BIM Model Submission 98 23-Nov-16 17-Jan-17 23-Nov-16 28-Feb-17 100% 42.86% 1st BIM Model Submission A53010 1st BIM Model Submission - Review & Approval 18-Jan-17 07-Feb-17 01-Mar-17 21-Mar-17 47.62% 1st BIM Model Submission - Review & Approval ■ A53020 2nd BIM Model Submission 14 08-Feb-17 21-Feb-17 22-Mar-17 04-Apr-17 0% 2nd BIM Model Submission 2nd BIM Mod A53030 2nd BIM Model Submission - Review & Approval 21 22-Feb-17 14-Mar-17 05-Apr-17 25-Apr-17 0% -42 A53030 BIM MODEL SUBMISSION - Glass Wall with Ceramic Mul A53040 1st BIM Model Submission 31-Jan-17 28-Jan-17* 14-Mar-17 91.3% 1st BIM Model Submission A53050 1st BIM Model Submission - Review & Approval 21 21 01-Feb-17 21-Feb-17 15-Mar-17 04-Apr-17 0% -42 A53050 1st BIM Model Submission - Review & Approval A53060 2nd BIM Model Submission 2nd BIM Model Submission 14 22-Feb-17 07-Mar-17 05-Apr-17 18-Apr-17 A53060 A53070 2nd BIM Model Submission - Review & Approva 21 08-Mar-17 28-Mar-17 19-Apr-17 09-May-17 0% A53070 ___ BIM MODEL SUBMISSION -Ceramic Concrete Tubes & Per A53080 1st BIM Model Submission 46 46 17-Dec-16 31-Jan-17 28-Jan-17* 14-Mar-17 91.3% 0% -42 1st BIM Model Submission ■ A53090 1st BIM Model Submission - Review & Approve 21 21 01-Feb-17 21-Feb-17 15-Mar-17 04-Apr-17 0% 1st BIM Model Submission - Review & Approval A53090 ■ A53100 2nd BIM Model Submission 14 22-Feb-17 07-Mar-17 05-Apr-17 18-Apr-17 0% 2nd BIM Model Submission A53100 A53110 2nd BIM Model Submission - Review & Approval 08-Mar-17 28-Mar-17 19-Apr-17 09-May-17 0% A53110 BIM MODEL SUBMISSION - Strip Glazing at Skylight G A53130 3rd BIM Model Submission - Review & Approva 10-Jan-17 01-Feb-17 21-Feb-17 100% 14 11-Jan-17 24-Jan-17 22-Feb-17 07-Mar-17 100% A53140 4th BIM Model Submission A53140 4th BIM Model Submission A53150 4th BIM Model Submission - Review & Approve 21 25-Jan-17 14-Feb-17 08-Mar-17 28-Mar-17 14.29% A53150 4th BIM Model Submission - Review & Approval BIM MODEL SUBMISSION -1.3 Storefront (MPLUS-BIM-D00

A53170 | 5th BIM Model Submission - Review & Approval 21 21-Dec-16 10-Jan-17 01-Feb-17 21-Feb-17 100% 5th BIM Model Submission - Review & Approva 14 14 11-Jan-17 24-Jan-17 22-Feb-17 07-Mar-17 100% A53180 6th BIM Model Submission A53180 6th BIM Model Submission 6th BIM Model Submission - Review & Approva 21 25-Jan-17 14-Feb-17 08-Mar-17 28-Mar-17 14.29% A53190 t 6th BIM Model Submission - Review & Approval BIM MODEL SUBMISSION - Garden Gallery Ceramic Cladd

A53200 1st BIM Model Submission 118 06-Oct-16 20-Dec-16 06-Oct-16 31-Jan-17 100% 94.74% 1st RIM Model Submission 21 21-Dec-16 10-Jan-17 01-Feb-17 21-Feb-17 100% ■ A53210 1st BIM Model Submission - Review & Approval 1st BIM Model Submission - Review & Approval A53220 2nd BIM Model Submission 24-Jan-17 22-Feb-17 07-Mar-17 100% 2nd BIM Model Submission A53220 A53230 2nd BIM Model Submission - Review & Approval 21 25-Jan-17 14-Feb-17 08-Mar-17 28-Mar-17 14.29% -42 A53230 2nd BIM Model Submission - Review & Approval BIM MODEL SUBMISSION - Metal Cladding FAC-LV-01a/FAC-LV-A53250 1st BIM Model Submission 70 17-Dec-16 24-Feb-17 28-Jan-17* 07-Apr-17 60% st BIM Model Submission A53260 1st BIM Model Submission - Review & Approval 21 21 25-Feb-17 17-Mar-17 08-Apr-17 28-Apr-17 0% 0% A53260 1st BIN FABRICATION & DELIVERY OF M+ TOWER & PODIUM FACADE SYSTEM 01A Tower Facade PC+CW (Bulk) A54880 Production & Fabrication - Precast Panel for Tower - Summary 229 | 271 | 19-Nov-16 | 05-Jul-17 | 19-Nov-16 | 16-Aug-17 | 30.57% | 12.23% | -42 A54450 Coated Glass Production 141 19-Nov-16 31-Mar-17 19-Nov-16 16-May-17 52.78% 22.22% A54460 Fabrication of Glass Pane 206 206 18-Feb-17 27-Oct-17 18-Feb-17 27-Oct-17 0% A54460 Die Making - Bulk Production Die Making - Bulk Production 101 22-Nov-16 15-Feb-17 22-Nov-16 25-Mar-17 80.88% 32.35% A54910 Aluminium Extrusion Production 201 201 16-Feb-17 19-Oct-17 27-Mar-17 28-Nov-17 0% 36 69 19-Nov-16 03-Jan-17 19-Nov-16 14-Feb-17 100% 66.67% A54930 Die Making Die Making 03-Oct-17 15-Feb-17 13-Nov-17 9.46% A54940 Terracotta Production - Tower (Bulk) A54950 Delivery to Precast Factory 212 212 10-Mar-17 24-Nov-17 22-Apr-17 05-Jan-18 0% 0% 01B Tower Lighting (Bulk)
Procurement & Production (3F to Roof) & A55010 Procurement - Tower Lighting Bar

02 Podium Facade PC + CW (Bulk) 128 161 26-Oct-16 30-Mar-17 26-Oct-16 15-May-17 60.94% 35.16% -33 262 | 304 | 12-Nov-16 | 31-Jul-17 | 12-Nov-16 | 11-Sep-17 | 29.39% | 13.36% | -42 Glass Production & Fabrication
A10020 Ordering of Coated Glass 106 | 139 | 12-Nov-16 | 22-Mar-17 | 12-Nov-16 | 06-May-17 | 59.43% | 28.3% | -33 A10040 Die Making - Bulk Production 46 46 17-Feb-17 12-Apr-17 17-Feb-17 12-Apr-17 0% 140 140 13-Apr-17 30-Sep-17 13-Apr-17 30-Sep-17 0% A10050 Aluminium Extrusion Production Å10050 Ordering of Terracotta - Podium (Bulk) 11 24-Dec-16 09-Jan-17 01-Feb-17 13-Feb-17 100% Ordering of Terracotta - Podium (Bulk 10-Jan-17 17-Mar-17 14-Feb-17 22-Apr-17 29.09% A10090 Die Making - Terracotta Production A10090 Die Making - Terrad A10100 Terracotta Production - Tower (Bulk) 165 165 16-Feb-17 05-Sep-17 20-Mar-17 09-Oct-17 0% Å10100 -G3 GW with T Mullion (Kinked & Straight B1F to GF) (Bulk ■ A54490 | Production & Fabrication - GW with T Mullion (Kinked & Straight B1F t | 187 | 187 | 25-Feb-17 | 30-Aug-17 | 25-Feb-17* | 30-Aug-17 | 0% | 0% A54490 Glass Production & Fabrication

A10190 Coated Glass Production 94 94 25-Feb-17 22-Jun-17 25-Feb-17 22-Jun-17 0% 0% A10190 A10210 Die Making - Bulk Production 38 38 22-Apr-17 08-Jun-17 22-Apr-17 08-Jun-17 0% 0% 0 A10210 nic Concrete Tubes & Perforated Cladding (Bulk) A54600 Production & Fabrication - Ceramic Concrete Tubes & Perforated Cladx | 229 | 229 | 25-Mar-17 | 08-Nov-17 | 25-Mar-17 | 08-Nov-17 | 09-Nov-17 |

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Three Months Rolling Programme (3MRP) - 27 Jan 2017 (MTH16)

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File Name: M+ MICP D14 OP3A - Month 16 - 27 Jan '17 Planned Actual % Finish Complete Variance MICP D15 Finish Start A10680 Die Making - Bulk Production

OA Plaza Skylight 3F (Bulk)

A19130 Production & Fabrication - Plaza Skylight 3F 77 77 25-Mar-17 30-Jun-17 25-Mar-17 30-Jun-17 0% 0% 0 A10680 207 | 207 | 18-Mar-17 | 10-Oct-17 | 18-Mar-17 | 10-Oct-17 | 0% | 0% | 0 72 | 72 | 18-Mar-17 | 17-Jun-17 | 18-Mar-17* | 17-Jun-17 | 0% | 0% | 0 A18770 Die Making - Bulk Product A18770 ☐ 068 STrip CW Skylight Gallery 3F (Bulk)
☐ A18810 | Production & Fabrication - Strip CW Skylight Gallery 3F 151 | 151 | 17-Mar-17 | 14-Aug-17 | 17-Mar-17* | 14-Aug-17 | 0% | 0% | 0 A18810 Glass Production & Fabrication

A19150 Coated Glass Production 68 68 17-Mar-17 12-Jun-17 17-Mar-17* 12-Jun-17 0% 0% A19150 A18830 Die Making - Bulk Production 44 44 18-Mar-17 15-May-17 18-Mar-17 15-May-17 0% 0% 0 A 18830 07 L3 Storefront (Bulk) A18870 Production & Fabrication - L3 Storefront 194 194 01-Apr-17 11-Oct-17 01-Apr-17 11-Oct-17 0% 0% Glass Production & Fabrication

A19170 Coated Glass Production 97 97 01-Apr-17 01-Aug-17 01-Apr-17* 01-Aug-17 0% 0% A19170 A18890 Die Making - Bulk Production 71 71 01-Apr-17 30-Jun-17 01-Apr-17 30-Jun-17 0% 0% 0 A18890 🔁 08 Garden Gallery Ceramic Cladding 3F (Bulk) A19190 Production & Fabrication - Garden Gallery Ceramic Cladding 3F 35 | 35 | 05-Apr-17 | 20-May-17 | 05-Apr-17* | 20-May-17 | 0% | 0% | 0 18930 □ 99 North Perimeter Louvre Cladding (Bulk)
□ A19210 | Production & Fabrication - North Perimeter Louvre Cladding 287 287 06-Apr-17 17-Jan-18 06-Apr-17 17-Jan-18 0% 0% Á19210 A18990 Die Making - Bulk Production 59 59 06-Apr-17 20-Jun-17 06-Apr-17* 20-Jun-17 0% 0% 0 Å18990 A19230 Production & Fabrication - Doors 332 332 06-Mar-17 31-Jan-18 06-Mar-17 31-Jan-18 0% 0% A19230 A19060 Die Making 89 89 06-Mar-17 24-Jun-17 06-Mar-17* 24-Jun-17 0% 0% 0 A19060 M+ Podium External Envelope (By RedLand, Perma (By Redland) Precast Concrete Panel
A41140 Handover Zone A - B1/F Working Areas 16-Dec-16 27-Jan-17 100% 0% -33 Handover Zone A - B1/F Working Areas elisa) Glass Wall with T Mullion A41160 Handover Zone A - B1/F Working Areas ver Zone A - B1/F Working Areas 16-Dec-16 27-Jan-17 100% 0% -33 0 0 (By Permasteelisa) Skylight/Ceramic Cladding/Sto A47610 Handover Zone F - 3/F Working Area Handover Zone F - 3/F Working Area. 0 0 16-Dec-16 27-Jan-17 100% 0% -33 M+ Tower External Envelope (By Permas Tower Facade Advance Works
Tower Facade Advance Works
Tower Facade Advance Working Platform A14820 Preparation & Design of Monorails 12 12 03-Apr-17 20-Apr-17 03-Apr-17* 20-Apr-17 0% 0% 12 12 21-Apr-17 06-May-17 21-Apr-17 06-May-17 06-May-17 0% 0% Preparation & Design of A14830 Monorails - 1st Submission, Review and Approval by MJV A14830 Provision of Tower Crane TC6 on B1/F & 3/F Podium 26-Jan-17 03-Feb-17 01-Feb-17 06-Feb-17 40% Erect TC6-1 @ Zone E on B1 Slab to 110.95 (mass level) A51080 Inspection and ICE & RPE Certification 2 2 04-Feb-17 06-Feb-17 07-Feb-17 08-Feb-17 0% 0% A5 080 — Inspection and ICE & RPE Certification CSF & RDE b-Structure RC Works B1/F Level North Zoning @ Portion - R
Portion B1R1 @ Grid Line I' to J / 6' to 1
A48220 Remove Scaffolds and 1st Layer of Struts 4 4 17-Jan-17 20-Jan-17 01-Feb-17 04-Feb-17 100% 0% -10 Remove Scaffolds and 1st Layer of Struts A48220 rtion B1R2 @ Grid Line G' to I' / 6' to 1 3 3 19-Jan-17 21-Jan-17 01-Feb-17 03-Feb-17 100% 0% -8 48260 Remove Scaffolds and Cleaning Portion B1R5 @ Grid Line A to A' / 3 to 4 3 3 29-Dec-16 31-Dec-16 01-Feb-17 03-Feb-17 100% 0% Remove Scaffolds and Cleaning on B1R3 @ Grid Line A' to C' / 6' to A48270 Construct beams & slab (B1/F) (106 m3) 36 28-Dec-16 16-Jan-17 28-Dec-16 11-Feb-17 100% 37.5% Construct beams & slab (B1/F) (106 m3 17-Jan-17 02-Feb-17 12-Feb-17 28-Feb-17 64.71% A48280 Concrete Curing period (2-weeks) A48280 Concrete Curing period (2-weeks) 03-Feb-17 06-Feb-17 01-Mar-17 03-Mar-17 0% A48290 Portion B1R4 @ Grid Line A to A' / 6' to 16-Jan-17 04-Feb-17 01-Feb-17 17-Feb-17 73.33% 0% Construct beams & slab (B1/F) (100 m3) A48300 Construct beams & slab (B1/F) (100 m3) A48300 12 12 05-Feb-17 16-Feb-17 18-Feb-17 01-Mar-17 0% Concrete Curing period (2-weeks)

Remove Scaffolds and Cleaning A48310 Concrete Curing period (2-weeks) A48310 A48320 Remove Scaffolds and Cleaning 3 17-Feb-17 20-Feb-17 02-Mar-17 04-Mar-17 0% A48320 North Zoning @ Portion - S
Portion S2 @ Grid Line A/6' to 2 14 14 06-Feb-17 21-Feb-17 18-Feb-17 06-Mar-17 0% 0% A48340 Construct B1 Slab on Grid (Entrance Portal Road - RC 150 m3,) Construct B1 Slab on Grid (Entrance Portal Road - RC 150 m3,) A48340 4 4 22-Feb-17 25-Feb-17 07-Mar-17 10-Mar-17 0% 0% A48350 Concrete Curing period (2-days), remove formworks & cleaning A48350 _____ Concrete Curing period (2-days), remove formworks & cleaning Portion S1 @ Grid Line A/ 2' to 3' Construct B1 Slab on Grid (CLP Cable Trench & Riser Room) 14 17-Dec-16 05-Jan-17 01-Feb-17 16-Feb-17 100% 0% 4 4 06-Jan-17 09-Jan-17 17-Feb-17 20-Feb-17 100% 0% Construct B1 Slab on Grid (CLP Cable Trench & Riser Room) A37940 Concrete Curing period (2-days), remove formworks & cleaning A37940 CSF Zoning @ Portion - T
Portion B1T1 @ Grid Line D' to F' / 1' to 3
 12
 17
 05-Jan-17
 16-Jan-17
 17-Jan-17
 02-Feb-17
 100%
 50%

 6
 6
 17-Jan-17
 23-Jan-17
 03-Feb-17
 09-Feb-17
 100%
 0%
 A48410 Concrete Curing period (2-weeks 48410 🕳 Concrete Curing period (2-weeks) A48420 Remove scaffolds and 1st Laver of Struts A48420 move scaffolds and 1st Layer of Struts Portion B1T2 @ Grid Line D' to F' / 3' to 5' 6 6 29-Dec-16 05-Jan-17 01-Feb-17 07-Feb-17 100% 0% -25 Remove scaffolds & deaning Portion B1T3 @ Grid Line D' to G' / 5' to 6 4 4 19-Dec-16 22-Dec-16 01-Feb-17 04-Feb-17 100% 0% Remove scaffolds & cleaning tion B1T4 @ Grid Line B' to D' / 3' to A48540 Construct beams & slab (B1/F) (230 m3) 21 17-Dec-16 07-Jan-17 09-Jan-17 04-Feb-17 100% Construct beams & slab (B1/F) (230 m3) A48550 Concrete Curing period (2-weeks) 19-Jan-17 05-Feb-17 16-Feb-17 100% 12 08-Jan-17 A48550 Concrete Curing period (2-weeks) 24-Jan-17 17-Feb-17 21-Feb-17 100% A48560 Remove scaffolds & cleaning Portion B1T5 @ Grid Line A' to B' / 4' to 6 A48580 Construct Columns & Walls B2 to B1/F @ GLA'-B' / 4'-6' 20-Jan-17 04-Feb-17 17-Feb-17 01-Mar-17 63.64% -21 A48580 Construct Columns & Walls B2 to B1/F @ GL A'-B' / 4'-6' A48590 Construct beams & slab (B1/F) (135 m3) A48590 Construct beams & slab (B1/F) (135 m3) A48600 Concrete Curing period (2-weeks) 15-Feb-17 25-Feb-17 11-Mar-17 21-Mar-17 0% A48600 Concrete Curing period (2-weeks) A48610 Remove scaffolds & cleaning 5 27-Feb-17 03-Mar-17 22-Mar-17 27-Mar-17 0% A48610 Remove scaffolds & cleaning Portion B1T6 @ Grid Line A to A' / 5' to 6' A48620 Construct Columns & Walls B2 to B1/F @ GLA-A' / 5'-6' 06-Feb-17 13-Feb-17 02-Mar-17 09-Mar-17 0% Construct Columns & Walls B2 to B1/F @ GLA-A' / 5'-6' A48620 = A48630 Construct beams & slab (B1/F) (135 m3) 13 13 10-Feb-17 24-Feb-17 07-Mar-17 21-Mar-17 0% 0% -21

Layout Name: MICP_3MRP_2

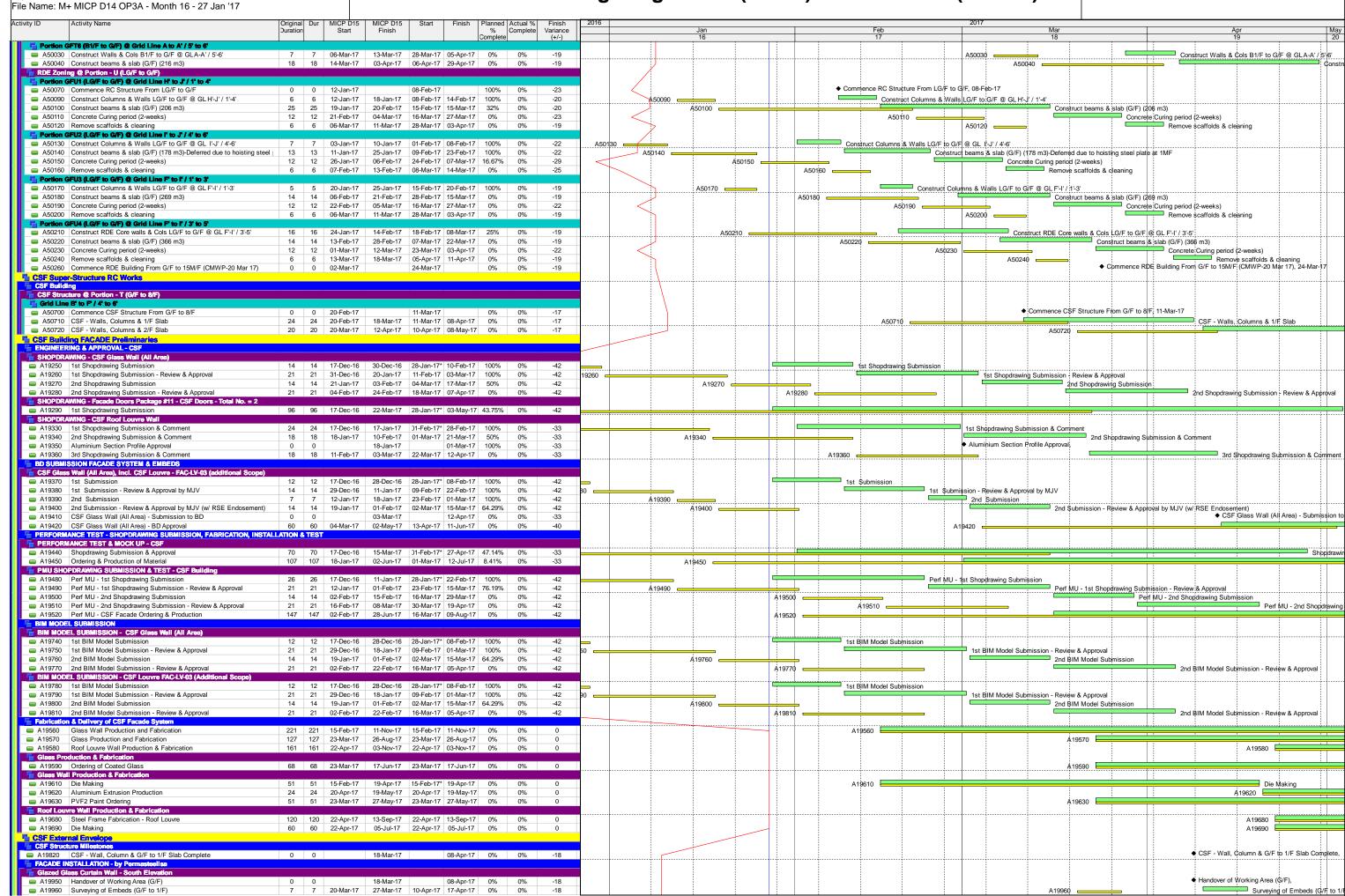
Three Months Rolling Programme (3MRP) - 27 Jan 2017 (MTH16)

File Name: M+ MICP D14 OP3A - Month 16 - 27 Jan '17 Planned Actual % Finish Complete Variance 25-Feb-17 A48640 Concrete Curing period (2-weeks) 06-Mar-17 22-Mar-17 31-Mar-17 Concrete Curing period (2-weeks) 25-Feb-17 06-Mar-17 22-Mar-17 31-Mar-17 0% 07-Mar-17 11-Mar-17 01-Apr-17 07-Apr-17 0% A48650 Remove scaffolds & cleaning A48650 emove scaffolds & cleaning RDE Zoning @ Portion - U 6 6 10-Jan-17 16-Jan-17 01-Feb-17 07-Feb-17 100% 0% -16 ■ A48710 Remove scaffolds and 1st Layer of Struts
Portion B1U2 @ Grid Line I' to J' / 4' to 6' A48710 Remove scaffolds and 1st Layer of Struts 10 10 16-Jan-17 26-Jan-17 01-Feb-17 11-Feb-17 100% 0% A48780 Remove Scaffolds and 1st Layer of Struts tion B1U3 @ Grid Line F' to H' / 1' to 3 6 6 13-Jan-17 19-Jan-17 01-Feb-17 07-Feb-17 100% 0% -13 A48840 Remove scaffolds and 1st Laver of Struts A48840 Remove scaffolds and 1st Laver of Struts Portion B1U4 @ Grid Line F to H' / 3' to 6' 5 5 21-Jan-17 26-Jan-17 01-Feb-17 06-Feb-17 100% 0% -6 A48880 LG/F Level CSF Zoning @ Portion - T
Portion LGT2 @ Grid Line D' to F' / 3' to 5' 13 15 11-Jan-17 23-Jan-17 25-Jan-17 08-Feb-17 100% 7.69% -16
14 11 24-Jan-17 08-Feb-17 09-Feb-17 21-Feb-17 36.36% 0% -11 A48930 Concrete Curing period (2-weeks)
 A48940 Remove scaffolds & cleaning A48930 Concrete Curing period (2-weeks) 11 24-Jan-17 08-Feb-17 09-Feb-17 21-Feb-17 36.36% A48940 -Remove scaffolds & cleaning A48980 Remove scaffolds & cleaning 6 6 18-Jan-17 24-Jan-17 01-Feb-17 07-Feb-17 100% 0% -9 Remove scaffolds & dleaning Portion LGT4 @ Grid Line B' to D' / 3' to 5 A49000 Construct Cols & Perimeter Walls B1/F to LG/F @ GL B'-D' / 3'-5 A49000 Construct Cols & Perimeter Walls B1/F to LG/F @ GL B'-D' / 3'-5' A49010 Construct beams & slab (LG/F) (145 m3) 13-Jan-17 25-Jan-17 06-Feb-17 17-Feb-17 100% A49010 Construct beams & slab (LG/F) (145 m3) 14 26-Jan-17 08-Feb-17 18-Feb-17 03-Mar-17 14.29% A49020 Concrete Curing period (2-weeks) A49020 Concrete Curing period (2-weeks) A49030 Remove scaffolds & cleaning 15-Feb-17 04-Mar-17 10-Mar-17 0% A49030 = Remove scaffolds & cleaning Portion LGT5 @ Grid Line A' to D' / 5' to 6 A49040 Construct Columns & Walls B1/F to LG/F @ GLA'-D' / 5'-6' 17-Jan-17 22-Feb-17 09-Feb-17 14-Mar-17 34.48% A49040 Construct Columns & Walls B1/F to 1 G/F @ GLA'-D' / 5'-6' A49050 Construct beams & slab (LG/F) (135 m3) 23-Feb-17 07-Mar-17 15-Mar-17 27-Mar-17 Construct beams & slab (LG/F) (135 m3) A49050 -A49060 Concrete Curing period (2-weeks) 08-Mar-17 20-Mar-17 28-Mar-17 09-Apr-17 0% A49060 Concrete Curing period (2-weeks) A49070 Remove scaffolds & cleaning 5 5 21-Mar-17 25-Mar-17 10-Apr-17 18-Apr-17 0% A49070 = RDE Zoning @ Portion - U A49100 Construct Cols & Perimeter Walls LG/F to G/F @ GL H'-J' / 1'-3' 36 15-Dec-16 20-Dec-16 15-Dec-16 01-Feb-17 100% 80% Construct Cols & Perimeter Walls LG/F to G/F @ GL H-J' / 1'-3 17 17-Dec-16 11-Jan-17 16-Jan-17 07-Feb-17 100% 68.42% A49110 Construct beams & slab (LG/F) (164 m3) Construct beams & slab (LG/F) (164 m3) A49120 Concrete Curing period (2-weeks) A49120 Concrete Curing period (2-weeks) 5 25-Jan-17 02-Feb-17 21-Feb-17 25-Feb-17 60% A49130 Remove scaffolds & cleaning Portion LGU2 @ Grid Line F' to H' / 1' to 3' A49140 Construct Cols & Perimeter Walls B1/F to LG/F @ GL F'-H' / 1'-3' 04-Jan-17 01-Feb-17 100% 83.33% Construct Cols & Perimeter Walls B1/F to LG/F @ GL F'-H' / 1'-3 A49150 Construct beams & slab (LG/F) (215 m3) 19-Jan-17 12-Jan-17 03-Feb-17 100% 66.67% Construct beams & slab (LG/F) (215 m3) A49170 Concrete Curing period (2-weeks) 14 20-Jan-17 02-Feb-17 04-Feb-17 17-Feb-17 57.14% 0% A49170 A49180 Remove scaffolds & cleaning 6 03-Feb-17 09-Feb-17 18-Feb-17 24-Feb-17 0% Remove scaffolds & cleaning Portion LGU3 @ Grid Line F to J' / 3' to (Construct Lift Core Walls & Cols B1/F to LG/F @ GL F'-I / 3'-6' A49190 Construct Lift Core Walls & Cols B1/F to LG/F @ GL F'-L/ 3'-6' 15 09-Jan-17 18-Jan-17 13-Jan-17 02-Feb-17 100% 77 78% A49190 A49200 Construct beams & slab (LG/F) (352 m3) 14-Jan-17 24-Jan-17 16-Jan-17 09-Feb-17 100% 11.11% A49200 Construct beams & slab (LG/F) (352 m3) 25-Jan-17 07-Feb-17 10-Feb-17 23-Feb-17 21.43% 0% A49210 Concrete Curing period (2-weeks) Concrete Curing period (2-weeks) A49220 Remove scaffolds & cleaning 6 08-Feb-17 14-Feb-17 24-Feb-17 02-Mar-17 0% G/F Level North Zoning @ Portion - R (B1/F to G/F) A49230 Commenced RC Structure From B1/F to G/F 20-Jan-17 28-Jan-17 100% A49240 Construct Columns & Walls & Cols B1/F to G/F @ GL I'-J' / 5'-1 20-Jan-17 A49240 Construct Columns & Walls & Cols B1/F to G/F @ GL I'-J' / 5'-1 03-Mar-17 20-Feb-17 11-Mar-17 0% A49250 Construct beams & slab (G/F) (180 m3) 11-Feb-17 Construct beams & slab (G/F) (180 m3) A49250 A49260 Concrete Curing period (2-weeks) 04-Mar-17 15-Mar-17 12-Mar-17 23-Mar-17 0% Concrete Curing period (2-weeks A49270 Remove scaffolds & cleaning 16-Mar-17 22-Mar-17 24-Mar-17 30-Mar-17 0% A49270 Remove scaffolds & cleaning A49280 Construct Columns & Walls & Cols B1/F to G/F @ GL F'-H' / 5'-1 16 16 11-Feb-17 01-Mar-17 20-Feb-17 09-Mar-17 0% Construct Columns & Walls & Cols B1/F to G/F @ GL F'-H' / 5'-1 A49280 A49290 Construct beams & slab (G/F) (175 m3) 18 04-Mar-17 24-Mar-17 13-Mar-17 01-Apr-17 0% A49290 Construct beams & slab (G/F) (175 m3) Concrete Curing period (2-weeks) A49300 Concrete Curing period (2-weeks) 05-Apr-17 02-Apr-17 13-Apr-17 A49300 12-Apr-17 18-Apr-17 24-Apr-17 A49310 -Portion GER3 & GER4 @ Grid Line F' to F / 6' to 2 A49330 Construct Columns & Walls & Cols B1/F to G/F @ GL F'-H' / 5'-1 02-Mar-17 10-Mar-17 28-Mar-17 20-Mar-17 A49330 Construct Columns & Walls & Cols B1/F to G/F @ GL F'-H' / 5'-1 A49340 Construct beams & slab (G/F) (184 m3) A49350 Concrete Curing period (2-weeks) 12 14-Apr-17 25-Apr-17 26-Apr-17 07-May-17 0% A49350 -Portion GFR5 @ Grid Line C' to E' / 1 to 2 14 21-Mar-17 06-Apr-17 29-Mar-17 18-Apr-17 0% Construct Columns & Walls A49370 -A49380 Construct beams & slab (G/F) (149 m3) 14 14 18-Apr-17 05-May-17 26-Apr-17 13-May-17 0% A49380 Portion GFR6 @ Grid Line D' to E' / 6' to 1 ■ A49420 Construct Columns & Walls & Cols B1/F to G/F @ GL D'-E' / 6'-1 14 14 07-Apr-17 26-Apr-17 19-Apr-17 06-May-17 0% 0% -7 A49420 = CSF Zoning @ Portion - T (LG/F to G/F) ion GFT1 (LG/F to G/F) @ Grid Line D' to F' / 1' to 3' A49780 Commenced RC Structure From B1/F to G/F ◆ Commenced RC Structure From B1/F to G/F, 03-Feb-17 20-Jan-17 A49790 Construct Columns & Walls & Cols B1/F to G/F @ GL D'-F' / 1'-3' 03-Feb-17 06-Feb-17 100% A49790 Construct Columns & Walls & Cols B1/F to G/F @ GL D'-F' / 1'-3' A49800 Construct beams & slab (G/F) (141 m3) 24-Jan-17 24-Feb-17 07-Feb-17 07-Mar-17 16% A49800 Construct beams & slab (G/F) (141 m3) A49810 Concrete Curing period (2-weeks) 12 25-Feb-17 08-Mar-17 08-Mar-17 19-Mar-17 A49810 -Concrete Curing period (2-weeks) A49820 Remove scaffolds & cleaning 15-Mar-17 20-Mar-17 25-Mar-17 Å49820 🕳 Remove scaffolds & cleaning

