# Civil Engineering and Development Department

## Contract No. ST/2013/01

## Sha Tin New Town Stage II

## Road T3 and Associated Roadworks – Remaining Works, Phase III

Monthly EM&A Report

(Version 2.0)
August 2015

Certified By

(Environmental Team Leader)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties

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## TABLE OF CONTENTS



## LIST OF TABLES

**LIST OF FIGURE**



**LIST OF APPENDICES**

# EXECUTIVE SUMMARY

## Introduction

1. This is the 15th monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for CEDD Contract No. ST/2013/01 "Sha Tin New Town Stage II, Road T3 and Associated Roadworks – Remaining Works, Phase III" (hereinafter referred to as 'the Project'). This report documents the findings of EM&A Works conducted in August 2015.

2. The major site activities undertaken in the reporting month included:

- Road marking modification
- Re-surfacing
- Break up surplus material

## Environmental Monitoring and Audit Works

3. Environmental monitoring and audit works for the Project were performed regularly and the results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.

4. Summary of the non-compliance of the reporting month is tabulated in **Table I**.

**Table I Summary Table for Events Recorded in the Reporting Month**

| Parameter | No. of Exceedance | | No. of Exceedance Due to this Project | Action Taken |
|---|---|---|---|---|
| | Action Level | Limit Level | | |
| Noise | 0 | 1* | 0 | N/A |

* Exceedances occurred in the noise monitoring during the restricted hours (23:00-07:00 hrs) conducted for the night-time construction works from 17th to 20th August 2015. No direct evidence showing that the exceedance was due to the Project as the measured impact noise level is influenced by nearby road traffic noise. Details of the exceedance investigation are given in **Appendix E**.

*Construction Noise*

5. All construction noise monitoring was conducted as scheduled in the reporting month. One Limit Level exceedance was recorded.

## Environmental Licenses and Permits

6. Environmental related licenses/permits granted to the Project include the Environmental Permit (EP) for the Project and the Water Discharge Licence.

## Key Information in the Reporting Month

7. Summary of key information in this reporting month is tabulated in **Table II**. The key information in the EIA Report is summarized in the Table III below. According to the EIA Report, air quality and noise would be the key environmental issues during the

construction of the Project. Details of the implementation of mitigation measures are provided in the **Appendix H**.

**Table II Summary Table for Key Information in the Reporting Month**

| Event | Event Details | | Action Taken | Status | Remark |
|---|---|---|---|---|---|
| | Number | Nature | | | |
| Complaint received | 0 | --- | N/A | N/A | --- |
| Changes to the assumptions and key construction / operation activities recorded | 0 | --- | N/A | N/A | --- |
| Status of submissions under EP | 1 | Monthly EM&A Report for (July 2015) | Submitted to EPD on 14th August 2015. | N/A | --- |
| Notifications of any summons & prosecutions | 0 | --- | N/A | N/A | --- |

**Future Key Issues**

Major site activities for the coming month will include:

- Road marking modification
- Re-surfacing
- Break up surplus material & planting works

The anticipated major environmental issues will be mainly on silty surface runoff, blocking of drainage system and ponding water during rainy season; and dust and noise nuisance due to roadwork activities.

**Table III Key Information in the EIA Report and the Status of EMIS**

| | Issues | Assumptions and Assessment | Recommended Mitigation Measures | Status of Implementation of Mitigation Measures |
|---|---|---|---|---|
| Construction Phase | Air | With the implementation of dust suppression mitigation measures, the level of construction dust would comply with the relevant AQO. | Watering the work area at least twice a day.<br><br>Environmental pollution control measures for minimizing construction dust impact as stipulated in the APCO. | During the audit sessions, it was observed that:<br>• Watering the work site was provided. |
| | Noise | Noise level at most of NSRs would exceed the noise criteria without mitigation measures. | Good site practices, adoption of quiet construction plant, reduction of on-time operation of plant, movable noise barrier, avoid simultaneous noisy activities. | During the audit sessions, it was observed that:<br>• Simultaneous noisy activities were avoided. |
| | Water | The potential impact rose from the construction of flyovers spanning to the upper Shing Mun River Channel. | Construction works spanning the upper Shing Mun River should be undertaken in the dry season<br><br>All storm runoff should be routed through oil/grit separators and/or sediment basins/traps before being allowed to be discharged into the nearby receiving waters.<br><br>All stockpiled areas should be covered.<br><br>All sediment removable facilities should be maintained and the deposited sediments should be removed regularly. | The construction of flyovers spanning to the upper Shing Mun River Channel was completed under Sha Tin New Town – Stage II, Trunk Road T3 Project in 2009 |

# 1 INTRODUCTION

## Background

1.1 'Road T3 and Associated Roadworks – Remaining Works, Phase III' Project (hereinafter referred to as "the Project") is the remaining works of the Project 'Sha Tin New Town – Stage II, Trunk Road T3 (Tai Wai)' which is a Schedule 2 Designated Project under the Environmental Impact Assessment Ordinance (Cap. 449). A study of environmental impact assessment (EIA) was undertaken for the 'Sha Tin New Town – Stage II, Trunk Road T3 (Tai Wai)' to consider the key issues of to provide information on nature and extent of environmental impacts arising from the construction and operation of Road T3, and identify possible mitigation measures associated with the works. An EIA Report was approved by the Environmental Protection Department (EPD) on March 1998.

1.2 The Project includes the construction of an outstanding 1-lane slip road in the original Road T3 Scheme under the Environmental Permit EP-135/2002/J (EP) issued for Schedule 2 Project 'Sha Tin New Town, Stage II - Road T3 and associated roadworks' on 6 February 2014. The construction period of the Contract is tentatively 16 months. The commencement date of major construction works of the Project was scheduled to 19th June 2014.

1.3 Cinotech Consultants Limited was commissioned by the CEDD to undertake the Environmental Monitoring and Audit (EM&A) works for the Project.

1.4 The site layout plan and the location of noise monitoring station are shown in **Figure 1.**

1.5 According to the Baseline Environmental Monitoring Plan submitted to EPD on 21 February 2014, there is one noise monitoring station under the Project for monitoring the impact construction noise. No comment was received from EPD.

1.6 This is the 15th monthly EM&A report summarizing the EM&A works conducted for the Projects in August 2015.

## Project Organizations

1.7 Different parties with different levels of involvement in the project organization include:

- Project Proponent - Civil Engineering and Development Department (CEDD)
- Engineer's Representative (ER) – AECOM
- Environmental Team (ET) – Cinotech Consultants Ltd.
- Independent Environmental Checker (IEC) – ANEWR Consulting Limited
- Contractor – Sheen Billion Development Ltd.

1.8 The key contacts of the Project are shown in **Table 1.1**, and the organization chart of ET is shown in **Figure 2**.

**Table 1.1 Key Project Contacts**

| Party | Role | Name | Position | Phone No. | Fax No. |
|---|---|---|---|---|---|
| CEDD | Project Proponent | Mr. Bryan YUEN | Engineer | 2301 1398 | / |
| | | Mr. T.M. KONG | Engineer | 2762 5392 | 2714 5174 |
| AECOM | Engineer's Representative | Mr. Daniel KO | Resident Engineer | 2607 7805 | 2687 2322 |
| Cinotech | Environmental Team Leader | Dr. Priscilla CHOY | Director | 2151 2089 | 3107 1388 |
| ANEWR | Independent Environmental Checker | Mr. James CHOI | Director | 2869 6018 | 3007 8556 |
| Sheen Billion Development Ltd. | Contractor | Mr. Walance LI | Project Manager | 9609 1908 | 3427 9289 |
| | | Mr. Ryan CHAN | Site Engineer / Environmental Officer | 9708 7539 | |

**Construction Programme**

1.9 The site activities undertaken in the reporting month were:

- Road marking modification
- Re-surfacing
- Break up surplus material

**Summary of EM&A Requirements**

1.10 The EM&A programme requires construction phase noise monitoring as well as environmental site audits. The EM&A requirements are described in the following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event / Action Plans;
- Environmental mitigation measures, as recommended in the project EIA study final report; and
- Environmental requirements in contract documents.

1.11 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 3 of this report.

1.12 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely noise as well as audit works for the Project in the reporting month.

# 2 NOISE MONITORING

## Monitoring Requirements

2.1 One noise monitoring station, namely N6 was approved for impact monitoring. **Appendix A** shows the established Action and Limit Level for the environmental monitoring works.

## Monitoring Locations

2.2 Noise monitoring was conducted at one designated monitoring station as presented in **Table 2.1**. **Figure 1** shows the location of the monitoring station.

**Table 2.1 Location of Noise Monitoring Station**

| Monitoring Station | Description | Location of Measurement |
|---|---|---|
| N6 | Scenery Court | Block 1 of Scenery Court |

## Monitoring Equipment

2.3 **Table 2.2** summarizes the noise monitoring equipment model being used.

**Table 2.2 Noise Monitoring Equipment**

| Equipment | Model and Make | Quantity |
|---|---|---|
| Integrating Sound Level Meter | SVANTEK - SVAN 955 and SVAN 957 | 3 |
| Calibrator | SVANTEK - SV30A<br>B&K - 4231 | 2 |

## Monitoring Parameters, Frequency and Duration

2.4 **Table 2.3** summarizes the monitoring parameters, frequency and total duration of monitoring.

**Table 2.3 Noise Monitoring Parameters, Frequency and Duration**

| Station | Parameter | Period | Frequency | Measurement |
|---|---|---|---|---|
| N6 | $L_{10}$(30 min.) dB(A)<br>$L_{90}$(30 min.) dB(A)<br>$L_{eq}$(30 min.) dB(A)<br>$L_{eq}$(5min) dB(A)* | 0700-1900 hrs. on normal weekdays;<br><br>2300-0700 hrs on normal weekdays* | Once a week | Façade |

* One set of measurements of impact noise monitoring during the restricted hours (2300-0700 hrs) was conducted for the night time construction works from 17th to 20th August 2015.

