


Civil Engineering and Development Department

Agreement No. CE 67/2015 (HY) Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works Design and Construction

Monthly EM&A Report (Version 1.0)

April 2019

Approved By	
	<hr/>
	Mr. KS Lee 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.

CINOTECH CONSULTANTS LTD

Room 1710, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong
Tel: (852) 2151 2083 Fax: (852) 3107 1388
Email: info@cinotech.com.hk

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
Introduction	1
Environmental Monitoring Works	1
Key Information in the Reporting Month.....	2
Environmental License and Permits.....	2
Future Key Issues	3
1 INTRODUCTION	4
Background	4
Project Organizations	4
Construction Activities undertaken during the Reporting Month	5
Summary of EM&A Requirements.....	7
2 AIR QUALITY	8
Monitoring Requirements	8
3 WATER QUALITY	8
Monitoring Requirements	8
4 NOISE	9
Monitoring Requirements	9
Monitoring Locations.....	9
Monitoring Equipment	9
Monitoring Parameters and Frequency	10
Monitoring Methodology and QA/QC Procedures	10
Maintenance and Calibration.....	11
Results and Observations	11
5 COMPARISON OF EM&A RESULTS WITH EIA PREDICTIONS	13
6 ECOLOGY AND FISHERIES	14
7 LANDSCAPE AND VISUAL IMPACT	14
8 ENVIRONMENTAL AUDIT	15
Site Audits	15
Review of Environmental Monitoring Procedures.....	15
Statuses of Environmental Licensing and Permitting	15
Status of Waste Management.....	17
Implementation Status of Environmental Mitigation Measures.....	17
Implementation Status of Event and Action Plans.....	17
Summary of Complaint, Warning, Notification of any Summons and Successful Prosecution	19
9 FUTURE KEY ISSUES	20
Monitoring Schedule for the Next Month	21
10 CONCLUSIONS AND RECOMMENDATIONS	22
Conclusions	22
Recommendations	22

LIST OF TABLES

Table I	Non-compliance Record for the Project in the Reporting Month
Table II	Summary Table for Key Information in the Reporting Month
Table 1.1	Key Project Contacts
Table 1.2	Construction Programme Showing the Inter-Relationship with Environmental Protection/Mitigation Measures
Table 4.1	Noise Monitoring Stations
Table 4.2	Noise Monitoring Equipment
Table 4.3	Frequency and Parameters of Noise Monitoring
Table 4.4	Other Noise Sources Identified Which Might Affect the Noise Monitoring Results
Table 4.5	Baseline Noise Level and Noise Limit Level for Monitoring Stations
Table 5.1	Comparison of Noise Monitoring Data with predictions in EIA Report and ERR
Table 8.1	Summary of Environmental Licensing and Permit Status
Table 8.2	Observations and Recommendations of Site Audit

LIST OF FIGURES

Figure 1a-1h	Layout Plan of the Project Site
Figure 2	Locations of Construction Noise Monitoring Stations
Figure 3	Organization Chart

LIST OF APPENDICES

A	Work Programme
B	Action and Limit Levels for Noise
C	Copies of Calibration Certificates
D	Environmental Monitoring Schedules
E	Noise Monitoring Results and Graphical Presentations
F	Summary of Exceedance
G	Site Audit Summary
H	Event and Action Plans
I	Environmental Mitigation Implementation Schedule (EMIS)
J	Record of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution
K	Summary of Waste Generation and Disposal Records

EXECUTIVE SUMMARY

Introduction

1. This is the 30th Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the “Agreement No. CE 67/2015 (HY) Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works – Design and Construction” (hereinafter called “the Project”). This report documents the findings of EM&A Works conducted in April 2019.
2. During the reporting month, the major site activities undertaken in the reporting month included:

Portion A	-	Construction of Cycle Track, Installation of Bicycle Parapet, Installation of Light pole
Portion B	-	Construction of Subway A, Construction of Cycle Track, Parapet Footing
Portion C	-	Construction of Retaining Wall RW 11B, 11C, 12, 13 & 14, 15A, Resting Station R7, Parapet Footing, Construction of U-Channel, Laying Bituminous for Cycle Track, Planting
Portion D	-	Construction of Drainage Pipe, Construction of RW 15B, 15C, 15D, 15E, 16A Stream Decking D1, D2 & D3
Portion E	-	Construction of Retaining Wall RW D4, D5, D6, D17, D18, D19, D20, D21, D22, D23, D24, D25 & D26A,B,C Construction of Drainage Pipe, Construction of Boundary Wall, Realignment of Mai Po Lung Road
Portion F	-	Construction of Drainage Pipe, Construction of Retaining wall RW 43, Construction of Boundary Wall, Relocation of Existing Bus Stop
Portion G	-	Remaining Works for Box Culvert C, Relocation of Traffic Sign Gantry
Portion H	-	Construction of Retaining Wall RW 45A, 45B Ramp, 49, DW1 & DW2 Construction of Drainage,
Portion I	-	Construction of Subway D, Construction of Drainage Pipe
Portion J	-	Construction of RW 46, 47, 48, 24A, 24C, 25, 26, Construction of Stream Decking D8, Construction near Dills Corner Garden
Portion K	-	Construction of U-Channel, Construction of DSD’s Access Road, Installation of Bicycle Parapet
Portion M	-	Backfilling behind RW 30A, 30B, Construction of Bridge E’s Roofing
Portion N	-	Construction of Bridge B

Environmental Monitoring Works

3. Environmental monitoring for the Project shall be performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Site Inspections/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 in the reporting month for the Project is tabulated in **Table I**.

Table I Non-compliance Record for the Project in the Reporting Month

Parameter	No. of Exceedance		Action Taken
	Action Level	Limit Level	
Noise	0	0	N/A

Key Information in the Reporting Month

5. Summary of key information in the reporting month is tabulated in **Table II**.

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	---
Reporting Changes	0	---	N/A	N/A	---
Notifications of any summons & prosecutions received	0	---	N/A	N/A	---

No complaint was received in this reporting month.

Environmental License and Permits

6. Licenses/Permits granted to the Project include:
- Environmental Permits (EP) for the Project,
 - EP-450/2013 issued on 30 May 2013 and EP-450/2013/A issued on 25 August 2015; and
 - EP-501/2015 issued on 2 September 2015
 - Billing Account for Waste Disposal (Acc No.: 7025411)
 - Discharge License
 - WT00028748-2017, WT00027672-2017, WT00027661-2017 , WT00027606-2017, WT00027510-2017, WT00027509-2017 , WT00027603-2017 , WT00027605-2017, WT00027508-2017, WT00027834-2017, WT00028431-2017, WT00027584-2017, WT00027607-2017, WT00028850-2017 , WT00030236-2018
 - Chemical Waste Producers
 - No.: WPN5213-524-K3261-01

Future Key Issues

7. The future key environmental issues in the coming months include:
- Wastewater and runoff generation on-site;
 - Regular removal of silt, mud and sand along u-channels and inside sedimentation tanks;
 - Review and implementation of temporary drainage system for the surface runoff;
 - Noise from operation of the equipment, especially for excavation works and machinery on-site;
 - Dust generation from stockpiles of dusty materials, exposed site area, excavation works and other dust-generating activities;
 - Water spraying for dust generating activities and on haul road;
 - Proper storage of construction materials on-site;
 - Storage of chemicals/fuel and chemical waste/ waste oil on-site;
 - Accumulation of general refuse and construction waste on-site; and
 - Protection measures for retained trees on-site.

1 INTRODUCTION

Background

- 1.1 “Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River” (the EIA Report) is a Schedule 2 Designated Project (DP) under Environmental Impact Assessment Ordinance (EIAO). The Environmental Impact Assessment (EIA) Report (Registered No.: AEIAR-133/2009) and the associated Environmental Monitoring and Audit (EM&A) Manual was approved on 12 March 2009.
- 1.2 Civil Engineering and Development Department (CEDD) implemented the DP in two stages, i.e. Stage 1 and Stage 2. An Environmental Permit (EP) No. EP-450/2013 has been granted for Stage 1 works on 30 May 2013. Pursuant to Section 13 of the EIAO, the Director of Environmental Protection amends the Environmental Permit (No. EP-450/2013) based on the Application No. VEP-478/2015 and the EP (Permit No. EP-450/2013/A) was issued on 25 August 2015 to CEDD as the Permit Holder.
- 1.3 An Environmental Review (ER) Report of the “Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River – Stage 2” had been prepared in July 2015 and the Environmental Monitoring and Audit Manual (EM&A Manual) was also included as part of the ER report in the application (Application No.: AEP-501-2015). An Environmental Permit No. EP-501/2015 was issued on 2 September 2015 for Stage 2 works to CEDD as the Permit Holder.
- 1.4 “Agreement No. CE 67/2015 (HY) Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works – Design and Construction” (hereinafter called the “Project”) covers the Stage 1 (Part) and Stage 2 works of the DP. This Project was commissioned to Sang Hing – Kuly Joint Venture (hereinafter called the “Contractor”) for “Contract No.: YL/2015/01 Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works”. The site location and work programme are shown in **Figure 1a-1h** and **Appendix A** respectively.
- 1.5 Cinotech Consultants Ltd. was designated as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) works for the Project. The construction commencement of the Project was on 23rd November 2016. This is the 30th Monthly EM&A Report summarizing the EM&A works for the Project during April 2019.

Project Organizations

- 1.6 Different parties with different levels of involvement in the project organization include:
 - Project Proponent – Civil Engineering and Development Department (CEDD)
 - Supervisor Representative – Mannings (Asia) Consultants Limited (Mannings)
 - Environmental Team (ET) – Cinotech Consultants Limited (Cinotech)
 - Independent Environmental Checker (IEC) – ANewR Consulting Limited (ANewR)
 - Contractor – Sang Hing – Kuly Joint Venture (SKJV)

1.7 The Organizational Structure for Environmental Management is shown in **Figure 3**.

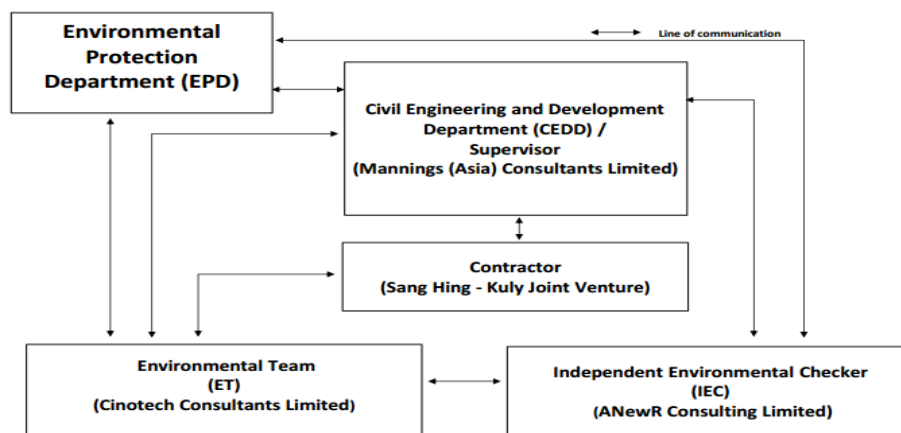


Figure 3 Organization Structure (Environmental Aspects)

1.8 The key contacts of the Project are shown in **Table 1.1**.

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Phone No.	Fax No.
CEDD	Project Proponent	Mr. Chu Wai Lun, Thomas	2417 6370	2412 0358
Mannings	Supervisor Representative	Mr. Simon Ng	3168 2028	3168 2022
Cinotech	Environmental Team	Mr. KS Lee	2151 2091	3107 1388
		Ms. Betty Choi	2151 2072	
ANewR	Independent Environmental Checker	Mr. Adi Lee	2618 2836	3007 8648
SKJV	Contractor	Mr. Ma Kin Man	9552 1734	2890 8205

Construction Activities undertaken during the Reporting Month

1.9 The major site activities undertaken in the reporting month included:

- Portion A - Construction of Cycle Track, Installation of Bicycle Parapet, Installation of Light pole
- Portion B - Construction of Subway A, Construction of Cycle Track, Parapet Footing
- Portion C - Construction of Retaining Wall RW 11B, 11C, 12, 13 & 14, 15A, Resting Station R7, Parapet Footing, Construction of U-Channel, Laying Bituminous for Cycle Track, Planting
- Portion D - Construction of Drainage Pipe, Construction of RW 15B, 15C, 15D, 15E, 16A Stream Decking D1, D2 & D3

Portion E	- Construction of Retaining Wall RW D4, D5, D6, D17, D18, D19, D20, D21, D22, D23, D24, D25 & D26A,B,C Construction of Drainage Pipe, Construction of Boundary Wall, Realignment of Mai Po Lung Road
Portion F	- Construction of Drainage Pipe, Construction of Retaining wall RW 43, Construction of Boundary Wall, Relocation of Existing Bus Stop
Portion G	- Remaining Works for Box Culvert C, Relocation of Traffic Sign Gantry
Portion H	- Construction of Retaining Wall RW 45A, 45B Ramp, 49, DW1 & DW2 Construction of Drainage,
Portion I	- Construction of Subway D, Construction of Drainage Pipe
Portion J	- Construction of RW 46, 47, 48,24A, 24C, 25, 26, Construction of Stream Decking D8, Construction near Dills Corner Garden
Portion K	- Construction of U-Channel, Construction of DSD's Access Road, Installation of Bicycle Parapet
Portion M	- Backfilling behind RW 30A, 30B, Construction of Bridge E's Roofing
Portion N	- Construction of Bridge B

1.10 Inter-relationship with environmental protection/mitigation measures are presented in **Table 1.2**.

Table 1.2 Construction Programme Showing the Inter-Relationship with Environmental Protection/Mitigation Measures

Construction Works	Major Environmental Impact	Control Measures
As mentioned in Section 1.9	Noise, dust impact, water quality and waste generation	<ul style="list-style-type: none"> • Sufficient watering of the works site with active dust emitting activities • Properly cover the stockpiles • On-site waste sorting and implementation of trip ticket system • Appropriate desilting/sedimentation devices provided on site for treatment with valid Discharge License before discharge • Well maintain the drainage system to prevent the spillage of wastewater during heavy rainfall • Use of quiet plant and well-maintained construction plant • Provide movable noise barrier • Proper wheel washing for construction vehicles before leaving the site • Provide sufficient mitigation measures as recommended in Approved EM&A Manual/Lease requirement

Summary of EM&A Requirements

- 1.11 The EM&A programme requires construction noise monitoring, air quality monitoring, landscape and visual monitoring and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:
- All monitoring parameters;
 - Action and Limit levels for all environmental parameters;
 - Event and Action Plans;
 - Environmental mitigation measures, as recommended in the EIA Reports, Environmental Review Reports and EM&A Manuals
- 1.12 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 8 of this report.
- 1.13 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required noise monitoring and audit works for the Project in April 2019.