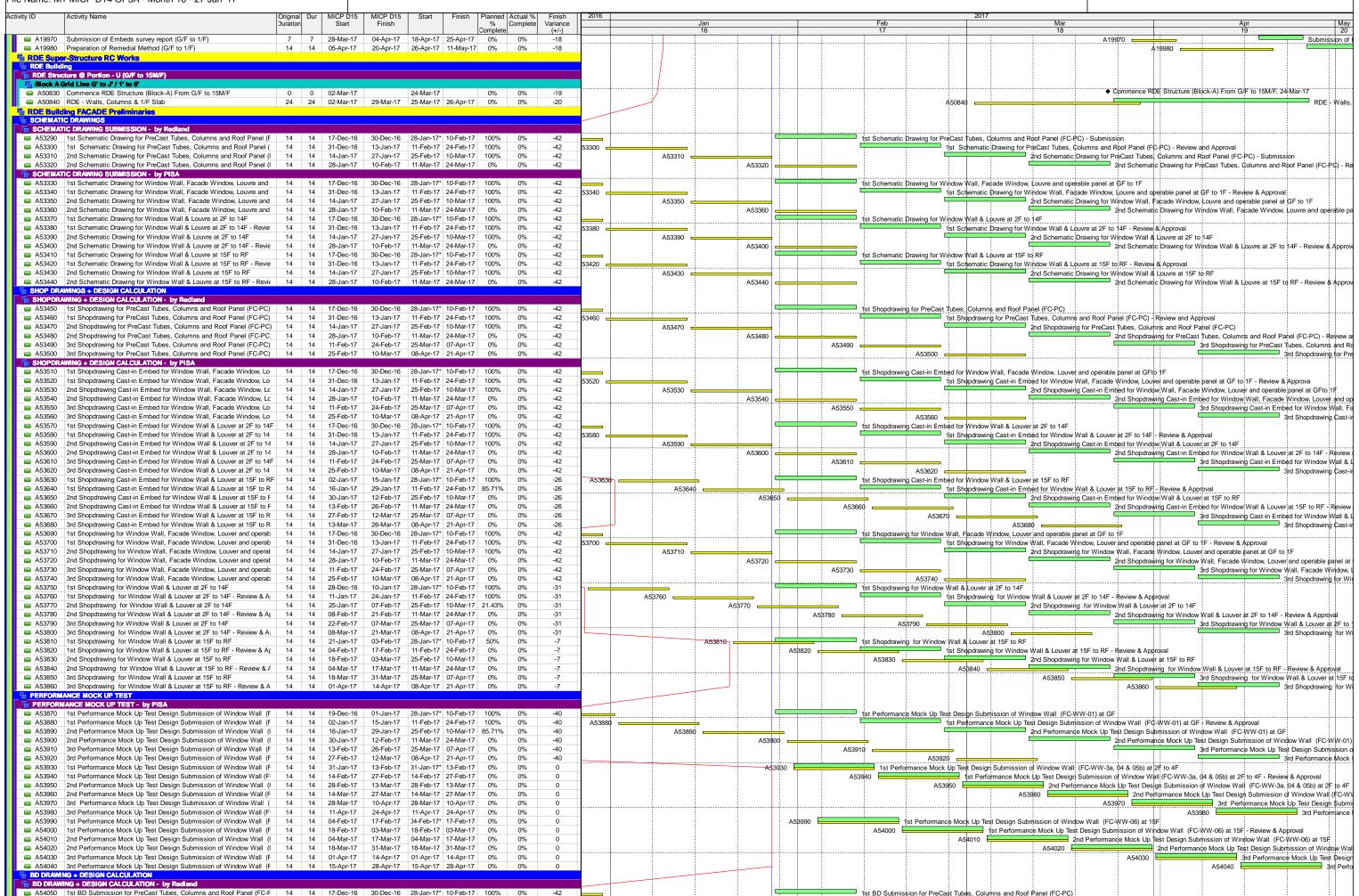
◆ Complete RDE Trx Room and Give Access to ABWF & MEP, 27-Mai-1 A49830 Complete RDF Try Room and Give Access to ABWF & MFP 16-Mar-17 27-Mar-17 0% Portion GFT2 (LG/F to G/F) @ Grid Line D' to F' / 3' to 5' Commence RC Structure From LG/F to G/F, 28-Jan-17 A49840 Commence RC Structure From LG/F to G/F A49850 Construct CSF Lift Corewalls & Cols LG/F to G/F @ GL D'-F' / 3'-5' 11-Jan-17 01-Feb-17 08-Feb-17 100% Construct CSF Lift Corewalls & Cols LG/F to G/F @ GL D'-F' / 3'-5' A49860 Construct beams & slab (G/F) (260 m3) 19-Jan-17 14-Feb-17 09-Feb-17 03-Mar-17 40% A49860 Construct beams & slab (G/F) (260 m3) A49870 Concrete Curing period (2-weeks) Concrete Curing period (2-weeks) 5 28-Feb-17 A49880 Remove scaffolds & cleaning 04-Mar-17 17-Mar-17 22-Mar-17 0% Portion GFT3 (LG/F to G/F) @ Grid Line D' to G' / 5' to 6' A49890 Construct Walls & Cols LG/F to G/F @ GL D'-G' / 5'-6' 06-Jan-17 01-Feb-17 07-Feb-17 Construct Walls & Cols LG/F to G/F @ GL D'-G' / 5'-6' 12-Jan-17 100% A49890 A49900 Construct beams & slab (G/F) (156 m3) 13-Jan-17 23-Jan-17 08-Feb-17 17-Feb-17 100% A49900 = Construct beams & slab (G/F) (156 m3) A49910 Concrete Curing period (2-weeks) 14 24-Jan-17 06-Feb-17 18-Feb-17 03-Mar-17 28.57% -25 Δ49910 Concrete Curing period (2-weeks) 5 07-Feb-17 11-Feb-17 04-Mar-17 09-Mar-17 0% A49920 Remove scaffolds & cleaning -22 A49920 -Remove scaffolds & cleaning Portion GFT4 (LG/F to G/F) @ Grid Line B' to D' / 3' to 6' 18-Feb-17 01-Mar-17 20% A49930 Construct Walls & Cols LG/F to G/F @ GL B'-D' / 3'-6' 26-Jan-17 09-Feb-17 Construct Walls & Cols LG/F to G/F @ GL B'-D' / 3'-6' Construct beams & slab (G/F) (284 m3) A49940 Construct beams & slab (G/F) (284 m3). 10-Feb-17 23-Feb-17 02-Mar-17 15-Mar-17 A49940 A49950 Concrete Curing period (2-weeks) 24-Feb-17 A49950 🕳 Concrete Curing period (2-weeks)

Remove scaffolds Remove scaffolds & cleaning

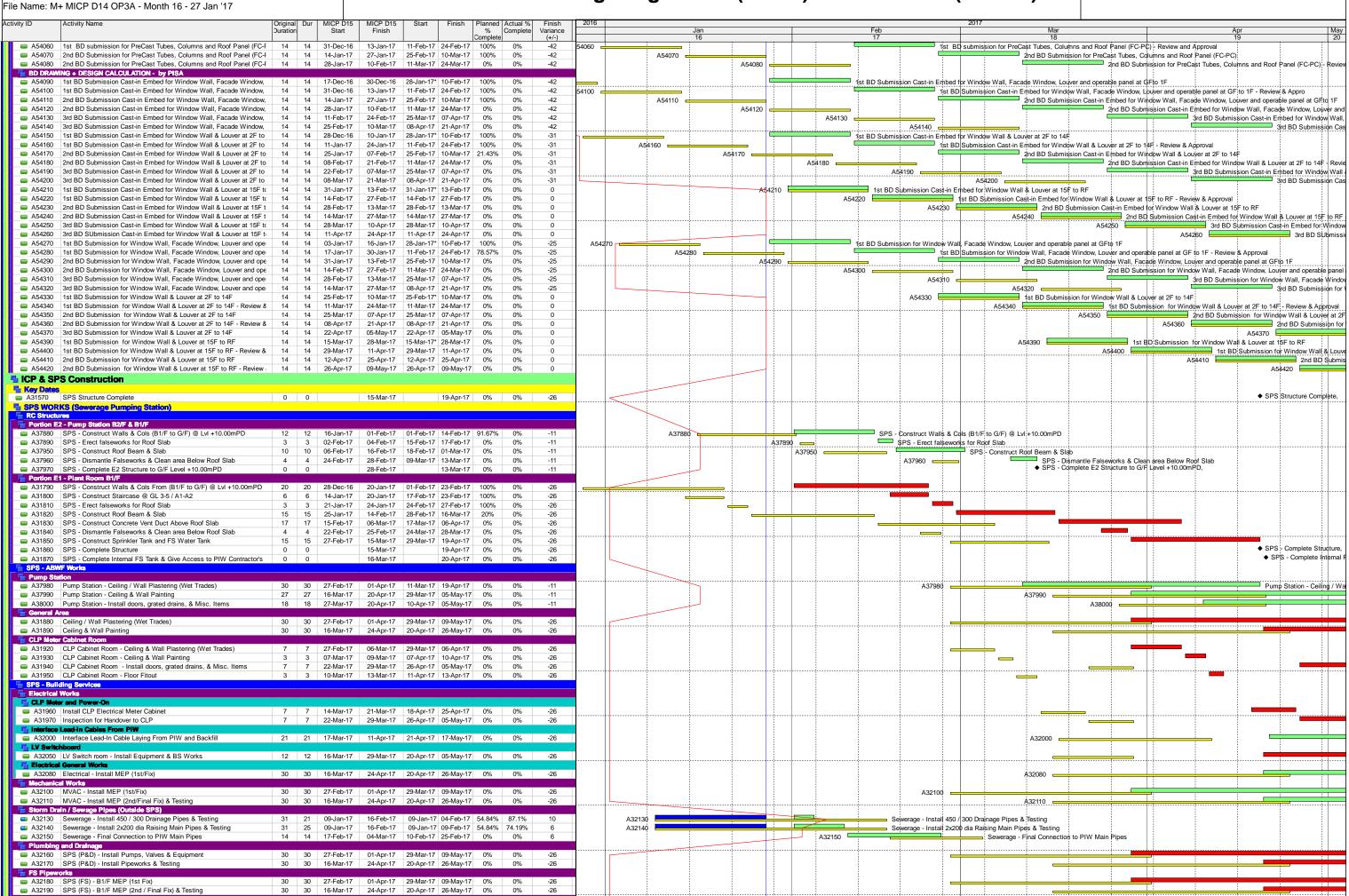
Commence C\$F Building From G/F to 8/F (CMWP - 24 Mar 17), 11-Mar-17 A49960 Remove scaffolds & cleaning 09-Mar-17 15-Mar-17 29-Mar-17 05-Apr-17 A49970 Commence CSF Building From G/F to 8/F (CMWP - 24 Mar 17) 20-Feb-17 11-Mar-17 Portion GFT5 (B1/F to G/F) @ Grid Line A' to B' / 3' to 6' 23-Jan-17 06-Feb-17 17-Feb-17 28-Feb-17 50% Construct Walls & Cols B1/F to G/F @ GLA'-B' / 3'-6' Construct beams & slab (G/F) (170 m3) A49990 Construct beams & slab (G/F) (170 m3). 12 12 07-Feb-17 20-Feb-17 01-Mar-17 14-Mar-17 0% A49990 14 14 21-Feb-17 06-Mar-17 15-Mar-17 28-Mar-17 A50010 Concrete Curing period (2-weeks) A50010 -Concrete Curing period (2-weeks) A50020 Remove scaffolds & cleaning 5 5 07-Mar-17 11-Mar-17 29-Mar-17 03-Apr-17 Remove scaffolds & cleaning



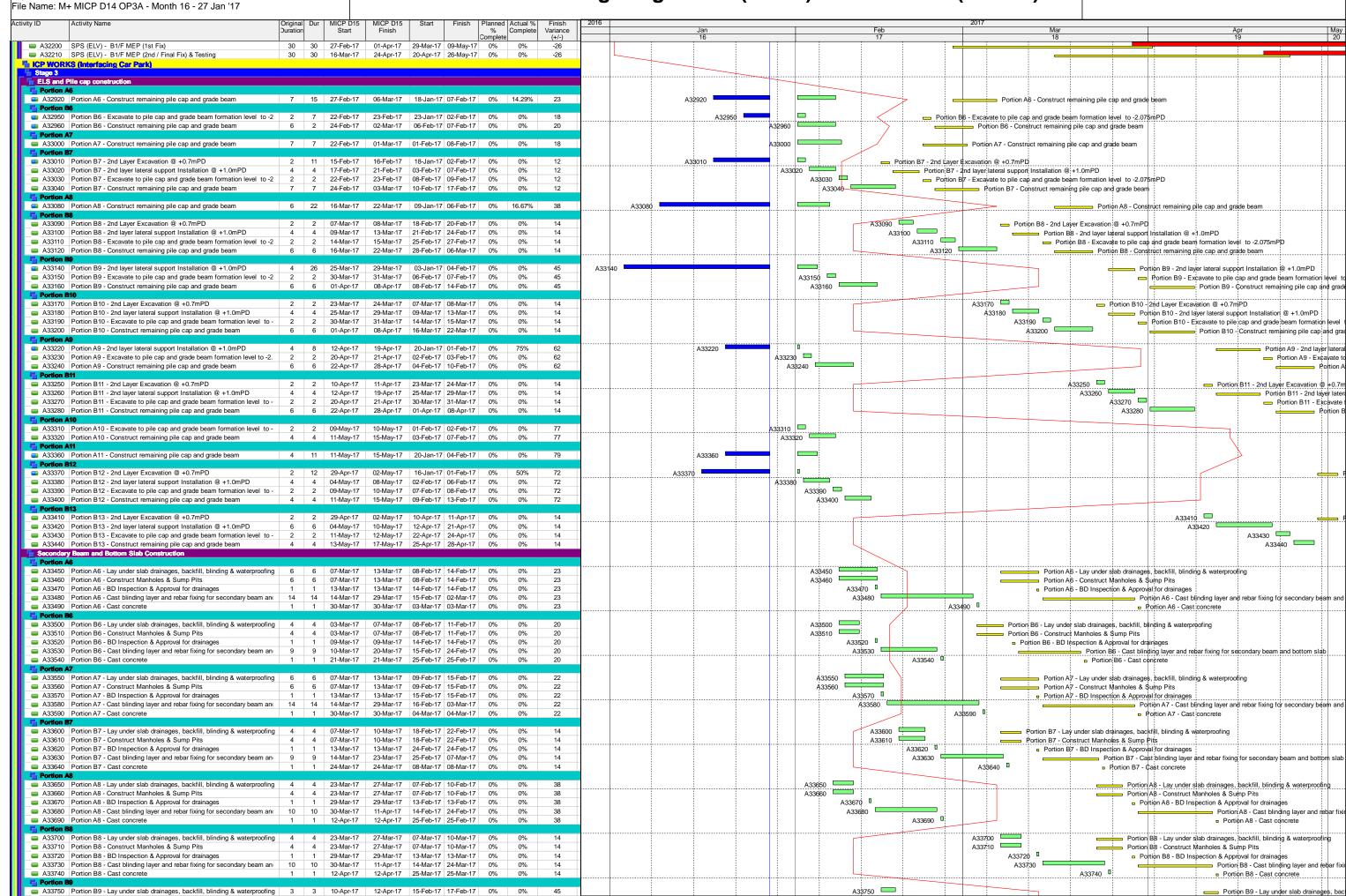
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lanned Actual % Complete Finish A33760 Portion B9 - Construct Manholes & Sump Pits 15-Feb-17 17-Feb-17 Portion B9 - Construct Manholes & Sump A33770 A33770 Portion B9 - BD Inspection & Approval for drainages 19-Apr-17 19-Apr-17 21-Feb-17 21-Feb-17 0% 0% Portion B9 - BD Inspection A33780 Portion B9 - Cast blinding layer and rebar fixing for secondary beam an 22-Feb-17 03-Mar-17 20-Apr-17 29-Apr-17 A33780 04-Mar-17 04-Mar-17 A33790 A33790 Portion B9 - Cast concrete A33800 A33800 Portion B10 - Lay under slab drainages, backfill, blinding & waterproofir 12-Apr-17 23-Mar-17 25-Mar-17 10-Apr-17 Portion B10 - Lay under slab drainages. A33810 A33810 Portion B10 - Construct Manholes & Sump Pits Portion B10 - Construct Manholes & Sump A33820 Portion B10 - BD Inspection & Approval for drainages 19-Apr-17 19-Apr-17 29-Mar-17 29-Mar-17 0% A33820 Portion B10 - BD Inspection A33830 Portion B10 - Cast blinding layer and rebar fixing for secondary beam a 20-Apr-17 29-Apr-17 30-Mar-17 10-Apr-17 0% A33830 A33840 Portion B10 - Cast concrete 11-Apr-17 11-Apr-17 A33850 Portion A9 - Lay under slab drainages, backfill, blinding & waterproofing 29-Apr-17 05-May-17 11-Feb-17 15-Feb-17 62 A33850 05-May-17 A33860 Portion A9 - Construct Manholes & Sump Pits 29-Apr-17 11-Feb-17 15-Feb-17 A33860 A33870 Portion A9 - BD Inspection & Approval for drainages 08-May-17 08-May-17 17-Feb-17 17-Feb-17 A33870 A33880 Portion A9 - Cast blinding layer and rebar fixing for secondary beam and 09-May-17 19-May-17 18-Feb-17 01-Mar-17 0% A33880 A33890 □ A33890 Portion A9 - Cast concrete 20-May-17 02-Mar-17 02-Mar-17 A33900 Portion B11 - Lay under slab drainages, backfill, blinding & waterproofir 29-Apr-17 05-Mav-17 10-Apr-17 13-Apr-17 14 A33900 A33910 Portion B11 - Construct Manholes & Sump Pits 05-May-17 10-Apr-17 13-Apr-17 29-Apr-17 0% A33910 A33920 Portion B11 - BD Inspection & Approval for drainages 08-May-17 19-Apr-17 19-Apr-17 a A33930 Portion B11 - Cast blinding layer and rebar fixing for secondary beam a 09-May-17 19-May-17 20-Apr-17 02-May-17 14 A33930 = A33950 A33950 Portion A10 - Lay under slab drainages, backfill, blinding & waterproofir 16-May-17 18-May-17 08-Feb-17 10-Feb-17 A33960 Portion A10 - Construct Manholes & Sump Pits 16-May-17 17-May-17 08-Feb-17 09-Feb-17 A33960 = A33970 I A33970 Portion A10 - BD Inspection & Approval for drainages 22-May-17 22-May-17 14-Feb-17 14-Feb-17 0% A33980 == A33980 Portion A10 - Cast blinding layer and rebar fixing for secondary beam at 23-May-17 27-May-17 15-Feb-17 20-Feb-17 29-May-17 A33990 Portion A10 - Cast concrete 29-May-17 21-Feb-17 21-Feb-17 A34000 Portion A11 - Lay under slab drainages, backfill, blinding & waterproofin 3 16-May-17 18-May-17 06-Feb-17 08-Feb-17 A34000 A34010 Portion A11 - Construct Manholes & Sump Pits A34010 = A34020 Portion A11 - BD Inspection & Approval for drainages 22-May-17 22-May-17 11-Feb-17 11-Feb-17 A34020 I 13-Feb-17 17-Feb-17 27-May-17 A34030 Portion A11 - Cast blinding layer and rebar fixing for secondary beam ar 23-May-17 0% A34030 A34040 Portion A11 - Cast concrete 18-Feb-17 18-Feb-17 A34040 A34050 Portion B12 - Lay under slab drainages, backfill, blinding & waterproofir A34050 16-May-17 18-May-17 14-Feb-17 16-Feb-17 A34060 Portion B12 - Construct Manholes & Sump Pits 17-May-17 14-Feb-17 15-Feb-17 A34060 A34070 Portion B12 - BD Inspection & Approval for drainages 22-May-17 22-May-17 20-Feb-17 20-Feb-17 A34070 0 A34080 = A34080 Portion B12 - Cast blinding layer and rebar fixing for secondary beam a 23-May-17 27-May-17 21-Feb-17 25-Feb-17 0% 0% A34090 A34090 Portion B12 - Cast concrete 1 29-May-17 29-May-17 27-Feb-17 27-Feb-17 0% A34200 Portion B14 - Columns & Walls Construction Portion B14 - Columns & Walls Construction 11 37 17-Dec-16 31-Dec-16 17-Dec-16 04-Feb-17 100% 63.64% -26 A34210 Portion B14 - Construct B1 Slab Portion B14 - Construct B1 Slab A34220 Portion B15 - Columns & Walls Construction
 14
 14
 11-Jan-17
 26-Jan-17
 01-Feb-17
 16-Feb-17
 100%
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 8
 8
 27-Jan-17
 08-Feb-17
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 25-Feb-17
 12.5%
 0%
 A34220 Portion B15 - Columns & Walls Construction A34230 Portion B15 - Construct B1 Slab A34230 Portion B15 - Construct B1 Slab B1 Slab Construction (Phase 2) - Construct B2/F to B1/F Cols, Walls & B1 Slab 15 15 21-Apr-17 10-May-17 17-Feb-17 06-Mar-17 0% 0% A34240 Portion A14 - Columns & Walls Construction A34240 9 11-May-17 20-May-17 07-Mar-17 16-Mar-17 0% A34250 Portion A14 - Construct B1 Slab A34250 14 14 22-Apr-17 10-May-17 01-Feb-17 16-Feb-17 0% 0% 65 A34260 Portion A15 - Columns & Walls Construction A34260 9 11-May-17 20-May-17 17-Feb-17 27-Feb-17 0% A34270 Portion A15 - Construct B1 Slab A34270 A34280 Portion B16 - Columns & Walls Construction
 12
 12
 27-Apr-17
 12-May-17
 07-Apr-17
 24-Apr-17
 0%
 0%
 14

 8
 8
 13-May-17
 22-May-17
 25-Apr-17
 05-May-17
 0%
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 14
 A34280 A34290 Portion B16 - Construct B1 Slab 11 11 26-Apr-17 10-May-17 28-Feb-17 11-Mar-17 0% 0% 7 7 11-May-17 18-May-17 13-Mar-17 20-Mar-17 0% 0% 0% A34300 Portion B17 - Columns & Walls Construction A34300 A34310 Portion B17 - Construct B1 Slab 11-May-17 18-May-17 13-Mar-17 20-Mar-17 0% A34310 A34320 Portion A16 - Columns & Walls Construction 31-Mar-17 04-Mar-17 09-Mar-17 06-Apr-17 A34320 Portion A16 - Columns & Walls Construction 11-Apr-17 10-Mar-17 14-Mar-17 A34330 Portion A16 - Construct B1 Slab A34330 Portion A16 - Construct B1 Slab A34340 = A34340 Portion A6 - Removal of Lateral Suppor 24-Apr-17 25-Apr-17 23-Mar-17 24-Mar-17 0% 23 A34350 A34350 Portion A16 - Columns & Walls Construction (Deffered Area) 26-Apr-17 29-Apr-17 25-Mar-17 29-Mar-17 A34360 Portion A16 - Construct B1 Slab (Deffered Area) 05-May-17 30-Mar-17 01-Apr-17 A34360 A34370 Portion B18 - Columns & Walls Construction 31-Mar-17 07-Apr-17 04-Mar-17 10-Mar-17 A34370 Portion B18 - Columns & Walls Construction A34380 Portion B18 - Construct B1 Slab 08-Apr-17 12-Apr-17 A34380 Portion B18 - Construct B1 Slab A34390 Portion B6 - Removal of Lateral Support 25-Apr-17 26-Apr-17 24-Mar-17 25-Mar-17 0% 23 A34390 🔲 A34400 A34400 Portion B18 - Columns & Walls Construction (Deffered Area) 27-Apr-17 29-Apr-17 27-Mar-17 29-Mar-17 0% A34410 A34410 Portion B18 - Construct B1 Slab (Deffered Area) 02-May-17 05-May-17 30-Mar-17 01-Apr-17 A34420 Portion A17 - Columns & Walls Construction 31-Mar-17 08-Apr-17 06-Mar-17 13-Mar-17 0% 22 A34420 Portion A17 - Columns & Walls Construct A34430 Portion A17 - Construct B1 Slab 10-Apr-17 18-Apr-17 14-Mar-17 18-Mar-17 A34430 — Portion A17 - Construct B1 S A34440 28-Apr-17 28-Mar-17 29-Mar-17 0% A34440 Portion A7- Removal of Lateral Support 27-Apr-17 A34450 Portion B19 - Columns & Walls Construction 31-Mar-17 07-Apr-17 06-Mar-17 11-Mar-17 A34450 ortion B19 - Columns & Walls Construction A34460 A34460 A34460 Portion B19 - Construct B1 Slab 08-Apr-17 12-Apr-17 Portion B19 - Construct B1 Slab 26-Apr-17 25-Mar-17 27-Mar-17 A34470 Portion B7 - Removal of Lateral Support 25-Apr-17 A34470 === — Portion B7 A34480 A34480 Portion B19 - Columns & Walls Construction (Deffered Area) 27-Apr-17 29-Apr-17 28-Mar-17 30-Mar-17 0% 0% Portic A34490 Portion B19 - Construct B1 Slab (Deffered Area) 02-May-17 05-May-17 31-Mar-17 03-Apr-17 A34490 A34500 Portion A18 - Columns & Walls Construction 13-Apr-17 24-Apr-17 27-Feb-17 06-Mar-17 0% A34500 Portion A18 - Co A34510 A34510 Portion A18 - Construct B1 Slab 28-Apr-17 07-Mar-17 10-Mar-17 25-Apr-17 A34520 Portion A8 - Removal of Lateral Suppor 11-May-17 20-Mar-17 21-Mar-17 A34520 = 12-May-17 A34530 A34530 Portion A18 - Columns & Walls Construction (Deferred Area) 15-May-17 22-Mar-17 24-Mar-17 0% A34540 Portion A18 - Construct B1 Slab (Deferred Area) 16-May-17 18-May-17 25-Mar-17 28-Mar-17 A34540 ortion B20 - Colur A34550 Portion B20 - Columns & Walls Construction 22-Apr-17 27-Mar-17 01-Apr-17 A34550 A34560 A34560 Portion B20 - Construct B1 Slab 24-Apr-17 27-Apr-17 03-Apr-17 07-Apr-17 0% A34570 A34570 Portion B8 - Removal of Lateral Support 10-May-17 20-Apr-17 21-Apr-17 09-May-17 A34580 A34580 Portion B21 - Columns & Walls Construction 4 04-May-17 08-May-17 06-Mar-17 09-Mar-17 0% A34590 A34590 Portion B21 - Construct B1 Slab 3 09-May-17 11-May-17 10-Mar-17 13-Mar-17 A34600 Portion B9 - Removal of Lateral Support 2 2 20-May-17 22-May-17 22-Mar-17 23-Mar-17 0% A34600 =