## Monitoring Methodology and QA/QC Procedures

### *Field Monitoring*

2.5 The monitoring procedures are as follows:

- The microphone head of the sound level meter was positioned 1m exterior of the noise sensitive facade and lowered sufficiently so that the building's external wall acts as a reflecting surface.
- The battery condition was checked to ensure good 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
  - measurement time : 30 minutes

- Prior to and after noise measurement, the meter was calibrated using the calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement is more than 1.0 dB, the measurement was considered invalid and repeat of noise measurement was required after re-calibration or repair of the equipment.
- The wind speed at the monitoring station was checked with the portable wind meter. Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.
- Noise measurement was paused during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- At the end of the monitoring period, the $L_{eq}$, $L_{10}$ and $L_{90}$ were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.

### *Maintenance and Calibration*

2.6 Maintenance and Calibration procedures were as follows:

- The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.
- The sound level meter and calibrator were checked and calibrated at yearly intervals. Copies of calibration certificates are attached in **Appendix B**.

## Results and Observations

2.7 In the reporting month, noise monitoring was conducted as scheduled at the designated location. The noise monitoring schedule is provided in **Appendix C**.

2.8 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq – Baseline Leq = Measured CNL), in order to facilitate the interpretation of the noise exceedance. The baseline noise level and the allowed CNL at the designated noise monitoring station are presented at Table

2.4.

**Table 2.4 Baseline Noise Level and Allowed Construction Noise Level for Monitoring Station**

| Station | Baseline Noise Level, dB (A) | Allowed CNL, dB (A) |
|---|---|---|
| N6 – Scenery Court | 66.7 | 75.0 |

2.9 The details of the monitoring results and graphical presentations are shown in **Appendix D**. The weather during the monitoring session was sunny. In accordance with Condition 6.2 of the EP, all environmental monitoring data was made available to the public via internet access at the website: http://www.st201301.com/test/ .

2.10 One Limit Level exceedance for construction noise monitoring was recorded in the reporting month. The Action/Limit Level and the noise monitoring result are summarized at Table 2.5.

**Table 2.5 Summary Table of Noise Monitoring Results during the Reporting Month**

| Parameter | Date | CNLs $L_{eq}$(30min) / $L_{eq}$(5min)* dB (A) | Action Level | Limit Level |
|---|---|---|---|---|
| N6 | 4 August 2015 | 64.3 Measured≤ Baseline | When one documented complaint is received | 75dB(A) |
| | 10 August 2015 | 61.7 | | |
| | 20 August 2015 | 63.2 | | |
| | 26 August 2015 | 66.7 | | |
| | 18 August 2015 | 60.4* | | 40dB(A)** |
| | | 61.7* | | |
| | | 58.6* | | |

*Three consecutive $L_{eq}$(5min) were measured for the impact noise monitoring during the restricted hours.
**The Project site area falls into Designated Areas, and Prescribed Construction Works would be carried out inside the site boundary during restricted hours. As specified in Technical Memorandum on Noise From Construction Work In Designated Areas, Acceptable Noise Level (ANL) of NSR with Area Sensitivity Rating 'C' for the time period 'All days during the night-time (23:00 to 0700 hours) is 40dB(A).

2.11 According to our field observations, the major noise sources identified at the designated monitoring station are as follows:

| Station | Major Noise Sources |
|---|---|
| N6 – Scenery Court | Road Traffic |

# 3 ENVIRONMENTAL AUDIT

## Site Audits

3.1 Site audits were carried out by ET on weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix F**.

3.2 Site audits were conducted on 7th, 14th, 21st and 28th August 2015 by ET. A joint site audit with the representative with IEC, ER, the Contractor and the ET was carried out on 28th August 2015. The details of observations during site audit can refer to **Table 3.3**.

## Review of Environmental Monitoring Procedures

3.3 The monitoring works conducted by the monitoring team were inspected regularly. The following observations have been recorded for the monitoring works:

*Noise Monitoring*

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- Major noise sources were identified and recorded. Other intrusive noise attributing to the result was trimmed off by pausing the monitoring temporarily.

## Status of Environmental Licensing and Permitting

3.4 All permits/licenses obtained for the Project are summarized in **Table 3.1**.

**Table 3.1 Summary of Environmental Licensing and Permit Status**

| Permit / License No. | Valid Period | | Status |
|---|---|---|---|
| | From | To | |
| **Environmental Permit (EP)** | | | |
| EP-135/2002/J | 6/2/2014 | N/A | Valid |
| **Billing Account for Construction Waste Disposal** | | | |
| RS01172 | 19/2/2014 | N/A | Valid |
| **Registration of Chemical Waste Producer** | | | |
| WPN5213-758-S3797-01 | 4/2/2014 | 12/11/2014 | Valid (Updated with two chemical waste types added – spent lubricating oil and contaminated soil with spent lubricating oil) |
| | 13/11/2014 | N/A | |
| **Effluent Discharge License under Water Pollution Control Ordinance** | | | |
| WT00019462-2014 | 8/7/2014 | 31/8/2019 | Valid |
| **Construction Noise Permit** | | | |
| GW-RN0436-15 | 23/7/2015 | 22/9/2015 | Valid |

## Status of Waste Management

3.5 There are 692.46 $m^3$ of Construction and Demolition (C&D) materials generated in this reporting month. The table summarizing the quantities of waste generated in this

reporting month is presented in **Appendix I**.

**Implementation Status of Environmental Mitigation Measures**

3.6 The key information in the EIA Report is summarized in **Table 3.2**. With referring to the EIA Report, air quality and noise would be the key issues during the construction of the Project. Details of the implementation of mitigation measures are provided in the **Appendix H**.

**Table 3.2 Key Information in the EIA Report and the Status of EMIS**

| | Issues | Assumptions and Assessment | Recommended Mitigation Measures | Status of Implementation of Mitigation Measures |
|---|---|---|---|---|
| Construction Phase | Air | With the implementation of dust suppression mitigation measures, the level of construction dust would comply with the relevant AQO. | Watering the work area at least twice a day.<br><br>Environmental pollution control measures for minimizing construction dust impact as stipulated in the APCO. | During the audit sessions, it was observed that:<br>• Watering the work site was provided. |
| | Noise | Noise level at most of NSRs would exceed the noise criteria without mitigation measures. | Good site practices, adoption of quiet construction plant, reduction of on-time operation of plant, movable noise barrier, avoid simultaneous noisy activities. | During the audit sessions, it was observed that:<br>• Simultaneous noisy activities were avoided. |
| | Water | The potential impact rose from the construction of flyovers spanning to the upper Shing Mun River Channel. | Construction works spanning the upper Shing Mun River should be undertaken in the dry season<br><br>All storm runoff should be routed through oil/grit separators and/or sediment basins/traps before being allowed to be discharged into the nearby receiving waters.<br><br>All stockpiled areas should be covered.<br><br>All sediment removable facilities should be maintained and the deposited sediments should be removed regularly. | The construction of flyovers spanning to the upper Shing Mun River Channel was completed under Sha Tin New Town – Stage II, Trunk Road T3 Project in 2009 |

3.7 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations made during the audit sessions are summarized in

**Table 3.3 Observations and Recommendations of Site Audit**

| Parameters | Date | Observations | Remedial Actions |
|---|---|---|---|
| ***Water Quality*** | 27 February 2015<br>March 2015<br>April 2015<br>May 2015<br>June 2015<br>July 2015<br>August 2015 | Further enhance the bundings at the bottom of water barriers to avoid the leakage of wastewater from the bottom of water barriers. | Muddy sand runoff was cleared and sandbags were observed. |
| | 29 July 2015 | Sediment should be cleared in u-channel and sedimentation tank regularly. | Sediment was cleared. Contractor was reminded to clear sediment inside the tank regularly. |
| | 07 August 2015 | Exposed slope should be covered. | Exposed slope was observed wet. |
| | 14 August 2015<br>21 August 2015<br>28 August 2015 | Muddy runoff in u-channel should be cleared regularly. | Follow up action will be reported during the next reporting period. |
| | 21 August 2015<br>28 August 2015 | Sandbags should be placed along the boundary and clear muddy sand. | Follow up action will be reported during the next reporting period. |
| ***Air Quality*** | 02 July 2015<br>09 July 2015<br>17 July 2015<br>07 August 2015 | Cover the slope properly with tarpaulin sheet. | Exposed slope was observed wet. |
| ***Noise*** | N/A | N/A | N/A |
| ***Waste/ Chemical Management*** | 28 August 2015 | Construction waste should be sorted and cleared. | Construction waste was cleared. |
| | 28 August 2015 | Chemical waste storage should be provided at the site. | Chemical waste storage was provided. |
| ***Permit/ Licenses*** | N/A | N/A | N/A |

### Summary of Exceedance

3.8 One exceedance of monitoring results was recorded in the reporting month. Summary of exceedance is provided in **Appendix E**.

### Implementation Status of Event Action Plans

3.9 The Event Action Plan for construction noise is presented in **Appendix G**. No exceedance was recorded and thus no action was required to be implemented.

**Summary of Complaint and Prosecution**

3.10 There was no environmental complaint received in the reporting month.

3.11 No prosecution or notification of summons was received in the reporting month. The Complaint Log is attached in **Appendix J.**

# 4 FUTURE KEY ISSUES

4.1 Key issues to be considered in the coming month include:

- Effluent discharge generated from surface runoff;
- Dust generation from excavation works, concrete breaking works and stockpile of dusty materials;
- Noise generation from the operation of PMEs
- Accumulation of stagnant water in the site areas; and
- Accumulation of C&D waste on site.