2 AIR QUALITY

Monitoring Requirements

- 2.1 According to the approved EM&A Manuals for Stage 1 works and Stage 2 works in Year 2015, no air quality monitoring is required for the Project.
- 2.2 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of air quality mitigation measures within the site boundaries of this Project. The summaries of site audits are attached in **Appendix G**.

3 WATER QUALITY

Monitoring Requirements

- 3.1 According to the approved EM&A Manuals for Stage 1 works and Stage 2 works in Year 2015, no water quality monitoring is required for the Project.
- 3.2 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of water quality mitigation measures within the site boundaries of this Project. The summaries of site audits are attached in **Appendix G**.

4 NOISE

Monitoring Requirements

- 4.1 In accordance with approved EM&A Manuals for Stage 1 works in Year 2015, no noise impact monitoring is required for Stage 1 works of the Project.
- 4.2 According to approved EM&A Manual for Stage 2 works (Year 2015), construction noise monitoring was conducted to monitor the construction noise arising from the construction activities under the Stage 2 works of the Project. The regular monitoring frequency for each monitoring station shall be on a weekly basis and conduct one set of measurements between 0700 and 1900 hours on normal weekdays. Appendix B shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

- 4.3 Noise monitoring was conducted at 6 designated monitoring stations (N1, N2, N3, N5, N6 and N7) in the reporting month. **Figures 2a – 2c** show the locations of these stations.

Table 4.1 Noise Monitoring Stations

Monitoring Stations	Locations	Location of Measurement
N1	HKMLC Wong Chan Sook Ying Memorial School	Rooftop (about 5/F) area
N2	Bethel High School	Rooftop (about 4/F) area
N3	No. 159 Mai Po San Tsuen	G/F area
N5	Block 2, Dills Corner Garden	G/F area
N6	Home of Loving Faithfulness	Rooftop (about 3/F) area
N7	Village House in Shek Wu Wai	G/F area

Monitoring Equipment

- 4.2 Integrating Sound Level Meter was used for impact noise monitoring. The meters are Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (L_x) that also complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications.
- 4.3 Acoustic Calibrator was used to check the accuracy of the sound level meter. The calibrators generate a continuous and highly stable sound pressure level at known frequency of 1 kHz that also complied with IEC 942: 1988 Class 1 specifications. **Table 4.2** summarizes the noise monitoring equipment in reporting period. Copies of calibration certificates are provided in **Appendix C**.

Table 4.2 Noise Monitoring Equipment

Equipment	Model No.	Qty.
Integrating Sound Level Meter/ Sound & Vibration Analyser	SVAN 979, SVAN957	2
Acoustic Calibrator	SV30A, B&K 4231	2

Monitoring Parameters and Frequency

- 4.4 **Table 4.3** summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix D**.

Table 4.3 Frequency and Parameters of Noise Monitoring

Monitoring Stations	Parameter	Period	Frequency	Measurement
N1	L _{eq} (30 min.) dB(A) L ₁₀ (30 min.) dB(A) L ₉₀ (30 min.) dB(A)	0700-1900 hrs on normal weekdays	Once per week	Façade
N2				Façade
N3				Free Field
N5				Free Field
N6				Façade
N7				Free Field

Monitoring Methodology and QA/QC Procedures

- 4.5 The monitoring procedures are as follows:
- The monitoring station were normally be at a point 1m from the exterior of the sensitive receivers building façade and be at a position 1.2m above the ground.
 - For free field measurement, the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB (A).
 - 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
 - Measurement time : 30 minutes
 - Prior to and after each noise measurement, the meter was calibrated using a 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.
 - At the end of the monitoring period, the L_{eq}, L₉₀ and L₁₀ were recorded. In addition, noise sources were recorded on a standard record sheet.
 - Noise measurement would be paused temporarily during periods of high intrusive noise if possible and observation would be recorded when intrusive noise was not avoided.
 - Noise monitoring would be 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. supplementary monitoring would be provided to ensure sufficient data would be obtained.

Maintenance and Calibration

- 4.6 The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.
- 4.7 The sound level meter and calibrator were checked and calibrated at yearly intervals.
- 4.8 Immediately prior to and following each noise measurement, the accuracy of the sound level meter was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

Results and Observations

- 4.9 All construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. The summary of exceedance record in the reporting month is shown in **Appendix F**.
- 4.10 The baseline noise level and the Noise Limit Level at each designated noise monitoring stations are presented in **Table 4.5**.
- 4.11 Noise monitoring results and graphical presentations are shown in **Appendix E**.
- 4.12 The other noise sources identified which might affect the noise monitoring results at the designated noise monitoring stations are as follows:

Table 4.4 Other Noise Sources Identified Which Might Affect the Noise Monitoring Results

Monitoring Stations	Locations	Other Noise Source(s)
N1	HKMLC Wong Chan Sook Ying Memorial School	Road traffic noise Noise from daily school activities
N2	Bethel High School	Road traffic noise Noise from daily school activities
N3	No. 159 Mai Po San Tsuen	Road traffic noise
N5	Block 2, Dills Corner Garden	Road traffic noise
N6	Home of Loving Faithfulness	Road traffic noise Noise from activities at the premise and workshops near the premise
N7	Village House in Shek Wu Wai	Road traffic noise Noise from activities at workshops near the village house

Table 4.5 Baseline Noise Level and Noise Limit Level for Monitoring Stations

Station	Baseline Noise Level, dB (A)	Noise Limit Level, dB (A)
N1	62.2 (at 0700 – 1900 hrs on normal weekdays)	70* (at 0700 – 1900 hrs on normal weekdays)
N2	55.2 (at 0700 – 1900 hrs on normal weekdays)	
N3	68.8 (at 0700 – 1900 hrs on normal weekdays)	75 (at 0700 – 1900 hrs on normal weekdays)
N5	70.7 (at 0700 – 1900 hrs on normal weekdays)	75 (at 0700 – 1900 hrs on normal weekdays)
N6	72.0 (at 0700 – 1900 hrs on normal weekdays)	75 (at 0700 – 1900 hrs on normal weekdays)
N7	70.7 (at 0700 – 1900 hrs on normal weekdays)	75 (at 0700 – 1900 hrs on normal weekdays)

(*) Noise Limit Level is 65 dB (A) during school examination periods.

5 COMPARISON OF EM&A RESULTS WITH EIA PREDICTIONS

- 5.1 The EM&A data was compared with the predictions in EIA Report (Year 2009) and Environmental Review Report (ERR) for Stage 2 Works (Year 2015) as summarized in **Table 5.1**.

Table 5.1 Comparison of Noise Monitoring Data with Predictions in EIA Report and ERR

Stations	Predicted Mitigated Construction Noise Levels in EIA (2009), dB(A)	Predicted Mitigated Worst Case Construction Noise Levels in ERR for Stage 2 (2015), dB(A)	Reporting Month (April 19), Leq (30min) dB(A)
N1 - HKMLC Wong Chan Sook Ying Memorial School	55-62	62 ⁽¹⁾	60.4 - 62.1
N2 – Bethel High School	57-64	64 ⁽¹⁾	45.0 - 54.5
N3 – No. 159 Mai Po San Tsuen	70-73	74 ⁽²⁾	64.6 - 70.3
N5 – Block 2, Dills Corner Garden	73-75	75 ⁽²⁾	68.1 - 70.5
N6 – Home of Loving Faithfulness	64-73	74 ⁽¹⁾	65.6 - 71.6
N7 – Village House in Shek Wu Wai	N/A ⁽³⁾	70 ⁽²⁾	63.1 - 70.5

Remark:

(1) With adoptions of quiet PMEs, temporary noise barrier and enclosure

(2) With sub-grouping of construction activities

(3) No construction noise level was predicted in EIA Report (2009)

- 5.2 When comparing the noise monitoring results to the predicted mitigated construction noise levels in the EIA Report, the results at N1 was slightly higher than the range of the predicted mitigated construction noise levels, while the results at N2, N5 were lower than the range of the predicted mitigated construction noise levels in the EIA Report. The results at N3 was slightly lower the range and N6 were within the range of the predicted mitigated construction noise levels in the EIA Report.
- 5.3 When comparing the noise monitoring results to the predicted mitigated worst case construction noise levels in the ERR for Stage 2 Works, the results at monitoring stations N2, N3, N5 and N6 were lower than the predicted mitigated worst case construction noise levels in the ERR for Stage 2 Works. The result at N1 and N7 exceeded the predicted mitigated worst case construction noise levels in the ERR for Stage 2 Works.

6 ECOLOGY AND FISHERIES

- 6.1 In accordance with the EM&A Manuals for Stage 1 and Stage 2 works in Year 2015, no specific ecological or fisheries monitoring is required during the construction phase of the Project.
- 6.2 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of ecology and fisheries mitigation measure. The summaries of site audits are attached in **Appendix G**.

7 LANDSCAPE AND VISUAL IMPACT

- 7.1 In accordance with the EM&A Manuals for Stage 1 and Stage 2 works in Year 2015, regular audits should be carried out to ensure all the recommended landscape and visual mitigation measures in EIA Report, Environmental Review Reports and EM&A Manuals were effectively implemented.
- 7.2 ET Site audits were carried out on a weekly basis to monitor and audit the timely implementation of landscape and visual mitigation measure. The summaries of site audits are attached in **Appendix G**.

8 ENVIRONMENTAL AUDIT

Site Audits

- 8.1 Site audit was carried out on a 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 G**.
- 8.2 Site audits were conducted on 3, 11, 17, 24 and 30 April 2019 in the reporting month. IEC joint site inspection was conducted on 11 April 2019. No non-compliance was observed during the site audit.

Review of Environmental Monitoring Procedures

- 8.3 The monitoring works conducted by the monitoring 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.

Statues of Environmental Licensing and Permitting

- 8.4 All permits/licenses obtained for the Project are summarized in **Table 8.1**.

Table 8.1 Summary of Environmental Licensing and Permit Status

Permit No.	Valid Period		Details	Status
	From	To		
Environmental Permit (EP)				
EP-450/2013/A	25/08/2015	N/A	Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River – Stage 1	Valid
EP-501/2015	02/09/2015	N/A	Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River – Stage 2	Valid
Billing Account for Construction Waste Disposal				
A/C No.: 7025411	N/A	N/A	Billing Account for construction waste disposal under Waste Disposal (Charges for Disposal of Construction Waste) Regulation	Valid
Effluent Discharge License				
WT00027672-2017	28/3/2017	31/3/2022	Discharge License for the discharge of wastewater from the construction site including contaminated surface run-off to	Valid
WT00027661-2017	28/3/2017	31/3/2022		
WT00027606-2017	27/3/2017	31/3/2022		
WT00027510-2017	27/3/2017	31/3/2022		

Permit No.	Valid Period		Details	Status
	From	To		
WT00027509-2017	20/3/2017	31/3/2022	the communal storm water drain	
WT00027603-2017	27/3/2017	31/3/2022		
WT00027508-2017	20/3/2017	31/3/2022		
WT00027584-2017	27/3/2017	31/7/2019		
WT00027605-2017	27/3/2017	31/3/2022		
WT00027607-2017	27/3/2017	31/3/2022		
WT00027834-2017	13/4/2017	30/4/2022		
WT00028431-2017	22/6/2017	30/6/2020		
WT00028748-2017	17/08/2017	31/08/2022		
WT00028850-2017	14/08/2017	31/08/2022		
WT00030236-2018	7/02/2018	28/02/2022		
Registration of Chemical Waste Producer				
No.:WPN5213-524-K3261-01	--	N/A	Registration of chemical waste producer for chemical waste produced during construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River – Stage 2	Valid

Status of Waste Management

- 8.5 The amount of wastes generated by the major site activities of this Project during the reporting month is shown in **Appendix K**.
- 8.6 In respect of the dump truck cover, the Contractor is advised to take record photos and inspection to ensure that all dump trucks have fully covered the skip before leaving the site.