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Planned Actual % Finish Complete Variance Finish Start A34610 Portion B21 - Columns & Walls Construction (Deffered Area) 25-May-17 24-Mar-17 27-Mar-17 A34620 29-May-17 28-Mar-17 30-Mar-17 0% A34620 Portion B21 - Construct B1 Slab (Deffered Area) A34630 Portion B22 - Columns & Walls Construction A34630 ==
 +
 4
 U4-Invay-17
 U8-May-17
 12-Apr-17
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 09-May-17
 11-May-17
 20-Apr-17
 22-Apr-17
 0%
 0%
 A34640 A34640 Portion B22 - Construct B1 Slab A34680 Portion A19 - Columns & Walls Construction A34690 Portion A19 - Construct B1 Slab 31-May-17 03-Jun-17 11-Mar-17 15-Mar-17 0% 62 A34690 A34700 A34700 Portion A9 - Removal of Lateral Support 13-Jun-17 14-Jun-17 24-Mar-17 25-Mar-17 0% 0% A34710 ■ A34710 Portion A19 - Columns & Walls Construction (Deffered Area) A34720 Portion A19 - Construct B1 Slab (Deffered Area) 3 19-Jun-17 21-Jun-17 30-Mar-17 01-Apr-17 0% A34720 A34760 A34760 Portion A20 - Columns & Walls Construction 22-Feb-17 25-Feb-17 31-May-17 03-Jun-17 A34770 📥 A34770 Portion A20 - Construct B1 Slab 07-Jun-17 27-Feb-17 01-Mar-17 A34780 A34780 Portion A10 - Removal of Lateral Suppor 16-Jun-17 17-Jun-17 10-Mar-17 11-Mar-17 0% A34790 A34790 Portion A21 - Columns & Walls Construction 03-Jun-17 20-Feb-17 23-Feb-17 31-May-17 A34800 Portion A21 - Construct B1 Slab 05-Jun-17 07-Jun-17 24-Feb-17 27-Feb-17 0% A34800 A34810 A34810 Portion A11 - Removal of Lateral Support 16-Jun-17 17-Jun-17 08-Mar-17 09-Mar-17 0% A34820 -■ A34820 Portion A21 - Columns & Walls Construction (Deffered Area) 17-Jun-17 27-Mar-17 29-Mar-17 A34830 Portion A21 - Construct B1 Slab (Deffered Area) 19-Jun-17 21-Jun-17 30-Mar-17 01-Apr-17 A34830 A34840 Portion B24 - Columns & Walls Construction 31-May-17 03-Jun-17 28-Feb-17 03-Mar-17 A34840 A34850 A34850 Portion B24 - Construct B1 Slab 07-Jun-17 04-Mar-17 07-Mar-17 Å34860 == A34860 Portion B12 - Removal of Lateral Support 2 16-Jun-17 17-Jun-17 16-Mar-17 17-Mar-17 0% Roof Slab (Portion A) - Construct B1/F to Roof Lvl Cols, Walls & Roof Sla Portion A22 - Columns & Walls Construction A34930 Portion A22 - Columns & Walls Construction 15 15 11-Jan-17 27-Jan-17 01-Feb-17 17-Feb-17 100% 10 10 01-Feb-17 11-Feb-17 18-Feb-17 01-Mar-17 0% A34930 A34940 Portion A22 - Construct Roof Slab A34940 Portion A22 - Construct Roof Slab A34950 Portion A23 - Columns & Walls Construction 13 13 22-May-17 06-Jun-17 17-Mar-17 31-Mar-17 0% 0% A34960 Portion A23 - Construct Roof Slab 7 07-Jun-17 14-Jun-17 01-Apr-17 10-Apr-17 0% A34960 A34970 Portion A24 - Columns & Walls Construction 19-Apr-17 26-Apr-17 20-Mar-17 27-Mar-17 0% 0% 4 27-Apr-17 02-May-17 28-Mar-17 31-Mar-17 0% A34980 Portion A24 - Construct Roof Slab 0% A34980 = 7 7 05-Jun-17 12-Jun-17 16-Mar-17 23-Mar-17 0% 4 4 13-Jun-17 16-Jun-17 24-Mar-17 28-Mar-17 0% A34990 Portion A25 - Columns & Walls Construction Å34990 == A35000 A35000 Portion A25 - Construct Roof Slab 0% 4 4 08-Jun-17 12-Jun-17 02-Mar-17 06-Mar-17 0% 0% 3 3 13-Jun-17 15-Jun-17 07-Mar-17 09-Mar-17 0% 0% A35010 Portion A26 - Columns & Walls Construction A3501 A35020 A35020 Portion A26 - Construct Roof Slab Roof Slab (Portion B) - Construct B1/F to Roof Lvi Cols, Walls & Roof Slab 9 9 09-Feb-17 18-Feb-17 27-Feb-17 08-Mar-17 0% 0% 6 6 20-Feb-17 25-Feb-17 09-Mar-17 15-Mar-17 0% 0% A35030 Portion B26 - Columns & Walls Construction A35030 Portion B26 - Columns & Walls Construction A35040 Portion B26 - Construct Roof Slab A35040 Portion B26 - Construct Roof Slab 6 13-Apr-17 22-Apr-17 17-Mar-17 23-Mar-17 0% 0% 5 24-Apr-17 28-Apr-17 24-Mar-17 29-Mar-17 0% 0% A35070 Portion B28 - Columns & Walls Construction A35070 = ortion B28 - Colum A35080 A35080 Portion B28 - Construct Roof Slab Portion B29 6 6 28-Apr-17 06-May-17 08-Apr-17 18-Apr-17 0% 0% 4 4 08-May-17 11-May-17 19-Apr-17 22-Apr-17 0% 0% A35090 Portion B29 - Columns & Walls Construction A35090 A35100 Portion B29 - Construct Roof Slab A35100 A35110 Portion B30 - Columns & Walls Construction 6 6 12-May-17 18-May-17 24-Apr-17 29-Apr-17 0% 0% 14 A35110 Dismantie TC 5 & Infili openings A35230 A35230 Dismantle Tower Crane TC5 3 17-Jun-17 20-Jun-17 11-Apr-17 13-Apr-17 0% 0% 9 21-Jun-17 30-Jun-17 18-Apr-17 27-Apr-17 0% 0% A35240 Concrete In-Fill from Roof to B1/slab Openings A35240 B2 Slab Construction (Phase 1)
Portion A12 - B2 Slab (200 thk) @ Lvi -0.09 1 25-Jan-17 25-Jan-17 06-Feb-17 06-Feb-17 100% Portion A12 - Preparation Works A35260 Portion A12 - Granular Fill on Top of Pilecaps & Bottom slab 26-Jan-17 01-Feb-17 07-Feb-17 09-Feb-17 66.67% 0% A35260 Portion A12 - Granular Fill on Top of Pilecaps & Bottom slab A35270 Portion A12 - Construct B2 Slab 02-Feb-17 08-Feb-17 10-Feb-17 16-Feb-17 0% A35270 Portion A12 - Construct B2 Slab: Portion A13 - B2 Slab (200 thk) @ Lvl -0.0 A35280 Portion A13 - Preparation Works 08-Feb-17 08-Feb-17 18-Feb-17 18-Feb-17 0% A35280 n Portion A13 - Preparation Works A35290 Portion A13 - Granular Fill on Top of Pilecaps & Bottom slab Portion A13 - Granular Fill on Top of Pilecaps & Bottom slab 09-Feb-17 11-Feb-17 20-Feb-17 22-Feb-17 0% A35290 -A35300 Portion A13 - Construct B2 Slab A35300 Portion A13 - Construct B2 Slab Portion B14 - B2 Slab (200 thk) @ Lvi -0. Portion B14 - Preparation Works A35310 Portion B14 - Preparation Works 08-Feb-17 08-Feb-17 02-Mar-17 02-Mar-17 A35310 m A35320 Portion B14 - Granular Fill on Top of Pilecaps & Bottom slab Portion B14 - Granular Fill on Top of Pilecaps & Bottom slab A35320 -A35330 Portion B14 - Construct B2 Slab 13-Feb-17 18-Feb-17 07-Mar-17 13-Mar-17 0% A35330 Portion B14 - Construct B2 Slab Portion B15 - B2 Slab (200 thk) @ Lvl -0.0 A35340 Portion B15 - Preparation Works Portion B15 - Preparation Works 06-Mar-17 06-Mar-17 23-Mar-17 23-Mar-17 0% A35340 -A35350 Portion B15 - Granular Fill on Top of Pilecaps & Bottom slab 09-Mar-17 24-Mar-17 27-Mar-17 Portion B15 - Granular Fill on Top of Pilecaps & Bottom slab A35350 -Portion B15 - Construct B2 Slab A35360 Portion B15 - Construct B2 Slab 6 6 10-Mar-17 16-Mar-17 28-Mar-17 03-Apr-17 0% 0% A 35360 B2 Slab Construction (Phase 2)
Portion A14 - B2 Slab (200 thk) @ Lvi -0.0 A35370 Portion A14 - Preparation Work 16-Jun-17 16-Jun-17 12-Apr-17 12-Apr-17 0% A35370 A35380 Portion A14 - Granular Fill on Top of Pilecaps & Bottom slab 17-Jun-17 20-Jun-17 13-Apr-17 19-Apr-17 A35380 A35390 Portion A14 - Construct B2 Slab A35390 20-Apr-17 26-Apr-17 Portion A15 - B2 Slab (200 thk) @ Lvi -0.0 A35400 Portion A15 - Preparation Works 16-Jun-17 16-Jun-17 24-Mar-17 24-Mar-17 0% A35400 I A35410 A35410 Portion A15 - Granular Fill on Top of Pilecaps & Bottom slab 17-Jun-17 20-Jun-17 25-Mar-17 28-Mar-17 A35420 Portion A15 - Construct B2 Slab 21-Jun-17 27-Jun-17 29-Mar-17 05-Apr-17 0% A35420 Portion B17 - B2 Slab (200 thk) @ Lvi -0.0 A35460 A35460 Portion B17 - Preparation Works 14-Jun-17 14-Jun-17 19-Apr-17 19-Apr-17 ■ A35470 Portion B17 - Granular Fill on Top of Pilecaps & Bottom slab 15-Jun-17 17-Jun-17 20-Apr-17 22-Apr-17 0% A35470 A35480 A35480 Portion B17 - Construct B2 Slab 6 6 19-Jun-17 24-Jun-17 24-Apr-17 29-Apr-17 0% B2 Slab Construction (Phase 3)
Portion A17 - B2 Slab (200 thk) @ Lvi -0.0 16-May-17 16-May-17 18-Apr-17 18-Apr-17 0% A35550 Portion A17 - Preparation Works A35550 📱 A35560 ■ A35560 Portion A17 - Granular Fill on Top of Pilecaps & Bottom slab 17-May-17 19-May-17 19-Apr-17 21-Apr-17 0% A35570 Portion A17 - Construct B2 Slab 20-May-17 26-May-17 22-Apr-17 28-Apr-17 A35570 A35790 I A35790 Portion A20 - Preparation Works 04-Jul-17 04-Jul-17 27-Mar-17 27-Mar-17 0% A35800 A35800 Portion A20 - Granular Fill on Top of Pilecaps & Bottom slab 3 05-Jul-17 07-Jul-17 28-Mar-17 30-Mar-17 0% 6 6 08-Jul-17 14-Jul-17 31-Mar-17 07-Apr-17 0% A35810 Portion A20 - Construct B2 Slab A35810 🖶

Data Date: 27-Jan-17 **Three Months Rolling Programme (3MRP) - 27 Jan 2017 (MTH16)** Layout Name: MICP 3MRP 2 File Name: M+ MICP D14 OP3A - Month 16 - 27 Jan '17 IICP D1 Finish Planned Actual % Finish Complete Variance A35850 Portion B24 - Preparation Wo 04-Jul-17 04-Jul-17 01-Apr-17 01-Apr-17 0% A35850 A35860 A35860 Portion B24 - Granular Fill on Top of Pilecaps & Bottom slab 03-Apr-17 06-Apr-17 05-Jul-17 07-Jul-17 A35870 Portion B24 - Construct B2 Slab 14-Jul-17 07-Apr-17 13-Apr-17 A35870 08-Jul-17
 40
 40
 21-Feb-17
 08-Apr-17
 01-Mar-17
 20-Apr-17
 0%
 0%
 -7

 40
 40
 06-Apr-17
 27-May-17
 18-Apr-17
 06-Jun-17
 0%
 0%
 -7
 A35880 ABWF Works - Internal Ceiling & Wall Plastering (Wet Trades) ABWF Works - Internal A35890 Fitout Works - Internal Ceiling & Wall Painting A35890 Portion B (Phase 1)

A36030 ABWF Works - Internal Ceiling & Wall Plastering (Wet Trades) 40 40 10-Feb-17 28-Mar-17 28-Feb-17 19-Apr-17 0% 0% 40 40 25-Mar-17 17-May-17 13-Apr-17 05-Jun-17 0% 0% A36030 A36040 Fitout Works - Internal Ceiling & Wall Painting B1/F to Roof ABWF and Fitout Works Phase 1 & 2 60 60 08-Mar-17 23-May-17 25-Mar-17 10-Jun-17 0% 0% A36150 ABWF Works - Internal Ceiling & Wall Plastering (Wet Trades) A36150 -Phase 3 A36190 ABWF Works - Internal Ceiling & Wall Plastering (Wet Trades) 60 60 08-Mar-17 23-May-17 25-Mar-17 10-Jun-17 0% 0% -15 B1/F Level CLP Works Leading to Energization / Power-Electrical (B1/F) - Transformer Room (B128) A36650 CLP Transformer - Builders Works & BS Installation 21 21 27-Jun-17 21-Jul-17 26-Apr-17* 22-May-17 0% 0% A36650 External Electrical Power and Lead-In Cable Ducts A36710 Construct (4x) 2.5x2.2x1.2m Electrical Draw Pits 36 36 27-Jun-17 08-Aug-17 26-Apr-17 09-Jun-17 0% 0% A36710 = xternal Works SPS - G/F External Utilities & Roadworks Grd Lvi - Watermain / FS Pipes Connection (Outside SPS) to PIW
A37210 Excavation Across Main Road From SPS Site to PIW Main pipes 45 53 29-Dec-16 23-Feb-17 09-Jan-17 14-Mar-17 55,56% 20% A37220 Construct Trench & Valve Pit A37230 Install Pipeworks and Testing 15-Mar-17 06-May-17 03-Apr-17 25-May-17 0% Grd Lvl - Storm / Dra A37250 Sewerage - Construct 5x Manhole Sewerage - Construct 5x Manholes A37250 A37260 Sewerage - Install 450 / 300 Storm Drainage Pipes & Testing 06-Feb-17 20-Apr-17 25-Feb-17 12-May-17 0% ■ A37270 Sewerage - Install 2x200 dia Raising Main Pipes & Testing 06-Feb-17 20-Apr-17 25-Feb-17 12-May-17 0% A37270 A37280 Connect to Existing Storm Manholes & Backfill 09-May-17 31-Mar-17 29-May-17 A37280 ICP - G/F External Utilities & Roadworks Grd Lvl - External Storm Drainage Connection

A37400 Storm drain Excavation Adjacent Main Road GL 5a-10a / Aa 36 36 23-Jun-17 04-Aug-17 22-Apr-17 06-Jun-17 0% 0% 50 M+ ABWF, MEP and Fit-Out Works RC Structure Completion & ABWF Access Dates Sector C3 Access 1380 Zone B1S1 - Complete B2F @ GL 2-3/A ◆ Zone B1S1 - Complete B2F:@ GL 2-3/A. 22-Mar-17 0% 0% -13 ◆ Zone B1S2 - Complete B2F @ GL 1-2/A, A11390 Zone B1S2 - Complete B2F @ GL 1-2/A 09-Mar-17 Sector B1 Access ◆ Zone H - Complete B2F @ GL 11-14/H-K A11250 Zone H - Complete B2F @ GL 11-14/H-k 16-Dec-16 A11260 Zone G - Complete B2F @ GL 12/G-H 16-Dec-16 27-Jan-17* 100% 0% -42 Zone G - Complete B2F @ GL 12/G-H. Sector B2 Access

A11280 Zone H - Complete B2F @ GL 11-14/K-M 16-Dec-16 27-Jan-17* 100% 0% -42 Zone H - Complete B2F @ GL 11-14/K-M, Sector F1 Access
A11370 Zone B1S2 - Complete B2F @ GL 5'-1/A ◆ Zone B1S2 - Complete B2F @ GL 5'-1/A, 09-Mar-17 22-Mar-17 ◆ Zone B1R4 - Complete B2F @ GL 6'-7'/A-C, A11410 Zone B1R4 - Complete B2F @ GL 6'-7'/A-C 0% 06-Mar-17 18-Mar-17 0% -12 Zone B1T6 - Complete B2F @ GL 4'-6'/A-C 25-Mar-17 ◆ Zone B1T6 - 0 ■ A11440 Zone B1T5 - Complete B2F @ GL 4'-6'/A'-C' ◆ Zone B1T5 - Complete B2F @ GL 4'-6'/A'-C' 17-Mar-17 11-Apr-17 0% -25 ■ A11450 Zone B1R3 - Complete B2F @ GL 6'-7'/A'-C 20-Feb-17 0% ◆ Zone B1R3 - Complete B2F @ GL 6'-7'/A'-C' ◆ Zone B1T4 - Complete B2F @ GL 4'-6'/B'-D'. A11460 Zone B1T4 - Complete B2F @ GL 4'-6'/B'-D' 10-Feb-17 07-Mar-17 0% 0% Sector F3 Access (Entrance Portal)
A11500 Zone B1S2 - Complete B2F @ GL 5'-1/A 09-Mar-17 ◆ Zone B1S2 - Complete B2F @ GL 5'-1/A ◆ Zone B1S1 - Complete B2F @ GL 2-3/A, ■ A11510 Zone B1S1 - Complete B2F @ GL 2-3/A 04-Mar-17 100% 0% A11470 Zone B1T5 - Complete B2F @ GL 3'-4'/A'-C' 17-Mar-17 ◆ Zone B1T5 - Complete B2F @ GL 3 4/A'-C ■ A11490 Zone B1T4 - Complete B2F @ GL 2'-5'/B'-D' Zone B1T4 - Complete B2F @ GL 2'5/B'-D' Sector G1 Access

A11520 Zone B1T3 - Complete B2F @ GL 5'-6'/D'-G' ◆ Zone B113 - C 25-Mar-17 25-Apr-17 0% 0% ◆ Zone B1R2 - Complete B2F @ GL 6'-1/G'-H' ■ A11540 Zone B1R2 - Complete B2F @ GL 6'-1/G'-H' 08-Feb-17 ◆ Zone B1U4 - Complete B2F @ GL 4'-6'/F'-H', A11550 Zone B1U4 - Complete B2F @ GL 4'-6/F'-H' 13-Feb-17 20-Feb-17 0% Zone A - Complete B2F @ GL 1-6/C-F, A11560 Zone A - Complete B2F @ GL 1-6/C-F 27-Jan-17 27-Jan-17 100% 0% ◆ Zone B1T2 - Complete B2F @ GL 4"-5"/D'-F", A11570 Zone B1T2 - Complete B2F @ GL 4'-5'/D'-F' 21-Feb-17 100% 0% 19-Jan-17 -33 Sector G2 Access

A11670 Zone B1R1 - Complete B2F @ GL 6'-1/l'-J' ◆ Zone B1R1 - Complete B2F @ GL 6'-1/l'-J' 07-Feb-17 18-Feb-17 0% 0% ♦ Zone B1U2 - Complete B2F @ GL 4'-6'/I'-J ■ A11680 Zone B1U2 - Complete B2F @ GL 4'-6'/I'-J 25-Feb-17 13-Feb-17 0% 0% ◆ Zone B1R2 - Complete B2F @ GL 6'-1/G'-I', 17-Feb-17 Zone B1R2 - Complete B2F @ GL 6'-1/G'-I ◆ Zone B1U4 - Complete B2F @ GL 4'-6/H'-I' A11700 Zone B1U4 - Complete B2F @ GL 4'-6'/H'-I' 13-Feb-17 20-Feb-17 0% 0% ◆ Zone B1T1 - Complete B2F @ GL 1'-3'/D'-F' Zone B1T1 - Complete B2F @ GL 1'-3'/D'-F ◆ Zone B1T2 - Complete B2F @ GL 3'-5'/D'-F', ■ A11590 Zone B1T2 - Complete B2F @ GL 3'-5'/D'-F' 21-Feb-17 100% 0% -33 ◆ Zone B1U3 - Complete B2F @ GL 1'-3'/F'-H', A11600 Zone B1U3 - Complete B2F @ GL 1'-3'/F'-H' 06-Feb-17 21-Feb-17 0% 0% -15 ◆ Zone B1U4 - Complete B2F @ GL 3'-5\/F'-H'. Zone B1U4 - Complete B2F @ GL 3'-5'/F'-H' 13-Feb-17 20-Feb-17 Sector G4 Access

A11630 Zone B1U1 - Complete B2F @ GL 1'-4/H'-J' ◆ Zone B1U1 - Complete B2F @ GL 1-4/H'-J', 02-Feb-17 21-Feb-17 Zone B1U2 - Complete B2F: @ GL 4'/I'-J', A11640 Zone B1U2 - Complete B2F @ GL 4'/I'-J' 0% -12 0% ◆ Zone B1U3 - Complete B2F @ GL 1 3/H'-J'. A11650 Zone B1U3 - Complete B2F @ GL 1'-3'/H'-J ◆ Zone B1U4 - Complete B2F @ GL 3'-5/H'-J', A11660 Zone B1U4 - Complete B2F @ GL 3'-5'/H'-J' 13-Feb-17 20-Feb-17 0% 0%

◆ Zone E - Complete B1F @ GL 8-9/A-C,

◆ Zone A1 - Complete B1F @ GL 2-4/A-C,

Zone A2 - Complete B1F @ GL 4-6/A-C,

Zone A2 - Complete B1F @ GL 4-5/C-E,

◆ Zone M - Complete B1F @ GL 7-8/C-D,

Żone A3 - Complete B1F @ GL 5-7/C-E

Sector C1 Access

■ A11940 Zone E - Complete B1F @ GL 8-9/A-C

A12390 Zone A2 - Complete B1F @ GL 4-6/A-C

■ A11950 Zone A2 - Complete B1F @ GL 4-5/C-E

A11960 Zone M - Complete B1F @ GL 7-8/C-D

■ A12400 Zone A3 - Complete B1F @ GL 5-7/C-E

■ A11990 Zone A1 - Complete B1F @ GL 2-4/A-C

10-Feb-17

19-Jan-17

19-Jan-17

03-Feb-17

05-Jan-17

01-Feb-17

0 0

24-Feb-17 0% 0%

27-Jan-17 100%

27-Jan-17 100%

27-Jan-17 0%

27-Jan-17 100% 0%

22-Feb-17 0% 0%

Data Date: 27-Jan-17

Layout Name: MICP_3MRP_2

File Name: M+ MICP D14 OP3A - Month 16 - 27 Jan '17

Three Months Rolling Programme (3MRP) - 27 Jan 2017 (MTH16)

MICP D1: Finish Planned Actual % Complete ◆ Zone A2 - Complete B1F @ GL 4-5/A-C, A12420 Zone A2 - Complete B1F @ GL 4-5/A-C 19-Jan-17 27-Jan-17 100% 0% Sector C4 Access

A12010 Zone A4 - Complete B1F @ GL 2-4/E-H Zone A4 - Complete B1F @ GL 2-4/E-H 26-Apr-17 ◆ Zone A1 - Complete B1F @ GL 2-4/C-E. ■ A12460 Zone A1 - Complete B1F @ GL 2-4/C-E 01-Feb-17 22-Feb-17 0% Zone A2 - Complete B1F @ GL 4-5/C-E, A12470 Zone A2 - Complete B1F @ GL 4-5/C-E 19-Jan-17 27-Jan-17 100% 0% Sector A3 Access ◆ Zone E - Complete B1F @ GL 8-11/A-C. ■ A12020 Zone E - Complete B1F @ GL 8-11/A-C 10-Feb-17 24-Feb-17 0% 0% -14 Sector B2 Access ■ A12080 Zone H - Complete B1F @ GL 11-14/K-M ◆ Zone H - Complete B1F @ GL 11-14/K-M, 0 0 24-Jan-17 03-Apr-17 100% 0% -69 ◆ Zone A4 - Complete B1F @ GL 2-4/F-H A12110 Zone A4 - Complete B1F @ GL 2-4/F-H 13-Mar-17 0% 0% 44 0 0 26-Apr-17 Sector F2 Access A12170 Zone GFT5 - Complete B1F @ GL 4'-6'/A'-B ◆ Zone GFT5 - Comple 25-Mar-17 ◆ Zone GFT4 - Complete B1F @ GL 4'-6'/B'-D', A12190 Zone GFT4 - Complete B1F @ GL 4'-6'/B'-D' 04-Mar-17 24-Mar-17 0% 0% Sector F4 Access
A12220 Zone GFT5 - Complete B1F @ GL 3'-5'/A'-B' ◆ Zone GFT5 - Complet 25-Mar-17 21-Apr-17 0% 0% ■ A12230 Zone GFT4 - Complete B1F @ GL 2'-6'/B'-D' ◆ Zone GFT4 - Compl 29-Mar-17 A12240 Zone GFT3 - Complete B1F @ GL 5'-6'/D'-G' ◆ Zone GFT3 - Complete B1F @ GL 5'-6'/D'-G', 23-Mar-17 25-Feb-17 0% 0% A12250 Zone GFT2 - Complete B1F @ GL 4'-5/D'-F ◆ Zone GFT2 - Complete B1F @ GL 4'-5'/D'-F', Sector G2 Access

A12280 Zone GFU2 - Complete B1F @ GL 4'-6'/l'-J' ◆ Zone GFU2 - Complete B1F @ GL 4'-6'/I'-J', 28-Mar-17 0% 27-Feb-17 0% 18-Apr-17 0% ◆ Zone GFR1 - Complete B1F ■ A12300 Zone GFR1 - Complete B1F @ GL 5'-1/l'-J' 06-Apr-17 0% Sector G3 Access

A12320 Zone GFT1 - Complete B1F @ GL 1'-3'/D'-F' ◆ Zone GFT1 - Complete B1F @ GL 1'-3'/D'-F' 29-Mar-17 ◆ Zone GFT2 - Complete B1F @ GL 3'-5/D'-F', A12330 Zone GFT2 - Complete B1F @ GL 3'-5'/D'-F 18-Mar-17 06-Apr-17 0% 0% A12340 Zone GFU3 - Complete B1F @ GL 1'-3'/F'-H' 25-Mar-17 21-Apr-17 0% -27 ◆ Zone GFU3 - Comple ■ A12370 Zone GFU1 - Complete B1F @ GL 1'-4'/H'-J' ◆ Zone GFU1 - Compl 25-Mar-17 21-Apr-17 A12380 Zone GFU2 - Complete B1F @ GL 4/I'-J' ◆ Zone GFU2 - Complete B1F @ GL 4//I'-J', ◆ Zone GFU3 - Complete A12700 Zone GFU3 - Complete B1F @ GL 1'-3'/F'-H' 25-Mar-17 21-Apr-17 0% 0% Sector C1 Access ■ A12720 Zone M - Complete GF @ GL 7-8/A-C 16-Feb-17 18-Feb-17 Zone M - Complete GF @ GL 7-8/A-C, ◆ Zone A2 - Complete GF @ GL 4-6/A-C, A12730 Zone A2 - Complete GF @ GL 4-6/A-C 16-Feb-17 07-Mar-17 0% ■ A12740 Zone A3 - Complete GF @ GL 5-7/A-C ◆ Zone A3 - Complete GF @ GL 5-7/A-C, ◆ Zone E - Complete GF @ GL 8-9/A-C. A12750 Zone E - Complete GF @ GL 8-9/A-C 07-Mar-17 21-Mar-17 0% Sector C2 Access A12770 Zone M - Complete GF @ GL 7-8/C-D Zone M - Complete GF @ GL 7-8/C-D. 16-Feb-17 18-Feb-17 0% 0% ◆ Zone A2 - Complete GF @ GL 4-5/C-E. ■ A12780 Zone A2 - Complete GF @ GL 4-5/C-E ◆ Zone A3 - Complete GF @ GL 5-7/C-E, A12790 Zone A3 - Complete GF @ GL 5-7/C-E 02-Feb-17 07-Mar-17 0% 0% -33 Sector C3 Access

A12830 Zone A1 - Complete GF @ GL 2-4/A-C ◆ Zone A1 - Complete GF @ GL 2-4/A-C, 07-Mar-17 0% 0% ◆ Zone A2 - Complete GF @ GL 4-5/A-C, A12840 Zone A2 - Complete GF @ GL 4-5/A-C 16-Feb-17 -19 Sector C4 Access A12860 Zone A1 - Complete GF @ GL 2-4/C-E ◆ Zone A2 - Complete GF @ GL 4-5/C-E. ■ A12870 Zone A2 - Complete GF @ GL 4-5/C-E 16-Feb-17 07-Mar-17 0% A12880 Zone A4 - Complete GF @ GL 2-4/E-H 23-May-17 07-Apr-17 0% Sector A3 Access ◆ Zone E - Complete GF @ GL 8-11/A-C. ■ A12920 Zone E - Complete GF @ GL 8-11/A-C 07-Mar-17 21-Mar-17 0% 0% -14 Sector B2 Access A13010 Zone H - Complete GF @ GL 11-14/K-M 13-Feb-17 24-Apr-17 0% 0% -70 ◆ Zone A4 - Complete GF @ GL 2-4/F-H, A13140 Zone A4 - Complete GF @ GL 2-4/F-H 23-May-17 07-Apr-17 0% 0% 46 1F-1MF Access Sector C1 Access ◆ Zone M - Complete 1F @ GL 7-8/A-C, A13290 Zone M - Complete 1F @ GL 7-8/A-C 01-Mar-17 03-Mar-17 ◆ Zone A2 - Complete 1F @ GL 4-6/A-C, 07-Mar-17 0% A13300 Zone A2 - Complete 1F @ GL 4-6/A-C 16-Feb-17 0% ◆ Zone A3 - Complete 1F @ GL 5-7/A-C, 02-Feb-17 Zone A3 - Complete 1F @ GL 5-7/A-C Sector C2 Access
A13340 Zone M - Complete 1F @ GL 7-8/C-D ◆ Zone M - Complete 1F @ GL 7-8/C-D, 01-Mar-17 03-Mar-17 ◆ Zone A2 - Complete 1F @ GL 4-5/C-E 0% A13350 Zone A2 - Complete 1F @ GL 4-5/C-E 16-Feb-17 A13360 Zone A3 - Complete 1F @ GL 5-7/C-E ◆ Zone A3 - Complete 1F @ GL 5-7/C-E ■ A13410 Zone A1 - Complete 1F @ GL 2-4/A-C ◆ Zone A1 - Complete 1F @ GL 2-4/A-C, 25-Feb-17 18-Mar-17 0% 0% ◆ Zone A2 - Complete 1F @ GL 4-5/A-C, 07-Mar-17 0% ■ A13420 Zone A2 - Complete 1F @ GL 4-5/A-C 16-Feb-17 Sector C4 Access

A13440 Zone A1 - Complete 1F @ GL 2-4/C-E ♦ Zone A1 - Complete 1F @ GL 2-4/C-E, 25-Feb-17 18-Mar-17 ◆ Zone A2 - Complete 1F @ GL 4-5/C-E ■ A13450 Zone A2 - Complete 1F @ GL 4-5/C-E 0% ◆ Zone A4 - Complete 1F @ GL 2-4/E-H. A13460 Zone A4 - Complete 1F @ GL 2-4/E-H 23-May-17 07-Apr-17 0% Sector D3 Access ■ A13720 Zone A4 - Complete 1F @ GL 2-4/F-H ◆ Zone A4 - Complete 1F @ GL 2-4/F-H, 23-May-17 07-Apr-17 0% 0% 46 ◆ Zone M - Complete 1MF @ GL 7-8/A-C, ■ A13800 Zone M - Complete 1MF @ GL 7-8/A-C 25-Mar-17 28-Mar-17 0% 0% ♦ Zone A2 - Complete 1MF @ GL 4-6/A-C ■ A13810 Zone A2 - Complete 1MF @ GL 4-6/A-C 13-Mar-17 0% Zone A3 - Complete 1MF @ GL 5-7/A-C, A13830 Zone A3 - Complete 1MF @ GL 5-7/A-C 27-Feb-17 31-Mar-17 ◆ Zone E - Complete 1MF @ A13840 Zone E - Complete 1MF @ GL 8-9/A-C 31-Mar-17 19-Apr-17 0% 0% -19 Sector C2 Access ◆ Zone M - Complete 1MF @ GL 7-8/C-D. A13850 Zone M - Complete 1MF @ GL 7-8/C-D 25-Mar-17 28-Mar-17 ◆ Zone A2 - Complete 1MF @ GL 4-5/C-E, A13860 Zone A2 - Complete 1MF @ GL 4-5/C-E 13-Mar-17 31-Mar-17 0% 0% -18 ◆ Zone A3 - Complete 1MF @ GL 5-7/C-E. A13870 Zone A3 - Complete 1MF @ GL 5-7/C-E 27-Feb-17 31-Mar-17 0% Sector C3 Access

A13930 Zone A1 - Complete 1MF @ GL 2-4/A-C 13-Apr-17 0% ◆ Zone A1 - Complete 1MF @ GL 2-4/A-C 22-Mar-17 Zone A2 - Complete 1MF @ GL 4-5/A-C, A13940 Zone A2 - Complete 1MF @ GL 4-5/A-C 13-Mar-17 31-Mar-17 0% 0% Sector C4 Access
A13950 Zone A1 - Complete 1MF @ GL 2-4/C-E ◆ Zone A1 - Complete 1MF @ GL 2-4/C-E 13-Apr-17 0% 31-Mar-17 0% 22-Mar-17 Zone A2 - Complete 1MF @ GL 4-5/C-E, A13960 Zone A2 - Complete 1MF @ GL 4-5/C-E 13-Mar-17 A14020 Zone E - Complete 1MF @ GL 8-11/A-C ◆ Zone E - Complete 1MF @ 31-Mar-17 19-Apr-17 0% 0% -19 2F-3F Access (Incl. Podium Roof) A14310 Zone M - Complete 2F @ GL 7-8/A-C 24-Apr-17 26-Apr-17 0% 0% -2 ◆ Zone M - Cor ■ A14350 Zone M - Complete 2F @ GL 7-8/C-D ◆ Zone M - Cor 24-Apr-17 26-Apr-17 0% 0% -2

Data Date: 27-Jan-17 Layout Name: MICP 3MRP 2

Three Months Rolling Programme (3MRP) - 27 Jan 2017 (MTH16)

File Name: M+ MICP D14 OP3A - Month 16 - 27 Jan '17 Planned Actual % Finish Complete Variance Finish Start Instruction issuance - commencement of works for M+ Podium ABWF & Fit-out work; 29-Jan-17* A20260 Instruction issuance - commencement of works for M+ Podium ABWF 0 0 0% ruction Works 02-Oct-16 12-May-17 02-Oct-16 21-Jun-17 54.29% 35.71% Shop drawings Submission & Approval A20290 A20300 Method Statement & ITP Submission & Approval 02-Oct-16 12-May-17 02-Oct-16 21-Jun-17 54.29% 35.71% A20310 Materials Submission & Approval 210 249 02-Oct-16 12-May-17 02-Oct-16 21-Jun-17 54.29% 35.71% Long Lead Materials Procurement & Delivery Long Lead Materials Procurement & Delivery Start, 29-Jan-17 ■ A20320 Long Lead Materials Procurement & Delivery Start 17-Dec-16 ■ A20330 Others 270 270 06-Jan-17 15-Oct-17 29-Jan-17 07-Nov-17 8.15% 0% A20330 Interfacing - Take Over Zone Areas Access
M+ Basement B2/F ◆ Sector B 29-Jan-17 100% A20360 Sector B 17-Dec-16 A20370 Sector C 27-Jan-17 100% Sector C. Sector D, A20380 Sector D 27-Jan-17 27-Jan-17 100% 0% Sector A, A20390 Sector A 13-Jan-17 27-Jan-17 100% Sector G. A20400 Sector G Sector F, A20410 Sector F 09-Mar-17 22-Mar-17 0% -13 - B1/F ♦ Sector G. 21-Apr-17 0% 0% ◆ Sector F, A20480 Sector F 25-Mar-17 -23 LG/F A20520 Sector G ◆ Sector G. 27-Feb-17 28-Mar-17 21-Apr-17 0% 0% ♦ Sector F, A20530 Sector F 25-Mar-17 M+ Podium ₩ G/F A20550 Sector B 13-Feb-17 Sector B. ♦ Şector C, A20560 Sector C 23-May-17 07-Apr-17 0% 0% 1/F & 1M/F 31-Mar-17 ♦ Sector C. 3/F