## Monitoring Schedule for the Next Month

4.2 The tentative environmental monitoring schedule for the next month is shown in **Appendix C**.

## Construction Program for the Next Month

4.3 A tentative construction programme is provided in **Appendix K**. The major construction activities in the coming month will include:

- Road marking modification
- Re-surfacing
- Break up surplus material & planting works

# 5 CONCLUSIONS AND RECOMMENDATIONS

## Conclusions

5.1 Environmental monitoring and audit works were conducted in the reporting month. Site inspections were conducted on a weekly basis. The results were reviewed and checked.

5.2 All construction noise monitoring was conducted as scheduled in the reporting month. One Limit Level exceedance was recorded.

5.3 There was no environmental complaint received in the reporting month. No prosecution or notification of summons received.

## Recommendations

5.4 According to the environmental audit performed in the reporting month, the following recommendations were made:

***Water Quality***

- Provide mitigation measures to prevent muddy surface runoff from leaking offsite
- Discharge groundwater and surface runoff to the discharge point via sedimentation tank only, and maintain the sedimentation tank to ensure it functions properly

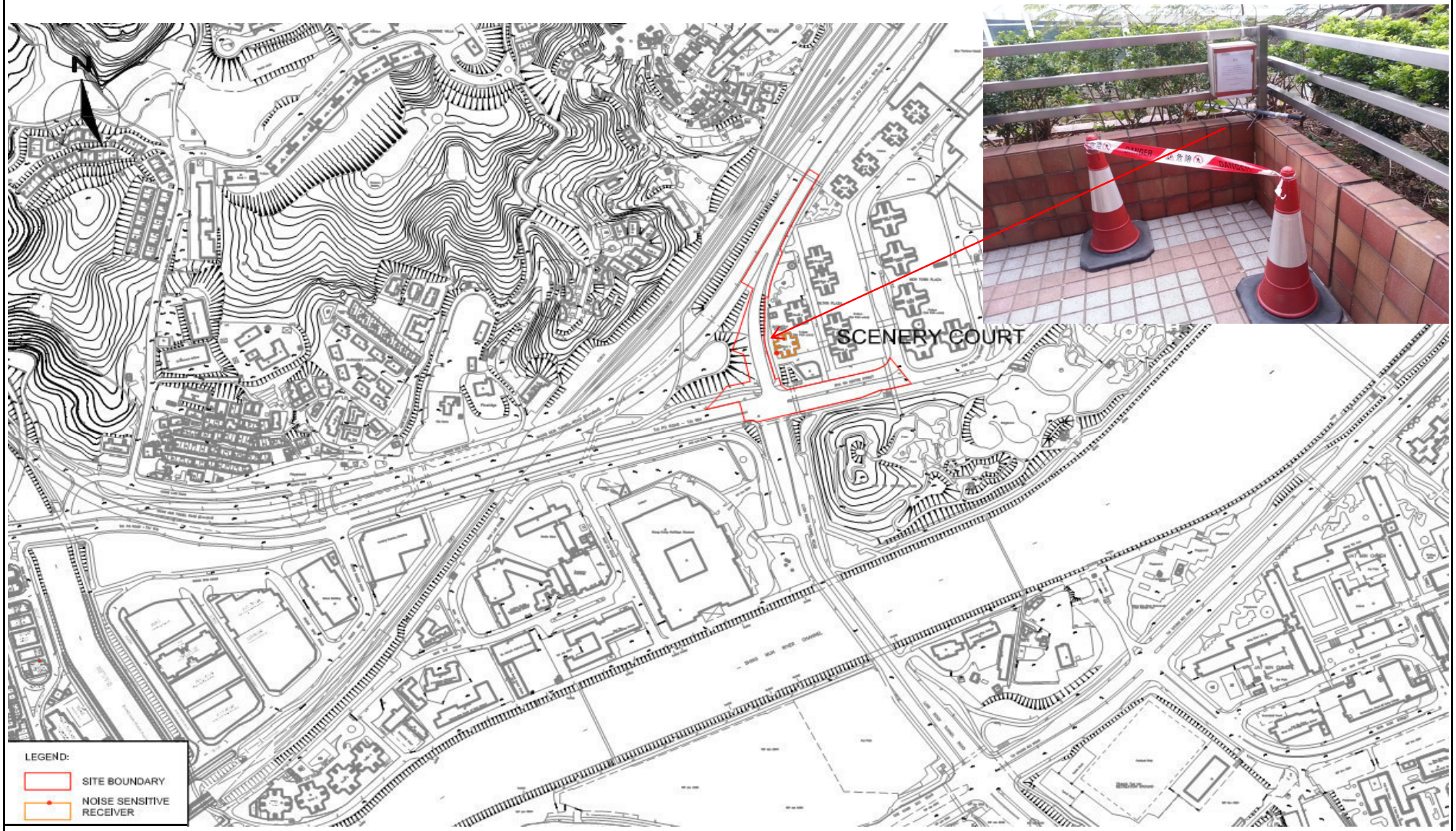
***Air Quality***

- Regularly clear the sand on haul road and water the haul road to prevent dust generation

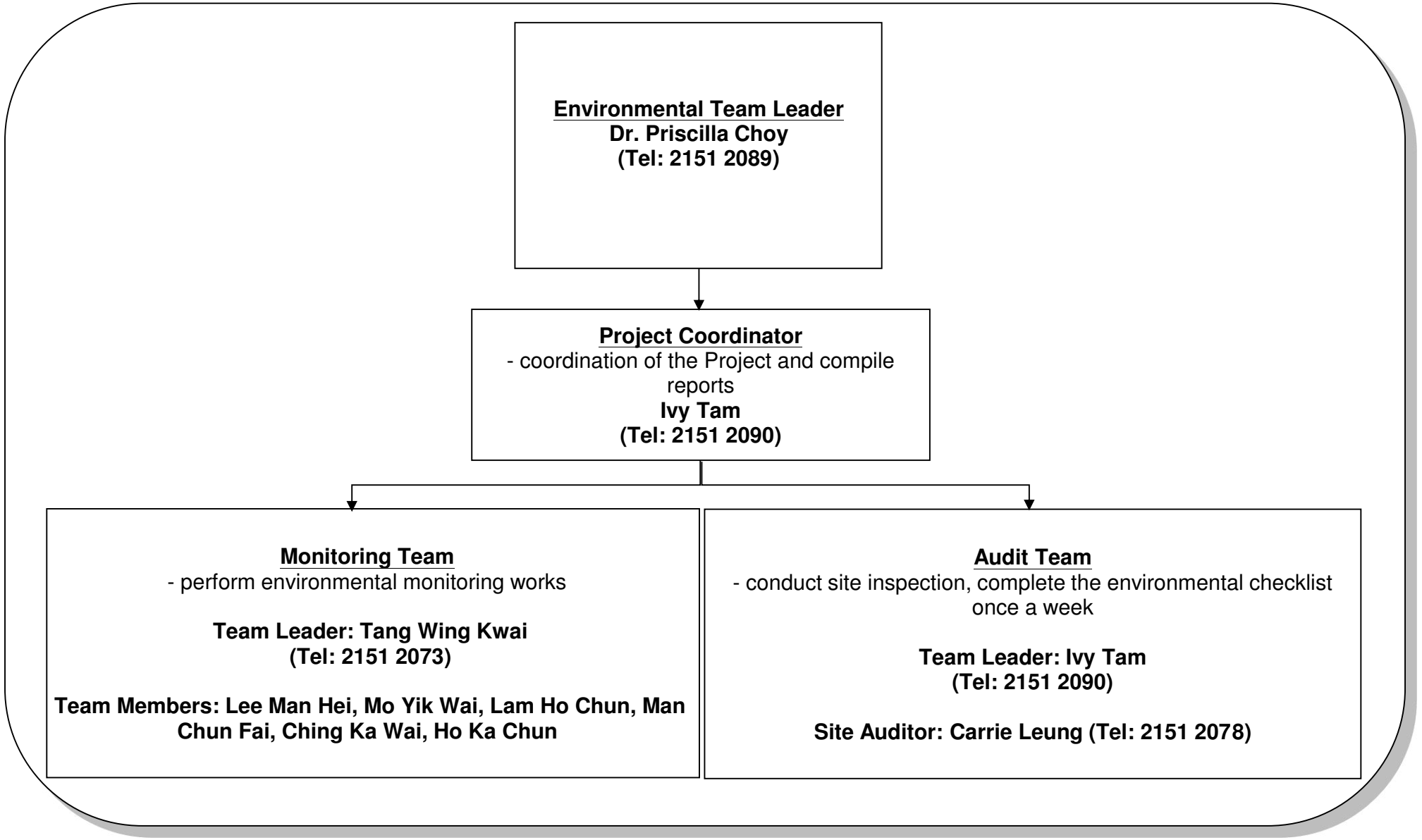
***Waste / Chemical Management***

- Provide mitigation measure to prevent oil spillage/leakage from construction equipment

**FIGURE(S)**




| | | | |
|---|---|---|---|
| Title: Contract No. ST/2013/01 - Sha Tin New Town Stage II - Road T3 and Associated Roadworks – Remaining Works, Phase III<br><br>Location of Noise Monitoring Station at Scenery Court | Scale: N.T.S | Project No.: MA13058 | CINOTECH |
| | Date: Feb-14 | Figure: 1 | |




| | | | |
|---|---|---|---|
| Title: Contract No. ST 2013/01 Sha Tin New Town, Stage II Environmental Team for Road T3 & Associated Roadworks - Remaining Works, Phase III<br>ET's Organization Chart | Scale: N.T.S | Project No.: MA13058 | CINOTECH |
| | Date: Aug-15 | Figure: 2 | |

**APPENDIX A**
**ACTION AND LIMIT LEVEL**

# APPENDIX A – Action and Limit Level

## Construction Noise

| Time Period | Action Level | Limit Level |
|---|---|---|
| 0700-1900 hrs on normal weekdays | When one documented complaint is received | 75 dB(A) |
| 0700-2300 hrs on holidays; and 1900-2300 hrs on all other days | | 70* dB(A) |
| 2300-0700 hrs of next day | | 55* dB(A) |

Notes:
Notes: If works are to be carried during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.
(*) reduce to 70 dB(A) for schools and 65 dB(A) during school examination periods.