Implementation Status of Environmental Mitigation Measures

- 8.7 According to the Environmental Review Reports, Environmental Permits and the EM&A Manuals of the Project, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An updated summary of the Environmental Mitigation Implementation Schedule (EMIS) is provided in **Appendix I**.
- 8.8 During site inspections in the reporting month, no non-conformance was identified. The ET weekly site inspections were carried out during the reporting month and the observations and recommendations are summarized in **Table 8.2**. Refer to **Appendix G** for the site inspection checklists in the reporting month.

Table 8.2 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	20, 27 Mar 2019	Standing water should be avoided at Portion D. Water pump should be switched on during operation hour.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Apr 2019.
	20 Mar – 24 Apr 2019	At Portion D, u-channel should be kept clean to ensure water flow direction.	The condition was observed to be improved/rectified by the contractor during the audit session on 30 Apr 2019.
	11 Apr 2019	Stand water should be avoided and pump out discharged via sediment tanks at Portion F.	The condition was observed to be improved/rectified by the contractor during the audit session on 17 Apr 2019.
	17, 24, 30 Apr 2019	Standing Water should be pumped out discharged via sediment tanks at Portion J.	Follow up actions will be reported in the next month.
	24 Apr 2019	Stand water should be avoided at Portion D.	The condition was observed to be improved/rectified by the contractor during the audit session on 30 Apr 2019.
	24, 30 Apr 2019	Stand water should be avoided at Portion F.	Follow up actions will be reported in the next month.
	30 Apr 2019	Sediment control measures should be inspected and maintained after rain storms at Portion J. Sandbags should be implemented to prevent muddy water from entering public drain.	Follow up actions will be reported in the next month.
	30 Apr 2019	Stand water should be avoided at Portion D.	Follow up actions will be reported in the next month.

Parameters	Date	Observations and Recommendations	Follow-up
<i>Air Quality</i>	22 Jan – 27 Mar 2019	At Portion A, mitigation measure for dust suppressing (e.g. watering) should be implemented at exposed area and public road.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Apr 2019.
	14, 20, 27 Mar 2019	The haul road should be watered regularly at Portion M.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Apr 2019.
	27 Mar - 30 Apr 2019	The haul road should be watered regularly to avoid dust generation at Subway A.	Follow up actions will be reported in the next month.
	27 Mar 2019	The excavated dusty materials or stockpile of dusty materials should be covered by impervious materials at Portion B.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Apr 2019.
	3, 11, 17 Apr 2019	The haul road should be kept clean at Portion B.	The condition was observed to be improved/rectified by the contractor during the audit session on 24 Apr 2019.
	11 Apr 2019	Unpaved areas should be watered regularly to avoid dust generation at Portion F.	The condition was observed to be improved/rectified by the contractor during the audit session on 17 Apr 2019.
	11, 17, 24 Apr 2019	The haul roads should be watered regularly to avoid dust generation at Portion B.	The condition was observed to be improved/rectified by the contractor during the audit session on 30 Apr 2019.
	17, 24, 30 Apr 2019	The excavated dusty materials or stockpile of dusty materials should be covered by impervious materials at Portion B.	Follow up actions will be reported in the next month.
	17 Apr 2019	The site vehicles wheels should be washed at the site exits at Portion D.	The condition was observed to be improved/rectified by the contractor during the audit session on 24 Apr 2019.
	24 Apr 2019	The public road around the site entrance should be kept clean at Portion F.	The condition was observed to be improved/rectified by the contractor during the audit session on 30 Apr 2019.
<i>Noise</i>	N/A	There was no observation in the reporting period.	N/A
<i>Waste/ Chemical Management</i>	26 Jul 2018 – 30 Apr 2019	Clear the oil stains as chemical waste at WA3.	Follow up actions will be reported in the next month.
	20, 27 Mar 2019	Contractor is reminded to store chemicals properly at Subway A and Portion B, e.g. provide drip tray and label containers.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Apr 2019.
	20, 27 Mar 2019	Contractor is reminded to store chemicals properly at Portion D, e.g. provide drip tray and label containers.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Apr 2019.
	3 Apr 2019	The construction waste should be reused where practicable or disposed at Portion B.	The condition was observed to be improved/rectified by the contractor during the audit session on 11 Apr 2019.

Parameters	Date	Observations and Recommendations	Follow-up
	3, 11, 17 Apr 2019	The accumulation of general refuse should be avoided at Portion F.	The condition was observed to be improved/rectified by the contractor during the audit session on 24 Apr 2019.
<i>Ecology and Fisheries</i>	N/A	There was no observation in the reporting period.	N/A
<i>Landscape and Visual</i>	26 Jul 2018 – 30 Apr 2019	To set up a proper tree protection zone at WA3.	Follow up actions will be reported in the next month.
	6 Mar – 17 Apr 2019	Existing trees should be protected and maintained carefully and set up a proper tree protection zone at Subway A.	The condition was observed to be improved/rectified by the contractor during the audit session on 24 Apr 2019.
<i>Permits/ Licenses</i>	N/A	There was no observation in the reporting period.	N/A

Implementation Status of Event and Action Plans

8.9 The Event and Action Plan for noise is presented in **Appendix H**.

Construction Noise

8.10 No Action/Limit Level exceedance was recorded in the reporting month.

Record of Complaint, Warning, Notification of any Summons and Successful Prosecution

8.11 The record of all environmental complaints, warnings, summons and notifications of successful prosecution for the Project is presented in **Appendix J**.

9 FUTURE KEY ISSUES

9.1 Major site activities undertaken for the coming months include:

- | | |
|-----------|---|
| Portion A | - Construction of Cycle Track, Installation of Bicycle Parapet, Installation of Light Pole. |
| Portion B | - Construction of Subway A, Construction of Cycle Track |
| Portion C | - Construction of Retaining Wall RW 11A, 11B, 11C, 12, 13 & 14, 15A, Resting Station R7, Construction of Drainage Works, Laying Bituminous for Cycle Track, Planting, Installation of Light Pole |
| Portion D | - Construction of Drainage Pipe, Construction of RW 15B, 15C, 15D, 15E, 16A Stream Decking D1, D2 & D3 |
| Portion E | - Construction of Retaining Wall RW D2, D4, D5, D6, D7, D17, D18, D19, D20, D21, D22, D23, D24 & D25, D26, D26ABC Construction of Drainage Pipe, Construction of Boundary Wall, Realignment of Mai Po Lung Road |
| Portion F | - Construction of Drainage Pipe, Construction of Retaining wall RW 43, Construction of Boundary Wall, Relocation of Existing Bus Stop |
| Portion G | - Remaining Works for Box Culvert C, Relocation of Traffic Sign Gantry |
| Portion H | - Construction of Retaining Wall RW 45A, 49, DW1 & DW2
Construction of Drainage |
| Portion I | - Construction of Subway D, Construction of Drainage |
| Portion J | - Construction of RW 46, 47, 48, 24, 25, 26, Construction of Stream Decking D8 |
| Portion K | - Installation of Bicycle Parapet, Construction of DSD's Access Road, Tree and Shrub Planting |
| Portion M | - Backfilling behind RW 30A, 30B, Construction of Bridge E's Roofing |
| Portion N | - Construction of Bridge B |

9.2 Key environmental issues in the coming months include:

- Wastewater and runoff generation on-site;
- Regular removal of silt, mud and sand along u-channels and inside sedimentation tanks;
- Review and implementation of temporary drainage system for the surface runoff;
- Noise from operation of the equipment, especially for excavation works and machinery on-site;
- Dust generation from stockpiles of dusty materials, exposed site area, excavation works and other dust-generating activities;
- Water spraying for dust generating activities and on haul road;
- Proper storage of construction materials on-site;
- Storage of chemicals/fuel and chemical waste/waste oil on-site;
- Accumulation of general refuse and construction waste on-site; and
- Protection measures for retained trees.

9.3 The tentative program of major site activities and the impact prediction and control measures for the coming months, i.e. April to May 2019, are summarized as follows:

Construction Works	Major Impact Prediction	Control Measures
As mentioned in Section 9.1	Air quality impact (dust)	(a) Frequent watering of haul road and unpaved/exposed areas; (b) Frequent watering or covering stockpiles with tarpaulin or similar means; and (c) Watering of any earth moving activities.
	Water quality impact (surface run-off)	(d) Diversion of the collected effluent to de-silting facilities for treatment in compliance with valid Discharge License prior to discharge to public storm water drains; (e) Provision of adequate de-silting facilities for treating surface run-off and other collected effluents prior to discharge; (f) Provision of perimeter protection such as sealing of hoarding footings to avoid run-off from entering the existing storm water drainage system via public road; and (g) Provision of measures to prevent discharge into the stream.
	Noise impact	(h) Scheduling of noisy construction activities if necessary to avoid persistent noisy operation; (i) Controlling the number of plants use on site; (j) Regular maintenance of machines (k) Use of quiet PME's on-site; and (l) Use of acoustic barriers and noise enclosure if necessary.
	Landscape and Visual	(m) Proper setup of precautionary area for retained trees.

Monitoring Schedule for the Next Month

9.4 The tentative environmental monitoring schedules for the next month are shown in **Appendix D**.

10 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 10.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.

Construction Noise Monitoring

- 10.2 All construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was record.

Site Audit

- 10.3 5 times of ET joint weekly environmental site inspections were conducted in the reporting month.

Complaint and Prosecution

- 10.4 No environmental complaints were received in this reporting month.
- 10.5 No environmental prosecution was received in the reporting month.

Recommendations

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

Air Quality

- Water spraying should be provided frequently to unpaved and exposed area, and haul roads for dust suppression.
- Proper tarpaulin coverage should be provided to all stockpiles in the Site to prevent dust generation.

Water Quality

- Nearby channels should be kept clean.
- Embankment or dikes should be established at the site boundary to direct any untreated wastewater from the Site to wastewater treatment facility during rain events to perform water treatment before discharge.
- Standing or ponding water within the Site should be cleared as far as practicable.

Waste/Chemical Management

- General refuse should be removed regularly to prevent accumulation on-site. Proper enclosed bin should be provided with maintenance for collection of general refuse from workforce.
- Drip tray should be provided to oil/chemical containers and generator to avoid oil leakage. Any oil stain observed on ground should be properly removed as chemical waste.

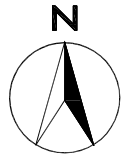
Landscape and Visual

- Adequate tree protection zones should be established to protect retained and existing trees. Conspicuous signs of status of trees should be clearly shown to avoid damage from PME's or workers.

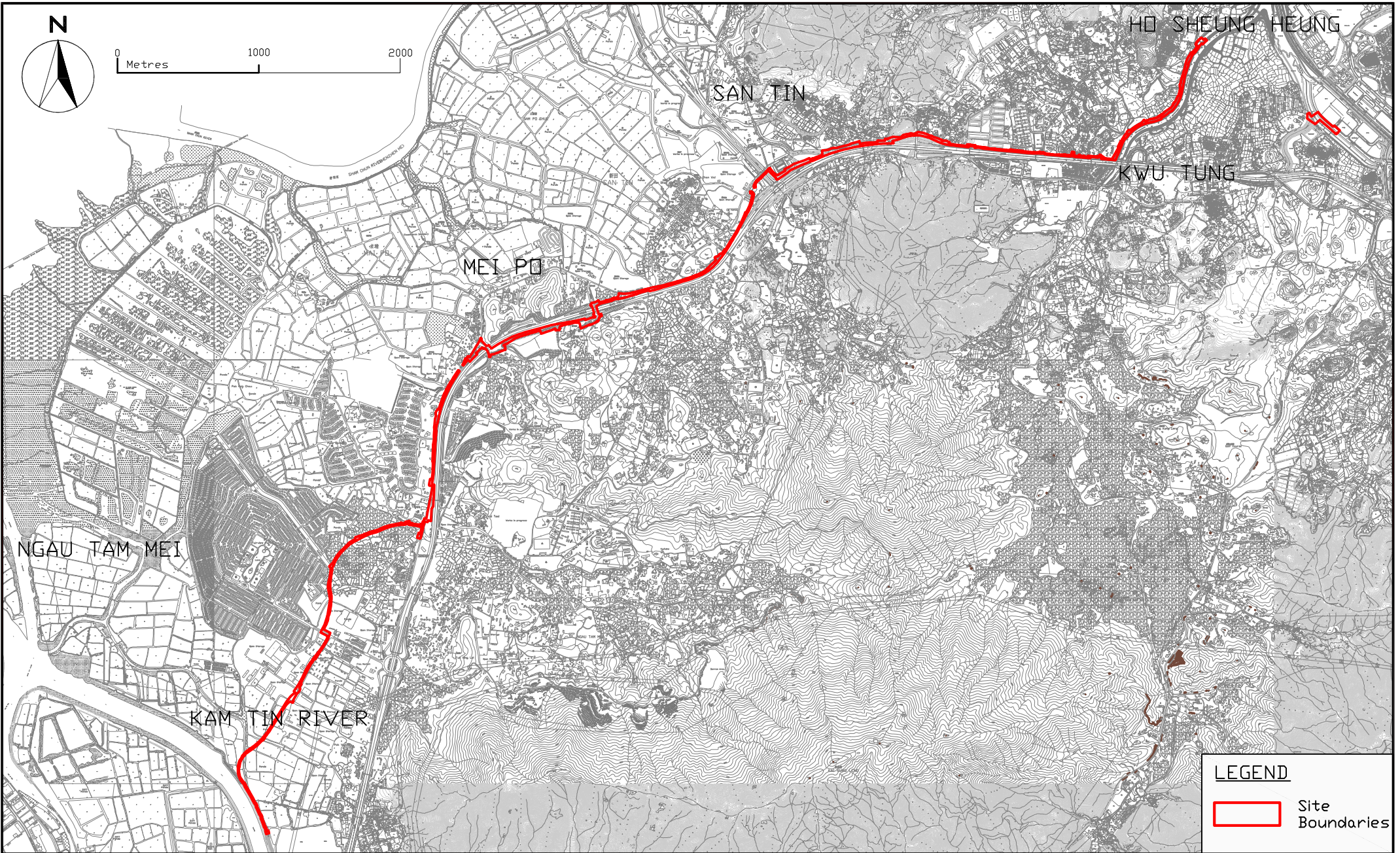
Permits/Licences

- Environmental licences should be properly displayed at every entrance.