A20700 Sector A, B, C & D - External Area Sector A, B, C & D - External Area, 16-Dec-16 27-Jan-17 100% 0% -39 ■ A23720 G/F Curing & Falseworks Stripping 30 30 19-Mar-17 21-Apr-17 09-Apr-17 13-May-17 0% 0% -20 A23720 ABWF Works Summary

M+ Basement ABWF & Building Services A23240 B2/F Sector C Builder's Works 31-Mar-17 29-Jan-17 31-Mar-17 0% B2/F Sector C Builder's Works A23260 B2/F Sector B Builder's Works 60 60 17-Dec-16 20-Feb-17 29-Jan-17 31-Mar-17 65% B2/F Sector B Builder's Works A23270 B2/F Sector A Builder's Works 14-Jan-17 17-Mar-17 29-Jan-17 31-Mar-17 23.33% A23270 B2/F Sector A Builder's Works A23290 B2/F Sector D Builder's Works B2/F Sector D Builder's Works A23290 A24500 B2/F Sector F Builder's Works 10-Mar-17 14-May-17 23-Mar-17 27-May-17 A24510 B1/F Sector G Builder's Works 60 60 28-Feb-17 04-May-17 29-Mar-17 03-Jun-17 0% 0% 60 60 26-Mar-17 31-May-17 22-Apr-17 23-Jun-17 0% 0% A24510 A24520 B1/F Sector F Builder's Works A23490 B1/F Sector C Building Services (late access area) 40 40 17-Dec-16 29-Jan-17 29-Jan-17 11-Mar-17 97.5% 0% -39 B1/F Sector C Building Services (late access area) Lifts and Escalators 27-Jan-17 100% 0% Start of Freight Lift Installation (podium weathertight + lead time LT10050 Start of Freight Lift Installation (podium weathertight + lead time) 0 0 16-Dec-16 -34 22 16-Dec-16 13-Jan-17 27-Jan-17 25-Feb-17 100% LT10060 Freight Lift LT17 Installation Period Freight Lift LT17 Installation Period 0 0 16-Dec-16 27-Jan-17 100% 0% 44 44 16-Dec-16 11-Feb-17 27-Jan-17 23-Mar-17 77.27% 0% Start of Art Lift Installation (podium weathertight + lead time). LT10020 Start of Art Lift Installation (podium weathertight + lead time) LT10030 Art Lifts LT11 & 13 Installation Period Art Lifts LT11 & 13 Installation Period Passenger Lifts, with disabled access (LT15, 16, 19, 22 & 23)

LT10080 Start of Lift Installation (podium weathertight + lead time) ◆ Start of Lift Installation (podium weathertight + lead time), 16-Dec-16 27-Jan-17 100% 0% 44 44 16-Dec-16 11-Feb-17 27-Jan-17 23-Mar-17 77.27% 0% ■ LT10090 Passenger Lifts LT 15,16,19,22 &23 Installation Period -34 Passenger Lifts LT 15,16,19,22 &23 Installation Period Passenger Lifts, FS (LT12, 14, 20 & 21)

LT10120 Start of Lift Installation (podium weathertight + lead time) Start of Lift Installation (podium weathertight + lead time). 0 0 16-Dec-16 27-Jan-17 100% 0% 44 44 16-Dec-16 11-Feb-17 27-Jan-17 23-Mar-17 77.27% 0% LT10130 Passenger Lifts LT12, 14,20&21 Installation Period -34 Passenger Lifts LT12, 14,20&21 Installation Period Escalators (A, B, C, D & E)

LT10140 Start of Escalators Installation (podium weathertight + lead time) Start of Escalafors Installation (podium weathertight + lead time) 0 0 16-Dec-16 27-Jan-17 100% 0% 44 44 16-Dec-16 11-Feb-17 27-Jan-17 23-Mar-17 77.27% 0% 27-Jan-17 100% 0% LT10150 Escalators A,B,C,D&E Installation Period Escalators A,B,C,D&E Installation Period Commence LT01 & 02 Lift Installation (tower; weathertight + lead time), LT10180 Commence LT01 & 02 Lift Installation (tower weathertight + lead time) 27-Jan-17 100% 0% 44 44 16-Dec-16 11-Feb-17 27-Jan-17 23-Mar-17 77.27% 0% ■ LT10190 Lift Installation Period (LT01 & 02) Lift Installation Period (LT01 & 02) Staff Lifts (LT03 & 04) Start of Lift Installation (tower weathertight + lead time). LT10210 Start of Lift Installation (tower weathertight + lead time) 44 44 16-Dec-16 11-Feb-17 27-Jan-17 23-Mar-17 77 27% 0% IT10220 Lift Installation Period (LT03 & 04) Lift Installation Period (LT03 & 04) Public Lifts (LT05 to 08, 4nos, pit in B2F) Start of Lift Installation (tower weathertight + lead time). LT10250 Lift Installation Period, LT05 & 06, LT05 - 08 16-Dec-16 11-Feb-17 27-Jan-17 23-Mar-17 77.27% 0% Lift Installation Period, LT05 & 06, LT05 - 08 ◆ Earliest lift installation for LT07 & 08, if necessary, ■ LT10260 Earliest lift installation for LT07 & 08, if necessary 16-Dec-16 27-Jan-17 100% Lift Installation Period, LT07 & 08 Public Lifts (LT09 & 10, plt in GF)

LT10290 | Start of Lift Installation (tower weathertight + lead time) Start of Lift Installation (tower weathertight + lead time), 16-Dec-16 27-Jan-17 100% 0% 44 44 16-Dec-16 11-Feb-17 27-Jan-17 23-Mar-17 77.27% 0% LT10300 Lift Installation Period, LT09 & 10 Lift Installation Period, LT09 & 10 Co-ordinated External Works & Utilities Services Installation Interface Dates ◆ M12 - Lyric Interface North (2nd access) (30Nov16), 28-Jan-17* A24720 M12 - Lyric Interface North (2nd access) (30Nov16) 28-Jan-17* 100% ♦ M43 - At-grade Road Footpath at ICP / SPS Entrance Portal (from PIW) (15Feb2017), 15-Feb 17* A25000 M43 - At-grade Road Footpath at ICP / SPS Entrance Portal (from PIV 15-Feb-17 15-Feb-17 0% ◆ M44 - At-grade Road Footpath at ICP / SPS Frontage (from PIW) (1Jun2016), 28-Jan-17 M44 - At-grade Road Footpath at ICP / SPS Frontage (from PIW) (1Jui ◆ M45 - At-grade Road Footpath along M+ Basement (from PIW) (¶Jun2016), 28-Jan-17 A25020 M45 - At-grade Road Footpath along M+ Basement (from PIW) (1Jun2) 0 17-Dec-16 28-Jan-17 100% 0% -42 ◆ M70 - Arts Pavilion Area on M+ side of M+ / Park Interface (t.b.a.), 28-Jan-17 A25130 M70 - Arts Pavilion Area on M+ side of M+ / Park Interface (t.b.a.) 0 17-Dec-16 28-Jan-17 100% 0% ■ A25840 M71 - Area Within Initial M+ Hoarding, but on Park Side of M+/Park Int 0 0 16-Dec-16 27-Jan-17* 100% 0% -42 M71 - Area Within Initial M+ Hoarding, but on Park Side of M+/Park Interface Line (for Access by Park Ctr)(15Jun2016) Interface Schedule (Appedix D1 - 16 December 2015) Along Interface North of AEL Complete excavation north of AEL for B2/F slab and vacate M12 0 0 A25950 Complete excavation north of AEL for B2/F slab and vacate M12 27-Jan-17* 100% 0%

Layout Name: MICP_3MRP_2

Three Months Rolling Programme (3MRP) - 27 Jan 2017 (MTH16)

File Name: M+ MICP D14 OP3A - Month 16 - 27 Jan '17 Planned Actual % Finish Complete Variance Start Take possession of M12 for external wall construction (30 Nov 2016), 01-Feb-1 ■ A25960 Take possession of M12 for external wall construction (30 Nov 2016) 01-Feb-17 0% M+ Portal Road Interface PIW at Grade Road ◆ Access Portion M43, 15-Feb-17 A26180 Access Portion M43 0 15-Feb-17 15-Feb-17 0% M+ Drain Connection to PIW Drainage MH WHC6_1f Commencement of drainage work for WHC6 1f, 01-Feb-17 0 0 06-Jan-17 100% 01-Feb-17* 0% A26190 Commencement of drainage work for WHC6 1 04-Mar-17* 0% Complete of drainage work for WHC6 1f. ■ A26200 Complete of drainage work for WHC6_1f DN150 incoming gas main at Entrance Portal (CIV-DWG-0403) ◆ Complete Entrance Portal RC Structure, 03-Apr-17* A26220 Excavate Trench & Install Shoring for Gas Main @ Footway (To be coo 03-Apr-17 10-Apr-17 03-Apr-17 10-Apr-17 0% 0% Excavate Trench & Install Shoring for Gas Ma A26230 Allow Towngas to install gas main (By Towngas) 6 6 11-Apr-17 3 3 21-Apr-17 20-Apr-17 11-Apr-17 20-Apr-17 0% 0% A26230 = Allow Towngas to install of ■ A26240 Backfill Trench to Ground Levels 24-Apr-17 21-Apr-17 24-Apr-17 A26240 Backfill Trench t DN150 incoming gas main for RDE (CIV-DWG-0404) = A26250 Excavate Trench & Install Shoring for Gas Main @ Footway (To be coo | 6 | 6 | 05-Apr-17 | 11-Apr-17 | 24-Apr-17 | 29-Apr-17 | 0% | 0% A26250 -◆ Allow Access to PIW to construct traffic signal draw pits, con ■ A26310 Allow Access to PIW to construct traffic signal draw pits, controller, siç 0 0 03-Apr-17 Seawater Cooling Intake Pipes Interface PIW
Civil Works Interface with PIW Watermain South of M+ KGO Cooling Main Diversion Allow access to PIW Contractor to complete KGO Cooling Main A26360 Allow access to PIW Contractor to complete KGO Cooling Main Divers 0 0 01-Apr-17 01-Apr-17* 0% 0% Sewage Interface w/ Park PIW (SW of M+ & ICP SPS) ◆ Complete Laying Sewer Pipe DN300 from F2.1E to SM 06-Apr-17 0% Telecoms Interface w/ Park PIW (W of M+) Allow Access to Park Contractor to connect ICT Gable Ducts to M+ Draw-pit, 01-Feb-17 A26520 Allow Access to Park Contractor to connect ICT Cable Ducts to M+ Dr 0 0 17-Dec-16 01-Feb-17 100% ■ A26530 Allow Access to Park Contractor to connect ELV Cable Ducts to M+ D 100% ◆ Allow Access to Park Contractor to connect ELV Cable Ducts to M+ Draw-pit. 01-Feb-17 Allow Access to Park Contractor to construct & connect FTNS Gable Ducts at M+ GL A/6-7, 01-Feb-17 ■ A26540 Allow Access to Park Contractor to construct & connect FTNS Cable [0 0 17-Dec-16 01-Feb-17 100% 0% -33 ■ A26550 Handover M+ - Transformer Room Trx A to CLP ◆ Handover M+ - Transformer Room Trx A to CLP ◆ Handover M+ - Transformer Room Trx B to CLP, ■ A26560 Handover M+ - Transformer Room Trx B to CLP 03-Mar-17 03-Mar-17* 0% ◆ Handover RDE - Transformer Room to CLP, A26580 Handover RDE - Transformer Room to CLP 06-Apr-17 06-Apr-17* 0% Construction ■ A26620 RSS Review & Approve Trench Detail Design and Method Statement | 109 | 142 | 12-Aug-16 | 20-Dec-16 | 12-Aug-16 | 03-Feb-17 | 100% | 97.25% | -33 RSS Review & Approve Trench Detail Design and Method Statement Construction at CH0+66 to CH0+108 A26660 Install Strut & Wailing @ +3.5mPD 03-Jan-17 01-Feb-17 14-Feb-17 17-Dec-16 100% -33 Install Strut & Wailing @ +3.5mPD ■ A26670 Trench Excavation@+3.0mPD to Final excavation Lvl 15-Feb-17 17-Feb-17 100% A26670 -Trench Excavation@+3.0mPD to Final excavation Lvl A26680 Pipe Laving & Associated Works 07-Jan-17 13-Jan-17 18-Feb-17 24-Feb-17 100% -33 A26680 Pipe Laying & Associated Works 25-Feb-17 03-Mar-17 100% A26690 A26690 Construct Bend Blocks 14-Jan-17 20-Jan-17 Construct Bend Blocks Pressure Test 04-Mar-17 10-Mar-17 100% A26700 a A26710 Back Filling to Struts & Wailing Lvl 01-Feb-17 07-Feb-17 11-Mar-17 17-Mar-17 -33 Back Filling to Struts & Wailing Lvl A26720 Dismantle Struts & Wailing 08-Feb-17 10-Feb-17 18-Mar-17 21-Mar-17 -33 A26720 ---Dismantle Struts & Wailing A26730 Back Filling to GL 11-Feb-17 17-Feb-17 22-Mar-17 28-Mar-17 Back Filling to GL -33 A26730 A26740 Extract Sheetpile 18-Feb-17 21-Feb-17 29-Mar-17 31-Mar-17 A26740 t Construct Cofferdam & Pipe works for Lead In (CH0+102 to CH0+1

A26750 Drive in Sheetpiles (Cofferdam) @ 18m depth 22-Dec-16 06-Feb-17 15-Feb-17 100% 04-Jan-17 -33 Drive in Sheetpiles (Cofferdam) @ 18m depth 16-Feb-17 01-Mar-17 100% A26760 Curtain Grouting (where required) 05-Jan-17 A26760 E Curtain Grouting (where required) A26770 Dewatering A26770 m 19-Jan-17 19-Jan-17 02-Mar-17 02-Mar-17 100% -33 A26780 ELS Excavation (Cofferdam)@GL +5.0mPD to +3.0mPD ELS Excavation (Cofferdam)@GL +5.0mPD to +3.0mPD 03-Mar-17 06-Mar-17 100% 20-Jan-17 23-Jan-17 A26780 - A26790 Install 1st Layer Strut & Wailing (Cofferdam) @ +3.5mPD Install 1st Layer Strut & Wailing (Cofferdam) @ +3.5mPD

ELS Excavation (Cofferdam) @+3.0mPD to +0.275mPD 07-Mar-17 13-Mar-17 66.67% A26790 = A26800 ELS Excavation (Cofferdam)@+3.0mPD to +0.275mPD 03-Feb-17 06-Feb-17 14-Mar-17 16-Mar-17 0% 0% -33 A26810 Install 2nd Layer Strut & Wailing (Cofferdam) @ +0.775mPD 07-Feb-17 13-Feb-17 17-Mar-17 23-Mar-17 -33 A26810 Install 2nd Laver Strut & Wailing (Cofferdam) @ +0.775mPD A26820 ELS Excavation (Cofferdam)@+0.275mPD to -2.45mPD 14-Feb-17 16-Feb-17 24-Mar-17 27-Mar-17 A26820 ____ ELS Excavation (Cofferdam)@+0.275mPD to -2.45mPD -33 28-Mar-17 03-Apr-17 Install 3rd Layer Strut & Wailing (Cofferdam) @ -1.95mPD A26830 Install 3rd Layer Strut & Wailing (Cofferdam) @ -1.95mPD 17-Feb-17 23-Feb-17 A26840 ELS Excavation Final (Cofferdam)@ -2.45mPD to -3.70mPD 24-Feb-17 27-Feb-17 05-Apr-17 07-Apr-17 -33 A26840 -ELS Excavation Final (Cofferdam)@ -2.45mPD to -08-Apr-17 12-Apr-17 A26850 Pipe Laying & Associated Works 03-Mar-17 A26850 -Pipe Laying & Associated Works 04-Mar-17 10-Mar-17 13-Apr-17 22-Apr-17 A26860 Construct 2 Nos of Bend Block A26860 A26870 Construct Valve Chamber 11-Mar-17 22-Mar-17 24-Apr-17 06-May-17 0% -33 A26870 Construction at CH0+0 to CH66
Trench Excavation & Pipe work
A26960 Drive In Sheet Piles 9 22-Feb-17 03-Mar-17 01-Apr-17 12-Apr-17 0% A26960 Drive In Sheet Pile A26970 Trench Excavation 04-Mar-17 07-Mar-17 13-Apr-17 19-Apr-17 A26970 -Trench Excavation A26980 Install 1st Layer of Struts & Wailing 20-Apr-17 05-May-17 0% A27100 Drive in Sheet Piles 22-Feb-17 03-Mar-17 01-Apr-17 12-Apr-17 A27100 Drive in Sheet Piles ■ A27110 Trench @GL +5.0mPD to +4.0mPD 04-Mar-17 07-Mar-17 13-Apr-17 19-Apr-17 0% Trench @GL+5.0mPD to A27110 = A27120 Install 1st Layer Strut & Wailing@ +4.5mPD 08-Mar-17 21-Mar-17 20-Apr-17 05-May-17 0% A27120 _ 1 1 17-Dec-16 17-Dec-16 01-Feb-17 01-Feb-17 100% 0% -33 A27270 Strip Formwork Strip Formwork A27370 Prepare & Submit Detailed Design and Modification Works to RSS 10 17-Dec-16 30-Dec-16 01-Feb-17 11-Feb-17 100% Prepare & Submit Detailed Design and Modification Works to RSS A27380 RSS Review & Approve Detail Design and Modification Works 12 12 31-Dec-16 14-Jan-17 13-Feb-17 25-Feb-17 100% RSS Review & Approve Detail Design and Modification Works -33 Form Access Road / Traffic Diversion (Along Seawall) A27390 Form Access Road / Traffic Diversion (Along Sea 27-Feb-17 04-Mar-17 A27400 Install UU Supports 23-Jan-17 08-Feb-17 06-Mar-17 18-Mar-17 41.67% -33 A27400 Install UU Supports A27410 Drill holes, Inject Curtain Grout & backfill 08-Mar-17 20-Mar-17 20-Apr-17 Å27410 **⊑** Drill holes, Inject Curtain A27420 Excavate from G/F (+4.5mPD) to +2.0mPD 09-Mar-17 11-Mar-17 21-Apr-17 24-Apr-17 A27420 A27430 Install UU Support 13-Mar-17 25-Mar-17 25-Apr-17 10-May-17 0% A27430 Sewerage Sewerage Interface with PIW & F2 Contractor ◆ PIW Implement TTMS & Allow Access to Manhole F1.2 to HCC, 01-Feb-17* A27790 PIW Implement TTMS & Allow Access to Manhole F1.2 to HCC 0 0 01-Feb-17 01-Feb-17* A27800 Excavate Trial Trench for UU within Austin Road West Area Excavate Trial Trench for UU within Austin Road West Area A27810 Demolished Existing Planter 15-Feb-17 25-Feb-17 15-Feb-17 25-Feb-17 A27810 Demolished Existing Planter Excavate & Install Lateral Support A27820 Excavate & Install Lateral Support 27-Feb-17 09-Mar-17 27-Feb-17 09-Mar-17 A27820 A27830 Construct M+ Terminal Manhole F1.3A A27830 Construct M+ Terminal Manhole F1.3A A27840 Lay down DN375 F1.3B to F1.3A to F1.2 17-Mar-17 20-Mar-17 17-Mar-17 20-Mar-17 A27840 Lay down DN375 F1.3B to F1.3A to F1.2 A27850 Pressure Test 21-Mar-17 23-Mar-17 21-Mar-17 23-Mar-17 0% A27850 Pressure Test A27860 Back fill & Reinstate pavement / Reinstate Planter 03-Apr-17 24-Mar-17 03-Apr-17 Back fill & Reinstate pavement / Reinstate Planter 24-Mar-17 0% A27860 == A27870 HCC connect DN375 to F1.2 05-Apr-17 05-Apr-17 05-Apr-17 A27870 HCC connect DN375 to F1.2 adjacent to CLP Station (Port F2 (Gammon's) allow access to HCC at Portion L06, 01-Feb-17 A27880 F2 (Gammon's) allow access to HCC at Portion L06 0 0 01-Feb-17 01-Feb-17* A27890 Excavate Trench and install shoring for sewer drain along CLP Station 14 14 01-Feb-17 16-Feb-17 01-Feb-17 06-Feb-17 06-Feb-17 06-Feb-17 08-Feb-17 08-Feb-18 08-Excavate Trench and install shoring for sewer drain along CLP Station

File Name: M+ MICP D14 OP3A - Month 16 - 27 Jan '17

Three Months Rolling Programme (3MRP) - 27 Jan 2017 (MTH16)

Planned Actual % Complete A27900 Construct manholes F1.3C and F1.3B 17-Feb-17 28-Feb-17 17-Feb-17 28-Feb-17 A27900 Lay down DN375 from F1.3C to F1.3B (approx. 39m)

A27920 Pressure Test A27910 Lay down DN375 from F1.3C to F1.3B (approx. 39m) 01-Mar-17 08-Mar-17 01-Mar-17 08-Mar-17 0% A27910 09-Mar-17 11-Mar-17 09-Mar-17 11-Mar-17 A27920 Pressure Test A27930 Backfill to adjacent ground level 13-Mar-17 21-Mar-17 13-Mar-17 21-Mar-17 A27930 = Sewerage at Portion M01, Gridline A/3-14
A27940 HCC grant access to Park Contractor for SM100 construction ◆ HCC grant access to Park Co 0 0 28-Mar-17 18-Apr-17 0% 0% -14 ◆ Completion of G/F \$lab, Wall & Column at Portion A, A27960 Completion of G/F Slab, Wall & Column at Portion A 17-.lan-17 08-Feb-17 100% Manhole & Trench Excavation for Sewerage Pipe between MH F2.1B to F2.1A A27970 Manhole & Trench Excavation for Sewerage Pipe between MH F2.1B to 19-Jan-17 09-Feb-17 10-Feb-17 100% A27970 -20-Jan-17 A27980 = Construct Manhole F2.1A Lay \$ewerage Pipe DN300 between MH F2.1A to F2.1B (Approx. 25m)

Lay & Connect Sewerage Pipe incoming from M+ to MH F2.1A ■ A27990 Lay Sewerage Pipe DN300 between MH F2.1A to F2.1B (Approx. 25m) 20-Jan-17 24-Jan-17 11-Feb-17 15-Feb-17 100% -16 A27990 -■ A28000 Lay & Connect Sewerage Pipe incoming from M+ to MH F2.1A 25-Jan-17 26-Jan-17 16-Feb-17 17-Feb-17 100% A28000 -18-Feb-17 21-Feb-17 33.33% A28010 Pressure Test 27-Jan-17 02-Feb-17 A28010 Pressure Test A28020 Backfill to ground level 07-Feb-17 22-Feb-17 25-Feb-17 0% Backfill to ground level 03-Feb-17 A28020 MH F2.1C to MH F2.1B ■ A28030 Manhole & Trench Excavation for Sewerage Pipe between MH F2.1C to 27-Jan-17 18-Feb-17 20-Feb-17 Manhole & Trench Excavation for Sewerage Pipe between MH F2.1C to F2.1B 01-Feb-17 A28030 A28040 Construct Manhole F2.1B & F2.1C A28040 -Construct Manhole F2.1B & F2.1C Lay Sewerage Pipe DN300 between MH F2.1C to F2.1B (Approx 40m) A28050 Lay Sewerage Pipe DN300 between MH F2.1C to F2.1B (Approx.40m) 02-Feb-17 09-Feb-17 21-Feb-17 28-Feb-17 0% -16 A28050 A28060 Pressure test 21-Feb-17 23-Feb-17 11-Mar-17 14-Mar-17 A28060 ---Pressure test A28070 Backfill to ground level Backfill to ground leve 15-Mar-17 20-Mar-17 A28070 -MH F2.1D to MH F2.1C ◆ Completion of G/F Slab, Wall & Column at Portion E, A28080 Completion of G/F Slab, Wall & Column at Portion E 24-Feb-17 22-Feb-17 ■ A28090 Manhole & Trench Excavation for Sewerage Pipe between MH F2.1D to 25-Feb-17 11-Mar-17 14-Mar-17 Manhole & Trench Excavation for \$ewerage Pipe between MH F2.1D to F2.1C A28090 ____ A28100 Construct Manhole F2.1D 27-Feb-17 09-Mar-17 15-Mar-17 25-Mar-17 -14 A28100 🕳 Construct Manhole F2.1D A28110 Lay Sewerage Pipe DN375 between MH F2.1D to F2.1C (Approx. 21m) Lay Sewerage Pipe DN375 between MH F2.1D to F2.1C (Approx. 21m) 27-Feb-17 02-Mar-17 15-Mar-17 18-Mar-17 -14 A28110 A28120 📥 ■ A28120 Lay & Connect Sewerage Pipe incoming from M+ to MH F2.1C 03-Mar-17 04-Mar-17 20-Mar-17 21-Mar-17 Lay & Connect Sewerage Pipe incoming from M+ to MH F2.1C A28130 Pressure Test 10-Mar-17 13-Mar-17 27-Mar-17 29-Mar-17 -14 A28130 = Pressure Test A28140 Backfill to ground level 3 14-Mar-17 16-Mar-17 30-Mar-17 01-Apr-17 0% A28140 ____ Backfill to ground level MH F2.1E to MH F2.1D ■ A28150 Manhole & Trench Excavation for Sewerage Pipe between MH F2.1E to 10-Mar-17 A28150 ___ Manhole & Trench Excavation for Sewerage Pipe between MH F2.1E to A28160 Construct Manholes F2 1F 14-Mar-17 20-Mar-17 30-Mar-17 06-Apr-17 0% -14 A28160 Construct Manholes F2.1E Lay Sewerage Pipe between MH F2.1E to F2.1D (DN3) A28170 Lay Sewerage Pipe between MH F2.1E to F2.1D (DN375mm) (Approx. 20-Mar-17 14-Mar-17 30-Mar-17 06-Apr-17 A28170 = 07-Apr-17 10-Apr-17 A281/80 -Pressure Test A28190 Backfill to ground leve 3 3 24-Mar-17 27-Mar-17 11-Apr-17 13-Apr-17 0% Backfill to ground level ete Sewerage Pipe & MH SM23, SM22B, SM22A inside SRS Complete Sewerage Pipe & MH SM23, SM22B, SM22A inside SPS 07-Jan-17 ◆ Complete B1 Column, Wall & Slab at ICP Portion A18. A28210 Complete B1 Column, Wall & Slab at ICP Portion A18 0% 18-May-17 28-Mar-17 ◆ Complete B1 Column, Wall & Slab at ICP Portion A19, A28220 Complete B1 Column, Wall & Slab at ICP Portion A19 21-Jun-17 01-Apr-17 0% 0% 62 ◆ Complete B1 Column, Wall & Slab at ICP Portion A20. A28230 Complete B1 Column, Wall & Slab at ICP Portion A20 11-Mar-17 17-Jun-17 ◆ Complete B1 Column, Wall & Slab at ICP Portion A21. ■ A28240 Complete B1 Column, Wall & Slab at ICP Portion A21 ◆ Complete SPS Structure A28250 Complete SPS Structure 15-Mar-17 19-Apr-17 MH SM22 to SM21T (DN450)
A28260 Excavate & Lateral Support for Manhole SM22 & SM21T 3 16-Mar-17 18-Mar-17 20-Apr-17 22-Apr-17 0% A28270 Construct MH SM22 & SM21T 18 20-Mar-17 10-Apr-17 24-Apr-17 16-May-17 0% Prepare & Submit ELS Design to RSS for Approval

RSS Review & Approve ELS Design A28440 Prepare & Submit ELS Design to RSS for Approval 09-Jan-17 14-Jan-17 01-Feb-17 07-Feb-17 100% A28440 = A28450 12 12 16-Jan-17 01-Feb-17 08-Feb-17 21-Feb-17 91.67% 0% A28450 RSS Review & Approve ELS Design Construction A28460 Drive In Sheetpiles 12 12 22-Jun-17 06-Jul-17 03-Apr-17 20-Apr-17 0% ■ A28470 Trench Excavation & Lateral Support from SM21A to SM13 A28470 Storm Drainage
Storm Drain DN750 along Gridline A/3-11 (MH S2.4 to S2.6) A28520 Excavate to formation level 3 08-Feb-17 10-Feb-17 27-Feb-17 01-Mar-17 0% A28530 Construct Manhole S2.4 & S2.6 12 11-Feb-17 24-Feb-17 02-Mar-17 15-Mar-17 0% A28530 Construct Manhole \$2.4 & \$2.6 ■ A28540 Lay DN700 pipe from Manholes S2.4 to S2.6 (Approx. 78m) 16-Mar-17 31-Mar-17 A28540 Lay DN700 pipe from Manholes S2.4 to S2.6 (Approx. 78m) 14-Mar-17 16-Mar-17 01-Apr-17 05-Apr-17 A28550 Pressure Test A28550 A28560 Backfill to existing ground level 5 17-Mar-17 22-Mar-17 06-Apr-17 11-Apr-17 0% A28560 Backfill to existing ground level Storm Drain DN1050 along Gridline A/11-14 (MH S2.6 to S2.6A to S2.7 to S2.8) 6 14-Mar-17 20-Mar-17 01-Apr-17 08-Apr-17 0% A28580 Construct Manhole S2 6a S2 7 & S2 8 12 12 21-Mar-17 03-Apr-17 10-Apr-17 26-Apr-17 0% 0% A28580 -Storm Drain DN400 suspended along Gridline J/f1-M/1
Storm Drain at Portion M12 ◆ External Wall @ gridline J'/1'-6' (including Wall Finish) compl 03-Apr-17 0% 0% A29080 External Wall @ gridline J'/1'-6' (including Wall Finish) complete 11-Mar-17 12 13-Mar-17 25-Mar-17 05-Apr-17 21-Apr-17 0% Erect Working Platform A29090 Erect Working Platform A29090 10 27-Mar-17 07-Apr-17 22-Apr-17 05-May-17 0% A29100 Install Brackets for Suspension Pipe A29100 Storm Drain DN250 suspended along Gridline M/4-12 Storm Drain at Portion M14