**APPENDIX B**
**COPIES OF CALIBRATION CERTIFCATES**

WELLAB 匯力 Testing & Research

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Website: www.wellab.com.hk

# TEST REPORT

**APPLICANT:** **Cinotech Consultants Limited**
**Room 1710, Technology Park,**
**18 On Lai Street,**
**Shatin, NT, Hong Kong**

| | |
|---|---|
| Test Report No.: | C/N/150103 |
| Date of Issue: | 2015-01-05 |
| Date Received: | 2015-01-03 |
| Date Tested: | 2015-01-03 |
| Date Completed: | 2015-01-05 |
| Next Due Date: | 2016-01-04 |

**ATTN:** **Mr. W. K. Tang**

Page: 1 of 1

## Certificate of Calibration

**Item for calibration:**

| | |
|---|---|
| Description | : 'SVANTEK' Integrating Sound Level Meter |
| Manufacturer | : SVANTEK |
| Model No. | : SVAN 955 |
| Serial No. | : 14303 |
| Microphone No. | : 35222 |
| Equipment No. | : N-08-05 |

**Test conditions:**

| | |
|---|---|
| Room Temperatre | : 20 degree Celsius |
| Relative Humidity | : 54% |

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**

In-house method, according to manufacturer instruction manual

**Results:**

| Reference Set Point, dB | Instrument Readings, dB |
|---|---|
| 94 | 94.0 |
| 114 | 114.0 |

Remark: 1)This report supersedes the one dated 2012/01/21 with certificate number C/N/120120/1.

*PREPARED AND CHECKED BY:*
For and On Behalf of **WELLAB Ltd.**

**PATRICK TSE**
*Laboratory Manager*

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# TEST REPORT

**APPLICANT:** **Cinotech Consultants Limited**
**Room 1710, Technology Park,**
**18 On Lai Street,**
**Shatin, NT, Hong Kong**

| | |
|---|---|
| Test Report No.: | C/N/140822/3 |
| Date of Issue: | 2014-08-25 |
| Date Received: | 2014-08-22 |
| Date Tested: | 2014-08-22 |
| Date Completed: | 2014-08-25 |
| Next Due Date: | 2015-08-24 |

**ATTN:** **Mr. W.K. Tang**

Page: 1 of 1

## Certificate of Calibration

**Item for calibration:**

| | |
|---|---|
| Description | : 'SVANTEK' Integrating Sound Level Meter |
| Manufacturer | : SVANTEK |
| Model No. | : SVAN 957 |
| Serial No. | : 21459 |
| Microphone No. | : 43676 |
| Equipment No. | : N-08-08 |

**Test conditions:**

| | |
|---|---|
| Room Temperatre | : 22 degree Celsius |
| Relative Humidity | : 55% |

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**

In-house method, according to manufacturer instruction manual

**Results:**

| Reference Set Point, dB | Instrument Readings, dB |
|---|---|
| 94 | 94.0 |
| 114 | 114.0 |

*PREPARED AND CHECKED BY:*
For and On Behalf of **WELLAB Ltd.**

Patrick Tse
**PATRICK TSE**
*Laboratory Manager*

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# TEST REPORT

**APPLICANT:** **Cinotech Consultants Limited**
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**Shatin, NT, Hong Kong**

| | |
|---|---|
| Test Report No.: | C/N/141129/3 |
| Date of Issue: | 2014-12-01 |
| Date Received: | 2014-11-29 |
| Date Tested: | 2014-11-29 |
| Date Completed: | 2014-12-01 |
| Next Due Date: | 2015-11-30 |

**ATTN:** **Mr. W.K. Tang**

Page: 1 of 1

## Certificate of Calibration

**Item for calibration:**

| | |
|---|---|
| Description | : 'SVANTEK' Integrating Sound Level Meter |
| Manufacturer | : SVANTEK |
| Model No. | : SVAN 957 |
| Serial No. | : 23851 |
| Microphone No. | : 48532 |
| Equipment No. | : N-08-12 |

**Test conditions:**

| | |
|---|---|
| Room Temperatre | : 20 degree Celsius |
| Relative Humidity | : 64% |

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**

In-house method, according to manufacturer instruction manual

**Results:**

| Reference Set Point, dB | Instrument Readings, dB |
|---|---|
| 94 | 94.0 |
| 114 | 114.0 |

*PREPARED AND CHECKED BY:*
For and On Behalf of **WELLAB Ltd.**

Patrick Tse
**PATRICK TSE**
*Laboratory Manager*

WELLAB 匯力 Testing & Research

WELLAB LIMITED
Rms 816, 1516 & 1701, Technology Park,
18 On Lai Street, Shatin, N.T, Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

# TEST REPORT

**APPLICANT:** **Cinotech Consultants Limited**
**Room 1710, Technology Park,**
**18 On Lai Street,**
**Shatin, NT, Hong Kong**

| | |
|---|---|
| Test Report No.: | C/N/141003/2 |
| Date of Issue: | 2014-10-04 |
| Date Received: | 2014-10-03 |
| Date Tested: | 2014-10-03 |
| Date Completed: | 2014-10-04 |
| Next Due Date: | 2015-10-03 |
| Page: | 1 of 1 |

**ATTN:** **Mr. W.K. Tang**

**Item for calibration:**

| | |
|---|---|
| Description | : Acoustical Calibrator |
| Manufacturer | : SVANTEK |
| Model No. | : SV30A |
| Serial No. | : 24791 |
| Equipment No. | : N-09-04 |

**Test conditions:**

| | |
|---|---|
| Room Temperatre | : 22 degree Celsius |
| Relative Humidity | : 56% |

**Methodology:**

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

**Results:**

| Sound Pressure Level (1kHz) | Measured SPL | Tolerance |
|---|---|---|
| At 94 dB SPL | 94.0 | 94.0 ± 0.1 dB |
| At 114 dB SPL | 114.0 | 114.0 ± 0.1 dB |

*PREPARED AND CHECKED BY:*
For and On Behalf of **WELLAB Ltd.**

**PATRICK TSE**
*Laboratory Manager*

WELLAB LIMITED
Rms 816, 1516 & 1701, Technology Park,
18 On Lai Street, Shatin, N.T, Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

# TEST REPORT

**APPLICANT:** **Cinotech Consultants Limited**
**Room 1710, Technology Park,**
**18 On Lai Street,**
**Shatin, NT, Hong Kong**

| | |
|---|---|
| Test Report No.: | C/N/140822/2 |
| Date of Issue: | 2014-08-25 |
| Date Received: | 2014-08-22 |
| Date Tested: | 2014-08-22 |
| Date Completed: | 2014-08-25 |
| Next Due Date: | 2015-08-24 |

**ATTN:** **Mr. W.K. Tang**

Page: 1 of 1

## Certificate of Calibration

**Item for calibration:**

| | |
|---|---|
| Description | : Acoustical Calibrator |
| Manufacturer | : Brüel & Kjær |
| Model No. | : 4231 |
| Serial No. | : 2412367 |
| Equipment No. | : N-02-03 |

**Test conditions:**

| | |
|---|---|
| Room Temperatre | : 20 degree Celsius |
| Relative Humidity | : 64% |

**Methodology:**

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

**Results:**

| Sound Pressure Level (1kHz) | Measured SPL | Tolerance |
|---|---|---|
| At 94 dB SPL | 94.0 | 94.0 ± 0.1 dB |
| At 114 dB SPL | 114.0 | 114.0 ± 0.1 dB |

*PREPARED AND CHECKED BY:*
For and On Behalf of **WELLAB Ltd.**

**PATRICK TSE**
*Laboratory Manager*

# APPENDIX C
# ENVIRONMENTAL MONITORING SCHEDULES

**Contract No. ST/2013/01 Sha Tin New Town Stage II Road T3 and Associated Roadworks – Remaining Works, Phase III**
**Noise Monitoring Schedule in August 2015**

| **Sunday** | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|
| | | | | | | 1-Aug |
| | | | | | | |
| **2-Aug** | 3-Aug | 4-Aug | 5-Aug | 6-Aug | 7-Aug | 8-Aug |
| | | Noise | | | | |
| **9-Aug** | 10-Aug | 11-Aug | 12-Aug | 13-Aug | 14-Aug | 15-Aug |
| | Noise | | | | | |
| **16-Aug** | 17-Aug | 18-Aug | 19-Aug | 20-Aug | 21-Aug | 22-Aug |
| | | Noise (Night Time) | | Noise | | |
| **23-Aug** | 24-Aug | 25-Aug | 26-Aug | 27-Aug | 28-Aug | 29-Aug |
| | | | Noise | | | |
| **30-Aug** | 31-Aug | | | | | |
| | | | | | | |

**Noise Monitoring Stations**
N6 - Scenery Court

**Contract No. ST/2013/01 Sha Tin New Town Stage II Road T3 and Associated Roadworks – Remaining Works, Phase III**
**Tentative Noise Monitoring Schedule in September 2015**

| **Sunday** | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|
| | | 1-Sep | 2-Sep | **3-Sep** | 4-Sep | 5-Sep |
| | | | Noise | | | |
| **6-Sep** | 7-Sep | 8-Sep | 9-Sep | 10-Sep | 11-Sep | 12-Sep |
| | | | Noise<br>(Evening & Night Time) | Noise | | |
| **13-Sep** | 14-Sep | 15-Sep | 16-Sep | 17-Sep | 18-Sep | 19-Sep |
| | | | | Noise | | |
| **20-Sep** | 21-Sep | 22-Sep | 23-Sep | 24-Sep | 25-Sep | 26-Sep |
| | | | | Noise | | |
| **27-Sep** | **28-Sep** | 29-Sep | 30-Sep | | | |
| | | | | | | |