FIGURES



0 Metres 1000 2000



LEGEND

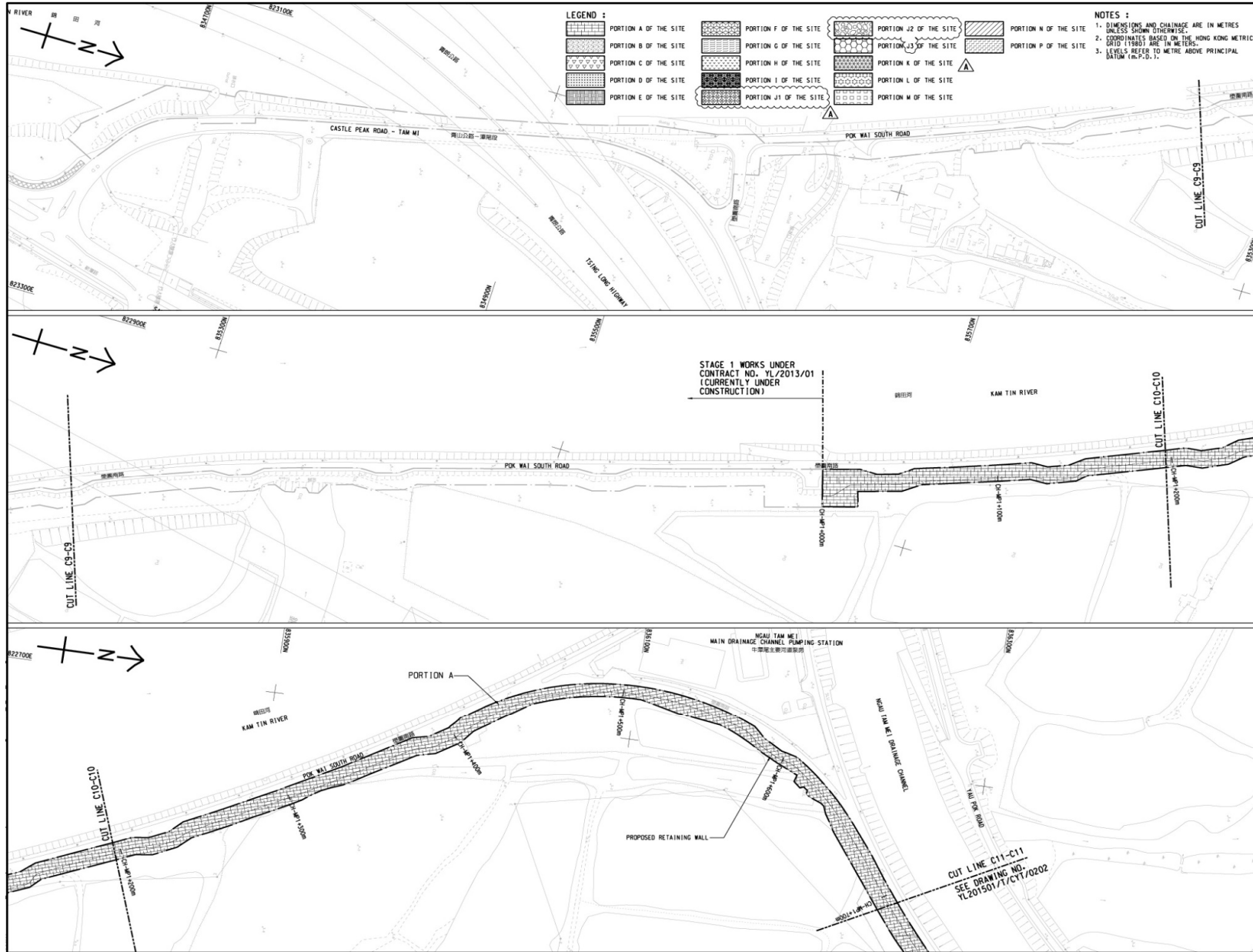
 Site Boundaries



Agreement No. CE 67/2015(HY) - Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works - Design and Construction

SITE LAYOUT PLAN

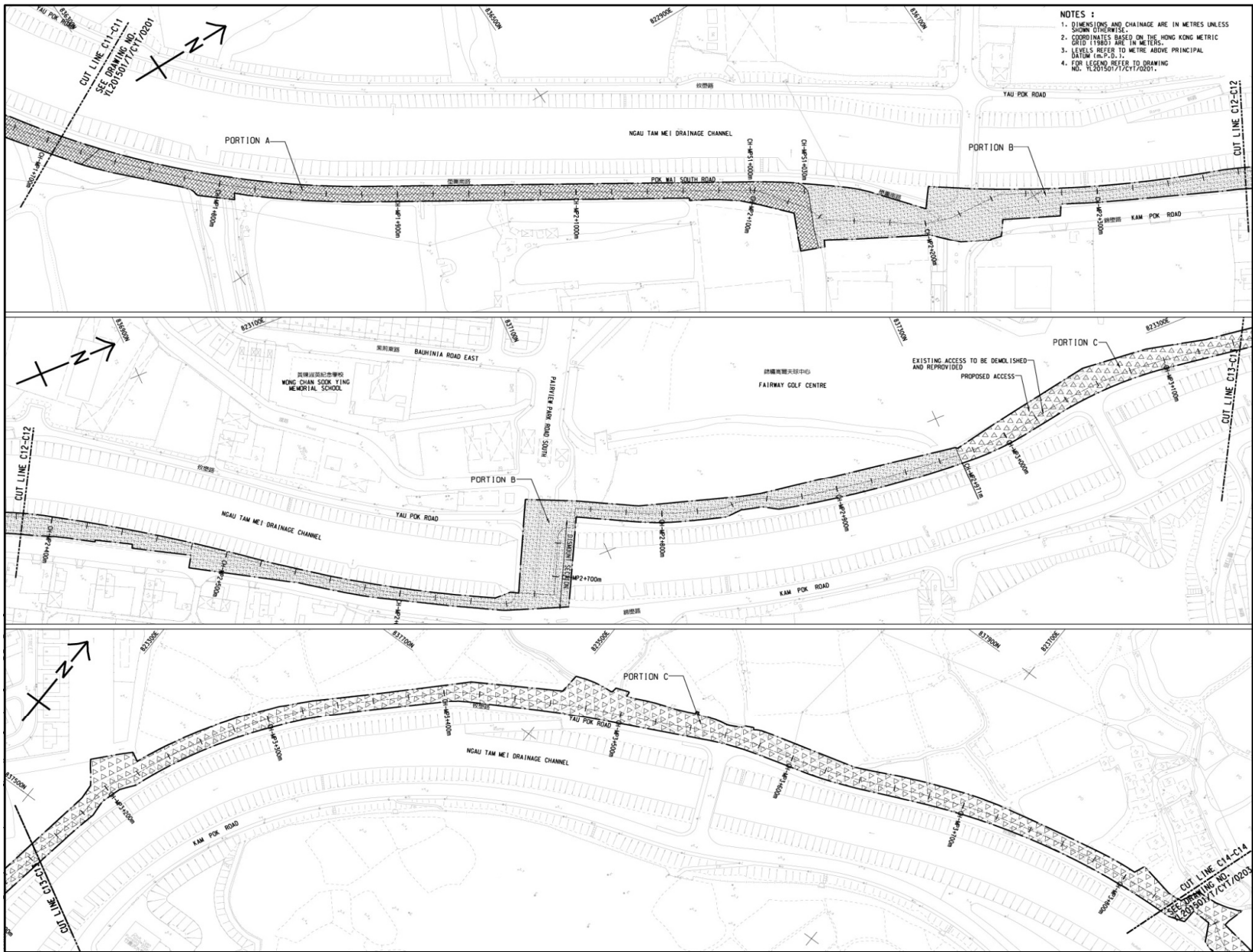
SCALE	A4 1:35m	DATE	Aug 2016		
CHECK	JL	DRAWN	VW		
JOB No.	MA16036	FIGURE NO.	1a	REV	-



Title Agreement No. CE 67/2015(HY)
 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
 Design and Construction
 Site Layout Plan

Scale	N.T.S	Project No.	MA16036
Date	Dec-16	Figure	1b

CINOTECH

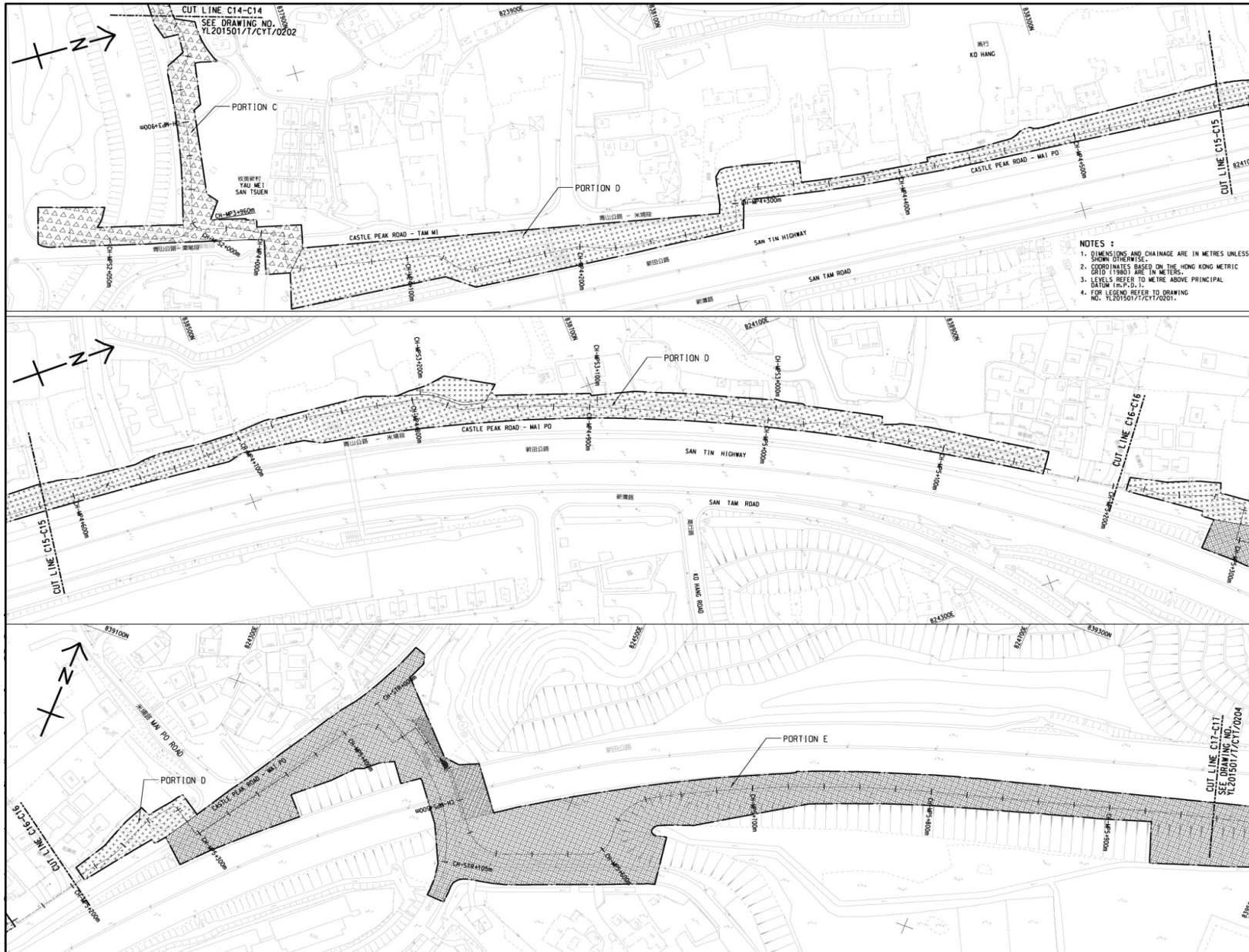


- NOTES :
1. DIMENSIONS AND CHAINAGE ARE IN METRES UNLESS SHOWN OTHERWISE.
 2. COORDINATES BASED ON THE HONG KONG METRIC GRID (1980) ARE IN METERS.
 3. LEVELS REFER TO METRIC ABOVE PRINCIPAL DATUM (m.P.D.).
 4. FOR LEGEND REFER TO DRAWING NO. 1/2015017/CY/0201.