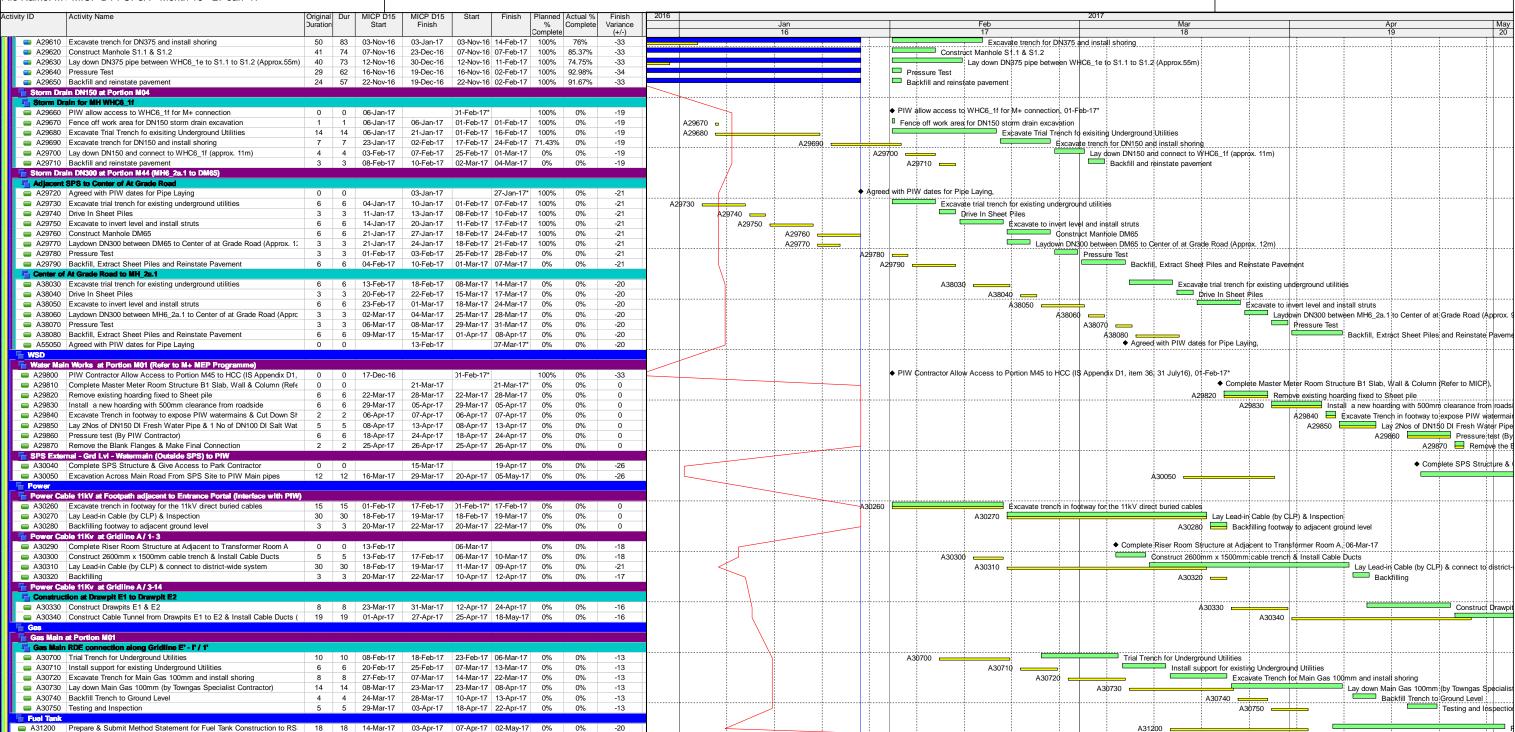
A29250 Coordinate with Lyrics Contractor for temporary access to M14 (App-I 0 0 31-Mar-17 31-Mar-17* 0% 0% 0 ◆ Coordinate with Lyrics Contractor for temporary access to M14 (A ine D'-F'/1'-2' (MH WHC6 1c to \$3.4) Storm Drain along Gridline D'-E'/1'-2' (MH

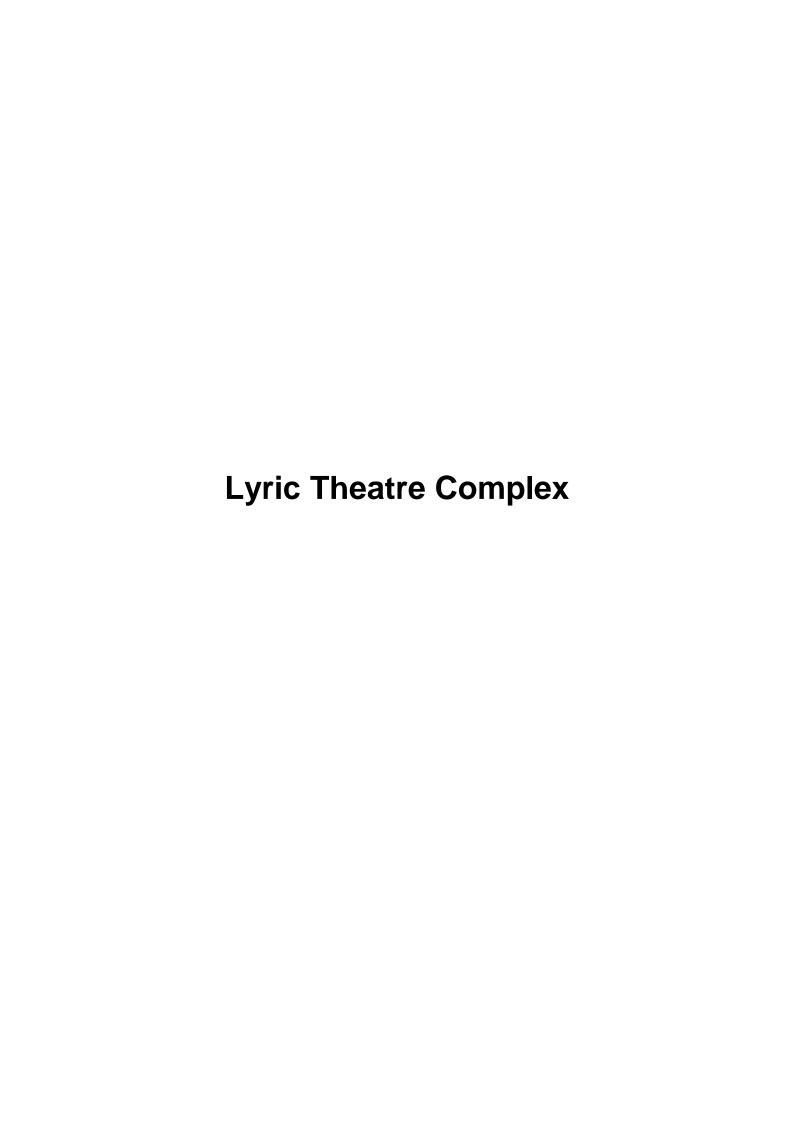
A29380 Formation and Construct MH S3.4 Formation and Construct MH S3.4 17-Dec-16 28-Dec-16 01-Feb-17 09-Feb-17 100% -33 A29400 Lay DN600 pipe from WHC6_1c to MHS3.4 (Approx. 18m) Lay DN600 pipe from WHC6_1c to MHS3.4 (Approx. 18m) 24-Aug-16 03-Feb-17 100% A29410 Pressure Test 3 20-Dec-16 23-Dec-16 04-Feb-17 07-Feb-17 100% Backfill and reinstate pavement -34 A29420 Backfill and reinstate pavement 26-Aug-16 02-Feb-17 100% 26-Aug-16 19-Dec-16 Storm Drain along Gridline E'-G' / 1'-2' (MH S3.4 to S3.3 to S3.2) ◆ Complete B1 Slab, Columns & Walls at GL F' to H' / 1'-3', A29430 Complete B1 Slab, Columns & Walls at GL F' to H' / 1'-3' 19-Jan-17 07-Feb-17 100% -13 Formation & Construct MH \$3.3 & S3.2 A29440 Formation & Construct MH S3.3 & S3.2 20-Jan-17 03-Feb-17 08-Feb-17 18-Feb-17 70% A29440 A29450 Connect DN250 pipe x 3Nos to MH S3.3 03-Feb-17 18-Feb-17 18-Feb-17 A29450 **a** Connect DN250 pipe x 3Nos to MH S3.3 A29460 Connect DN250 pipe x 2Nos to MH S3.2 03-Feb-17 03-Feb-17 18-Feb-17 18-Feb-17 -13 A29460 Connect DN250 pipe x 2Nos to MH S3.2 Formation & Lay DN600 pipe from S\$.4 to S3.3 to S3.2 (Approx 7m) A29470 Formation & Lay DN600 pipe from S3.4 to S3.3 to S3.2 (Approx 7m) 20-Jan-17 23-Jan-17 08-Feb-17 10-Feb-17 100% 0% -13 A29470 -A29480 Pressure Test 07-Feb-17 20-Feb-17 22-Feb-17 04-Feb-17 0% 0% -13 Pressure Test

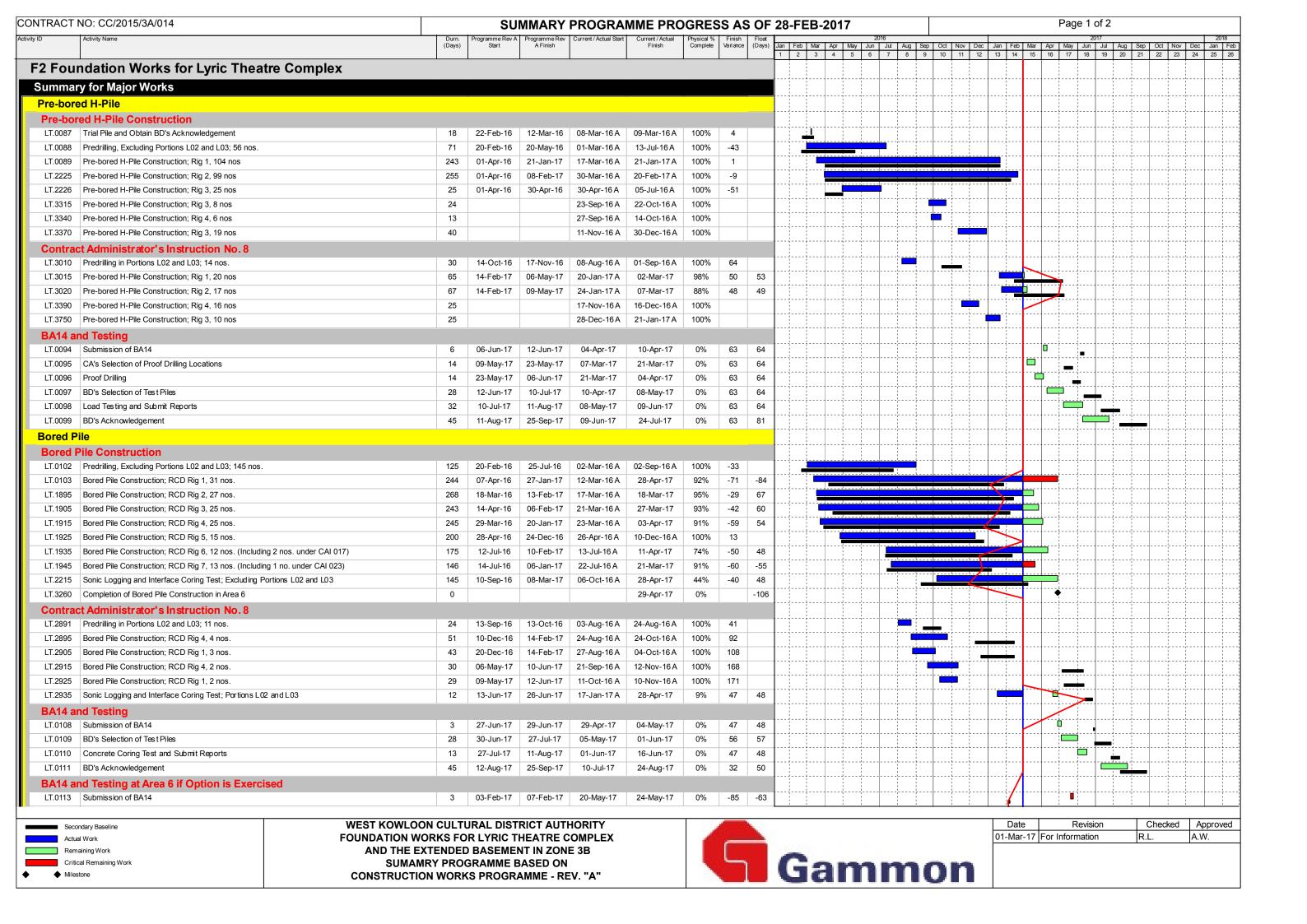
Backfill trench to Ground Level, 23-Feb-17 A29480 -A29490 Backfill trench to Ground Level 08-Feb-17 23-Feb-17 | Storm Drain DN450 at Portion M01 | Storm Drain along Gridline G'-\| /1'-2 (MH \$3.2 to \$3.1 to \$3.1b to \$3.1a) | A29500 | Formation & Construct MH \$3.1, \$3.1b & \$3.1a 08-Feb-17 24-Feb-17 23-Feb-17 11-Mar-17 A29500 Formation & Construct MH \$3.1, S3.1b & \$3.1a A29510 Connect DN200 pipe to MH S3.1 24-Feh-17 24-Feb-17 11-Mar-17 11-Mar-17 Connect DN200 pipe to MH S3.1 A29510 a A29520 Connect DN200 pipe to MH S3.1b 24-Feb-17 24-Feb-17 11-Mar-17 11-Mar-17 -13 A29520 n Connect DN200 pine to MH S3 1b A29530 Connect DN300 & DN400 pipe to MH S3.1a 24-Feb-17 Connect DN300 & DN400 pipe to MH S3 1a A29530 • & Lay DN450 pipe from MH3.2 to S3.1a (Approx. 39m)

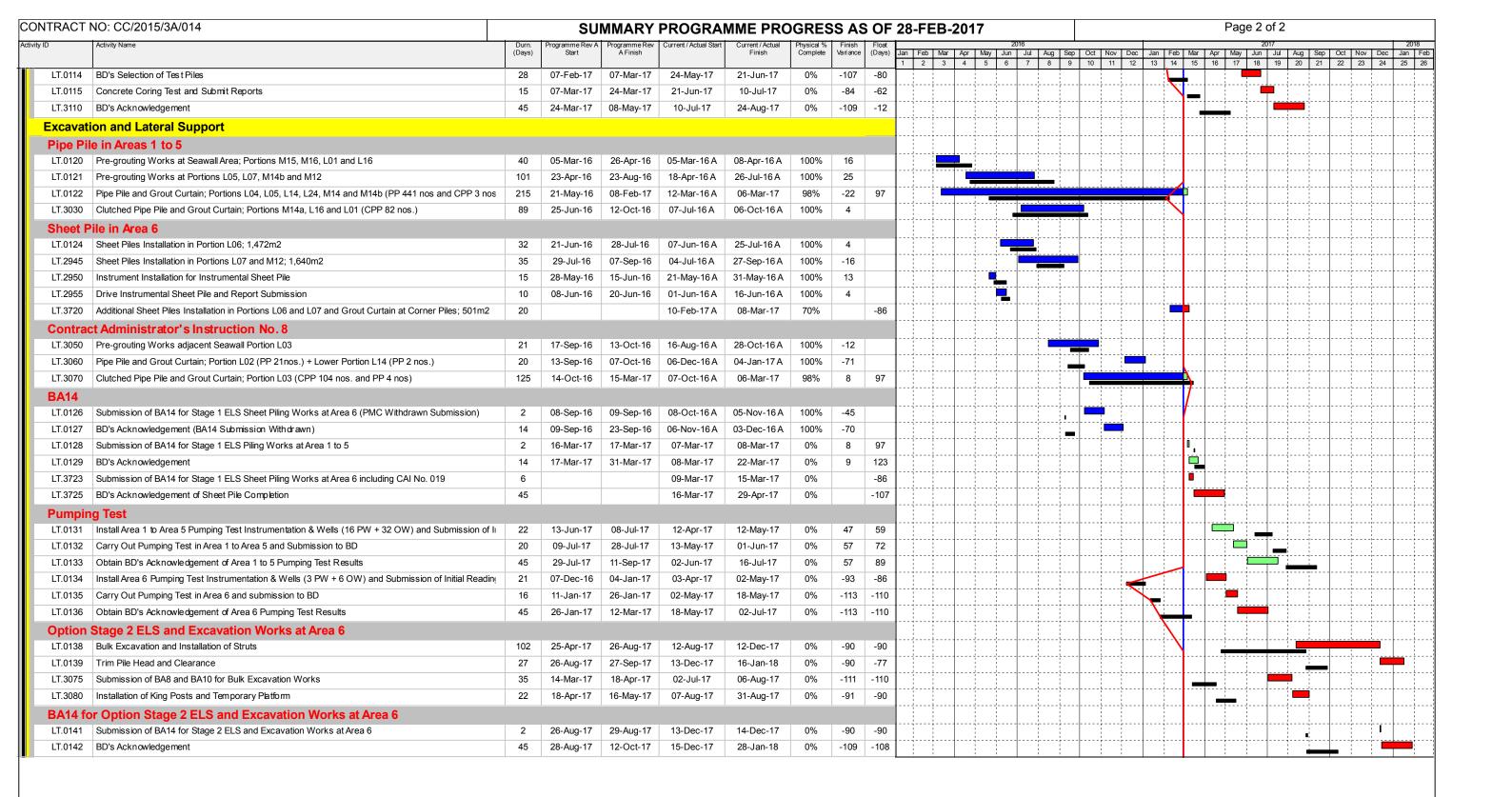
Pressure Test A29540 Formation & Lay DN450 pipe from MH3.2 to S3.1a (Approx. 39m) 08-Feb-17 11-Feb-17 23-Feb-17 27-Feb-17 -13 A29540 -A29550 Pressure Test 25-Feb-17 28-Feb-17 13-Mar-17 15-Mar-17 0% 0% -13 A29550 -A29560 Backfill trench to Ground Level Backfill trench to Ground Leve 0% A29560 Storm Drain DN375 at Portion M45
Storm Drain along Gridline A-K' / 5' (S1.1 to S1.2 to WHC6_1e)
A29590 Excavate Trial Trench for existing Underground Utilities 14 17-Dec-16 05-Jan-17 01-Feb-17 16-Feb-17 100% Excavate Trial Trench for existing Underground Utilities 14 14 06-Jan-17 21-Jan-17 17-Feb-17 04-Mar-17 100% A29600 Install support to exisiting underground Utilities Install support to exisiting underground Util

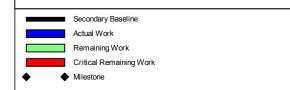
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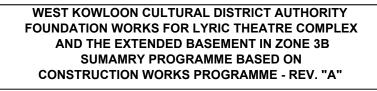














| Date | | Revision | Checked | Approved |
|------|-----------|-----------------|---------|----------|
| | 01-Mar-17 | For Information | R.L. | A.W. |
| | | | • | • |
| | | | | |
| | | | | |
| | | | | |

C. Action and Limit Levels for Construction Phase

Air Quality

The Action and Limit Levels for 1-hour and 24-hour TSP for the monitoring station are presented in following tables:

Table C-1: Action and Limit Levels for 1-hour TSP

| Monitoring Station | Action Level (mg/m³) | Limit Level (mg/m³) |
|--------------------|----------------------|---------------------|
| AM1 | 273.7 | 500 |
| AM2A | 274.2 | 500 |

Table C-2: Action and Limit Levels for 24-hour TSP

| Monitoring Station | Action Level (μg/m³) | Limit Level (µg/m³) |
|--------------------|----------------------|---------------------|
| AM1 | 143.6 | 260 |
| AM2A | 151.1 | 260 |

<u>Noise</u>

The Action and Limit Levels for Noise for the monitoring stations are presented in following table:

Table C-3: Action and Limit Levels for Construction Noise

| Time Period & Monitoring Locations | Action Level | Limit Level |
|------------------------------------|---|-------------|
| NM1A | | _ |
| 0700-1900 hours on normal weekdays | When one documented complaint is received from any one of the sensitive receivers | 75 dB(A) |

D. Event and Action Plan for Air Quality, Noise, Landscape and Visual Impact

Air Quality

In case the Action and Limit Levels are not complied during construction stage, the following Event and Action Plan should be followed:

Table D-1: Event and Action Plan for Air Quality

informed of the results.

| Event | Action | | | | |
|---------------------------------|---|---|--|---|--|
| | ET | IEC | WKCDA | Contractor | |
| Action Level | | | | | |
| 1. Exceedance for one sample | 1. Identify source, investigate the causes of exceedance and propose remedial measures; | Check monitoring data submitted by ET; Check Contractor's working method. | 1. Notify Contractor | Rectify any unacceptable practice; Amend working methods if appropriate. | |
| | 2. Inform IEC and WKCDA; | - | | | |
| | Repeat measurement to confirm finding; | | | | |
| | Increase monitoring frequency to daily. | | | | |
| two or more consecutive | Identify source; Inform IEC and WKCDA; | Check monitoring data submitted by ET; Check Contractor's | notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly | remedial to WKCDA within three working | |
| samples | 3. Advise the WKCDA on the effectiveness of the proposed remedial measures; | working method; 3. Discuss with ET and Contractor on possible remedial measures; | | | |
| | 4. Repeat measurements to confirm findings; | effectiveness of the | | | |
| | 5. Increase monitoring frequency to daily; | proposed remedial measures; | | | |
| | 6. Discuss with IEC and Contractor on remedial actions required; | 5. Monitor the implementation of remedial measures. | | | |
| | 7. If exceedance continues, arrange meeting with IEC and WKCDA; | | | | |
| | 8. If exceedance stops, cease additional monitoring. | | | | |
| Limit Level | | | | | |
| 1. Exceedance for one sample | 1. Identify source, investigate the causes of exceedance and propose | Check monitoring data submitted by ET; Check Contractor's | | 1. Take immediate action to avoid further exceedance; | |
| | remedial measures; 2. Inform WKCDA, | working method; 3. Discuss with ET and Contractor on possible oremedial measures; 4. Advise the WKCDA on the effectiveness of the proposed remedial | Notify Contractor; Ensure remedial measures properly implemented. | Submit proposals f remedial actions to IE | |
| | Contractor and EPD; | | | within three working days of notification; | |
| | confirm finding; | | | 3. Implement the agree | |
| | 4. Increase monitoring frequency to daily; | | | proposals; 4. Amend proposal if | |
| | 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and WKCDA | | | appropriate. | |

Event Action

- two or more consecutive samples
- 2. Exceedance for 1. Notify IEC, WKCDA, Contractor and EPD;
 - 2. Identify source;
 - 3. Repeat measurement to working method; confirm findings;
 - 4. Increase monitoring 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 WKCDA to discuss the remedial actions to be taken:
 - 7. Assess effectiveness of Contractor's remedial actions and keep IEC. EPD and WKCDA informed of the results;
 - 8. If exceedance stops, cease additional monitoring.

- 1. Check monitoring data 1. Confirm receipt of 1. Take immediate submitted by ET;
- 2. Check Contractor's
- 3. Discuss amongst WKCDA, ET, and Contractor on the potential with the Contractor remedial actions;
- 4. Review Contractor's remedial actions whenever necessary to assure their effectiveness measures properly and advise the WKCDA accordingly;
- 5. Monitor the implementation of remedial measures.

- in writing;
- 2. Notify Contractor; 2. Submit proposals for
- 3. In consolidation with the IEC, agree on the remedial measures to be implemented;
- 4. Ensure remedial 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 of failure action to avoid further exceedance;
 - remedial actions to IEC within three working days of 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 WKCDA until the exceedance is abated.

Construction Noise

In case the Action and Limit Levels are not complied during construction stage, the following Event and Action Plan should be followed:

Table D-2: Event and Action Plan for Construction Noise

| Event | Action | | | | | |
|--------------|---|--|--|---|--|--|
| | ET | IEC | WKCDA | Contractor | | |
| Action Level | Notify WKCDA, IEC and Contractor; Carry out investigation; Report the results of investigation to the IEC, WKCDA and Contractor; Discuss with the IEC and Contractor on remedial measures required; Increase monitoring frequency to check mitigation effectiveness. | investigation results | in writing;2. Notify Contractor;3. In consolidation | mitigation proposals to IEC and WKCDA; | | |
| Limit Level | 1. Inform IEC, WKCDA, Contractor and EPD; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 6. Discuss with the IEC, Contractor and WKCDA on remedial measures required; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and WKCDA informed of the results; 8. If exceedance stops, cease additional monitoring. | 1. Discuss amongst WKCDA, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the WKCDA accordingly. | lin writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to | action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC and WKCDA within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by the WKCDA until the exceedance is abated. | | |

Landscape and Visual Impact

In case of non-compliance of landscape and visual impacts, procedures in accordance with the Event and Action Plan should be followed:

Table D-3: Event and Action Plan for Landscape and Visual Impact

| Event | Action | | | | |
|--------------------------------|--|--|--|---|--|
| | ET | IEC | WKCDA | Contractor | |
| Design Check | Design check to make sure the design complies with all the proposed mitigation measures in the EIA report; Prepare and submit | Check report submitted by ET; Recommend remedial design if necessary. | Undertake remedial design if necessary. | - | |
| | report. | | | | |
| Non-conformity on one occasion | 1. Identify source of non-conformity; | 1. Check and verify source of non-conformity; | | 1. Amend working method as necessary; | |
| | 2. Report to IEC and WKCDA; | Discuss remedial actions with ET and Contractor; | | 2. Rectify damage and undertake necessary | |
| | 3. Discuss remedial actions with IEC, WKCDA and Contractor; | | | replacement and remedial actions. | |
| | 4. Monitor remedial actions until rectification has been completed. | remedial actions; 4. Check implementation of remedial actions. | | | |
| Repeated non conformity | -1. Identify source of non- conformity; | 1. Check and verify source of non-conformity; | Notify Contractor; Ensure remedial actions are properly implemented. | 1. Amend working method as necessary; | |
| | 2. Report to IEC and WKCDA; | Check Contractor's working method; Discuss remedial actions with ET and | | 2. Rectify damage and undertake necessary | |
| | 3. Increase monitoring frequency; | | | replacement and remedial actions. | |
| | 4. Discuss remedial actions with IEC, WKCDA and Contractor; | Contractor; 4. Advise WKCDA on effectiveness of proposed | | | |
| | 5. Monitor remedial actions until rectification has been completed; | remedial actions; 5. Supervise implementation of | | | |
| | 6. If non-conformity rectified, reduce monitoring frequency back to normal. | remedial actions. | | | |

E. Monitoring Schedule

FEBRUARY 2017

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|---|---|---|---------------------------------------|----------|
| | | | AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring | | 3 | 4 |
| 5 | 6 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring | | 8 | 9 | 10 AM1, AM2A - 24hrTSP, 1hr TSP x3 | 11 |
| 12 | 13 | 14 | 15 | 16 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring | | 18 |
| 19 | 20 | 21 | AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring | | 24 | 25 |
| 26 | 27 | 28 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring | | | | |
| | | Notes: AM1 - International Commerce Centre (ICC) AM2A - Austin Road West (Opposite to The Harbourside) NM1A - International Commerce Centre (ICC) | | | | |

MARCH 2017

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|---|---|---|---------------------------------------|----------|
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring | | 8 | 9 | 10 AM1, AM2A - 24hrTSP, 1hr TSP x3 | 11 |
| 12 | 13 | 14 | 15 | 16 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring | | 18 |
| 19 | 20 | 21 | AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring | | 24 | 25 |
| 26 | 27 | 28 AM1, AM2A - 24hrTSP, 1hr TSP x3 NM1A - Noise Impact Monitoring | | 30 | 31 | |
| | | AM2A - Austin Road \ | ommerce Centre (ICC) West (Opposite to The Commerce Centre (ICC | Harbourside) | | |

F. Calibration Certifications

Location : AM1(ICC)
Calibrated by : K.T.Ho
Date : 16/12/2016

Sampler

Model : TE-5170 Serial Number : S/N 0767

Calibration Orfice and Standard Calibration Relationship

Serial Number : 2454

 Service Date
 :
 14 Mar 2016

 Slope (m)
 :
 2.09532

 Intercept (b)
 :
 -0.03812

 Correlation Coefficient(r)
 :
 0.99994

Standard Condition

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

Calibration Condition

Pa (hpa) : 1020 Ta(K) : 295

| Resi | istance Plate | dH [green liquid] | Z | X=Qstd | IC | Y |
|------|---------------|-------------------|-------|-------------------|---------|-------------|
| | | (inch water) | | (cubic meter/min) | (chart) | (corrected) |
| 1 | 18 holes | 11.2 | 3.375 | 1.637 | 58 | 58.50 |
| 2 | 13 holes | 8.6 | 2.958 | 1.438 | 48 | 48.41 |
| 3 | 10 holes | 6.4 | 2.551 | 1.245 | 40 | 40.34 |
| 4 | 7 holes | 4.4 | 2.116 | 1.038 | 31 | 31.26 |
| 5 | 5 holes | 2.6 | 1.626 | 0.805 | 20 | 20.17 |

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

Sampler Calibration Relationship

Slope(m):45.463 Intercept(b): -16.295 Correlation Coefficient(r): 0.9995

Checked by: Date: 19/12/2016

Magnum Fan

Location : AM1(ICC)
Calibrated by : K.T.Ho
Date : 16/02/2017

Sampler

 Model
 :
 TE-5170

 Serial Number
 :
 S/N 0767

Calibration Orfice and Standard Calibration Relationship

Serial Number : 2454

 Service Date
 :
 14 Mar 2016

 Slope (m)
 :
 2.09532

 Intercept (b)
 :
 -0.03812

 Correlation Coefficient(r)
 :
 0.99994

Standard Condition

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

Calibration Condition

Pa (hpa) : 1021 Ta(K) : 290

| Resi | stance Plate | dH [green liquid] | Z | X=Qstd | IC | Y |
|------|--------------|-------------------|-------|-------------------|---------|-------------|
| | | (inch water) | | (cubic meter/min) | (chart) | (corrected) |
| 1 | 18 holes | 10.2 | 3.250 | 1.577 | 59 | 60.04 |
| 2 | 13 holes | 8.4 | 2.950 | 1.434 | 52 | 52.92 |
| 3 | 10 holes | 6.2 | 2.534 | 1.237 | 44 | 44.78 |
| 4 | 7 holes | 4.4 | 2.135 | 1.047 | 36 | 36.64 |
| 5 | 5 holes | 2.6 | 1.641 | 0.812 | 26 | 26.46 |

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

Sampler Calibration Relationship

Slope(m): 43.452 Intercept(b): -8.903 Correlation Coefficient(r): 0.9997

Checked by: Date: 18/02/2017

Magnum Fan

Location : AM2A (Harbourside)

 Calibrated by
 :
 K.T.Ho

 Date
 :
 16/12/2016

Sampler

Model : TE-5170 Serial Number : S/N 8919

Calibration Orfice and Standard Calibration Relationship

Serial Number : 2454

 Service Date
 :
 14 Mar 2016

 Slope (m)
 :
 2.10326

 Intercept (b)
 :
 -0.06696

 Correlation Coefficient(r)
 :
 0.99989

Standard Condition

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

Calibration Condition

Pa (hpa) : 1020 Ta(K) : 295

| Resi | istance Plate | dH [green liquid] | Z | X=Qstd | IC | Y |
|------|---------------|-------------------|-------|-------------------|---------|-------------|
| | | (inch water) | | (cubic meter/min) | (chart) | (corrected) |
| 1 | 18 holes | 12.4 | 3.551 | 1.720 | 62 | 62.53 |
| 2 | 13 holes | 9.4 | 3.092 | 1.502 | 54 | 54.46 |
| 3 | 10 holes | 7.2 | 2.706 | 1.319 | 48 | 48.41 |
| 4 | 7 holes | 4.4 | 2.116 | 1.038 | 38 | 38.32 |
| 5 | 5 holes | 2.6 | 1.626 | 0.805 | 28 | 28.24 |

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

Sampler Calibration Relationship

| Slope(m):36.964 | Intercept(b):-0.799 | Correlation Coefficient(r): 0.9990 |
|-----------------|---------------------|------------------------------------|
| | | |

Checked by: Date: 19/12/2016

Magnum Fan

Location : AM2A (Harbourside)

Calibrated by : K.T.Ho
Date : 16/02/2017

Sampler

 Model
 :
 TE-5170

 Serial Number
 :
 S/N 8919

Calibration Orfice and Standard Calibration Relationship

Serial Number : 2454

 Service Date
 :
 14 Mar 2016

 Slope (m)
 :
 2.10326

 Intercept (b)
 :
 -0.06696

 Correlation Coefficient(r)
 :
 0.99989

Standard Condition

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

Calibration Condition

Pa (hpa) : 1021 Ta(K) : 290

| Resi | istance Plate | dH [green liquid] | Z | X=Qstd | IC | Y |
|------|---------------|-------------------|-------|-------------------|---------|-------------|
| | | (inch water) | | (cubic meter/min) | (chart) | (corrected) |
| 1 | 18 holes | 12.2 | 3.555 | 1.722 | 60 | 61.06 |
| 2 | 13 holes | 9.2 | 3.087 | 1.499 | 52 | 52.92 |
| 3 | 10 holes | 7.2 | 2.731 | 1.330 | 44 | 44.78 |
| 4 | 7 holes | 4.6 | 2.183 | 1.070 | 34 | 34.60 |
| 5 | 5 holes | 2.6 | 1.641 | 0.812 | 24 | 24.42 |

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

Sampler Calibration Relationship

Slope(m):40.647 Intercept(b):-8.741 Correlation Coefficient(r): 0.9994

Checked by: Date: 18/02/2017

Magnum Fan



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

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

| perator | Tisch | Rootsmeter Orifice I.I | D ======== |)438320 2454 ======= | Ta (K) - Pa (mm) - | 295 745.49 |
|-----------------------|-------------------------|---------------------------|------------------------------|--|----------------------------------|--------------------------------------|
| PLATE OR Run # | VOLUME START (m3) | VOLUME STOP (m3) | DIFF VOLUME (m3) | DIFF TIME (min) | METER DIFF Hg (mm) | ORFICE DIFF H2O (in.) |
| 1 2 3 4 5 | NA NA NA NA | NA NA NA NA | 1.00 1.00 1.00 1.00 | 1.4020 1.0060 0.9010 0.8590 0.7090 | 3.2 6.4 7.9 8.8 12.8 | 2.00 4.00 5.00 5.50 8.00 |

DATA TABULATION

| Vstd | (x axis) Qstd | (y axis) | Va | (x axis) Qa | (y axis) |
|---|--|--|--|--|--|
| 0.9866 0.9824 0.9803 0.9792 0.9738 | 0.7037 0.9765 1.0880 1.1399 1.3735 | 1.4078 1.9909 2.2259 2.3345 2.8155 | 0.9957 0.9914 0.9893 0.9882 0.9828 | 0.7102 0.9855 1.0980 1.1504 1.3862 | 0.8896 1.2581 1.4066 1.4753 1.7792 |
| Qstd slor intercept coefficie y axis = | (b) = ent (r) = | 2.10326 -0.06696 0.99989 | Qa slop intercep coeffic: y axis = | ot (b) = ient (r) = | 1.31703 -0.04232 0.99989 |

CALCULATIONS

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

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

For subsequent flow rate calculations:

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



SIBATA SCIENTIFIC TECHNOLOGY LTD.