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

**Noise Monitoring Stations**

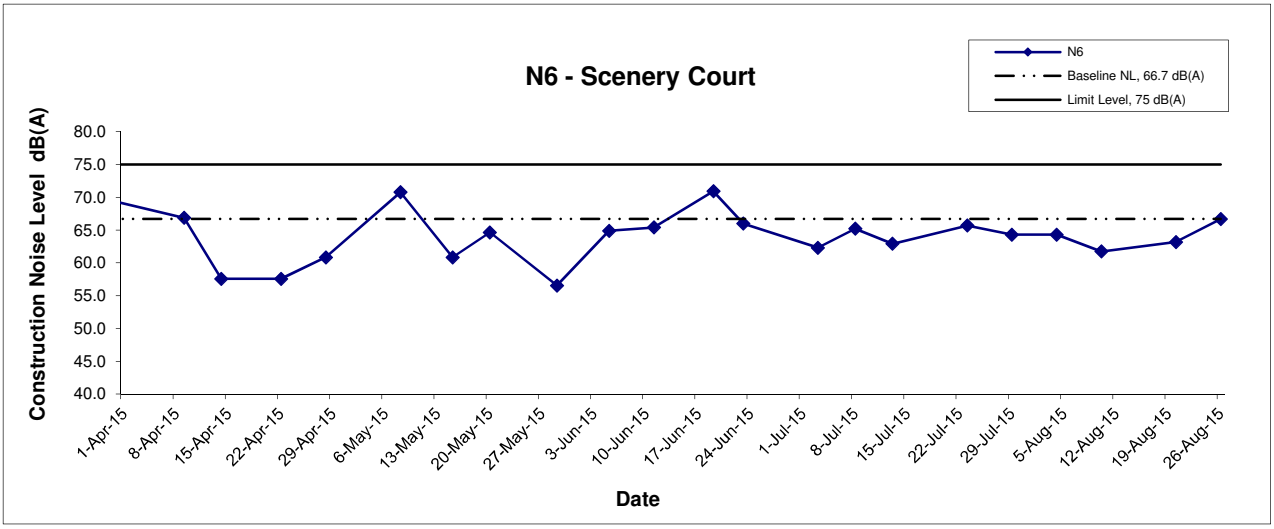
N6 - Scenery Court

**APPENDIX D**
**NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS**

## App D - Noise Monitoring Results

| Location N6 - Scenery Court | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Time | Weather | Unit: dB (A) (30-min) | | | | |
| | | | Measured Noise Level | | | Baseline Level | Construction Noise Level |
| | | | $L_{eq}$ | $L_{10}$ | $L_{90}$ | $L_{eq}$ | $L_{eq}$ |
| 4-Aug-15 | 11:30 | Sunny | 64.3 | 65.8 | 62.0 | 66.7 | 64.3 Measured ≤ Baseline |
| 10-Aug-15 | 11:00 | Sunny | 67.9 | 70.4 | 65.7 | | 61.7 |
| 20-Aug-15 | 16:00 | Sunny | 68.3 | 72.1 | 65.9 | | 63.2 |
| 26-Aug-15 | 15:10 | Sunny | 69.7 | 72.1 | 67.9 | | 66.7 |

# Noise Levels




| | | | | |
|---|---|---|---|---|
| Title | Sha Tin New Town Stage II<br>Road T3 and Associated Road Works- Remaning Works, Phase III<br>Graphical Presentation of Construction Noise Monitoring Results | Scale<br>N.T.S | Project No.<br>MA13058 | CINOTECH |
| | | Date<br>Aug 15 | Appendix<br>D | |

**APPENDIX E**
**SUMMARY OF EXCEEDANCE**

## APPENIDX E – SUMMARY OF EXCEEDANCE

**Reporting Month:** August 2015

***a) Exceedance Report for Construction Noise (NIL)***

**(One limit level exceedance was recorded for the impact noise monitoring for the night-time construction works during the restricted hours (23:00-0700hr) on 18 August 2015. The limit level is 40 dB(A) (Leq) as the Project site area falls into Designated Areas, and Prescribed Construction Works would be carried out inside the site boundary during the restricted hours as per the Technical Memorandum on Noise From Construction Work In Designated Areas)**

- **Cause of Exceedance:**
  - Background noise monitoring was conducted before the commencement of works during the restricted hours (23:00-07:00hrs), the major noise source recorded in the background noise measurement was road traffic noise from Tai Po Road and East Rail, and the background noise level (60.6-61.8 dB(A)) had already exceeded the Limit Level (40dB(A)).
  - During construction noise measurement, night works such as road resurfacing and roadmarking modification were carried out. Traffic noise from Tai Po Road and East Rail was still identified as the major noise source.
  - Average measured background noise level (61.1 dB(A)) was higher than the average measured noise level (60.4 dB(A))
  - With reference to the baseline noise measurement during the restricted hours (23:00-07:00 hrs), the major noise source recorded was road traffic from Tai Po Road and East Rail, the baseline noise level (62.5 dB(A)) had already exceeded the Limit Level (40 dB(A)).
  - In view of background and baseline noise measurements which are higher than that of impact noise, the exceedance was considered to be contributed from the traffic noise and non-Project related.
- **ET's conclusion/recommendations for mitigation:**
  - The exceedance was considered non-related to the Project works.
  - No further mitigation measures would be required.

**APPENDIX F**
**SITE AUDIT SUMMARY**

**Weekly Site Inspection Record Summary**

**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 150807 |
| Date | 07 August 2015 (Friday) |
| Time | 14:00-15:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|---|---|---|
| | None identified | - |
| **Ref. No.** | **Remarks/Observations** | **Related Item No.** |
| | ***A. Water Quality*** | |
| 150807-O01 | • Further enhance the bundings and clear muddy sand outside site boundary. | B2 |
| 150807-O02 | • Exposed slope should be covered. | B 10 |
| | | |
| | ***B. Air Quality*** | |
| 150807-O02 | • Exposed slope should be covered. | C 7 |
| | | |
| | ***C. Noise*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***D. Waste/Chemical Management*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***E. Permits/Licences*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***F. Others*** | |
| | • Follow-up on previous site audit session (Ref. No. 150729), follow-up action is required for the item 150729-O01 which was renamed as 150807-O01. | |

| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Carrie Leung | | 10 August 2015 |
| Checked by | Dr. Priscilla Choy | | 10 August 2015 |

*Contract ST/2013/01*

*Sha Tin New Town Stage II*

*Road T3 and Associated Roadworks – Remaining Works, Phase III*

**Weekly Site Inspection Record Summary**

**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 150814 |
| Date | 14 August 2015 (Friday) |
| Time | 14:00-15:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|---|---|---|
| | None identified | - |
| **Ref. No.** | **Remarks/Observations** | **Related Item No.** |
| | ***A. Water Quality*** | |
| 150814-O01 | • Further enhance the bundings and clear muddy sand runoff. | B2 |
| 150814-R01 | • Muddy runoff in u-channel should be cleared regularly. | B 8 |
| | | |
| | ***B. Air Quality*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***C. Noise*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***D. Waste/Chemical Management*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***E. Permits/Licences*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***F. Others*** | |
| | • Follow-up on previous site audit session (Ref. No. 150807), follow-up action is required for the item 150807-O01 which was renamed as 150814-O01. | |

| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Carrie Leung | | 17 August 2015 |
| Checked by | Dr. Priscilla Choy | | 17 August 2015 |

**Weekly Site Inspection Record Summary**

**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 150821 |
| Date | 21 August 2015 (Friday) |
| Time | 14:00-15:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|---|---|---|
| | None identified | - |
| **Ref. No.** | **Remarks/Observations** | **Related Item No.** |
| | ***A. Water Quality*** | |
| 150821-O01 | • Sandbags should be placed along the boundary and clear muddy sand. | B 2 |
| 150821-O02 | • Muddy runoff in u-channel should be cleared. | B 8 |
| | | |
| | ***B. Air Quality*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***C. Noise*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***D. Waste/Chemical Management*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***E. Permits/Licences*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***F. Others*** | |
| | • Follow-up on previous site audit session (Ref. No. 150814), follow-up action is required for the item 150814-R01 which was renamed as 150821-O02. | |

| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Carrie Leung | | 25 August 2015 |
| Checked by | Dr. Priscilla Choy | | 25 August 2015 |

**Weekly Site Inspection Record Summary**

**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 150828 |
| Date | 28 August 2015 (Friday) |
| Time | 14:00-16:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|---|---|---|
| | None identified | - |
| **Ref. No.** | **Remarks/Observations** | **Related Item No.** |
| | ***A. Water Quality*** | |
| 150828-O01 | • Sandbags should be placed along the boundary and clear muddy sand. | B 2 |
| 150828-O02 | • Muddy runoff in u-channel should be cleared. | B 8 |
| | | |
| | ***B. Air Quality*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***C. Noise*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***D. Waste/Chemical Management*** | |
| 150828-O03 | • Construction waste should be sorted and cleared. | E 4ii |
| 150828-O04 | • Chemical waste storage should be provided at the site. | E 2i |
| | | |
| | ***E. Permits/Licences*** | |
| | No environmental deficiency was identified during site inspection. | |
| | | |
| | ***F. Others*** | |
| | • Follow-up on previous site audit session (Ref. No. 150821), follow-up action is required for the item 150821-O01 which was renamed as 150827-O01. | |

| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Carrie Leung | | 31 August 2015 |
| Checked by | Dr. Priscilla Choy | | 31 August 2015 |