Title Agreement No. CE 67/2015(HY)
 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
 Design and Construction
 Site Layout Plan

Scale	N.T.S	Project No.	MA16036
Date	Dec-16	Figure	1c

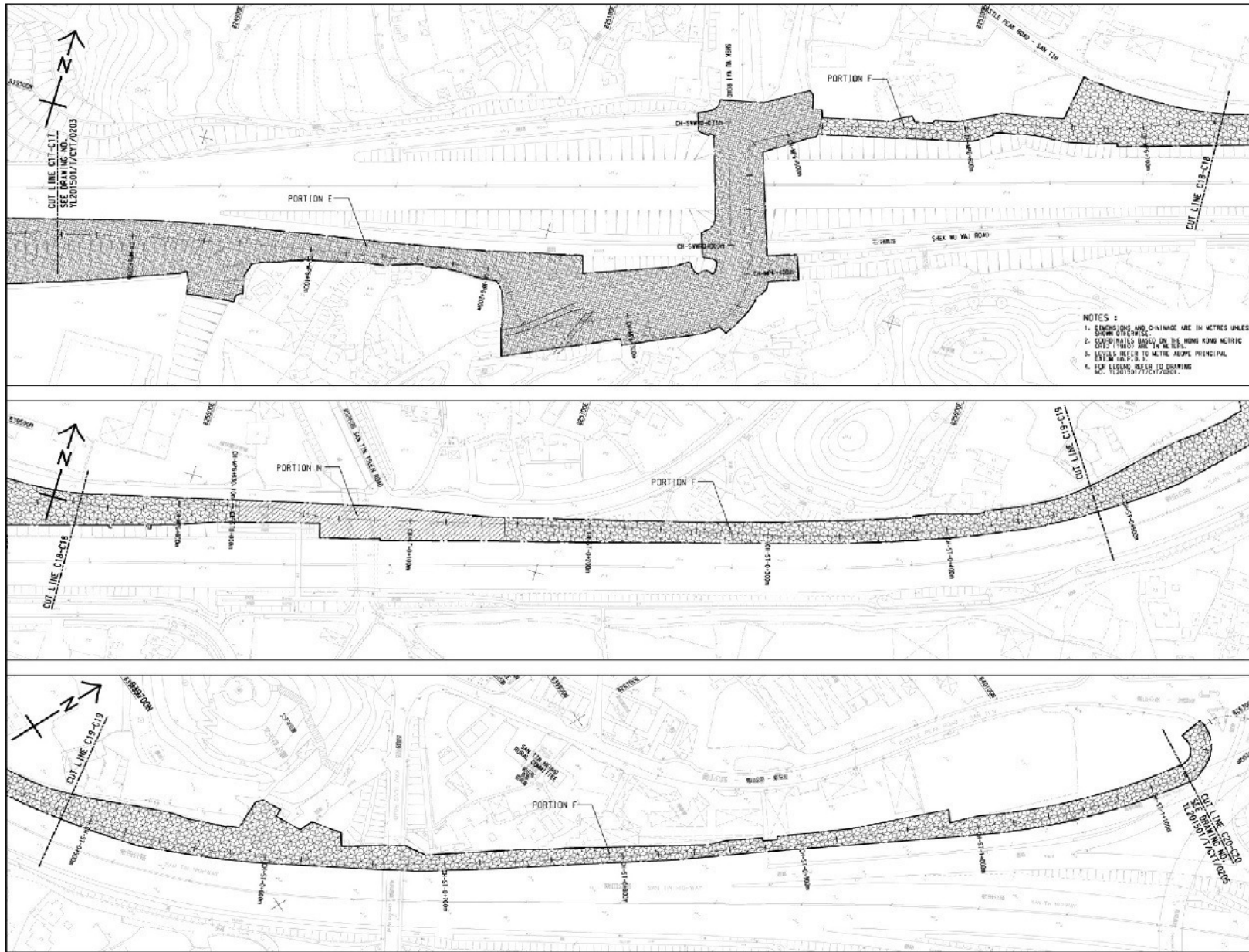




Title Agreement No. CE 67/2015(HY)
 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
 Design and Construction
 Site Layout Plan

Scale	N.T.S	Project No.	MA16036
Date	Dec-16	Figure	1d



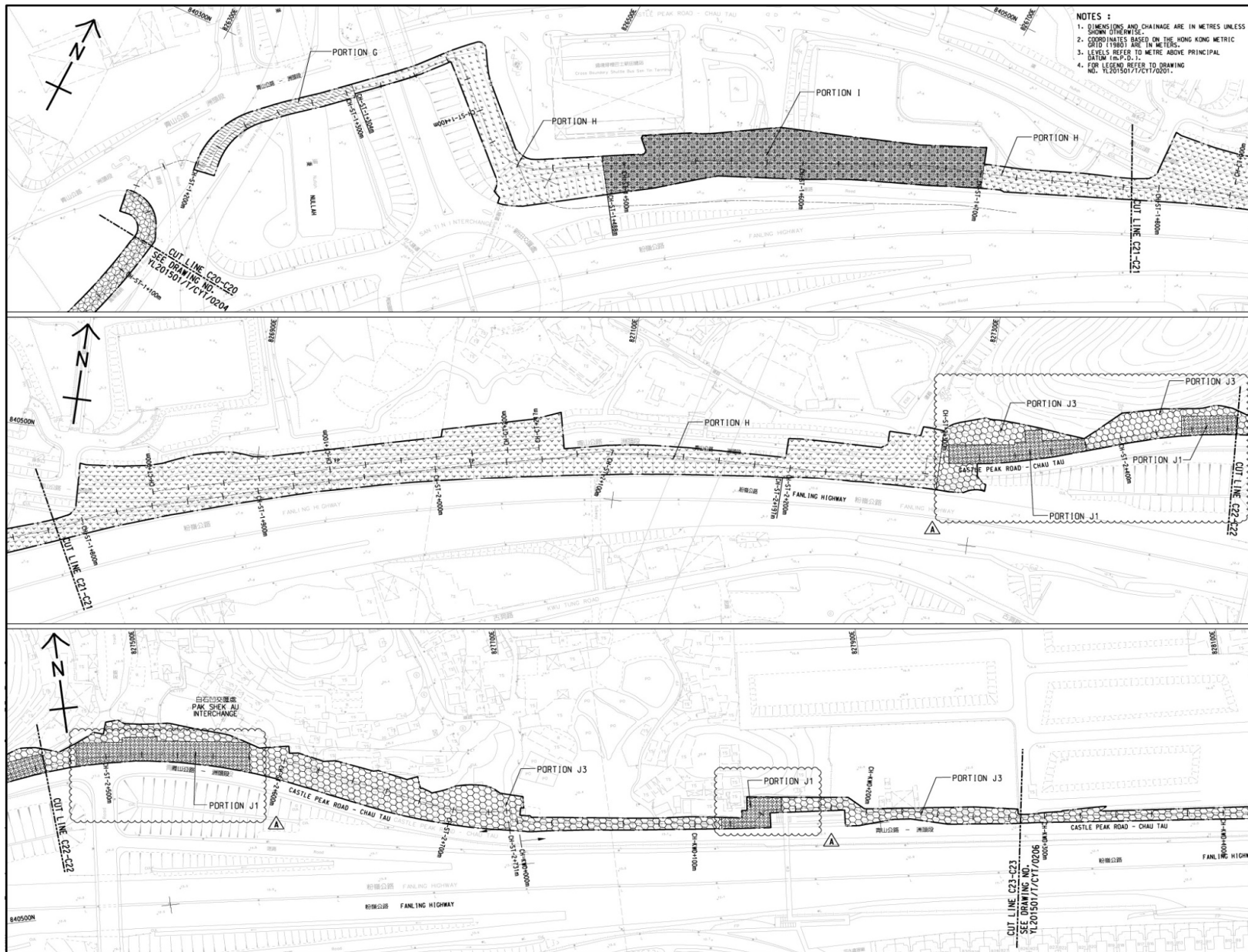


Title

Agreement No. CE 67/2015(HY)
 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
 Design and Construction
 Site Layout Plan

Scale	N.T.S	Project No.	MA16036
Date	Dec-16	Figure	1e

CINOTECH

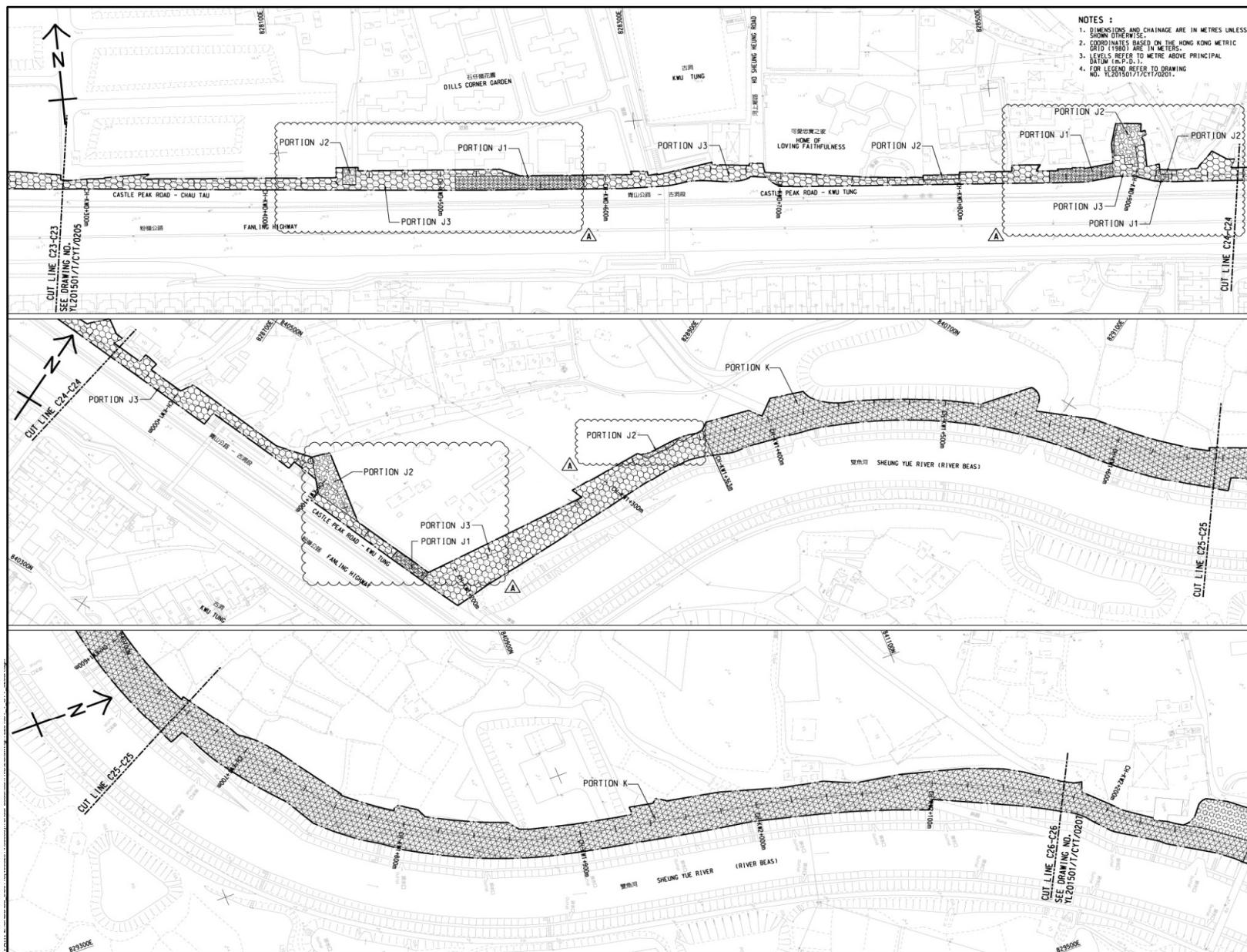


Title

Agreement No. CE 67/2015(HY)
 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
 Design and Construction
 Site Layout Plan

Scale	N.T.S	Project No.	MA16036
Date	Dec-16	Figure	1f





Title Agreement No. CE 67/2015(HY)
 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
 Design and Construction
 Site Layout Plan

Scale	N.T.S	Project No.	MA16036
Date	Dec-16	Figure	1g







Title

Agreement No. CE 67/2015(HY)
 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
 Design and Construction
 Site Layout Plan