1-1-62, Nakane, Soka, Saitama, 340-0005 Japan

TEL: 048-933-1582 FAX: 048-933-1591

CALIBRATION CERTIFICATE

Date: December 21, 2016

Equipment Name

: Digital Dust Indicator, Model LD-3B

Code No.

: 080000-42

Quantity

: 1 unit

Serial No.

: 276020

Sensitivity

: 0.001 mg/m3

Sensitivity Adjustment

: 787CPM

Scale Setting

: December 16, 2016

We hereby certify that the avobe mentioned instrment has been calibrated satisfactory.

Sincerely

SIBATA SCIENTIFIC TECHNOLOGY LTD.

Shintaro Okamura

Shintaro Okamura

Overseas Sales Division

TEST CERTIFICATE

CUSTOMER : INNOTECH INSTRUMENTATION CO.LTD.

Report No. 16-1879-1

SIBATA SCIENTIFIC TECHNOLOGY LTD. DATE 19/ December /2016

APPROVE BY VERIFIED BY ISSUED BY





| PILLA | |
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| | AND CONTRACTOR OF THE PROPERTY |
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| Principle - 12 to - 1800 | The second second |

| PRODUCT NAME | T NA | ME | ٠. | Digital | Dust | Digital Dust Indicator |
|------------------|------|------|----|---------|--------|------------------------|
| MODEL NUMBER | NUMI | BER | | LD-3B | | |
| SERIAL NUMBER | NUMI | 3ER | | 276020 | | |
| CALIBRATION DATE | TION | DATE | | 16- De | cember | 16- December -2016 |

| Testing Category | Judging Standard | | $_{ m Judgment}$ | | | |
|--------------------|--|------------|---|------------|--------------------|----------|
| Function Test | Switch, Display, Wiring will nomally function | | OK | | | |
| Sensitivity | Count is ±2% accurate to the master by the | Reading of | Reading of this | Correction | Inspection chart | . chart |
| Calibration | standard calibration particle | Master | Instrument | ****** | 2 0 | (0) |
| | | 799 CPM | 795 CPM | -0.5 % | Kererence Value(5) | value(5) |
| Dust Concentration | Dust Concentration Count is ±10% accurate to the master under | 2053 CPM | 1979 CPM | -3.6 % | r c | , r.c. |
| Measuring | the 3 different concentration. | 978 CPM | 957 CPM | -2.1 % | 181 CFM | FIM |
| | | 516 CPM | 507 CPM | -1.7 % | Test atmosphere | sphere |
| Reproducibility | The difference between maximum and minimum | | | | Temperature | Humidity |
| | value of sensitivity adjustment scale setting must be 5.0 % or less of maximum value. | | OK | 9 | 23 °C | 45 % |
| | (The results of measurement of sensitivity adjustment in 5 times are within this range.) | | (; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; | | | |
| | Synthetic Judgment | | Good | | | |



REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

REPORT NO. PROJECT NAME DATE OF ISSUE

: HK1710039 : PERFORMANCE CHECK / CALIBRATION OF DUST METER

: 17/01/2017

CUSTOMER **ADDRESS**

: Envirotech Services Company

REPORT NO.

: Rm. 113, 1/F., MY LOFT, 9 HOI WING ROAD, TUEN MUN, N.T.

PROJECT ITEM NO.

: HK1710039

PERFORMANCE CHECK / CALIBRATED EQUIPMENT

: HK1710039-01

: Digital Dust Indicator

MANUFACTURER MODEL NO.

SIBATA

SERIAL NO.

: LD-3B

EQUIPMENT NO.

: 276020

: 11/01/2017

RECEIPT DATE

PERFORMANCE CHECK / CALIBRATION DATE : 12/01/2017

PERFORMANCE CHECK / CALIBRATION Information

| CODE | Calibration Parameter | Method Procedure | Reference Method |
|----------------|---|------------------|--|
| Dust PC/CAL | Performance Check / Calibration of Dust Meter | CAL003 | General Technical Requirements of Environmental Monitoring, Environmental Monitoring & Audit Guidelines for Development Projects in HK |

Notes: 1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.

2. Performance Check / Calibration result relates to performance check / calibration item(s) as received.

Approved Signatory

Wong Po Yan Pauline (Testing Engineer)

Issue Date:

17/01/2017



REPORT OF PERFORMANCE CHECK / CALIBRATION

PROJECT NAME DATE OF ISSUE PERFORMANCE CHECK / CALIBRATION OF DUST METER 17/01/2017

REPORT NO. HK1710039

PERFORMANCE CHECK / CALIBRATED EQUIPMENT

TYPE Digital Dust Indicator MANUFACTURER

SIBATA MODEL NO. LD-3B SERIAL NO. EQUIPMENT NO. 276020

SENSITIVITY ADJUSTMENT
PERFORMANCE CHECK / CALIBRATION DATE 12/01/2017

STANDARD EQUIPMENT

HIGH VOLUME AIR SAMPLER

TYPE MANUFACTURER MODEL NO. TISCH TE-5170 EQUIPMENT REF NO. PTL_HV002 LAST CALIBRATION DATE 23/11/2016

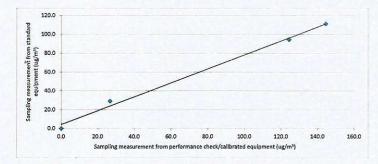
EQUIPMENT PERFORMANCE CHECK / CALIBRATION RESULTS:

Sensitivity Adjustment Scale Setting (Before Performance check / Calibration): 787 _CPM Sensitivity Adjustment Scale Setting (After Performance check / Calibration): 787 СРМ

| Trial no. in 1-hr period | Time | Mean Temp (°C) | Mean Pressure (hPa) | Concentration in ug/m³ (Standard equipment) . (Y - Axis) | Total Count ² (Performance Check / Calibrated equipment) | Concentration in Count/Minute ³ (Performance Check / Calibrated equipment) (X - Axis) |
|-----------------------------|------------------------|-------------------|------------------------|--|--|--|
| Zero Check ¹ | 12/01/2017,10:00:00 AM | 19 | 1016 | 0 | 0 | 0 |
| 1 | 12/01/2017,11:10:00 AM | 19 | 1016 | 95 | 7462 | 124 |
| 2 | 12/01/2017,2:30:00 PM | 19 | 1016 | 111 | 8670 | 145 |
| 3 | 12/01/2017,3:34:00 PM | 19 | 1016 | 29 | 1600 | 27 |

Linear Regression of Y on X

Slope (K- factor) 0.7 Correlation Coefficient 0.9972 12/01/2018 Validity of Performance Check / Calibration Record



Zero check conducted as per CAL003 SOP and manufacturer's manual as appropriate. Notes: 1.

- 2. Total Count was measured by Digital Dust Indicator.
- 3. Count/minute was calcuated by (Total Count/60)
- 4. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
- 5. Performance Check / Calibration result relates to performance check / calibration item(s) as received.

Operator: MA Ching Him, Jackey Signature: 12/01/2017

Checked by: Wong Po Yan, Pauline Signature: Date: 17/01/2017



SIBATA SCIENTIFIC TECHNOLOGY LTD.

1-1-62, Nakane, Soka, Saitama, 340-0005 Japan

*TEL: 048-933-1582 FAX: 048-933-1591

CALIBRATION CERTIFICATE

Date: December 21, 2016

Equipment Name

: Digital Dust Indicator, Model LD-3B

Code No.

: 080000-42

Quantity

: 1 unit

Serial No.

: 2Z6240

Sensitivity

: 0.001 mg/m3

Sensitivity Adjustment

: 565CPM

Scale Setting

: December 16, 2016

We hereby certify that the avobe mentioned instrment has been calibrated satisfactory.

'Sincerely

SIBATA SCIENTIFIC TECHNOLOGY LTD.

Okamura

Shintaro Okamura

Overseas Sales Division

TEST CERTIFICATE

CUSTOMER : INNOTECH INSTRUMENTATION CO.LTD.

Report No. 16-1879-2

SIBATA SCIENTIFIC TECHNOLOGY LTD. DATE 19/ December /2016

APPROVE BY

VERIFIED BY ISSUED BY





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| The second second | | | | |
|-------------------|----|---------|--------|------------------------|
| PRODUCT NAME | •• | Digital | Dust | Digital Dust Indicator |
| MODEL NUMBER | •• | LD-3B | | |
| SERIAL NUMBER | | 2Z6240 | | |
| CALIBRATION DATE | | 16— De | cember | 16— December —2016 |

| vill nomally function to the master by the Master ticle To the master under to the master under to the master under to the master under Tops T | Testing Category | Judging Standard | | Judgment | | | |
|--|-------------------|--|------------|-----------------|------------|-------------|----------|
| Count is ±2% accurate to the master by the standard calibration particle Instrument Count is ±10% accurate to the master under Togs CPM Togs C | Function Test | Switch, Display, Wiring will nomally function | | OK | 10 | | |
| at standard calibration particle standard calibration particle standard calibration particle count is $\pm 10\%$ accurate to the master under 2053 CPM 796 CPM -0.3 % 168 CPM 1989 CPM -3.1 % 168 different concentration. The difference between maximum and minimum value of sensitivity adjustment scale setting must be 5.0 % or less of maximum value. (The results of measurement of sensitivity adjustment in 5 times are within this range.) Good Synthetic Judgment | Sensitivity | Count is ±2% accurate to the master by the | Reading of | Reading of this | Correction | Inspecti | on chart |
| ntration Count is ±10% accurate to the master under the 3 different concentration. 2053 CPM 796 CPM -0.3 % the 3 different concentration. 978 CPM 966 CPM -1.2 % 1889 CPM -0.2 % ility The difference between maximum and minimum value of sensitivity adjustment scale setting must be 5.0 % or less of maximum value. OK CPM -0.2 % Temp (The results of measurement of sensitivity adjustment in 5 times are within this range.) Chood Chood Chood Chood Chood | Jalibration | standard calibration particle | Master | Instrument | | , u | 17.1 (G) |
| ntration Count is ±10% accurate to the master under good CPM (2053 CPM) (1989 CPM (-3.1 %) (1989 CPM) (1988 CP | | | 798 CPM | 796 CPM | 0.3 % | Reference | value(5) |
| the 3 different concentration. 516 CPM 966 CPM -1.2 % 516 CPM -0.2 % The difference between maximum and minimum value of sensitivity adjustment scale setting must be 5.0 % or less of maximum value. (The results of measurement of sensitivity adjustment in 5 times are within this range.) Synthetic Judgment | ust Concentration | Count is ±10% accurate to the master under | 2053 CPM | 1989 CPM | -3.1 | י ני | Many |
| The difference between maximum and minimum value of sensitivity adjustment scale setting must be 5.0 % or less of maximum value. (The results of measurement of sensitivity adjustment in 5 times are within this range.) Synthetic Judgment | Leasuring | the 3 different concentration. | 978 CPM | 966 CPM | -1.2 | 606 | CEIM |
| The difference between maximum and minimum value of sensitivity adjustment scale setting must be 5.0 % or less of maximum value. (The results of measurement of sensitivity adjustment in 5 times are within this range.) Synthetic Judgment Good | | | 516 CPM | 515 CPM | _ | Test atm | osphere |
| OK Good | teproducibility | The difference between maximum and minimum | | | | Temperature | Humidity |
| Good | | value of sensitivity adjustment scale setting | | 210 | gen. | 23 °C | 45 % |
| | | must be 5.0 % or less of maximum value. (The results of measurement of sensitivity | | OR | | | |
| | | adjustment in 5 times are within this range.) | | | | | |
| | | Synthetic Judgment | | Good | | | |



REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

REPORT NO. PROJECT NAME

DATE OF ISSUE

: HK1710040 : PERFORMANCE CHECK / CALIBRATION OF DUST METER : 17/01/2017

CUSTOMER

: Envirotech Services Company

ADDRESS

: Rm. 113, 1/F., MY LOFT, 9 HOI WING ROAD, TUEN MUN, N.T.

REPORT NO.

: HK1710040

PROJECT ITEM NO.

: HK1710040-01

PERFORMANCE CHECK / CALIBRATED EQUIPMENT

: Digital Dust Indicator

MANUFACTURER

SIBATA

MODEL NO.

TYPE

: LD-3B

SERIAL NO.

: 2Z6240

EQUIPMENT NO.

RECEIPT DATE

: 11/01/2017

PERFORMANCE CHECK / CALIBRATION DATE : 12/01/2017 PERFORMANCE CHECK / CALIBRATION Information

| CODE | Calibration Parameter | Method Procedure | Reference Method |
|----------------|---|------------------|--|
| Dust PC/CAL | Performance Check / Calibration of Dust Meter | CAL003 | General Technical Requirements of Environmental Monitoring, Environmental Monitoring & Audit Guidelines for Development Projects in HK |

Notes: 1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.

2. Performance Check / Calibration result relates to performance check / calibration item(s) as received.

Approved Signatory

Wong Po Yan Pauline (Testing Engineer)

Issue Date:

17/01/2017



REPORT OF PERFORMANCE CHECK / CALIBRATION PROJECT NAME PERFORMANCE CHECK / CALIBRATION OF DUST METER

DATE OF ISSUE REPORT NO. 17/01/2017 HK1710040

PERFORMANCE CHECK / CALIBRATED EQUIPMENT

Digital Dust Indicator

MANUFACTURER SIBATA MODEL NO. I D-3B SERIAL NO. 2Z6240 EQUIPMENT NO. SENSITIVITY ADJUSTMENT

PERFORMANCE CHECK / CALIBRATION DATE 12/01/2017

STANDARD EQUIPMENT

HIGH VOLUME AIR SAMPLER TYPE

MANUFACTURER TISCH MODEL NO. EQUIPMENT REF NO. TE-5170 PTL_HV002 LAST CALIBRATION DATE 23/11/2016

EQUIPMENT PERFORMANCE CHECK / CALIBRATION RESULTS:

Sensitivity Adjustment Scale Setting (Before Performance check / Calibration): 565 CPM Sensitivity Adjustment Scale Setting (After Performance check / Calibration): 565 СРМ

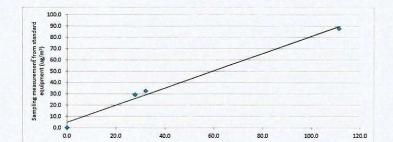
| Trial no. in 1-hr | Time | Mean Temp | Mean Pressure (hPa) | Concentration in ug/m³ (Standard equipment) | Total Count ² | Concentration in Count/Minute ³ (Performance Check / Calibrated equipment) |
|-------------------------|------------------------|-----------|------------------------|---|---|--|
| | | (6) | (III-a) | · (Y - Axis) | (Performance Check / Calibrated equipment) | (X - Axis) |
| Zero Check ¹ | 12/01/2017,10:00:00 AM | 19 | 1016 | 0 | 0 | 0 |
| 1 | 12/01/2017,12:15:00 PM | 19 | 1016 | 88 | 6680 | 111 |
| 2 | 12/01/2017,1:25:00 PM | 19 | 1016 | 33 | 1924 | 32 |
| 3 | 12/01/2017,3:34:00 PM | 19 | 1016 | 29 | 1664 | 28 |

0.8

Linear Regression of Y on X

Slope (K- factor) Correlation Coefficient

0.9940 12/01/2018 Validity of Performance Check / Calibration Record



- Notes: 1. Zero check conducted as per CAL003 SOP and manufacturer's manual as appropriate.
 - 2. Total Count was measured by Digital Dust Indicator.
 - 3. Count/minute was calcuated by (Total Count/60)
 - 4. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
 - Performance Check / Calibration result relates to performance check / calibration item(s) as received.

MA Ching Him, Jackey Signature: Operator: Date: 12/01/2017

Checked by: Wong Po Yan, Pauline Signature: Date: 17/01/2017



Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.: C164166

Date of Receipt / 收件日期: 20 July 2016

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號: IC16-1465)

Description / 儀器名稱

Precision Integrating Sound Level Meter

Manufacturer / 製造商 Model No. / 型號

Rion NL-18

Serial No. / 編號

00360030

Supplied By / 委託者

Envirotech Services Co.

Room 113, 1/F, My Loft, 9 Hoi Wing Road, Tuen Mun,

New Territories, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : $(23 \pm 2)^{\circ}$ C

Relative Humidity / 相對濕度 :

 $(55 \pm 20)\%$

Line Voltage / 電壓

TEST SPECIFICATIONS / 測試規節

Calibration check

DATE OF TEST / 測試日期

29 July 2016

TEST RESULTS / 測試結果

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

The results do not exceed manufacturer's specification.

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

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

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

Tested By

測試

HT Wong Technical Officer

Certified By

核證

Project Engineer

Date of Issue 簽發日期

1 August 2016

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

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Sun Creation Engineering Limited - Calibration & Testing Laboratory

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

輝創工程有限公司 - 校正及檢測實驗所

c/o 香港新界屯門興安里一號青山灣機樓四樓 Fax/傳真: 2744 8986 Tel/電話: 2927 2606

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校正證書

Certificate No.:

C164166

證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

2. Self-calibration was performed before the test.

3. The results presented are the mean of 3 measurements at each calibration point.

4. Test equipment:

Equipment ID CL280 CL281

<u>Description</u>
40 MHz Arbitrary Waveform Generator
Multifunction Acoustic Calibrator

Certificate No. C160077 PA160023

5. Test procedure: MA101N.

6. Results:

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

| | UU | JT Setting | | Applie | d Value | UUT | IEC 60651 Type 1 |
|------------|------|------------------------|-------------------|------------|----------------|--------------|------------------|
| Range (dB) | Mode | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | Reading (dB) | Spec. (dB) |
| 50 - 110 | LA | A | Fast | 94.00 | 1 | 94.4 | ± 0.7 |

6.1.2 Linearity

| | UU | T Setting | | Applied | Value | UUT |
|------------|------|------------------------|-------------------|---------------|----------------|--------------|
| Range (dB) | Mode | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | Reading (dB) |
| 60 - 120 | LA | A | Fast | 94.00 | 1 | 94.4 (Ref.) |
| | | | | 104.00 | | 104.4 |
| | | | | 114.00 | | 114.4 |

IEC 60651 Type 1 Spec. : \pm 0.4 dB per 10 dB step and \pm 0.7 dB for overall different.

6.2 Time Weighting

6.2.1 Continuous Signal

| | UU | Γ Setting | | Applie | d Value | UUT | IEC 60651 Type 1 |
|------------|------|------------------------|-------------------|------------|-------------|--------------|------------------|
| Range (dB) | Mode | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | Reading (dB) | Spec. (dB) |
| 50 - 110 | LA | A | Fast | 94.00 | 1 | 94.4 | Ref. |
| | | | Slow | | | 94.4 | ± 0.1 |

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Tel/電話: 2927 2606 Fax/傳真: 2744 8986 E-mail/電郵: callab/a suncreation.com Website/網址: www.suncreation.com



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Certificate No.:

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證書編號

6.2.2 Tone Burst Signal (2 kHz)

| | UU | T Setting | | App | lied Value | UUT | IEC 60651 Type 1 |
|------------|------|------------------------|-------------------|------------|-------------------|--------------|------------------|
| Range (dB) | Mode | Frequency Weighting | Time Weighting | Level (dB) | Burst Duration | Reading (dB) | Spec. (dB) |
| 50 -110 | LA | A | Fast | 106.00 | Continuous | 106.0 | Ref. |
| | LAmx | 38 40 | | | 200 ms | 105.1 | -1.0 ± 1.0 |
| | LA | | Slow | | Continuous | 106.0 | Ref. |
| | LAmx | | | | 500 ms | 102.4 | -4.1 ± 1.0 |

6.3 Frequency Weighting

6.3.1 A-Weighting

| | UU | T Setting | | Appl | ied Value | UUT | IEC 60651 Type 1 |
|-------------|------|------------------------|-------------------|------------|-----------|-----------------|--------------------|
| Range (dB) | Mode | Frequency Weighting | Time Weighting | Level (dB) | Freq. | Reading (dB) | Spec. (dB) |
| 50 - 110 LA | A | Fast | 94.00 | 31.5 Hz | 54.7 | -39.4 ± 1.5 | |
| | | | | 63 Hz | 68.0 | -26.2 ± 1.5 | |
| | | | | | 125 Hz | 78.0 | -16.1 ± 1.0 |
| | | | | | 250 Hz | 85.6 | -8.6 ± 1.0 |
| | | | | | 500 Hz | 91.1 | -3.2 ± 1.0 |
| | | | | | 1 kHz | 94.4 | Ref. |
| | | | | | 2 kHz | 95.7 | $+1.2 \pm 1.0$ |
| | | | | | 4 kHz | 95.5 | $+1.0 \pm 1.0$ |
| | | | | | 8 kHz | 93.3 | -1.1 (+1.5; -3.0) |
| | | | | | 12.5 kHz | 90.1 | -4.3 (+3.0 ; -6.0) |

6.3.2 C-Weighting

| | UU | T Setting | | Appl | ied Value | UUT | IEC 60651 Type 1 |
|------------|------|------------------------|-------------------|------------|-----------|--------------|--------------------|
| Range (dB) | Mode | Frequency Weighting | Time Weighting | Level (dB) | Freq. | Reading (dB) | Spec. (dB) |
| 50 - 110 | LC | С | Fast | 94.00 | 31.5 Hz | 91.3 | -3.0 ± 1.5 |
| | | | | | 63 Hz | 93.5 | -0.8 ± 1.5 |
| | | | | | 125 Hz | 94.2 | -0.2 ± 1.0 |
| | | | | | 250 Hz | 94.4 | 0.0 ± 1.0 |
| | | | | | 500 Hz | 94.5 | 0.0 ± 1.0 |
| | | | | | 1 kHz | 94.4 | Ref. |
| | | | | | 2 kHz | 94.3 | -0.2 ± 1.0 |
| | | | | | 4 kHz | 93.6 | -0.8 ± 1.0 |
| | | | | | 8 kHz | 91.4 | -3.0 (+1.5; -3.0) |
| | | THE STATE | | | 12.5 kHz | 88.1 | -6.2 (+3.0 ; -6.0) |

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E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

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Certificate No.: C164166

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Time Averaging

| | UU | T Setting | S May 10 10 10 10 10 10 10 10 10 10 10 10 10 | | UUT | IEC 60804 | | | | | |
|---------------|------|------------------------|--|----------------|---------------------------|-------------------------|------------------------|-----------------------------|--------------|-------------------------|--|
| Range (dB) | Mode | Frequency Weighting | Integrating Time | Freq. (kHz) | Burst Duration (ms) | Burst Duty Factor | Burst Level (dB) | Equivalent Level (dB) | Reading (dB) | Type 1 Spec. (dB) | |
| 50 - 110 | LAeq | A | 10 sec. | 4 | 1 | 1/10 | 110 | 100 | 100.1 | ± 0.5 | |
| | | | | | | 1/10 ² | | 90 | 89.9 | ± 0.5 | |
| | | | 60 sec. | | | 1/10 ³ | | 80 | 79.6 | ± 1.0 | |
| | | | 5 min. | | | 1/104 | | 70 | 69.7 | ± 1.0 | |

Remarks: - UUT Microphone Model No.: UC-53A & S/N: 307435

- Mfr's Spec. : IEC 60651 Type 1 & IEC 60804 Type 1

- Uncertainties of Applied Value: 94 dB : 31.5 Hz - 125 Hz : \pm 0.35 dB

250 Hz - 500 Hz : \pm 0.30 dB 1 kHz $: \pm 0.20 \text{ dB}$ 2 kHz - 4 kHz $: \pm 0.35 \text{ dB}$ 8 kHz $: \pm 0.45 \text{ dB}$

12.5 kHz $: \pm 0.70 \text{ dB}$

104 dB : 1 kHz $: \pm 0.10 \text{ dB (Ref. 94 dB)}$ 114 dB : 1 kHz $: \pm 0.10 \text{ dB (Ref. 94 dB)}$ Burst equivalent level $: \pm 0.2 \text{ dB}$ (Ref. 110 dB) continuous sound level)

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

Note:

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

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E-mail/電郵: callab(a suncreation.com Website/網址: www.suncreation.com



Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.:

C163248

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號: IC16-1307)

Date of Receipt / 收件日期: 10 June 2016

Description / 儀器名稱

Sound Level Calibrator

Manufacturer / 製造商 Model No. / 型號

Rion

Serial No./編號

NC-73 10997142

Supplied By / 委託者

Envirotech Services Co.

Room 113, 1/F, My Loft, 9 Hoi Wing Road, Tuen Mun,

New Territories, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : $(23 \pm 2)^{\circ}$ C Relative Humidity / 相對濕度 :

 $(55 \pm 20)\%$

Line Voltage / 電壓 :

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期

15 June 2016

TEST RESULTS / 測試結果

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

The results do not exceed manufacturer's specification.

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

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

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

Tested By

測試

HT Wong

Technical Officer

Certified By

核證

Lee Project/Engineer Date of Issue

17 June 2016

簽發日期

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Certificate of Calibration 校正證書

Certificate No.: C163248

證書編號

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

Equipment ID CL130 CL281 TST150A

Description Universal Counter Multifunction Acoustic Calibrator Measuring Amplifier

Certificate No. C153519 PA160023 C161175

- 4. Test procedure: MA100N.
- 5. Results:

5.1 Sound Level Accuracy

| UUT Nominal Value | Measured Value (dB) | Mfr's Spec. | Uncertainty of Measured Value (dB) |
|----------------------|------------------------|-------------|------------------------------------|
| 94 dB, 1 kHz | 93.7 | ± 0.5 | ± 0.2 |

Frequency Accuracy

| UUT Nominal Value | Measured Value | Mfr's | Uncertainty of Measured Value |
|-------------------|----------------|--------------------------|-------------------------------|
| (kHz) | (kHz) | Spec. | (Hz) |
| 1 | 0.985 | $1 \text{ kHz} \pm 2 \%$ | ± 1 |

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

Note:

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

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

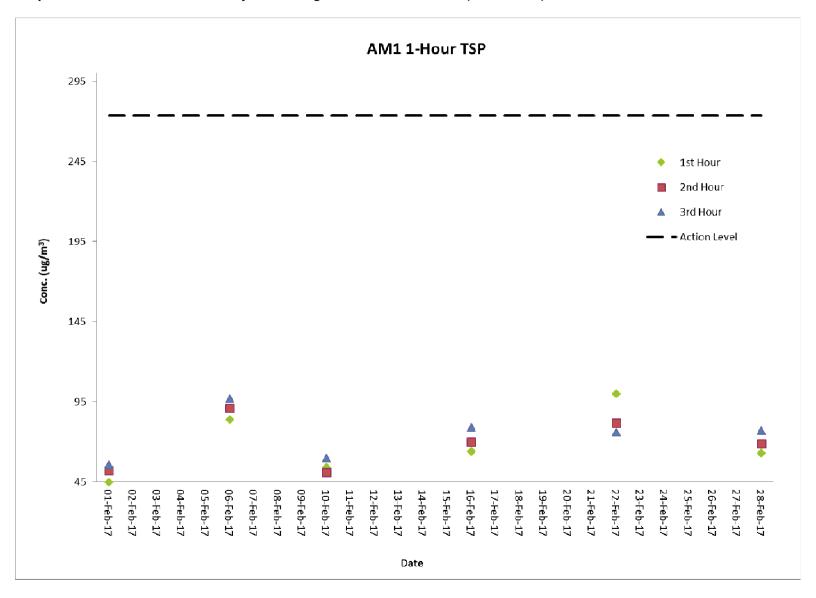
本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

G. Graphical Plots of the Monitoring Results

Air Quality Monitoring Result at Station AM1 (1-hour TSP)

| | | | | Conc. (µg/m³ | Action | Limit | |
|-----------|-----------|---------------|----------------------|----------------------|----------------------|---------------|---------------|
| | Weather | | | | | Level | Level |
| Date | Condition | Time | 1 st Hour | 2 nd Hour | 3 rd Hour | $(\mu g/m^3)$ | $(\mu g/m^3)$ |
| 01-Feb-17 | Fine | 10:50 - 16:00 | 45 | 52 | 56 | 273.7 | 500 |
| 06-Feb-17 | Fine | 10:42 - 16:00 | 84 | 91 | 97 | 273.7 | 500 |
| 10-Feb-17 | Cloudy | 8:02 - 11:02 | 54 | 51 | 60 | 273.7 | 500 |
| 16-Feb-17 | Sunny | 10:48 - 16:00 | 64 | 70 | 79 | 273.7 | 500 |
| 22-Feb-17 | Cloudy | 10:47 - 16:00 | 100 | 82 | 76 | 273.7 | 500 |
| 28-Feb-17 | Sunny | 10:40 - 16:00 | 63 | 69 | 77 | 273.7 | 500 |

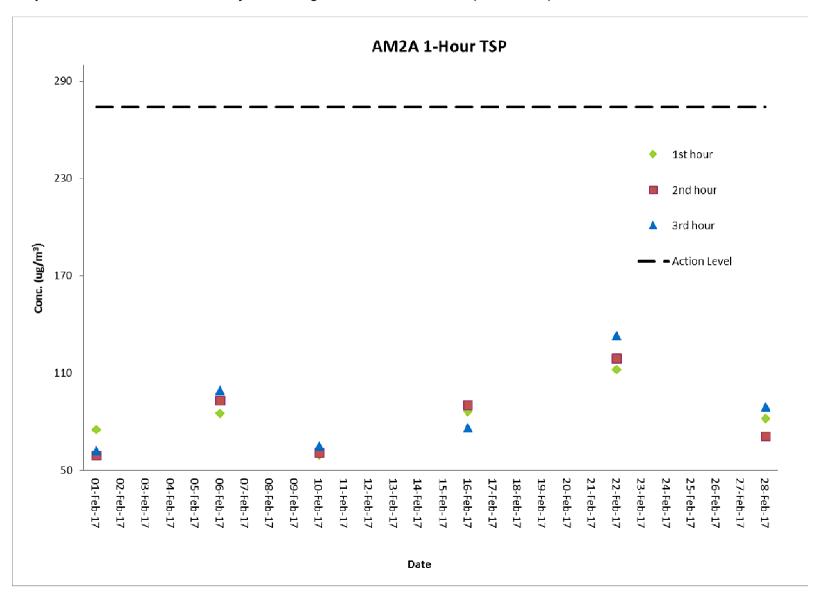
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (1-hour TSP)