**APPENDIX G**
**EVENT ACTION PLAN**

# Appendix G Event/Action Plan

## Event/Action Plan for Construction Noise

| EVENT | ACTION | | | |
|---|---|---|---|---|
| | **ET** | **IEC** | **ER** | **CONTRACTOR** |
| ACTION LEVEL | | | | |
| | 1. Undertake measurement to establish validity of complaint<br>2. Identify the source(s) of the complaint<br>3. Inform ER & IEC in writing. Discuss remedial actions required with ER & IEC<br>4. Increase monitoring frequency to assess efficacy of remedial measures<br>5. If exceedance continues, meet with ER&IEC to review implementation of appropriate mitigation measures<br>6. If exceedance stops, cease additional monitoring | 1. Review the analyzed results submitted by the ET<br>2. Review the proposed remedial measures by the Contractor and advise the ER & ET accordingly<br>3. Supervise the implementation of remedial measures. | 1. Confirm receipt of notification of complaint and notify Contractor if proven<br>2. Check monitoring data trends and Contractor's working methods.<br>3. Remind the Contractor of his Contractual obligations and discuss with ET, IEC and Contractor on proposed remedial actions.<br>4. Assess the efficacy of remedial actions and keep the Contractor informed<br>5. Inform complainant of actions taken | 1. Submit proposals for remedial actions to ER within three working days of notification<br>2. Amend proposals if required by the Engineer<br>3. Implement the remedial actions immediately upon instruction<br>4. Liaise with the ER to optimise the effectiveness of the agreed mitigation<br>5. Amend proposal if appropriate |
| LIMIT LEVEL | | | | |
| | 1. Repeat measurement to confirm findings<br>2. Identify the source(s) of impact<br>3. Inform ER&IEC and EPD in writing<br>4. Discuss remedial actions required with ER&IEC<br>5. Increase monitoring frequency to assess efficacy of remedial measures<br>6. If exceedance continues, meet with ER&IEC to identify appropriate mitigation measures<br>7. If exceedance stops, cease additional monitoring | 1. Check monitoring data submitted by ET<br>2. Review Contractor's remedial actions to assure their effectiveness and advise the ER &ET accordingly<br>3. Supervise the implementation of the remedial measures | 1. Confirm receipt of notification of exceedance and notify Contractor<br>2. Check monitoring data trends and Contractor's working methods<br>3. Discuss with ET, IC(E) and Contractor on proposed remedial actions to be implemented<br>4. Assess the efficacy of remedial actions and keep the Contractor informed<br>5. If exceedance continuous, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is aborted | 1. Take immediate action to avoid further exceedance<br>2. Submit proposals for remedial actions to ER within three working days of notification<br>3. Amend proposals if required by the ER<br>4. Implement remedial actions immediately upon instruction<br>5. Liaise with the ER to optimize the effectiveness of the agreed mitigation<br>6. Resubmit proposals if problem still not under control<br>7. Stop the relevant portion of works as determined by the ER until the exceedance is aborted. |

# APPENDIX H
# UPDATED ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE

## Appendix H - Implementation Schedule of Environmental Mitigation Measures

| EIA/ ERR Ref. Ref. | Recommended Mitigation Measures | Who to implement the measures? | Location of the measures | When to Implement the measures? |
|---|---|---|---|---|
| **Construction Noise** | | | | |
| 2.5.4 / 2.3 | - Where available, the Contractor shall use quiet items of PME or model of plants that are quieter than those specified in the EPD's Technical Memorandum (GW-TM) for undertaking construction works.<br>- Where practicable, the Contractor shall use movable noise barriers and avoid simultaneous noisy activities. | Contractor | At active construction locations. | Construction stage |
| **Air Quality** | | | | |
| 3.5.3/ 3.4.5 | Watering the works area at least twice a day | Contractor | Work site | Construction stage |
| 3.5.4/ 3.4.5 | Environmental pollution control measures for minimizing construction dust impact as stipulated in the Air Pollution Control Regulation. | Contractor | Work site | Construction stage |
| **Waste Management** | | | | |
| 5.2 – 5.6/4.5 | Environmental pollution control measures for minimizing waste arising from the construction works. | Contractor | Within the works boundary | Construction stage |
| **Water Quality** | | | | |
| 4.5.1/5.5.1 | Environmental pollution control measures for minimizing impacts on water quality. | Contractor | All construction sites | Construction stage |
| **Landscape and Visual** | | | | |
| -/Table 6-1 | Storage of materials and plant shall be limited to areas less visible to receivers. | Contractor | Project site | Construction stage |
| -/Table 6-1 | Preservation wherever possible of existing trees and transplanting wherever practical of trees affected by the Works. | Contractor | Project site | Construction stage |
| -/Table 6-1 | Stripping, storing and re-use of topsoil. | Contractor | Project site | Construction stage |

Note: EIA Ref. refers to Trunk Road T3 (Tai Wai) - Updated Final Environmental Impact Assessment Report, March 1998

**APPENDIX I**
**WASTE GENERATION IN THE REPORTING MONTH**

# Civil Engineering and Development Department

## Contract No. ST/2013/01
## Sha Tin New Town Stage II
## Road T3 and Associated Roadworks – Remaining Works, Phase III

## Monthly Summary Waste Flow Table for 2015 (year)

| Month | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | Actual Quantities of C&D Wastes Generated Monthly | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Quantity Generated | Broken Concrete | Reused in the Contract | Reused in other Projects | Disposed as Public Fill | Imported Fill | Metals | Paper/ cardboard packaging | Plastics | Chemical Waste | Others, e.g. general refuse |
| | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000 kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000$m^3$) |
| Jan | **0.366** | **0.018** | **0.000** | **0.000** | **0.348** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |
| Feb | **0.218** | **0.000** | **0.000** | **0.000** | **0.218** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |
| Mar | **0.318** | **0.000** | **0.000** | **0.000** | **0.318** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |
| Apr | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |
| May | **0.089** | **0.000** | **0.000** | **0.000** | **0.089** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |
| Jun | **0.054** | **0.000** | **0.000** | **0.000** | **0.054** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |
| G.Total (Jan-Jun 2015) | **2.266** | **0.023** | **0.000** | **0.000** | **2.243** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |
| Jul | **0.064** | **0.038** | **0.000** | **0.000** | **0.026** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |
| Aug | **0.692** | **0.000** | **0.000** | **0.000** | **0.692** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |
| G.Total | **0.756** | **0.038** | **0.000** | **0.000** | **0.756** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** |