Scale	N.T.S	Project No.	MA16036
Date	Dec-16	Figure	1h





LEGEND	
	Site Boundary
	Noise Monitoring Stations



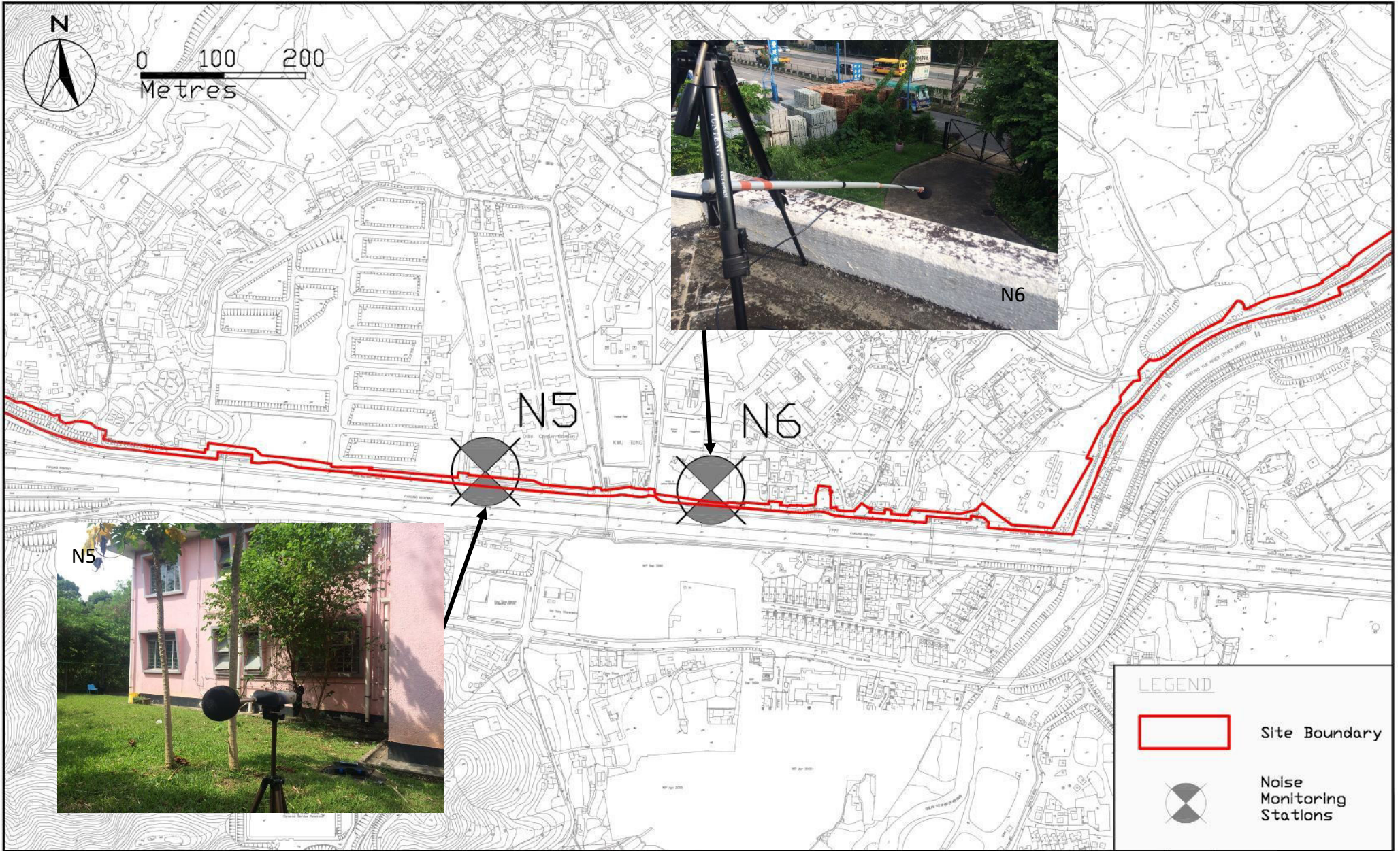
Agreement No. CE 67/2015(HY) - Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works - Design and Construction

Locations of the Noise Monitoring Stations (N1, N2)

SCALE	A4 1:6m	DATE	Aug 2016
CHECK	JL	DRAWN	VW
JOB No.	MA16036	FIGURE NO.	2a
		REV	-



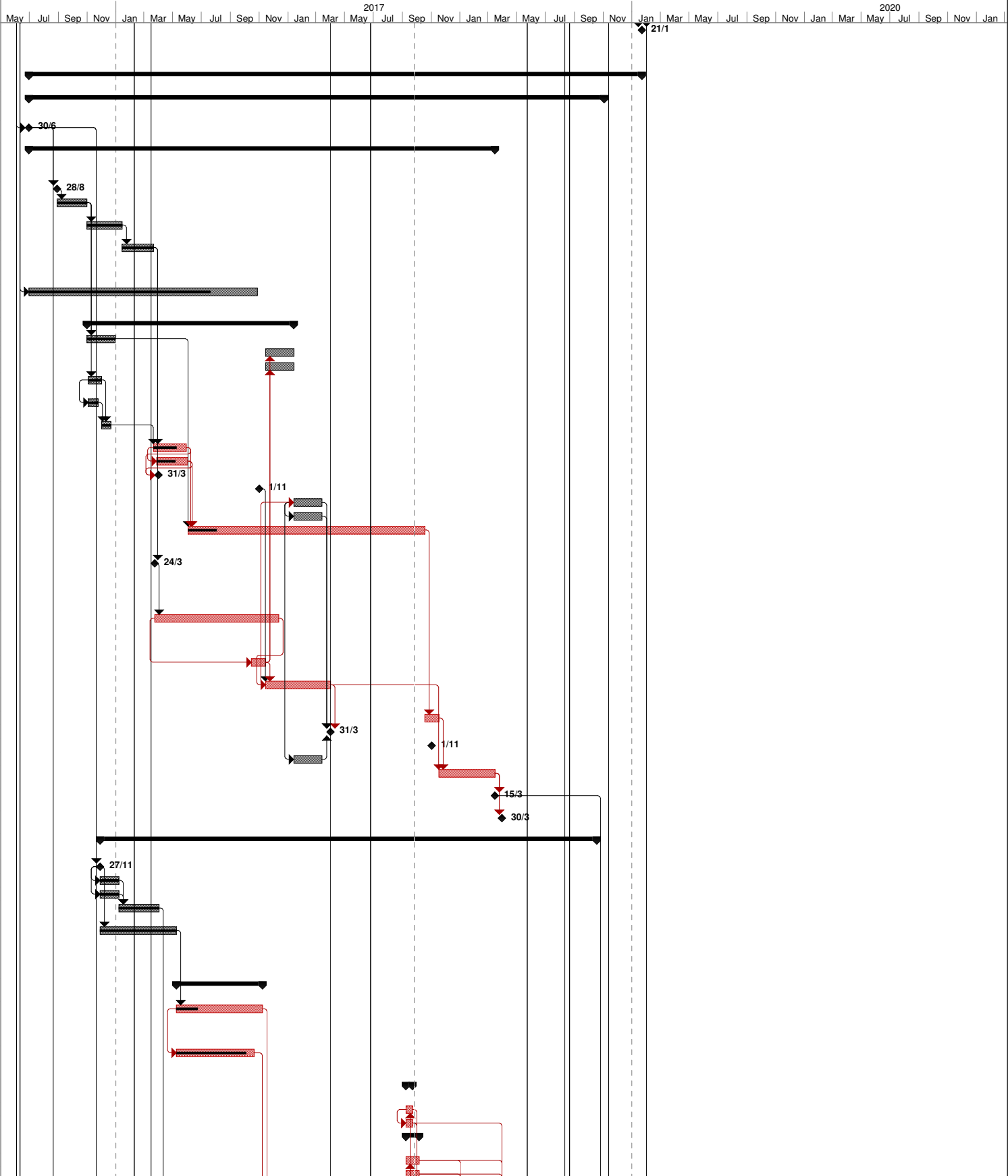
SCALE	A4 1:6m	DATE	Aug 2016
CHECK	JL	DRAWN	VW
JOB No.	MA16036	FIGURE NO.	2b
		REV	-