Air Quality Monitoring Result at Station AM2A (1-hour TSP)

| | | | Action | Limit | | | |
|-----------|-----------|---------------|----------------------|----------------------|----------------------|---------------|---------------|
| | Weather | | | | | Level | Level |
| Date | Condition | Time | 1 st Hour | 2 nd Hour | 3 rd Hour | $(\mu g/m^3)$ | $(\mu g/m^3)$ |
| 01-Feb-17 | Fine | 11:02 - 16:10 | 75 | 59 | 62 | 274.2 | 500 |
| 06-Feb-17 | Fine | 10:55 - 16:10 | 85 | 93 | 99 | 274.2 | 500 |
| 10-Feb-17 | Cloudy | 8:14 - 11:14 | 59 | 61 | 65 | 274.2 | 500 |
| 16-Feb-17 | Sunny | 11:02 - 16:10 | 86 | 90 | 76 | 274.2 | 500 |
| 22-Feb-17 | Cloudy | 11:00 - 16:10 | 112 | 119 | 133 | 274.2 | 500 |
| 28-Feb-17 | Sunny | 10:54 - 16:10 | 82 | 71 | 89 | 274.2 | 500 |

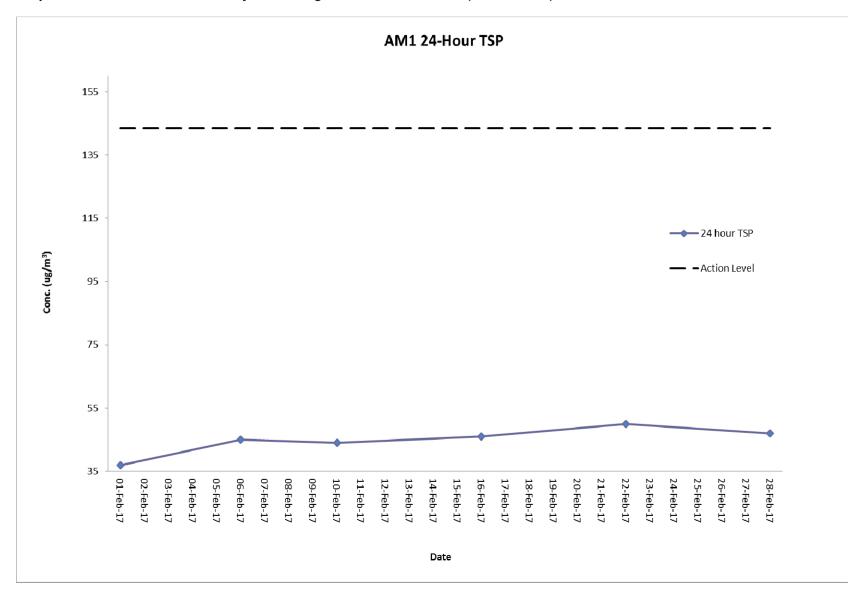
Graphical Presentation of Air Quality Monitoring Result at Station AM2A (1-hour TSP)



Air Quality Monitoring Result at Station AM1 (24-hour TSP)

| Star | 't | Finis | sh | Filter W | eight (g) | Elapsed Time Reading | | Sampling | Flov | v Rate (m ³ / | min) | Conc. | Weather | Action | Limit |
|-----------|-------|-----------|-------|----------|-----------|-------------------------|----------|------------|---------|--------------------------|---------|---------|-----------|--------|-------|
| Date | Time | Date | Time | Initial | Final | Initial | Final | Time (hrs) | Initial | Final | Average | (μg/m³) | Condition | Level | Level |
| 01-Feb-17 | 10:52 | 02-Feb-17 | 10:52 | 2.7999 | 2.8713 | 20592.38 | 20616.38 | 24 | 1.33 | 1.33 | 1.33 | 37 | Fine | 143.6 | 260 |
| 06-Feb-17 | 10:40 | 07-Feb-17 | 10:40 | 2.8132 | 2.8986 | 20616.38 | 20640.38 | 24 | 1.33 | 1.33 | 1.33 | 45 | Fine | 143.6 | 260 |
| 10-Feb-17 | 08:00 | 11-Feb-17 | 08:00 | 2.793 | 2.8771 | 20640.38 | 20664.38 | 24 | 1.33 | 1.33 | 1.33 | 44 | Cloudy | 143.6 | 260 |
| 16-Feb-17 | 10:50 | 17-Feb-17 | 10:50 | 2.7735 | 2.8535 | 20664.38 | 20688.38 | 24 | 1.22 | 1.22 | 1.22 | 46 | Sunny | 143.6 | 260 |
| 22-Feb-17 | 10:45 | 23-Feb-17 | 10:45 | 2.78 | 2.868 | 20688.38 | 20712.38 | 24 | 1.22 | 1.22 | 1.22 | 50 | Cloudy | 143.6 | 260 |
| 28-Feb-17 | 10:42 | 01-Mar-17 | 10:42 | 2.788 | 2.8711 | 20712.38 | 20736.38 | 24 | 1.22 | 1.22 | 1.22 | 47 | Sunny | 143.6 | 260 |

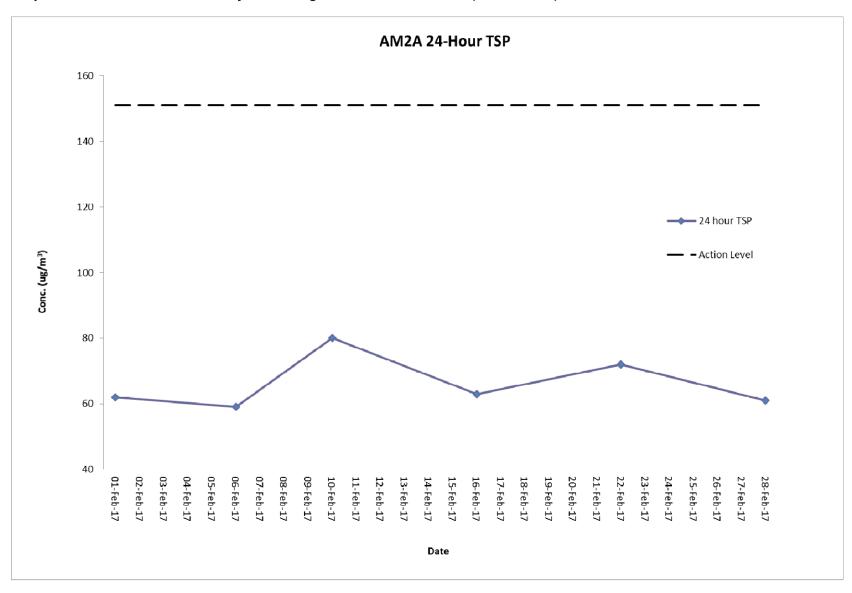
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (24-hour TSP)



Air Quality Monitoring Result at Station AM2A (24-hour TSP)

| Star | 't | Finis | sh | Filter W | eight (g) | Elapsed Time Reading | | Sampling | Flow Rate (m ³ /min) | | Conc. | Weather | Action | Limit | |
|-----------|-------|-----------|-------|----------|-----------|-------------------------|----------|------------|---------------------------------|-------|---------|---------|-----------|-------|-------|
| Date | Time | Date | Time | Initial | Final | Initial | Final | Time (hrs) | Initial | Final | Average | (μg/m³) | Condition | Level | Level |
| 01-Feb-17 | 11:04 | 02-Feb-17 | 11:04 | 2.8132 | 2.9210 | 16247.59 | 16271.59 | 24 | 1.21 | 1.21 | 1.21 | 62 | Fine | 151.1 | 260 |
| 06-Feb-17 | 10:52 | 07-Feb-17 | 10:52 | 2.7880 | 2.8912 | 16271.59 | 16295.59 | 24 | 1.21 | 1.21 | 1.21 | 59 | Fine | 151.1 | 260 |
| 10-Feb-17 | 08:12 | 11-Feb-17 | 08:12 | 2.7736 | 2.9125 | 16295.59 | 16319.59 | 24 | 1.21 | 1.21 | 1.21 | 80 | Cloudy | 151.1 | 260 |
| 16-Feb-17 | 11:00 | 17-Feb-17 | 11:00 | 2.7832 | 2.9009 | 16319.59 | 16343.59 | 24 | 1.30 | 1.30 | 1.3 | 63 | Sunny | 151.1 | 260 |
| 22-Feb-17 | 10:57 | 23-Feb-17 | 10:57 | 2.7800 | 2.9145 | 16343.59 | 16367.59 | 24 | 1.30 | 1.30 | 1.3 | 72 | Cloudy | 151.1 | 260 |
| 28-Feb-17 | 10:52 | 01-Mar-17 | 10:52 | 2.7757 | 2.8908 | 16367.59 | 16391.59 | 24 | 1.30 | 1.30 | 1.3 | 61 | Sunny | 151.1 | 260 |

Graphical Presentation of Air Quality Monitoring Result at Station AM2A (24-hour TSP)



Noise Monitoring Result at Station NM1A

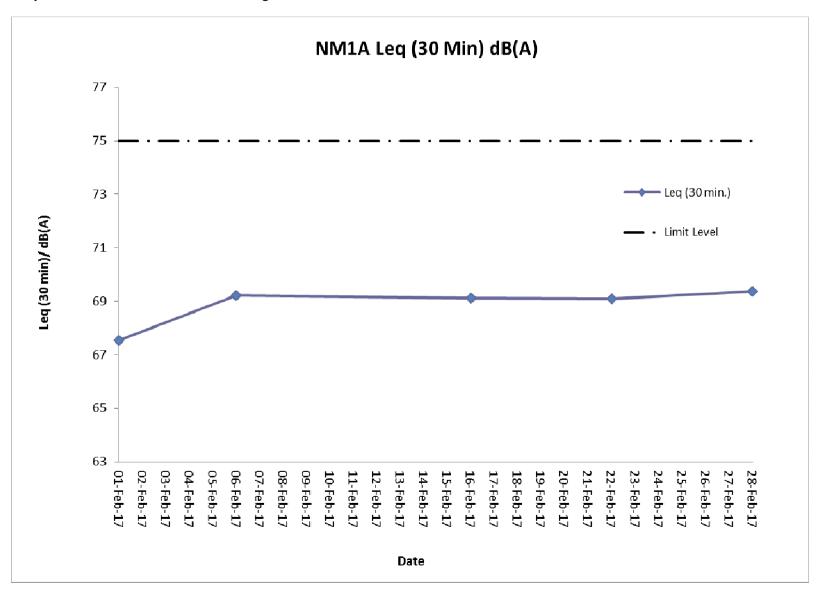
| Date | Time | Measured L ₁₀ dB(A) | Measured L ₉₀ dB(A) | L _{eq} (30 min.) dB(A) |
|-----------|-------|--------------------------------|--------------------------------|---------------------------------|
| 01-Feb-17 | 14:00 | 66.1 | 62.1 | |
| 01-Feb-17 | 14:05 | 67.1 | 62.4 | |
| 01-Feb-17 | 14:10 | 67.4 | 63.1 | 68 |
| 01-Feb-17 | 14:15 | 66.0 | 61.7 | 00 |
| 01-Feb-17 | 14:20 | 66.5 | 62.2 | |
| 01-Feb-17 | 14:25 | 66.9 | 62.8 | |
| 06-Feb-17 | 14:00 | 68.0 | 62.7 | |
| 06-Feb-17 | 14:05 | 67.9 | 62.4 | |
| 06-Feb-17 | 14:10 | 68.8 | 63.0 | 69 |
| 06-Feb-17 | 14:15 | 68.0 | 62.9 | 09 |
| 06-Feb-17 | 14:20 | 68.4 | 63.2 | |
| 06-Feb-17 | 14:25 | 67.7 | 63.0 | |
| 16-Feb-17 | 14:00 | 68.0 | 63.1 | |
| 16-Feb-17 | 14:05 | 68.7 | 64.1 | |
| 16-Feb-17 | 14:10 | 68.1 | 63.7 | 69 |
| 16-Feb-17 | 14:15 | 68.4 | 64.9 | 09 |
| 16-Feb-17 | 14:20 | 68.9 | 64.8 | |
| 16-Feb-17 | 14:25 | 68.2 | 63.7 | |
| 22-Feb-17 | 14:00 | 67.9 | 63.2 | |
| 22-Feb-17 | 14:05 | 68.0 | 64.7 | |
| 22-Feb-17 | 14:10 | 68.2 | 63.8 | 69 |
| 22-Feb-17 | 14:15 | 68.7 | 64.2 | 09 |
| 22-Feb-17 | 14:20 | 68.0 | 63.9 | |
| 22-Feb-17 | 14:25 | 68.8 | 64.2 | |
| 28-Feb-17 | 14:00 | 68.7 | 63.1 | |
| 28-Feb-17 | 14:05 | 68.0 | 63.2 | |
| 28-Feb-17 | 14:10 | 68.9 | 62.9 | 60 |
| 28-Feb-17 | 14:15 | 69.2 | 63.7 | - 69 |
| 28-Feb-17 | 14:20 | 67.7 | 63.2 | |
| 28-Feb-17 | 14:25 | 68.8 | 64.1 | |

Remarks:

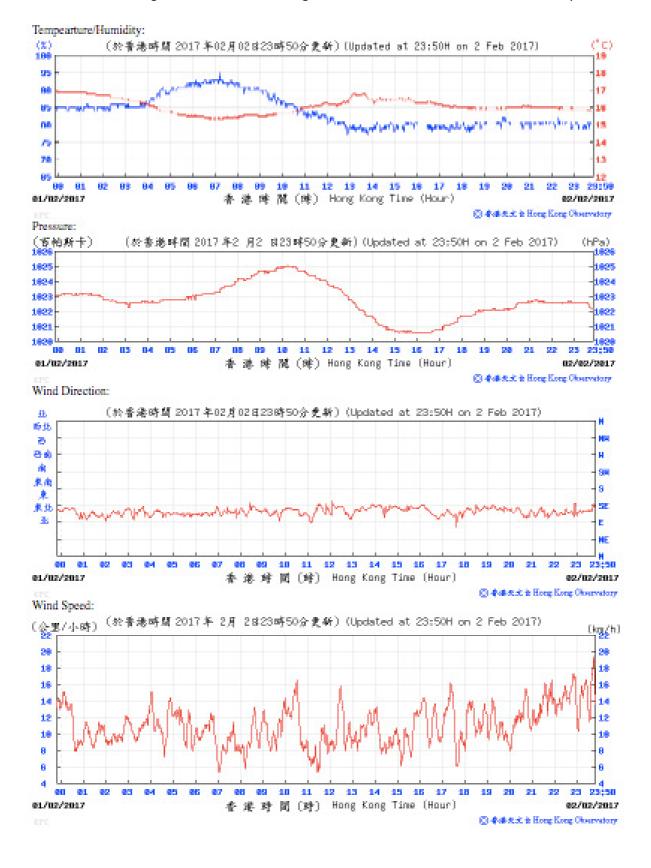
+3dB (A) correction was applied to free-field measurement.

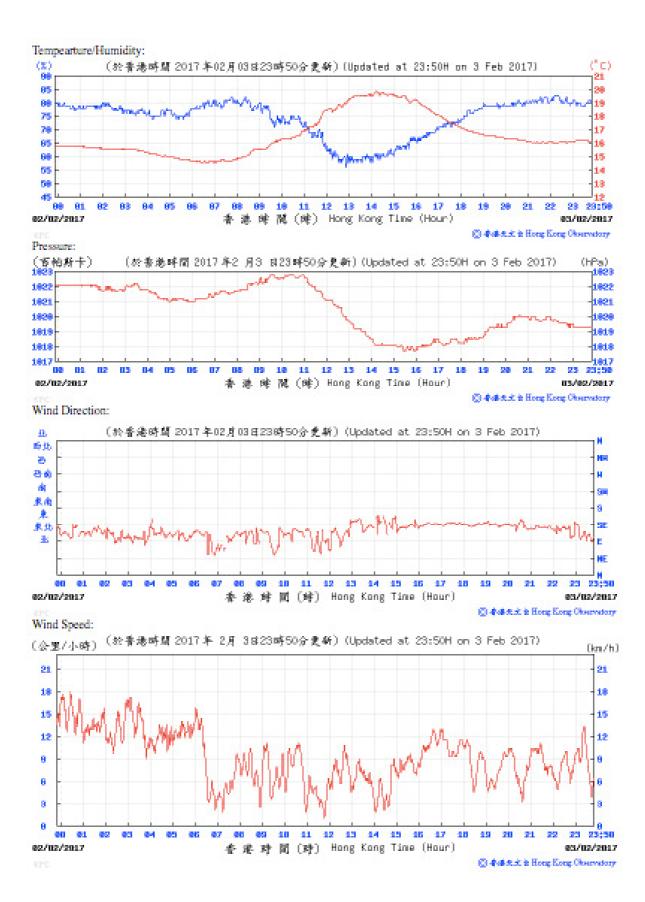


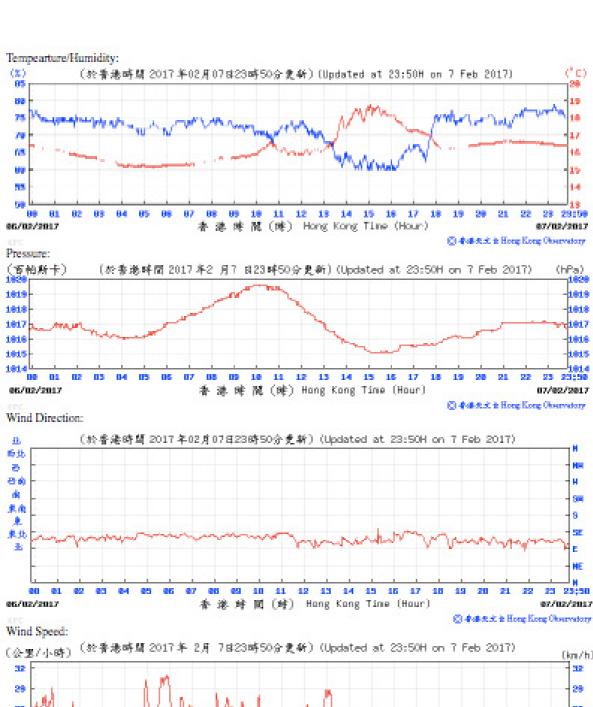
The station set-up of a free-field measurement at Station NM1A.

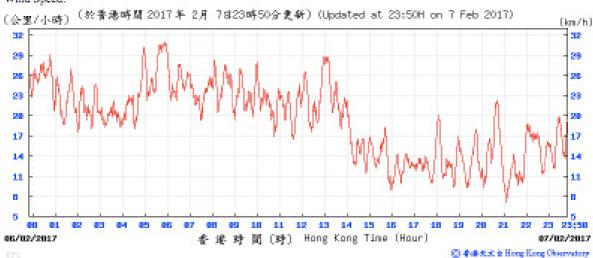


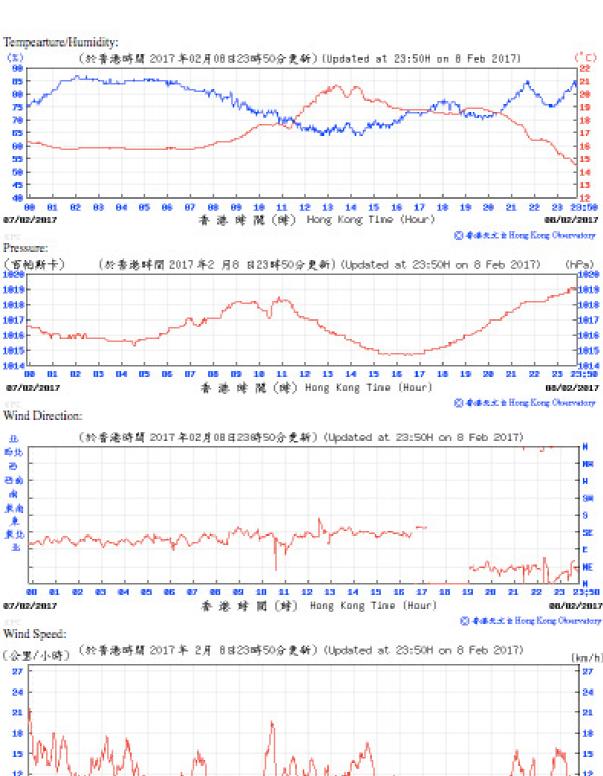
H. Meteorological Data Extracted from Hong Kong Observatory

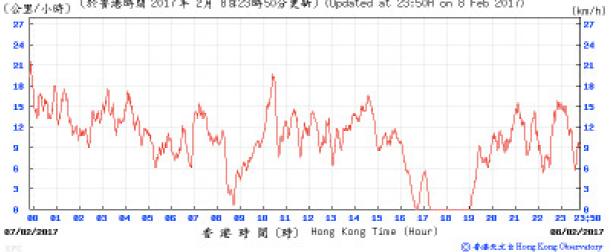




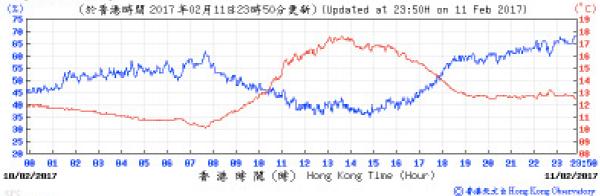












Pressure: (香柏斯卡) (於香港時間 2017年2 月11日23時50分更新) (Updated at 23:50H on 11 Feb 2017). (hPa) 1828 1027 1626 1826 1025 -1624 23;50 01 83 14 12 13 14 13 16 17

香港離院(除) Hong Kong Time (Hour)

Wind Direction:

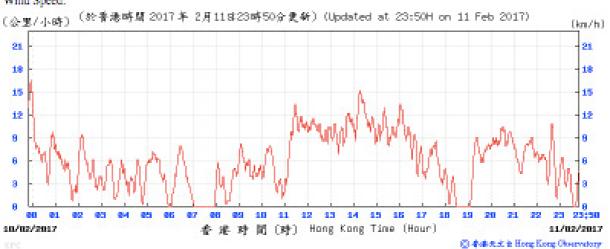
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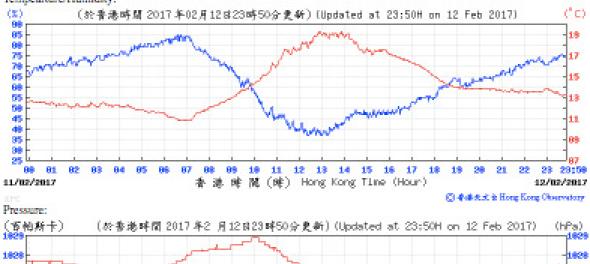
wind Direction.

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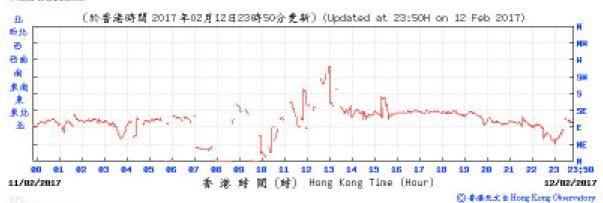


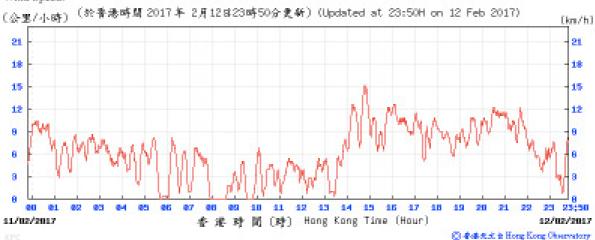


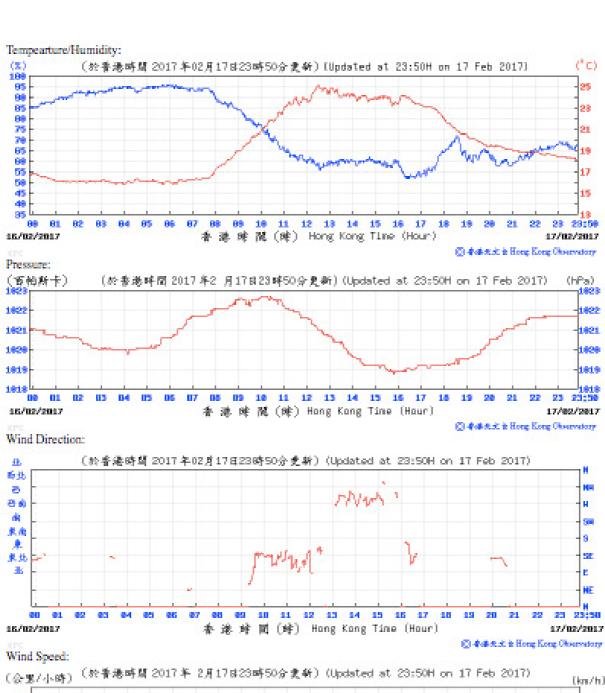


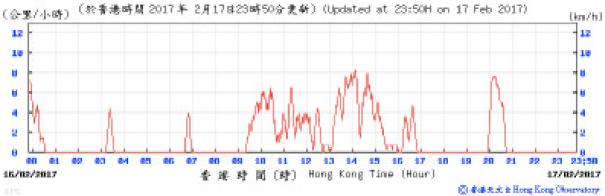


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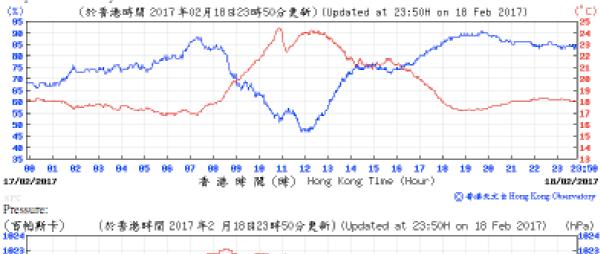








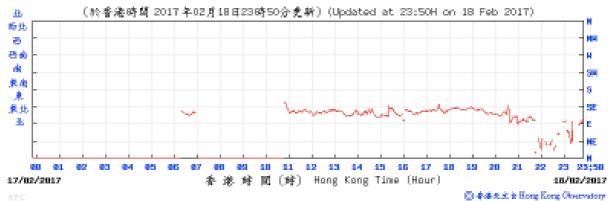


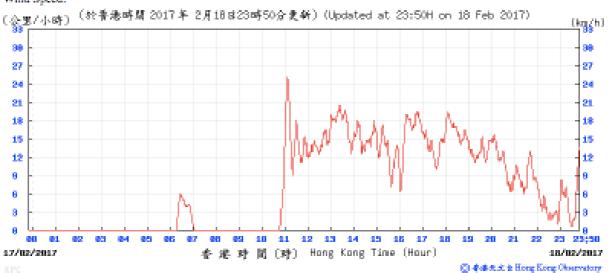




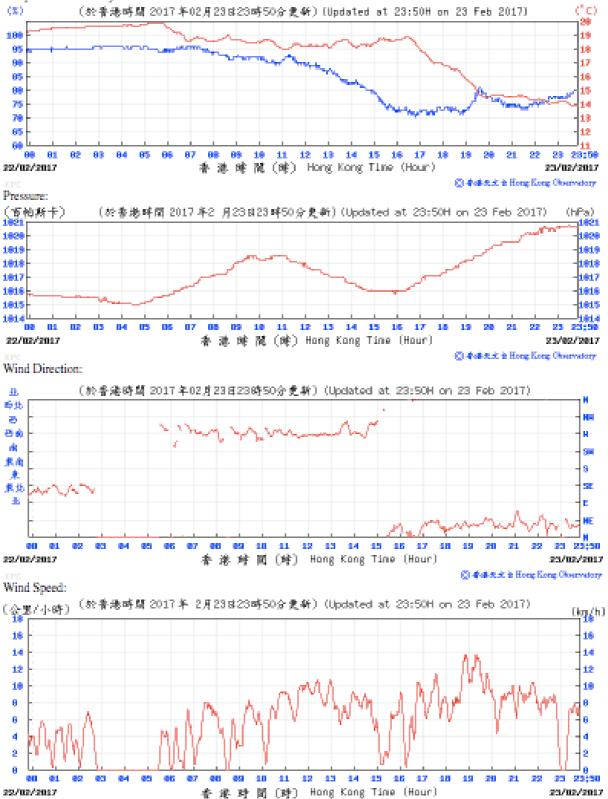
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Wind Direction:

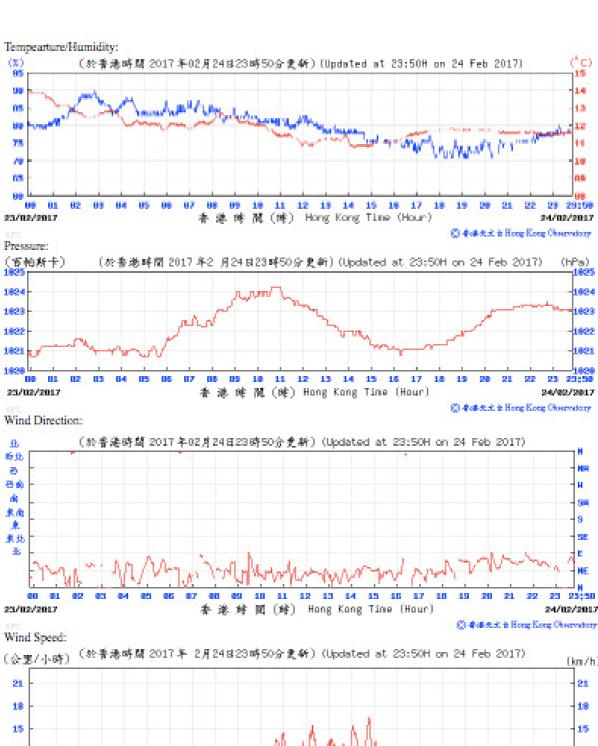


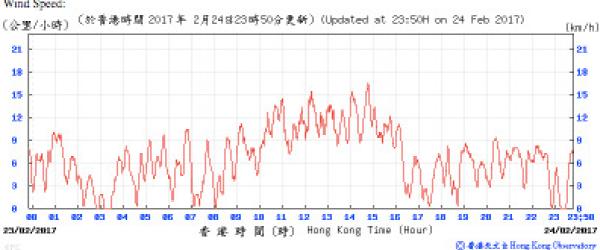




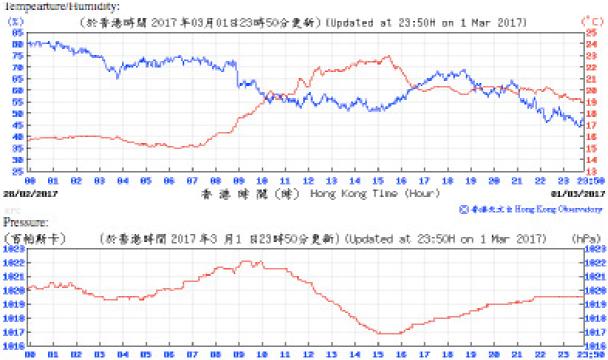


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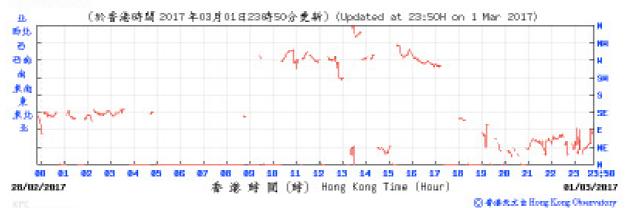