**APPENDIX J**
**COMPLAINT LOG**

## APPENDIX J – COMPLAINT LOG

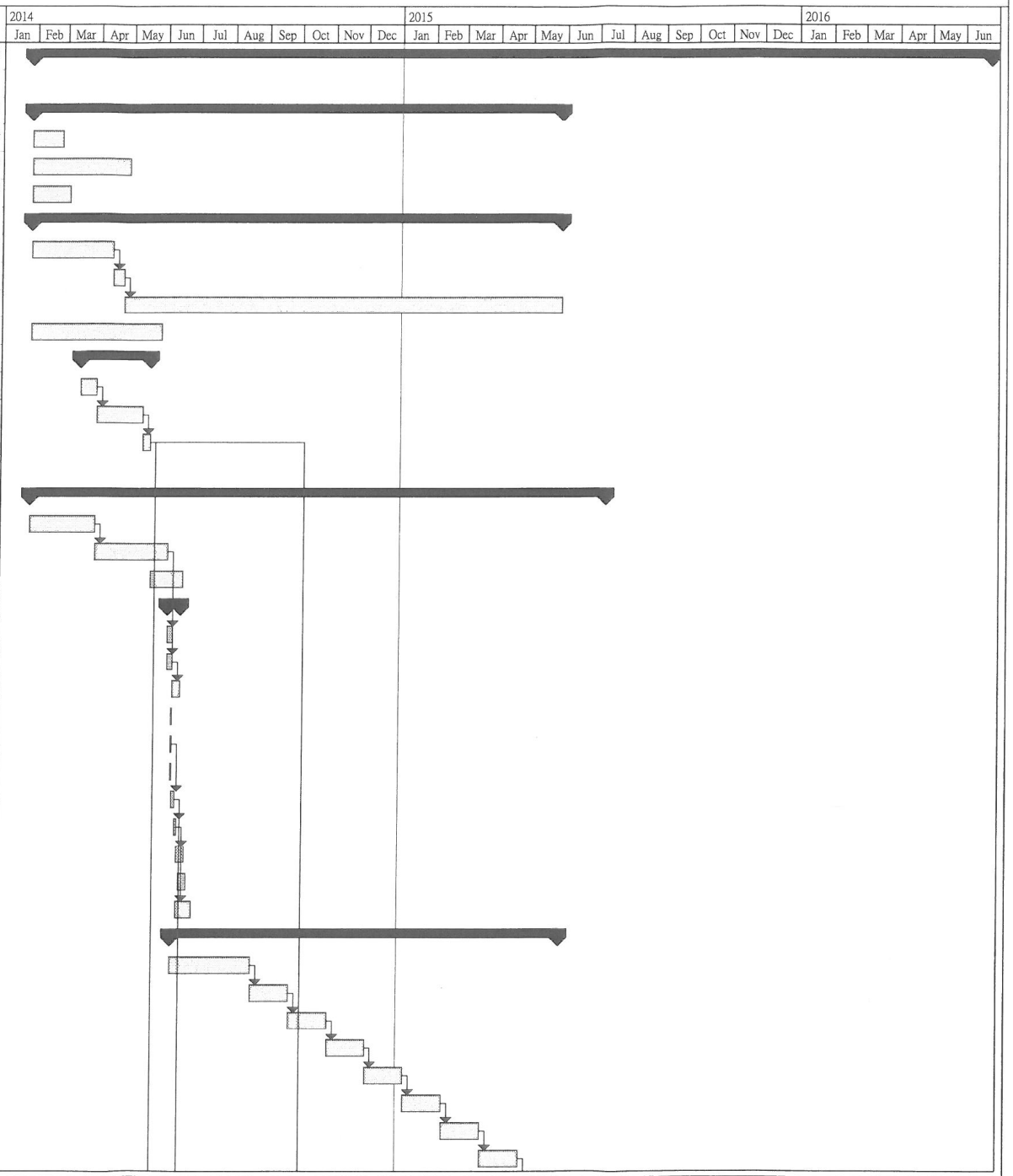
**Reporting Month**: August 2015

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/Mitigation Action | Status |
|---|---|---|---|---|---|
| Com-2014-11-01 | Tai Po Slip Road | 15th November 2014 | The complaint was received from a resident of Hilton Plaza by the Public Relation Officer (PRO) of Contractor (Sheen Billion Development Ltd) at 8:50 a.m. on 15th November 2014 (Saturday). The complainant concerned about the noisy construction works conducted before 10 a.m. | According to the information provided by the Contractor, the noisy construction work at the time of complaint was concrete breaking work using an excavator-mounted breaker.<br><br>No violation of the Noise Control Ordinance as the noisy construction work was conducted within the non-restricted hour (07:00 to 19:00 on normal weekdays).<br><br>However, according to item 2 of section 25.11B in PS of the Contract, demolition of existing artificial hard material should not be conducted during 8a.m. to 10a.m. Thus, the Contractor did not fulfil such requirement.<br><br>After received the complaint, PRO coordinated the site personnel to stop the noisy works once the complaint was received. The noisy construction works have been re-scheduled to be commenced after 10 a.m. based on the requirement specified in the PS. | Closed |
| Com-2014-12-01 | Tai Po Slip Road | 29th December 2014 | The complaint was received by Environmental Protection Department (EPD) (EPD Complaint Ref: RN32146-14) in the morning of 29th December 2014. The complainant complained about the effluent discharge to a gully in the worksite may cause pollution to the nearby environment. | According to the information provided by the Contractor, the effluent discharge was due to groundwater leakage from the trench excavation at deep depth of Bay 7 of the worksite.<br><br>Since site inspection was also conducted in the morning of 29th December 2014 and no improper effluent discharge was observed, it is likely that the complainant observed the issue before 29th December 2014. | Closed |

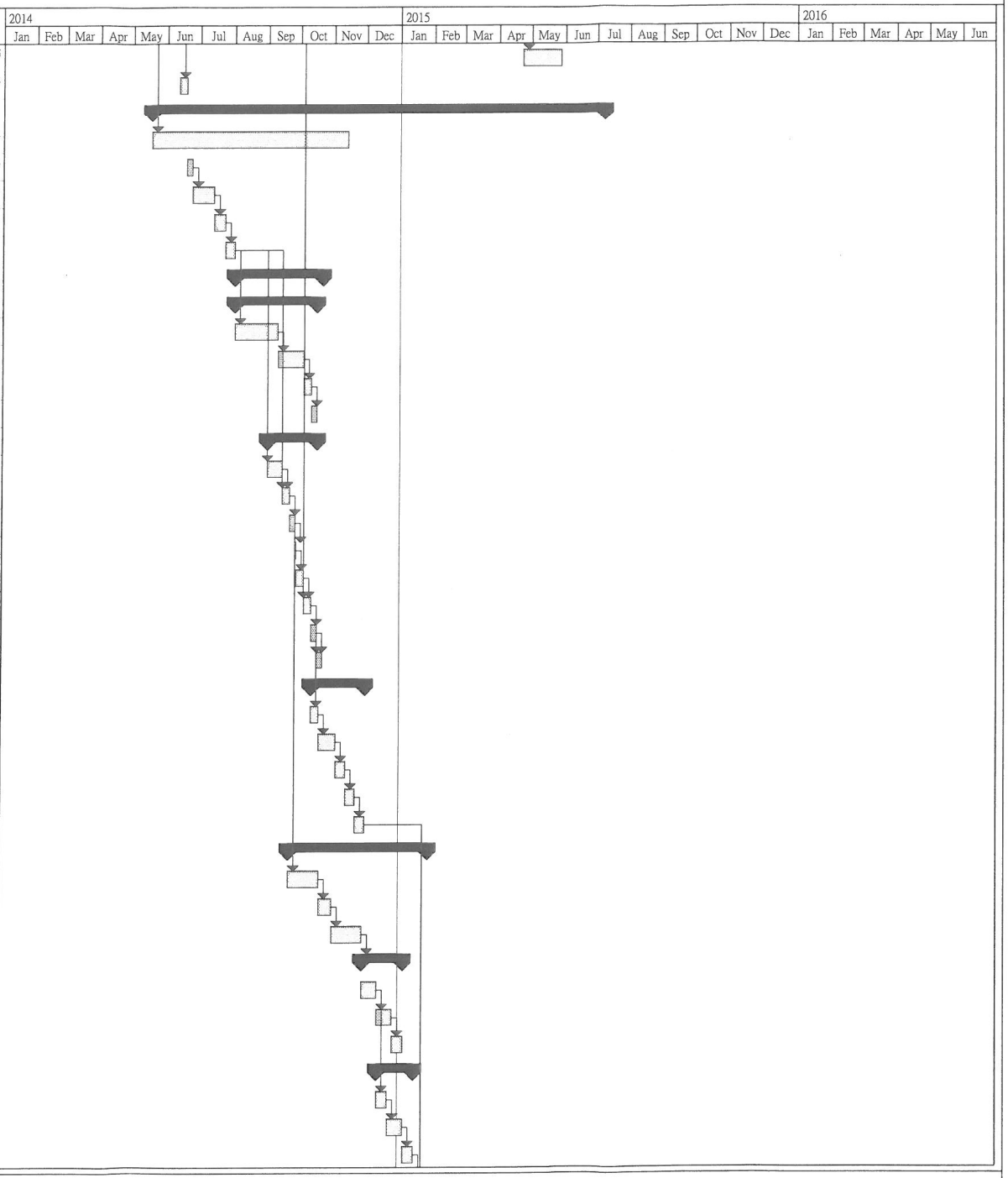
| Log Ref. | Location | Received Date | Details of Complaint | Investigation/Mitigation Action | Status |
|---|---|---|---|---|---|
| | | | | Improper effluent discharge was observed during the site inspections on 3rd, 10th and 22nd December 2014. Recommendations were given to the Contractor during the site inspections, and a further reminder was also given to the Contractor through email dated 22nd December 2014.<br><br>The improper effluent discharge was ceased as per the rectified photos given by the Contractor on 24th December 2014, as well as during the site inspection on 6th January 2015. The discharge pipes were also connected to the discharge point via the sediment tank as per the photographic records given by the Contractor on 6th January 2015 and from the site inspection on 7th January 2015. | |

# APPENDIX K
# CONSTRUCTION PROGRAMME

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 1 | **Whole of the works** | **878.5 days** | **Tue 28/1/14** | **Fri 24/6/16** |
| 2 | | | | |
| 3 | **Preliminaries** | **485 days** | **Tue 28/1/14** | **Wed 27/5/15** |
| 4 | RE office take-over | 28 days | Tue 28/1/14 | Mon 24/2/14 |
| 5 | Site Office set up | 90 days | Tue 28/1/14 | Sun 27/4/14 |
| 6 | Site setting-out & project signboard erection | 35 days | Tue 28/1/14 | Mon 3/3/14 |
| 7 | **Public Relation Plan** | **485 days** | **Tue 28/1/14** | **Wed 27/5/15** |
| 8 | Plan Preparation and submission for approval | 75 days | Tue 28/1/14 | Sat 12/4/14 |
| 9 | Preparation for 1st CLG meeting | 10 days | Sun 13/4/14 | Tue 22/4/14 |
| 10 | Plan implementation | 400 days | Wed 23/4/14 | Wed 27/5/15 |
| 11 | Material & Method Statement submission | 120 days | Tue 28/1/14 | Tue 27/5/14 |
| 12 | **Noise Barrier System submission** | **64 days** | **Sat 15/3/14** | **Sat 17/5/14** |
| 13 | Preparation for material submission and approval | 15 days | Sat 15/3/14 | Sat 29/3/14 |
| 14 | Preparation for shop drawing & design calculation submission and approval | 42 days | Sun 30/3/14 | Sat 10/5/14 |
| 15 | Design and Check Certificate provision | 7 days | Sun 11/5/14 | Sat 17/5/14 |
| 16 | | | | |
| 17 | **Section 1 Works - Noise barrier & roadworks** | **526 days** | **Tue 28/1/14** | **Tue 7/7/15** |
| 18 | TTA preparation | 60 days | Tue 28/1/14 | Fri 28/3/14 |
| 19 | TTA submission and approval and Gazzette publication | 67 days | Sat 29/3/14 | Tue 3/6/14 |
| 20 | CCTV inspection of existing drains/sewer and report submission | 30 days | Mon 19/5/14 | Tue 17/6/14 |
| 21 | **Preparation works for T3 slip road closure on 8Jun 2014** | **12 days** | **Wed 4/6/14** | **Sun 15/6/14** |
| 22 | RA application | 5 days | Wed 4/6/14 | Sun 8/6/14 |
| 23 | Permemant / temp. gantry sign plates replacement | 5 days | Wed 4/6/14 | Sun 8/6/14 |
| 24 | Permenant / temp. traffic signs provision | 7 days | Mon 9/6/14 | Sun 15/6/14 |
| 25 | TTA set up for slip road lane closure | 1 day | Sun 8/6/14 | Sun 8/6/14 |
| 26 | 1st stage modification of traffic signal at J/O Sha Tin Centre St & Lion Rock Tunnel Rd | 1 day | Sun 8/6/14 | Sun 8/6/14 |
| 27 | Road marking modification works | 1 day | Sun 8/6/14 | Sun 8/6/14 |
| 28 | Sit setting out works | 3 days | Mon 9/6/14 | Wed 11/6/14 |
| 29 | UU detection and trialpit excavation | 2 days | Thu 12/6/14 | Fri 13/6/14 |
| 30 | UU diversion | 7 days | Sat 14/6/14 | Fri 20/6/14 |
| 31 | Joint site inspection with LCSD for site pocession at LCSD area & record taking | 7 days | Mon 16/6/14 | Sun 22/6/14 |
| 32 | Site setup, Signboard and hoarding erection | 14 days | Sat 14/6/14 | Fri 27/6/14 |
| 33 | **Modification works to existing traffic sign plates and posts** | **353 days** | **Mon 9/6/14** | **Wed 27/5/15** |
| 34 | TTA submission & RA application | 73 days | Mon 9/6/14 | Wed 20/8/14 |
| 35 | TDS 1 | 35 days | Thu 21/8/14 | Wed 24/9/14 |
| 36 | NTE/ST/SHATINRC-05 | 35 days | Thu 25/9/14 | Wed 29/10/14 |
| 37 | NTE/ST/TAIPO-37 | 35 days | Thu 30/10/14 | Wed 3/12/14 |
| 38 | NTE/ST/SHATINRC-06 | 35 days | Thu 4/12/14 | Wed 7/1/15 |
| 39 | NTE/ST/SHATINRC-03 | 35 days | Thu 8/1/15 | Wed 11/2/15 |
| 40 | NTE/ST/SHATINRC-01B | 35 days | Thu 12/2/15 | Wed 18/3/15 |
| 41 | NTE/ST/TAICHUK-07 | 35 days | Thu 19/3/15 | Wed 22/4/15 |



| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 42 | NTE/ST/MANLAM-01A | 35 days | Thu 23/4/15 | Wed 27/5/15 |
| 43 | Site clearance and street furniture removal at slip road | 7 days | Thu 12/6/14 | Wed 18/6/14 |
| 44 | **Noise barrier (NB) construction** | **416 days** | **Sun 18/5/14** | **Tue 7/7/15** |
| 45 | Material procument and panel delivery | 180 days | Sun 18/5/14 | Thu 13/11/14 |
| 46 | Breakup & dispose of extg hard material | 5 days | Thu 19/6/14 | Mon 23/6/14 |
| 47 | **EOT granted due to Inclement Weather in Jul. & Aug14 (EOT Order No. 2 & 3)** | 19.5 days | Tue 24/6/14 | Sun 13/7/14 |
| 48 | Tentative EOT Claims due to Claim No.4 | 10 days | Sun 13/7/14 | Wed 23/7/14 |
| 49 | Tentative EOT claim due to Inclement Weather in Sep.14 | 9 days | Wed 23/7/14 | Fri 1/8/14 |
| 50 | **Bay 1 & 2 (1st Portion) Footing construction** | **81.5 days** | **Fri 1/8/14** | **Tue 21/10/14** |
| 51 | **Bay 1 Footing Construction** | **76 days** | **Fri 1/8/14** | **Thu 16/10/14** |
| 52 | ELS system installation & surplus material disposal | 40 days | Fri 1/8/14 | Wed 10/9/14 |
| 53 | Forwork erection & steel reinforcement fixing | 24 days | Wed 10/9/14 | Sat 4/10/14 |
| 54 | Concreting & curing | 7 days | Sat 4/10/14 | Sat 11/10/14 |
| 55 | Formwork removal & soil backfill | 5 days | Sat 11/10/14 | Thu 16/10/14 |
| 56 | **Bay 2 Footing Construction ( 1st portion of 5m length )** | **46 days** | **Mon 1/9/14** | **Thu 16/10/14** |
| 57 | ELS system installation & surplus material disposal | 14 days | Mon 1/9/14 | Sun 14/9/14 |
| 58 | Tentative EOTclaims due to conflict with unexpected watermains | 7 days | Mon 15/9/14 | Sun 21/9/14 |
| 59 | Forwork erection & steel reinforcement fixing for base slab | 5 days | Mon 22/9/14 | Fri 26/9/14 |
| 60 | Concreting | 1 day | Sat 27/9/14 | Sat 27/9/14 |
| 61 | Forwork erection & steel reinforcement fixing for wall stem | 7 days | Sun 28/9/14 | Sat 4/10/14 |
| 62 | Concreting & curing | 7 days | Sun 5/10/14 | Sat 11/10/14 |
| 63 | Formwork removal & soil backfill | 5 days | Sun 12/10/14 | Thu 16/10/14 |
| 64 | ELS system removal | 5 days | Fri 17/10/14 | Tue 21/10/14 |
| 65 | **Existing boundary wall ( Bay 2 ~ Bay 5) demolition** | **50 days** | **Sun 12/10/14** | **Sun 30/11/14** |
| 66 | Temporary access reprovision | 7 days | Sun 12/10/14 | Sat 18/10/14 |
| 67 | Break up and dispose of extg boundary wall along Bay 5 & wall stem along Bay 4 ~ Bay2 | 16 days | Sun 19/10/14 | Mon 3/11/14 |
| 68 | Break up and dispose of extg boundary wall (footing) along Bay 4 | 9 days | Tue 4/11/14 | Wed 12/11/14 |
| 69 | Break up and dispose of extg boundary wall (footing) along Bay 3 | 9 days | Thu 13/11/14 | Fri 21/11/14 |
| 70 | Break up and dispose of extg boundary wall (footing) along Bay 2 | 9 days | Sat 22/11/14 | Sun 30/11/14 |
| 71 | **Bay 6 & 7 Footing construction** | **128 days** | **Mon 22/9/14** | **Tue 27/1/15** |
| 72 | Access setup, locate extg UU & breakup extg boundary wall | 28 days | Mon 22/9/14 | Sun 19/10/14 |
| 73 | Shoring installation along Bays without UU disturbance (I.e. Bay 3~5 & portion of Bay 6&7) | 12 days | Mon 20/10/14 | Fri 31/10/14 |
| 74 | Tentative EOT Claims due to extg. Sheet-pile, WSD pipe & PCCW cable ducts | 28 days | Sat 1/11/14 | Fri 28/11/14 |
| 75 | **Bay 7 Construction** | **38 days** | **Sat 29/11/14** | **Mon 5/1/15** |
| 76 | ELS system installation & surplus material disposal | 14 days | Sat 29/11/14 | Fri 12/12/14 |
| 77 | Forwork erection & steel reinforcement fixing | 14 days | Sat 13/12/14 | Fri 26/12/14 |
| 78 | Concreting & curing | 10 days | Sat 27/12/14 | Mon 5/1/15 |
| 79 | **Bay 6 construction** | **34 days** | **Sat 13/12/14** | **Thu 15/1/15** |
| 80 | Excavation & surplus material disposal | 10 days | Sat 13/12/14 | Mon 22/12/14 |
| 81 | Forwork erection & steel reinforcement fixing | 14 days | Tue 23/12/14 | Mon 5/1/15 |
| 82 | Concreting & curing | 10 days | Tue 6/1/15 | Thu 15/1/15 |



| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 83 | Formwork removal & soil backfill | 7 days | Fri 16/1/15 | Thu 22/1/15 |
| 84 | ELS system removal | 5 days | Fri 23/1/15 | Tue 27/1/15 |
| 85 | **Bay 4 & 5 Footing construction** | **52 days** | **Fri 23/1/15** | **Sun 15/3/15** |
| 86 | Excavation & surplus material disposal | 12 days | Fri 23/1/15 | Tue 3/2/15 |
| 87 | Forwork erection & steel reinforcement fixing | 18 days | Wed 4/2/15 | Sat 21/2/15 |
| 88 | Concreting & curing | 10 days | Sun 22/2/15 | Tue 3/3/15 |
| 89 | Formwork removal & soil backfill | 7 days | Wed 4/3/15 | Tue 10/3/15 |
| 90 | ELS system removal | 5 days | Wed 11/3/15 | Sun 15/3/15 |
| 91 | **Bay 3 and 2 (2nd portion of 7m span) Footing construction** | **52 days** | **Mon 16/3/15** | **Wed 6/5/15** |
| 92 | Excavation & surplus material disposal | 12 days | Mon 16/3/15 | Fri 27/3/15 |
| 93 | Forwork erection & steel reinforcement fixing | 18 days | Sat 28/3/15 | Tue 14/4/15 |
| 94 | Concreting & curing | 10 days | Wed 15/4/15 | Fri 24/4/15 |
| 95 | Formwork removal & soil backfill | 7 days | Sat 25/4/15 | Fri 1/5/15 |
| 96 | ELS system removal | 5 days | Sat 2/5/15 | Wed 6/5/15 |
| 97 | Noise Barrier Sytem Steelwork Erection | 140 days | Wed 28/1/15 | Tue 16/6/15 |
| 98 | Noise Barrier Panel, cladding and gutter fixing | 21 days | Wed 17/6/15 | Tue 7/7/15 |
| 99 | **New Sign Gantry construction** | **283 days** | **Mon 1/9/14** | **Wed 10/6/15** |
| 100 | Shop drawing and E&M works submission and approval | 150 days | Mon 1/9/14 | Wed 28/1/15 |
| 101 | Footing modification | 21 days | Thu 7/5/15 | Wed 27/5/15 |
| 102 | Steelwork fabrication, delivery & erection | 14 days | Thu 28/5/15 | Wed 10/6/15 |
| 103 | Drainage works | 28 days | Thu 7/5/15 | Wed 3/6/15 |
| 104 | Carriageway construction | 34 days | Thu 4/6/15 | Tue 7/7/15 |
| 105 | St lighting duct laying and street furniture provision | 12 days | Thu 11/6/15 | Mon 22/6/15 |
| 106 | Irrigation system construction | 7 days | Tue 23/6/15 | Mon 29/6/15 |
| 107 | Cycletracks & footpath construction | 14 days | Tue 23/6/15 | Mon 6/7/15 |
| 108 | Landscaping works | 27 days | Thu 11/6/15 | Tue 7/7/15 |
| 109 | 2nd stage modification of traffic signal at J/O Sha Tin Centre St & Lion Rock Tunnel Rd | 1 day | Tue 7/7/15 | Tue 7/7/15 |
| 110 | Joint site inspection with LCSD for handover posessed site | 1 day | Tue 7/7/15 | Tue 7/7/15 |
| 111 | | | | |