SCALE	A4 1:6m	DATE	Aug 2016
CHECK	JL	DRAWN	VW
JOB No.	MA16036	FIGURE NO.	2c
		REV	-

**APPENDIX A
WORK PROGRAMME**

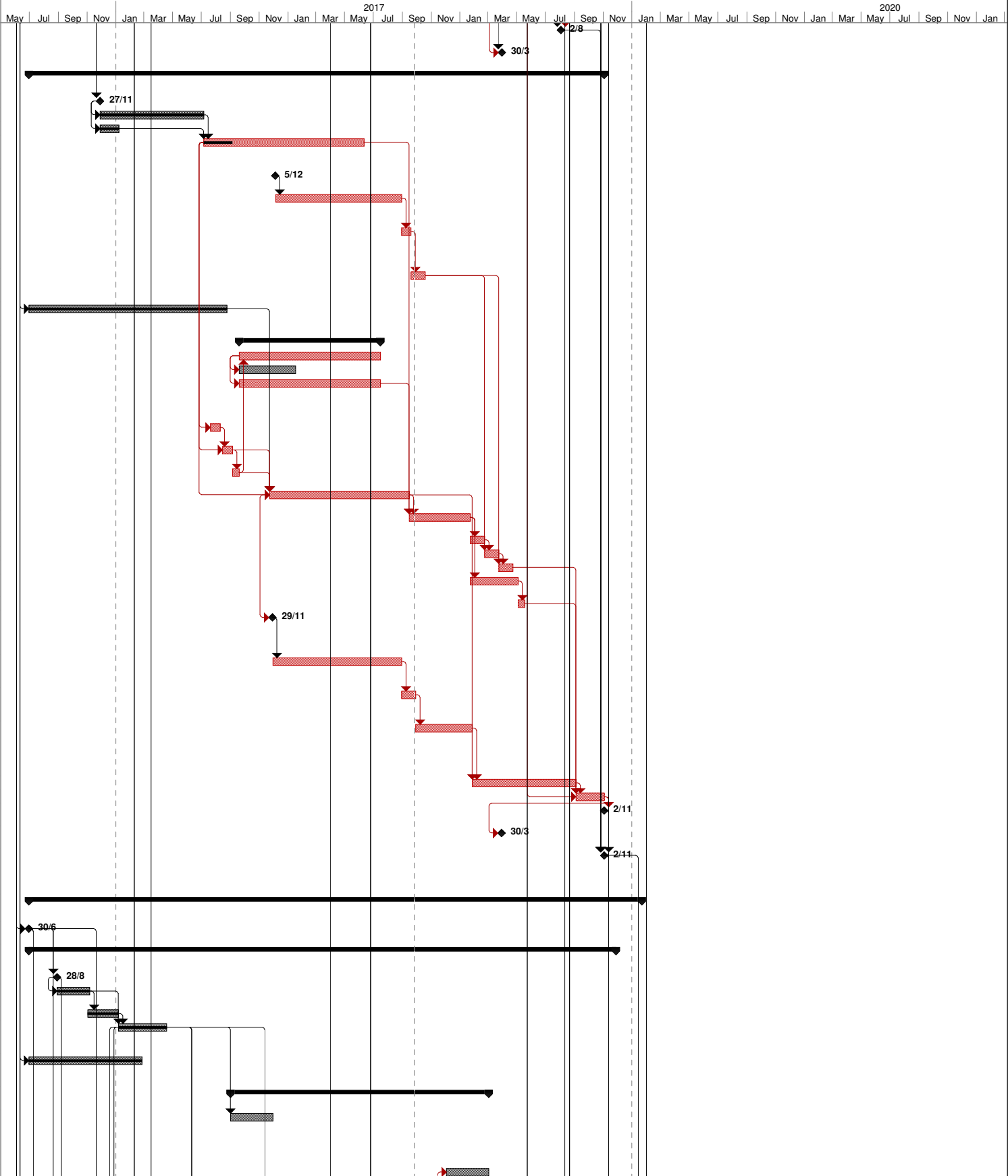
ID	Activity ID	Task Name	Duration	Time Risk Allowance (days)	Early Start	Early Finish	Actual Start	Actual Finish	Predecessors	% Comple	Finish Slack
60	100480	SECTION W1 TO W7 ANTICIPATED COMPLETION DATE WITH CE / NCE (Including Implemented and NOT Implemented CE)	0 days	0 day	Tue 21/1/20	Tue 21/1/20	NA	NA	12,23,32,45,58	0%	606 days
61	200000	PLANNED WORKS PROGRAMME	1301 days	0 day	Thu 30/6/16	Tue 21/1/20	-	-	-	-	606 days
62	210010	SECTION W1 (PORTION A,B,C & D)	1221 days	0 day	Thu 30/6/16	Sat 2/11/19	-	-	-	-	686 days
63	210020	STARTING DATE OF CONTRACT	0 days	0 day	Thu 30/6/16	Thu 30/6/16	Thu 30/6/16	Thu 30/6/16	2SS	100%	0 days
64	211000	PORTION A - POK WAI ROAD SOUTH (MP 1+000 - MP 2+130)	989 days	0 day	Thu 30/6/16	Fri 15/3/19	-	-	-	-	918 days
65	211010	POSSESSION OF SITE	0 days	0 day	Sun 28/8/16	Sun 28/8/16	Sun 28/8/16	Sun 28/8/16	63FS+60 days	100%	0 days
66	211020	INITIAL SURVEY + 3 DAY DELAY (INCLEMENT WEATHER) IN OCT 2016	63 days	3 days	Mon 29/8/16	Sun 30/10/16	Mon 29/8/16	Sun 30/10/16	65	100%	0 days
67	211030	TREE SURVEY + 5 DAY DELAY (INCLEMENT WEATHER) IN SEP 2016	75 days	3 days	Mon 31/10/16	Fri 13/1/17	Mon 31/10/16	Fri 13/1/17	66	100%	0 days
68	211040	TREE FELLING / TRANSPLANTING AND SITE CLEARANCE (FOR NEW DLO MEMO) + 6 DAY DELAY (INCLEMENT WEATHER) IN DEC 2016	66 days	5 days	Sat 14/1/17	Mon 20/3/17	Fri 13/1/17	Sun 19/3/17	67	100%	0 days
69	211050	APPLICATION AND APPROVAL OF EXCAVATION PERMIT AND ROAD WORK ADVISE	485 days	10 days	Thu 30/6/16	Fri 27/10/17	NA	NA	63SS	100%	1422 days
70	211060	UTILITIES DIVERSION WORKS	439 days	0 day	Mon 31/10/16	Fri 12/1/18	-	-	-	-	1345 days
71	211070	CLP (@ Approx MP1+300)	60 days	0 day	Mon 31/10/16	Thu 29/12/16	Mon 31/10/16	Thu 29/12/16	66	100%	0 days
72	211075	CLP (Between MP1+600 TO MP2+100)	60 days	2 days	Tue 14/11/17	Fri 12/1/18	NA	NA	86	100%	1345 days
73	211080	PCCW (Between MP1+600 TO MP2+100)	60 days	2 days	Tue 14/11/17	Fri 12/1/18	NA	NA	86	100%	1345 days
74	211090	GROUND INVESTIGATION WORKS (1 NO. BOREHOLE & TRIAL PITS)	28 days	2 days	Thu 3/11/16	Wed 30/11/16	Thu 3/11/16	Wed 30/11/16	66FS+4 days	100%	0 days
75	211100	SUBMISSION AND APPROVAL OF MONITORING PROPOSAL	21 days	2 days	Thu 3/11/16	Wed 23/11/16	Thu 3/11/16	Wed 23/11/16	74SS	100%	0 days
76	211110	INSTALLATION OF MONITORING MARKERS	20 days	2 days	Thu 1/12/16	Tue 20/12/16	Thu 1/12/16	Wed 21/12/16	75,74	100%	0 days
77	211115	RETAINING WALL - RW 8A (60M)	70 days	5 days	Tue 21/3/17	Mon 29/5/17	Thu 22/12/16	Fri 2/6/17	76,68	100%	-59 days
78	211120	RETAINING WALL - RW 8B (40M)	66 days	5 days	Tue 28/3/17	Thu 1/6/17	Fri 27/1/17	Fri 31/3/17	77SS+7 days	100%	-62 days
79	211125	END DATE OF DRY SEASON	0 days	0 day	Fri 31/3/17	Fri 31/3/17	Fri 31/3/17	Fri 31/3/17	78,77	100%	0 days
80	211130	START DATE OF DRY SEASON	0 days	0 day	Wed 1/11/17	Wed 1/11/17	Wed 1/11/17	Wed 1/11/17		100%	0 days
81	211150	RETAINING WALL - RW7 (20M) - CSD	60 days	2 days	Sat 13/1/18	Tue 13/3/18	Sat 13/1/18	Tue 13/3/18	87SS+60 days	100%	18 days
82	211160	RETAINING WALL - RW7A (67M) - CSD	60 days	4 days	Sat 13/1/18	Tue 13/3/18	Sat 13/1/18	Tue 13/3/18	81SS	100%	18 days
83	211190	EARTHWORKS AND DRAINAGE WORKS, UTILITIES LAYING BETWEEN MP1+000 TO MP 1+600	502 days	5 days	Sat 3/6/17	Wed 17/10/18	Sat 3/6/17		77,78,71	95%	-75 days
84	211200	EARTHWORKS AND DRAINAGE WORKS BETWEEN CH1+600 TO CH2+100, THE WORKS SUSPENDED DUE TO SLOPE WORKS FALLING ON WATER POND & OUTSIDE SITE BOUNDARY (SKJV EW No.3 Dated 24/3/17)	0 days	0 day	Fri 24/3/17	Fri 24/3/17	Fri 24/3/17	Fri 24/3/17	68	100%	0 days
85	211210	PENDING THE SUPERVISOR TO ISSUE CE TO RESOLVE CONFLICT (SKJV EW No.3) AND SKJV NCE No. 78 - ADDITIONAL BICYCLE PARAPET FOOTING IN PORTION A	263 days	0 day	Fri 24/3/17	Mon 11/12/17	Fri 24/3/17	11/12/2017	84	100%	0 days
86	211215	PREPARATION WORKS FOR WORKS UNDER CE TO RESOLVE CONFLICT (SKJV EW No.3) BY SKJV	30 days	0 day	Sun 15/10/17	Mon 13/11/17	Sun 15/10/17	Mon 13/11/17	85SS+205 days	100%	0 days
87	211220	CONSTRUCTION OF WORKS UNDER CE TO RESOLVE THE CONFLICT UNDER SKJV EW No.3 AND SKJV NCE No.78	138 days	3 days	Tue 14/11/17	Sat 31/3/18	Tue 14/11/17	Sat 31/3/18	86,80,85FS-28 days	100%	0 days
88	211235	STAIRCASE @ MP1+960	30 days	3 days	Thu 18/10/18	Fri 16/11/18	NA	NA	83	0%	-75 days
89	211225	END DATE OF DRY SEASON	0 days	0 day	Sat 31/3/18	Sat 31/3/18	Sat 31/3/18	Sat 31/3/18	82,87,81,91	100%	0 days
90	211230	START DATE OF DRY SEASON	0 days	0 day	Thu 1/11/18	Thu 1/11/18	NA	NA		0%	0 days
91	211250	RETAINING WALL - RW 7B (20M) - CSD	60 days	0 day	Sat 13/1/18	Tue 13/3/18	Sat 13/1/18	Tue 13/3/18	81SS	100%	18 days
92	211270	ROAD WORKS	119 days	7 days	Sat 17/11/18	Fri 15/3/19	NA	NA	87,88	0%	-75 days
93	211275	PORTION A - ANTICIPATED COMPLETION DATE	0 days	0	Fri 15/3/19	Fri 15/3/19	NA	NA	92	0%	-75 days
94	211280	W1 (PORTION A) - LATEST REVISED COMPLETION DATE IN THIS PROG DATE	0 days	0 day	Sat 30/3/19	Sat 30/3/19	NA	NA	92	0%	0 days
95	212000	PORTION B (MP 2+130 - MP 2+950)	1054 days		Sun 27/11/16	Thu 17/10/19	-	-	-	-	-291 days
96	212010	POSSESSION OF SITE	0 days	0 day	Sun 27/11/16	Sun 27/11/16	Sun 27/11/16	Sun 27/11/16	63FS+151 days	100%	0 days
97	212020	INITIAL SURVEY	40 days	3 days	Mon 28/11/16	Fri 6/1/17	Mon 28/11/16	Fri 6/1/17	96SS	100%	0 days
98	212030	TREE SURVEY	40 days	3 days	Mon 28/11/16	Fri 6/1/17	Mon 28/11/16	Fri 6/1/17	96SS	100%	0 days
99	212040	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE	85 days	4 days	Sat 7/1/17	Sat 1/4/17	Sat 7/1/17	Sat 1/4/17	98,97	100%	0 days
100	212070	TTM PREPARATION BY SKJV & APPROVAL BY SUPREVISOR/PM/TMLG & XP ISSUE+ 36 DAYS DELAY DUE TO BELATED APPROVAL OF XP & ADDITIONAL TRIAL RUN (SKJV NCE No.15)	162 days	0 day	Mon 28/11/16	Mon 8/5/17	Mon 28/11/16	Mon 8/5/17	96	100%	0 days
101	212100	UTILITIES DIVERSION WORKS (FOR SUBWAY BAY PW5 TO PW8)	183 days		Tue 9/5/17	Tue 7/11/17	-	-	-	-	0 days
102	212110	CLP CABLE + Anticipated 95 Days Delay of Works Due to Uncharted CLP Cable Ducts (SKJV NCE No.46) and Delay in Diversion of CLP Pole (SKJV NCE No. 50)	183 days	2 days	Tue 9/5/17	Tue 7/11/17	Tue 9/5/17	Tue 7/11/17	100	100%	-288 days
103	212140	WSD PIPE + Anticipated 95 Days Delay of Works Due to Delay in Diversion of WSD pipes (SKJV NCE No.40)	165 days	2 days	Tue 9/5/17	Fri 20/10/17	Tue 9/5/17	Fri 20/10/17	102SS	100%	-270 days
104	212200	UTILITIES DIVERSION WORKS (FOR SUBWAY BAY PW9 TO PW11)	14 days		Sat 8/9/18	Fri 21/9/18	-	-	-	-	-288 days
105	212210	CLP	14 days	1 day	Sat 8/9/18	Fri 21/9/18	NA	NA	112	0%	-288 days
106	212230	WSD	14 days	1 day	Sat 8/9/18	Fri 21/9/18	NA	NA	105SS	0%	-288 days
107	212240	UTILITIES DIVERSION WORKS (FOR SUBWAY BAY 12 TO 16)	28 days		Sat 8/9/18	Fri 5/10/18	-	-	-	-	-112 days
108	212260	HCL	28 days	1 day	Sat 8/9/18	Fri 5/10/18	NA	NA	112	0%	-112 days
109	212270	WSD	28 days	1 day	Sat 8/9/18	Fri 5/10/18	NA	NA	112	0%	-112 days



Task Summary External Milestone Inactive Summary Manual Summary Rollup Finish-only Progress
 Split Project Summary Inactive Task Manual Task Manual Summary Critical Deadline
 Milestone External Tasks Inactive Milestone Duration-only Start-only Critical Split