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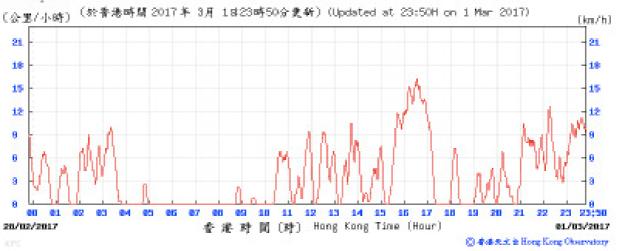
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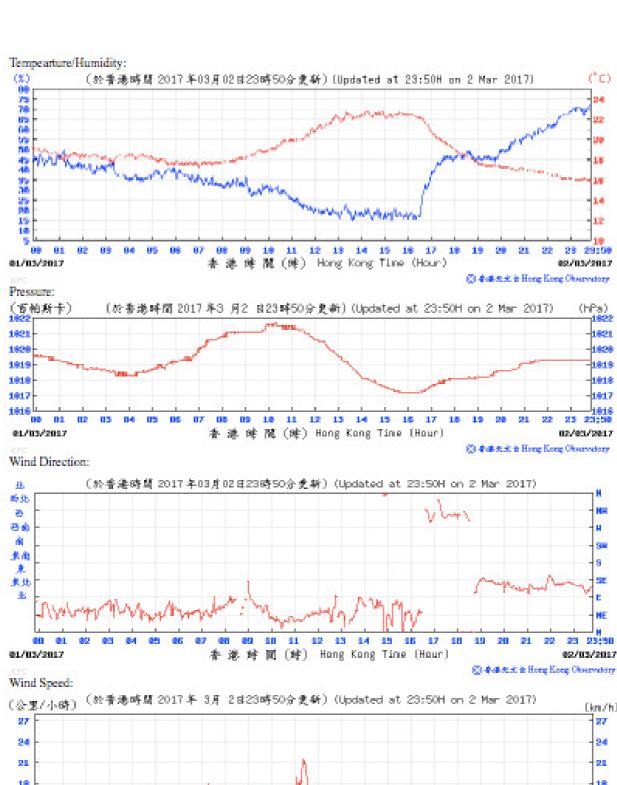
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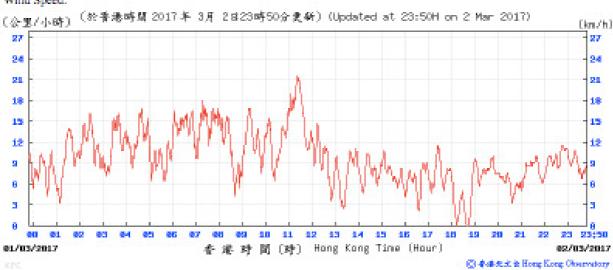
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I. Waste Flow table



Table I-1: Monthly Waste Flow Table for M+ Museum

| | Actual Quantities of Inert C&D Materials Generated Monthly Actual Quantities of C&D Wastes Generated Monthly Actual Quantities of C&D Wastes Generated Monthly | | | | | | | lv | | | | | |
|---------------------|--|---|----------|--------------------------|----------|------------------------------------|------------------|----------|----------------------------------|----------|-----------------|-------------------|--------------------------------------|
| Month | Total Quantity Generated | Hard Rocks and Large Broken Concrete | | Reused in other Projects | | Disposed to Sorting Facility | Imported Fill | Metals | Paper/ Cardboard Packaging | Plastics | Wood/ Timber | Chemical Waste | Others, e.g. General Refuse |
| | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) |
| 2015 | | | | | | | | | | | | | |
| Nov | 46607.4 | 0.0 | 0.0 | 8240.0 | 38367.4 | 0.0 | 0.0 | 76.2 | 0.0 | 0.0 | 0.0 | 0.0 | 67.6 |
| Dec | 29652.9 | 0.0 | 0.0 | 29621.4 | 31.5 | 0.0 | 0.0 | 26.3 | 0.0 | 0.0 | 0.0 | 1.0 | 66.0 |
| Sub-total (2015) | 76260.3 | 0.0 | 0.0 | 37861.4 | 38398.9 | 0.0 | 0.0 | 102.5 | 0.0 | 0.0 | 0.0 | 1.0 | 133.6 |
| 2016 | | | | | | | | | | | | | |
| Jan | 21077.4 | 0.0 | 6352.0 | 14576.0 | 149.4 | 0.0 | 0.0 | 18.8 | 0.0 | 0.0 | 0.0 | 0.0 | 23.2 |
| Feb | 7626.2 | 0.0 | 3424.0 | 4048.0 | 154.2 | 0.0 | 0.0 | 59.8 | 0.0 | 0.0 | 0.0 | 0.0 | 20.5 |
| Mar | 10442.5 | 0.0 | 1600.0 | 7888.0 | 954.5 | 0.0 | 0.0 | 29.7 | 0.0 | 0.0 | 0.0 | 0.0 | 46.3 |
| Apr | 30413.2 | 0.0 | 6352.0 | 23408.0 | 653.2 | 0.0 | 0.0 | 25.8 | 0.1 | 0.0 | 27.8 | 0.0 | 34.5 |
| May | 24083.5 | 0.0 | 112.0 | 23216.0 | 755.5 | 0.0 | 0.0 | 61.5 | 0.4 | 0.0 | 33.6 | 0.0 | 62.3 |
| Jun | 7880.1 | 0.0 | 4736.0 | 2384.0 | 760.1 | 0.0 | 0.0 | 106.6 | 0.1 | 0.0 | 14.6 | 0.0 | 52.8 |
| Jul | 5893.1 | 0.0 | 2656.0 | 2240.0 | 997.1 | 0.0 | 0.0 | 77.6 | 0.0 | 0.0 | 33.6 | 0.0 | 83.1 |
| Aug | 13709.6 | 0.0 | 0.0 | 12432.0 | 1277.6 | 0.0 | 0.0 | 111.3 | 0.3 | 0.0 | 38.5 | 0.0 | 104.9 |
| Sep | 6702.0 | 0.0 | 0.0 | 5648.0 | 1000.1 | 53.9 | 0.0 | 104.2 | 0.0 | 0.0 | 45.5 | 0.2 | 107.9 |
| Oct | 2103.6 | 0.0 | 0.0 | 496.0 | 1595.4 | 12.2 | 0.0 | 83.0 | 0.4 | 0.0 | 73.5 | 0.0 | 108.2 |
| Nov | 3302.7 | 0.0 | 0.0 | 2384.0 | 855.5 | 63.2 | 0.0 | 88.4 | 0.6 | 0.0 | 63.0 | 0.0 | 129.1 |
| Dec | 899.8 | 0.0 | 0.0 | 736.0 | 126.8 | 37.0 | 0.0 | 48.3 | 0.6 | 0.0 | 70.0 | 0.0 | 89.0 |
| Sub-total (2016) | 134133.5 | 0.0 | 25232.0 | 99456.0 | 9279.3 | 166.3 | 0.0 | 814.9 | 2.5 | 0.0 | 400.1 | 0.2 | 861.8 |
| Total | 210393.8 | 0.0 | 25232.0 | 137317.4 | 47678.2 | 166.3 | 0.0 | 917.4 | 2.5 | 0.0 | 400.1 | 1.2 | 995.4 |
| 2017 | • | | · | | | | | | | | | • | |
| Jan | 675.2 | 0.0 | 0.0 | 432.0 | 237.9 | 5.3 | 0.0 | 79.5 | 1.0 | 0.0 | 70.0 | 0.0 | 79.7 |
| Feb | 927.7 | 0.0 | 0.0 | 768.0 | 125.6 | 34.0 | 0.0 | 70.5 | 0.6 | 0.0 | 84.0 | 0.0 | 81.4 |
| Mar | | | | | | | | | | | | | |
| Apr | | | | | | | | | | | | | |
| Sub-total (2017) | 1602.9 | 0.0 | 0.0 | 1200.0 | 363.5 | 39.3 | 0.0 | 150.1 | 1.6 | 0.0 | 154.0 | 0.0 | 161.1 |

Note

^{-15.52} ton and 110.12 ton of inert C&D material were disposed of as public fill to Tuen Mun Area 38 and Tseung Kwan O Area 137 Public Fill respectively in the reporting month.

⁻For inert C&D materials reused in other projects, the projects refer to (1) Green Valley; (2) Advance Works for Shek Wu Hui Sewage Treatment Works (3) Design and Construction of Kai Tak Cable Tunnel, CLP; (4) MTR Contract 1002 Whampoa Station and Overrun Tunnel; (5) CEDD Tuen Mun Area 54 Contract No. CV/2015/03; (6) Union Construction Ltd.'s site; (7) Foundation Works at Marriot Hotel at Ocean Park.

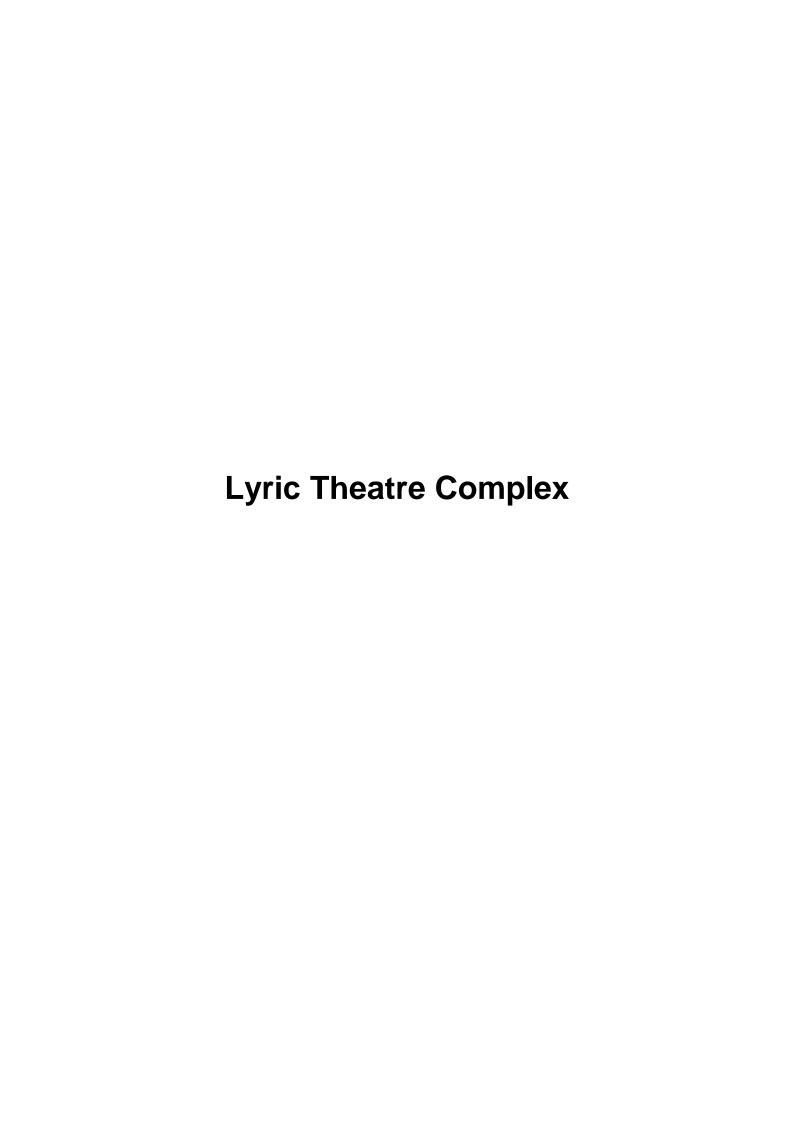


Table I-2: Monthly Waste Flow Table for Lyric Theatre Complex

| | Actual Quantities of Inert C&D Materials Generated Monthly Actual Quantities of C&D Wastes Generated Monthly | | | | | rated Mont | hly | | | | | | |
|---------------------|---|---|------------------------------|--------------------------------|-------------------------------|-----------------------------------|------------------|----------|----------------------------------|----------|-----------------|-------------------|--------------------------------------|
| Month | Total Quantity Generated | Hard Rocks and Large Broken Concrete | Reused in the Contract | Reused in other Projects | Disposed as Public Fill | Disposed to Sorting Facilty | Imported Fill | Metals | Paper/ Cardboard Packaging | Plastics | Wood/ Timber | Chemical Waste | Others, e.g. General Refuse |
| | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) | (in ton) |
| 2016 | | | | | | | | | | | | | |
| Mar | 2702.1 | 0.0 | 0.0 | 0.0 | 2702.1 | 0.0 | 0.0 | 4.5 | 0.1 | 0.0 | 0.0 | 0.0 | 30.6 |
| Apr | 8631.5 | 0.0 | 0.0 | 0.0 | 8631.5 | 0.0 | 0.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.2 |
| May | 12487.8 | 0.0 | 0.0 | 0.0 | 12487.8 | 0.0 | 0.0 | 34.0 | 0.0 | 0.0 | 0.0 | 0.7 | 60.5 |
| Jun | 8600.8 | 0.0 | 0.0 | 0.0 | 8600.8 | 0.0 | 0.0 | 31.4 | 0.2 | 0.0 | 0.0 | 0.5 | 13.5 |
| Jul | 12624.2 | 0.0 | 0.0 | 0.0 | 12624.2 | 0.0 | 0.0 | 19.6 | 0.0 | 0.0 | 0.0 | 2.0 | 9.9 |
| Aug | 14419.9 | 0.0 | 0.0 | 0.0 | 14419.9 | 0.0 | 0.0 | 43.9 | 0.0 | 0.0 | 0.0 | 0.0 | 11.1 |
| Sep | 13671.3 | 0.0 | 0.0 | 0.0 | 13671.3 | 0.0 | 0.0 | 59.8 | 0.0 | 0.0 | 0.0 | 1.6 | 12.4 |
| Oct | 13088.9 | 0.0 | 0.0 | 0.0 | 13088.9 | 0.0 | 0.0 | 37.1 | 0.2 | 1.5 | 0.0 | 0.0 | 15.2 |
| Nov | 12424.7 | 0.0 | 0.0 | 0.0 | 12424.7 | 0.0 | 0.0 | 74.7 | 0.0 | 0.0 | 0.0 | 1.4 | 10.2 |
| Dec | 12487.6 | 0.0 | 0.0 | 0.0 | 12487.6 | 0.0 | 0.0 | 13.9 | 0.0 | 0.0 | 0.0 | 1.3 | 9.0 |
| Sub-total (2016) | 111138.8 | 0.0 | 0.0 | 0.0 | 111138.8 | 0.0 | 0.0 | 334.7 | 0.4 | 1.5 | 0.0 | 7.6 | 191.6 |
| 2017 | | | | | | | | | | | | | |
| Jan | 9607.8 | 0.0 | 0.0 | 0.0 | 9607.8 | 0.0 | 0.0 | 29.5 | 0.0 | 0.0 | 0.0 | 0.0 | 7.3 |
| Feb | 9108.2 | 0.0 | 0.0 | 0.0 | 9108.2 | 0.0 | 0.0 | 50.2 | 0.2 | 0.0 | 0.0 | 0.7 | 9.8 |
| Mar | 0.0 | | | | | | | | | | | | |
| Apr | 0.0 | | | | | | | | | | | | |
| May | 0.0 | | | | | | | | | | | | |
| Jun | 0.0 | | | | | | | | | | | | |
| Sub-total (2017) | 18716.0 | 0.0 | 0.0 | 0.0 | 18716.0 | 0.0 | 0.0 | 79.7 | 0.2 | 0.0 | 0.0 | 0.7 | 17.1 |
| Total | 129854.7 | 0.0 | 0.0 | 0.0 | 129854.7 | 0.0 | 0.0 | 414.4 | 0.6 | 1.5 | 0.0 | 8.3 | 208.7 |

Note:

^{-1,142.06} ton and 7966.1 ton of inert C&D material were disposed of as public fill to Tuen Mun Area 38 and Tseung Kwan O Area 137 respectively in the reporting month.

J. Environmental Mitigation Measures – Implementation Status

Table J-1: Environmental Mitigation Measures Implementation Status

| | | Implementation Stage | | | |
|---------------|--|----------------------|------------------------------|--|--|
| EM&A Ref. | Recommendation Measures | M+ Museum | Lyric Theatre Complex | | |
| Air Quality I | mpact (Construction) | | | | |
| 2.1 & | General Dust Control Measures | | | | |
| 10.3.1 | Frequent water spraying for active construction areas (12 times a day or once every one hour), including Heavy construction activities such as construction of buildings or roads, drilling, ground excavation, cut and fill operations (i.e., earth moving) | Obs | Obs | | |
| 2.1 & | Best Practice For Dust Control | | | | |
| 10.3.1 | The relevant best practices for dust control as stipulated in the Air Pollution Control (construction Dust) Regulation should be adopted to further reduce the construction dust impacts from the Project. These best practices include: | | | | |
| | Good Site Management | | | | |
| | • Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or byproducts should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning. | Obs | ✓ | | |
| | Disturbed Parts of the Roads | | | | |
| | Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or | ✓ | ✓ | | |
| | Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. | ✓ | ✓ | | |
| | Exposed Earth | | | | |
| | Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. | N/A | N/A | | |
| | Loading, Unloading or Transfer of Dusty Materials | | | | |
| | All dusty materials should be sprayed with water immediately prior to any loading or transfer operation | ✓ | ✓ | | |

| | | mpiomo | situation Stage |
|----------|--|-----------|------------------------------|
| M&A Ref. | Recommendation Measures | M+ Museum | Lyric Theatre Complex |
| | so as to keep the dusty material wet. | | |
| | Debris Handling | | |
| | Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides. | ✓ | ✓ |
| | Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. | ✓ | ✓ |
| | Transport of Dusty Materials | | ✓ |
| | Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. | Obs | · |
| | Wheel washing | , | |
| | Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. | √ | ✓ |
| | Use of vehicles | | |
| | The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site. | ✓ | ✓ |
| | Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. | ✓ | ✓ |
| | Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. | ✓ | ✓ |
| | Site hoarding | | |
| | Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. | ✓ | ✓ |
| 1 & | Best Practicable Means for Cement Works (Concrete Batching Plant) | | |
| 10.3.1 | The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2(93) should be followed and implemented to further reduce the construction dust impacts of the Project. These best practices include: | | |
| | Exhaust from Dust Arrestment Plant | | |

| | | impieme | entation Stage |
|-------------|--|-----------|------------------------------|
| EM&A Ref. | Recommendation Measures | M+ Museum | Lyric Theatre Complex |
| | Wherever possible the final discharge point from particulate matter arrestment plant, where is not necessary to achieve dispersion from residual pollutants, should be at low level to minimise the effect on the local community in the case of abnormal emissions and to facilitate maintenance and inspection | √ | √ |
| | Emission Limits | | |
| | All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist or smoke | ✓ | ✓ |
| | Engineering Design/Technical Requirements | | |
| | As a general guidance, the loading, unloading, handling and storage of fuel, raw materials, products, wastes or by-products should be carried out in a manner so as to prevent the release of visible dust and/or other noxious or offensive emissions | √ | ✓ |
| | Non-Road Mobile Machinery (NRMM): | | |
| | All NRMMs operating on-site which are subject to emission control of Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation are approved/exempted (as the case may be) and affixed with the requisite approval/exemption labels. | ✓ | ✓ |
| loise Impac | et (Construction) | | |
| 0.4.1 | Good Site Practice Good site Practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction: | √ | Obs |
| | only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; machines and plant that may be in intermittent use to be shut down between work periods or should be | ✓ | ✓ |
| | throttled down to a minimum; plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; | ✓ | ✓ |
| | mobile plant should be sited as far away from NSRs as possible; and | ✓ | ✓ |
| | material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities. | ✓ | ✓ |
| .1 & | Adoption of Quieter PME | | |
| 0.4.1 | The recommended quieter PME adopted in the assessment were taken from the EPD's QPME Inventory and "Sound Power Levels of Other Commonly Used PME" are presented in Table 4.26 in the EIA report. It should be noted that the silenced PME selected for assessment can be found in Hong Kong. | N/A | N/A |
| | | | |

| EM&A Ref. | Recommendation Measures | M+ Museum | Lyric Theatre Complex |
|-----------------|---|-----------|------------------------------|
| 3.1 & 10.4.1 | Use of Movable Noise Barriers Movable noise barriers can be very effective in screening noise from particular items of plant when constructing the Project. Noise barriers located along the active works area close to the noise generating component of a PME could produce at least 10 dB(A) screening for stationary plant and 5 dB(A) for mobile plant provided the direct line of sight between the PME and the NSRs is blocked. | ~ | ✓ |
| 3.1 & 10.4.1 | Use of Noise Enclosure/ Acoustic Shed The use of noise enclosure or acoustic shed is to cover stationary PME such as air compressor and concrete pump. With the adoption of the noise enclosure, the PME could be completely screened, and noise reduction of 15 dB(A) can be achieved according to the EIAO Guidance Note No.9/2010. | N/A | N/A |
| 3.1 & 10.4.1 | Use of Noise Insulating Fabric Noise insulating fabric can also be adopted for certain PME (e.g. drill rig, pilling machine etc). The fabric should be lapped such that there are no openings or gaps on the joints. According to the approved Tsim Sha Tsui Station Northern Subway EIA report (AEIAR-127/2008), a noise reduction of 10 dB(A) can be achieved for the PME lapped with the noise insulating fabric. | ~ | ✓ |
| 3.1 & 10.4.1 | Scheduling of Construction Works outside School Examination Periods During construction phase, the contractor should liaise with the educational institutions (including NSRs LCS and CRGPS) to obtain the examination schedule and avoid the noisy construction activities during school examination periods. | N/A | N/A |
| Water Qualit | ty Impact (Construction) | | |
| 4.1 & 10.5.1 | Construction site runoff and drainage The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended to protect water quality and sensitive uses of the coastal area, and when properly implemented should be sufficient to adequately control site discharges so as to avoid water quality impacts: | | |
| | • At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the WKCDA's Contractor prior to the commencement of construction; | ✓ | ✓ |
| | Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM standards under the WPCO. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the WKCDA's Contractor prior to the commencement of construction. All drainage facilities and erosion and sediment control structures should be regularly inspected and | √ Obs | √ Obs |

| EM&A Ref. | Recommendation Measures | M+ Museum | Lyric Theatre Complex |
|-----------|--|-----------|-----------------------|
| | maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. • Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever | Dom | √ |
| | practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities. • All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, | Rem | v |
| | debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exit where practicable. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. | ~ | ✓ |
| | Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. | ✓ | ✓ |
| | Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and stormwater runoff being directed into foul sewers. Precautions should be taken at any time of the year when rainstorms are likely. Actions should be | ✓ | ✓ |
| | taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC Note PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. • Bentonite slurries used in piling or slurry walling should be reconditioned and reused wherever | ~ | ✓ |
| | practicable. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. | N/A | N/A |
| | Barging facilities and activities | | |
| | Recommendations for good site practices during operation of the proposed barging point include: | | |
| | All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; | N/A | N/A |
| | Loading of barges and hoppers should be controlled to prevent splashing of material into the surrounding water. Barges or hoppers should not be filled to a level that will cause the overflow of | N/A | N/A |

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| | materials or polluted water during loading or transportation; All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; and | N/A | N/A |
| | Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site. | N/A | N/A |
| .1 & | Sewage effluent from construction workforce | | |
| 10.5.1 | Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance. | ✓ | ✓ |
| .1 & 0.5.1 | General construction activities Construction solid waste, debris and refuse generated on-site should be collected, handled and | ✓ | ✓ |
| | disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used. | | |
| | Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event. | Obs | Obs |
| Waste Mana | gement Implications (Construction) | | |
| 6.1 & | Good Site Practices | | |
| 0.7.1 | Recommendations for good site practices during the construction activities include: | | |
| | Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site | ✓ | ✓ |
| | Training of site personnel in proper waste management and chemical handling procedures | ✓ | ✓ |
| | Provision of sufficient waste disposal points and regular collection of waste | Obs | Obs |
| | Appropriate measures to minimise windblown litter and dust/odour during transportation of waste by either covering trucks or by transporting wastes in enclosed containers | Obs | ✓ |
| | Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust introduction to public roads We will be a second of the control | ✓ | ✓ |
| | Well planned delivery programme for offsite disposal such that adverse environmental impact from transporting the inert or non-inert C&D materials is not anticipated | ✓ | ✓ |

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| 6.1 & | Waste Reduction Measures | | |
| 10.7.1 | Recommendations to achieve waste reduction include: | | |
| | Sort inert C&D material to recover any recyclable portions such as metals | ✓ | ✓ |
| | Segregation and storage of different types of waste in different containers or skips to enhance reuse or recycling of materials and their proper disposal | ✓ | ✓ |
| | Encourage collection of recyclable waste such as waste paper and aluminium cans by providing separate labelled bins to enable such waste to be segregated from other general refuse generated by the work force | ✓ | ✓ |
| | Proper site practices to minimise the potential for damage or contamination of inert C&D materials | ✓ | ✓ |
| | Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste | ✓ | ✓ |
| 6.1 & | Inert and Non-inert C&D Materials | | |
| 10.7.1 | In order to minimise impacts resulting from collection and transportation of inert C&D material for off-site disposal, the excavated materials should be reused on-site as fill material as far as practicable. In addition, inert C&D material generated from excavation works could be reused as fill materials in local projects that require public fill for reclamation. | ✓ | ✓ |
| | The surplus inert C&D material will be disposed of at the Government's PFRFs for beneficial use by other projects in Hong Kong. | ✓ | ✓ |
| | Liaison with the CEDD Public Fill Committee (PFC) on the allocation of space for disposal of the inert C&D materials at PFRF is underway. No construction work is allowed to proceed until all issues on management of inert C&D materials have been resolved and all relevant arrangements have been endorsed by the relevant authorities including PFC and EPD. | ✓ | ✓ |
| | The C&D materials generated from general site clearance should be sorted on site to segregate any inert materials for reuse or disposal of at PFRFs whereas the non-inert materials will be disposed of at the designated landfill site. | ✓ | ✓ |
| | • In order to monitor the disposal of inert and non-inert C&D materials at respectively PFRFs and the designated landfill site, and to control fly-tipping, it is recommended that the Contractor should follow the Technical Circular (Works) No.6/2010 for Trip Ticket System for Disposal of Construction & Demolition Materials issued by Development Bureau. In addition, it is also recommended that the Contractor should prepare and implement a Waste Management Plan detailing their various waste arising and waste management practices in accordance with the relevant requirements of the Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site. | ✓ | ✓ |

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| 6.1 & 10.7.1 | Chemical Waste If chemical wastes are produced at the construction site, the Contractor will be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the "Code of Practice on the Packaging Labelling and Storage of Chemical Wastes". Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor should use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed | Rem/ Obs | Obs |
| | recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. Potential environmental impacts arising from the handling activities (including storage, collection, transportation and disposal of chemical waste) are expected to be minimal with the implementation of appropriate mitigation measures as recommended. | ✓ | ✓ |
| 6.1 & 10.7.1 | General Refuse General refuse should be stored in enclosed bins or compaction units separated from inert C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material. | √ | ✓ |
| Land Contai | mination (Construction) | | |
| 7.1 & 10.8.1 | The potential for land contamination issues at the TST Fire Station due to its future relocation will be confirmed by site investigation after land acquisition. Where necessary, mitigation measures for minimising potential exposure to contaminated materials (if any) or remediation measures will be identified. If contaminated land is identified (e.g., during decommissioning of fuel oil storage tanks) after the commencement of works, mitigation measures are proposed in order to minimise the potentially adverse effects on the health and safety of construction workers and impacts arising from the disposal of potentially contaminated materials. | | |
| | The following measures are proposed for excavation and transportation of contaminated material: To minimize the chance for construction workers to come into contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; | N/A | N/A |
| | Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when interacting directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; Stockpiling of contaminated excavated materials on site should be avoided as far as possible: | N/A N/A | N/A N/A |

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| | The use of contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; | N/A | N/A |
| | Vehicles containing any contaminated excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; | N/A | N/A |
| | Truck bodies and tailgates should be sealed to stop any discharge; | N/A | N/A |
| | Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; Speed control for trucks carrying contaminated materials should be exercised; | N/A | N/A |
| | Observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap | N/A | N/A |
| | 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and | N/A | N/A |
| | Maintain records of waste generation and disposal quantities and disposal arrangements. | N/A | N/A |
| Ecological I | mpact (Construction) | | |
| | No mitigation measure is required. | | |
| Landscape a | and Visual Impact (Construction) | | |
| Table 9.1 & 10.8 (CM1) | Trees should be retained in situ on site as far as possible. Should tree removal be unavoidable due to construction impacts, trees will be transplanted or felled with reference to the stated criteria in the Tree Removal Applications to be submitted to relevant government departments for approval in accordance to ETWB TCW No. 29/2004 and 3/2006. | √ | N/A |
| Table 9.1 & 10.8 (CM2) | Compensatory tree planting shall be incorporated to the proposed project and maximize the new tree, shrubs and other vegetation planting to compensate tree felled and vegetation removed. Also, implementation of compensatory planting should be of a ratio not less than 1:1 in terms of quality and quantity within the site. | N/A | N/A |
| Table 9.1 & 10.8 (CM3) | Buffer trees for screening purposes to soften the hard architectural and engineering structures and facilities. | N/A | N/A |
| Table 9.1 & 10.8 (CM4) | Softscape treatments such as vertical green wall panel /planting of climbing and/or weeping plants, etc, to maximize the green coverage and soften the hard architectural and engineering structures and facilities. | N/A | N/A |
| Table 9.1 & 10.8 (CM5) | Roof greening by means of intensive and extensive green roof to maximize the green coverage and improve aesthetic appeal and visual quality of the building/structure. | N/A | N/A |
| Table 9.1 & 10.8 (CM6) | Sensitive streetscape design should be incorporated along all new roads and streets. | N/A | N/A |

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| Table 9.1 & 10.8 (CM7) | Structure, ornamental planting shall be provided along amenity strips to enhance the landscape quality. | N/A | N/A |
| Table 9.1 & 10.8 (CM8) | Landscape design shall be incorporated to architectural and engineering structures in order to provide aesthetically pleasing designs. | N/A | N/A |
| Table 9.1 (CM9) | Minimize the structure of marine facilities to built on the seabed and foreshore in order to minimize the affected extent to the waterbody | N/A | N/A |
| Table 9.2 & 10.9 (MCP1) | Use of decorative screen hoarding/boards | ✓ | ✓ |
| Table 9.2 & 10.9 (MCP2) | Early introduction of landscape treatments | N/A | N/A |
| Table 9.2 & 10.9 (MCP3) | Adoption of light colour for the temporary ventilation shafts for the basement during the transition period. | N/A | N/A |
| Table 9.2 & 10.9 (MCP4) | Control of night time lighting | ✓ | ✓ |
| Table 9.2 & 10.9 (MCP5) | Use of greenery such as grass cover for the temporary open areas will help achieve the visual balance and soften the hard edges of the structures. | N/A | N/A |

N/A - Not Applicable

✓ - Implemented

Obs - Observed

Rem - Reminder

K. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Cumulative statistics for complaints, notifications of summons and successful prosecutions for the Project account for period starting from the date of commencement of construction works (i.e. 31 October 2015 for M+ Museum main works and 1 March 2016 for Lyric Theatre Complex foundation works) to the end of the reporting month and are summarized in the **Table K-1** and **Table K-2** below respectively.

Table K-1: Statistics for complaints, notifications of summons and successful prosecutions for M+ Museum Main Works

Reporting Period Cumulative Statistics

Complaints Notifications of summons Successful prosecutions

This reporting month 0 0 0

This reporting month 0 0 0

From 31 October 2015 to end of the reporting month

Table K-2: Statistics for complaints, notifications of summons and successful prosecutions for Lyric Theatre Complex Foundation Works

Reporting PeriodCumulative StatisticsComplaintsNotifications of summonsSuccessful prosecutionsThis reporting month00From 1 March 2016 to end of the reporting month40