REMARK: ALL SUNDAYS AND HOLIDAYS ARE INCLUDED IN THIS PROGRAMME

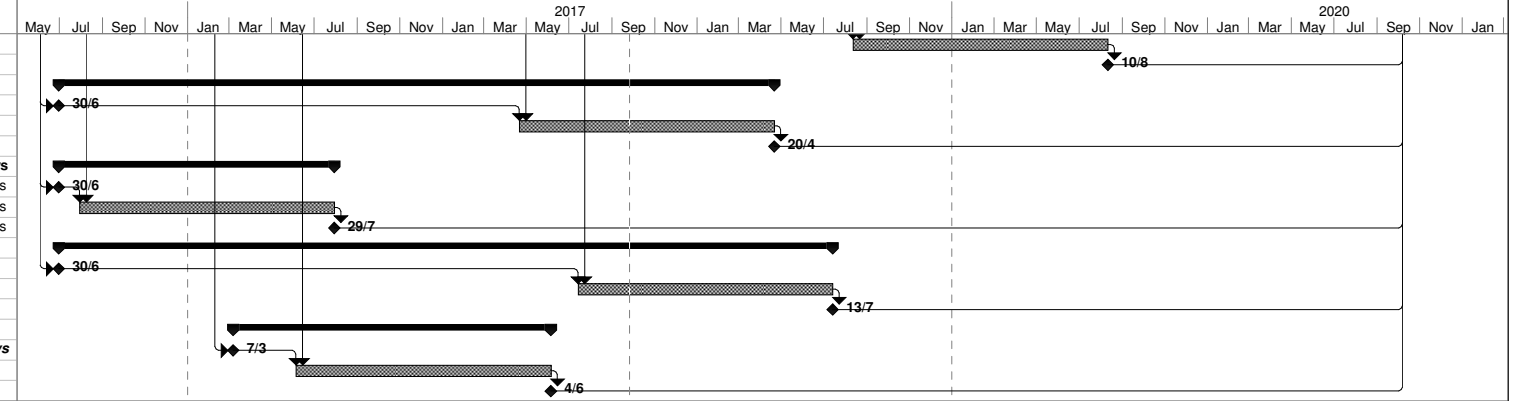
ID	Activity ID	Task Name	Duration	Time Risk Allowance (days)	Early Start	Early Finish	Actual Start	Actual Finish	Predecessors	% Comple	Finish Slack
167	213310	PORTION C - ANTICIPATED COMPLETION DATE	0 days	0 day	Fri 2/8/19	Fri 2/8/19	NA	NA	165,166	0%	-215 days
168	213320	W1 (PORTION C) - LATEST REVISED COMPLETION DATE IN THIS PROG DATE	0 days	0 day	Sat 30/3/19	Sat 30/3/19	NA	NA	165,166	0%	0 days
169	214000	PORTION D (MP 4+010 - MP 5+280)	1221 days		Thu 30/6/16	Sat 2/11/19	-	-		-	686 days
170	214010	POSSESSION OF SITE	0 days	0 day	Sun 27/11/16	Sun 27/11/16	Sun 27/11/16	Sun 27/11/16	63FS+151 days	100%	0 days
171	214020	INITIAL SURVEY	220 days	3 days	Mon 28/11/16	Wed 5/7/17	Mon 28/11/16	Wed 5/7/17	170SS	100%	0 days
172	214030	TREE SURVEY	40 days	3 days	Mon 28/11/16	Fri 6/1/17	Mon 28/11/16	Fri 6/1/17	170SS	100%	0 days
173	214040	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE EXCLUDING CH-MP5+050 TO 5+290 (+ DELAY DUE TO INCLEMENT WEATHER)	340 days	5 days	Thu 6/7/17	Sun 10/6/18	Thu 6/7/17	NA	172,171	70%	-102 days
174	214041	TREE FELLING WORKS FROM CH-MP5+050 TO 5+290 WAS SUSPENDED, SKJV EW No.12	1 day	0 day	Tue 5/12/17	Tue 5/12/17	Tue 5/12/17	Tue 5/12/17			-47 days
175	214042	PENDING THE SUPERVISOR TO ISSUE CE TO RESOLVE CONFLICT (SKJV EW No.12), Up to this Prog Date	267 days	0 day	Wed 6/12/17	Wed 29/8/18	Wed 6/12/17	NA	174		-47 days
176	214043	PREPARATION WORKS FOR TREE FELLING WORKS UNDER CE TO RESOLVE CONFLICT (SKJV EW No.12) BY SKJV (ASSUMED 20 days)	20 days	0 day	Thu 30/8/18	Tue 18/9/18	NA	NA	175		-47 days
177	214044	TREE FELLING WORKS FROM CH-MP5+050 TO 5+290 (SKJV EW No. 12)	30 days	0 day	Wed 19/9/18	Thu 18/10/18	NA	NA	176		-47 days
178	214050	APPLICATION AND APPROVAL OF EXCAVATION PERMIT AND ROAD WORK ADVICE	420 days	0 day	Thu 30/6/16	Wed 23/8/17	Thu 30/6/16	NA	63SS	100%	0 days
179	214060	UTILITIES DIVERSION WORKS	300 days	0 day	Tue 19/9/17	Sun 15/7/18	-	-		-	1161 days
180	214070	CLP	300 days	3 days	Tue 19/9/17	Sun 15/7/18	Tue 19/9/17	NA	185	50%	-97 days
181	214080	PCCW	120 days	3 days	Tue 19/9/17	Tue 16/1/18	Tue 19/9/17	Tue 16/1/18	180SS	100%	1341 days
182	214085	WSD (+DELAY DUE TO SKJV NCE No.63 Additional Relocation of Existing WSD Utilities in Conflict with Proposed Works, up to this Prog Date)	300 days	3 days	Tue 19/9/17	Sun 15/7/18	Tue 19/9/17	NA	180SS	25%	-97 days
183	214090	GROUND INVESTIGATION WORKS (3 NOS. BOREHOLE & TRIAL PITS)	21 days	2 days	Thu 20/7/17	Wed 9/8/17	Wed 15/2/17	Tue 7/3/17	173SS+14 days	100%	-231 days
184	214100	SUBMISSION AND APPROVAL OF MONITORING PROPOSAL	21 days	2 days	Tue 15/8/17	Mon 4/9/17	Tue 15/8/17	Mon 4/9/17	173SS+40 days,183	100%	-236 days
185	214110	INSTALLATION OF MONITORING MARKERS	14 days	2 days	Tue 5/9/17	Mon 18/9/17	Tue 5/9/17	Mon 18/9/17	184	100%	-236 days
186	214120	RETAINING WALL - RW 15B (70M) (+ DELAY DUE TO SKJV NCE)	296 days	7 days	Thu 23/11/17	Fri 14/9/18	Thu 23/11/17	NA	173SS+140 days,184,185,178	60%	-301 days
187	214130	RETAINING WALL - RW 15C (45M) & STAIRCASE S6	130 days	7 days	Sat 15/9/18	Tue 22/1/19	NA	NA	186,182FS-40 days,173	0%	-198 days
188	214140	STREAM DECKING D1	30 days	3 days	Wed 23/1/19	Thu 21/2/19	NA	NA	187	0%	-173 days
189	214150	STREAM DECKING D2	30 days	3 days	Fri 22/2/19	Sat 23/3/19	NA	NA	188,177	0%	-173 days
190	214160	STREAM DECKING D3	30 days	3 days	Sun 24/3/19	Mon 22/4/19	NA	NA	189,177	0%	-173 days
191	214170	PEDSTRIAN RAMP CONSTRUCTION & PROVIDE SAFETY ACCESS TO RESIDENT	101 days	7 days	Wed 23/1/19	Fri 3/5/19	NA	NA	187	0%	-198 days
192	214190	DEMOLITION OF EXISTING STRUCTURE	14 days	2 days	Sat 4/5/19	Fri 17/5/19	NA	NA	191	0%	-198 days
193	214200	RW16A (80M) (THE WORKS SUSPENDED, SKJV EW No.10 - Conflict of Proposed Cycle Track and Actual Site Condition CH-MP-4+660 TO 5+010)	1 day	0 day	Wed 29/11/17	Wed 29/11/17	Wed 29/11/17	Wed 29/11/17	186SS	0%	-307 days
194	214201	PENDING THE SUPERVISOR TO ISSUE CE TO RESOLVE CONFLICT (SKJV EW No.10), Up to this Prog Date	273 days	0 day	Thu 30/11/17	Wed 29/8/18	Thu 30/11/17	NA	193	0%	-307 days
195	214202	PREPARATION WORKS FOR WORKS UNDER CE TO RESOLVE CONFLICT (SKJV EW No.10) BY SKJV (ASSUMED 30 days)	30 days	0 day	Thu 30/8/18	Fri 28/9/18	NA	NA	194	0%	-307 days
196	214203	CONSTRUCTION WORKS UNDER CE TO RESOLVE CONFLICT OF SKJV EW No.10, DUARTION WAS ASSUMED TO THE SAME AS THE DURATION AS CONFORMING DESIGN OF 120 days	120 days	0 day	Sat 29/9/18	Sat 26/1/19	NA	NA	195	0%	-307 days
197	214210	EARTHWORKS AND DRAINAGE WORKS	220 days	8 days	Sun 27/1/19	Tue 3/9/19	NA	NA	196,186	0%	-307 days
198	214220	ROAD WORKS	60 days	6 days	Sat 2/11/19	Wed 4/9/19	NA	NA	165SS,197,192,190	0%	-307 days
199		PORTION D - ANTICIPATED COMPLETION DATE	0 days	0 day	Sat 2/11/19	Sat 2/11/19	NA	NA	198		-307 days
200	214225	W1 (PORTION D) - LATEST REVISED COMPLETION DATE IN THIS PROG DATE	0 days	0 day	Sat 30/3/19	Sat 30/3/19	NA	NA	198	0%	0 days
201	210030	SECTION W1 - ANTICIPATED COMPLETION DATE OF WORKS WITH CE / NCE EFFECT DUE TO INCLEMENT WEATHER & OTHER ISSUES	0 days	0 day	Sat 2/11/19	Sat 2/11/19	NA	NA	93,131,167,199	-	-307 days
202		SECTION W2 (PORTION E, F, G, H, I & N)	1301 days	days	Thu 30/6/16	Tue 21/1/20	-	-		-	606 days
203	220010	STARTING DATE OF CONTRACT	0 days	0 day	Thu 30/6/16	Thu 30/6/16	Thu 30/6/16	Thu 30/6/16	2SS	100%	0 days
204	221000	PORTION E (MP 5+280 - MP 6+530)	1246 days	days	Thu 30/6/16	Wed 27/11/19	-	-		-	661 days
205	221010	POSSESSION OF SITE	0 days	0 day	Sun 28/8/16	Sun 28/8/16	Sun 28/8/16	Sun 28/8/16	203FS+60 days	100%	0 days
206	221020	INITIAL SURVEY + 4 DAY DELAY (INCLEMENT WEATHER) IN NOV 16	69 days	5 days	Mon 29/8/16	Sat 5/11/16	Mon 29/8/16	Sat 5/11/16	205SS	100%	0 days
207	221030	TREE SURVEY	65 days	5 days	Wed 2/11/16	Thu 5/1/17	Wed 2/11/16	Thu 5/1/17	206	100%	0 days
208	221040	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE (+ DELAY DUE TO INCLEMENT WEATHER)	102 days	5 days	Fri 6/1/17	Mon 17/4/17	Fri 6/1/17	Mon 17/4/17	206,207	100%	0 days
209	221050	APPLICATION AND APPROVAL OF EXCAVATION PERMIT AND ROAD WORK ADVICE	240 days	0 day	Thu 30/6/16	Fri 24/2/17	Thu 30/6/16	Fri 24/2/17	203SS	100%	0 days
210	221060	UTILITIES DIVERSION WORKS (GAS MAIN, CLP, WSD)	548 days	0 day	Fri 1/9/17	Sat 2/3/19	-	-		-	931 days
211	221070	GAS MAIN (Culvert D4), Liaison for Gas Main Diversion will be conducted once the realignment of Cycle Track at Culvert D4 is fixed (NO DIVERSION IS REQUIRED)	90 days	5 days	Fri 1/9/17	Wed 29/11/17	NA	NA	208FS+136 days	100%	1389 days
212	221080	CLP (NOT REQUIRED)	90 days	5 days	Mon 3/12/18	Sat 2/3/19	NA	NA	231SS	100%	931 days



Task		Summary		External Milestone		Inactive Summary		Manual Summary Rollup		Finish-only		Progress	
Split		Project Summary		Inactive Task		Manual Task		Manual Summary		Critical		Deadline	
Milestone		External Tasks		Inactive Milestone		Duration-only		Start-only		Critical Split			

REMARK: ALL SUNDAYS AND HOLIDAYS ARE INCLUDED IN THIS PROGRAMME

ID	Activity ID	Task Name	Duration	Time Risk Allowance (days)	Early Start	Early Finish	Actual Start	Actual Finish	Predecessors	% Comple	Finish Slack
633	400390	ESTABLISHMENT WORKS	365 days	30 days	Mon 12/8/19	Mon 10/8/20	NA	NA	606,632		155 days
634	400400	COMPLETION OF SECTION W9C	0 days		Mon 10/8/20	Mon 10/8/20	NA	NA	633		155 days
635	400410	SECTION W9D	1025 days		Thu 30/6/16	Sat 20/4/19	NA	NA			196 days
636	400420	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	NA	NA	2SS		856 days
637	400430	ESTABLISHMENT WORKS	365 days	30 days	Sat 21/4/18	Sat 20/4/19	NA	NA	610,636		196 days
638	400440	COMPLETION OF SECTION W9D	0 days		Sat 20/4/19	Sat 20/4/19	NA	NA	637		196 days
639	400450	SECTION W9E	395 days		Thu 30/6/16	Sat 29/7/17	NA	NA			1359 days
640	400460	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	NA	NA	2SS		1389 days
641	400470	ESTABLISHMENT WORKS	365 days	30 days	Sat 30/7/16	Sat 29/7/17	NA	NA	614,640		1359 days
642	400480	COMPLETION OF SECTION W9E	0 days		Sat 29/7/17	Sat 29/7/17	NA	NA	641		1359 days
643	400490	SECTION W9F	1109 days		Thu 30/6/16	Sat 13/7/19	NA	NA			244 days
644	400500	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	NA	NA	2SS		988 days
645	400510	ESTABLISHMENT WORKS	365 days	30 days	Sat 14/7/18	Sat 13/7/19	NA	NA	618,644		244 days
646	400520	COMPLETION OF SECTION W9F	0 days		Sat 13/7/19	Sat 13/7/19	NA	NA	645		244 days
647	400530	SECTION W9G	455 days		Tue 7/3/17	Mon 4/6/18	NA	NA			987 days
648	400540	<i>INSTRUCTION TO EXECISE</i>	<i>0 days</i>		<i>Tue 7/3/17</i>	<i>Tue 7/3/17</i>	NA	NA	53SS		1077 days
649	400550	ESTABLISHMENT WORKS	365 days	30 days	Mon 5/6/17	Mon 4/6/18	NA	NA	622,648		987 days
650	400560	COMPLETION OF SECTION W8A	0 days		Mon 4/6/18	Mon 4/6/18	NA	NA	649		987 days



Task		Summary		External Milestone		Inactive Summary		Manual Summary Rollup		Finish-only		Progress	
Split		Project Summary		Inactive Task		Manual Task		Manual Summary		Critical		Deadline	
Milestone		External Tasks		Inactive Milestone		Duration-only		Start-only		Critical Split			

REMARK: ALL SUNDAYS AND HOLIDAYS ARE INCLUDED IN THIS PROGRAMME

**APPENDIX B
ACTION AND LIMIT LEVELS FOR
NOISE**

Appendix B - Action and Limit Levels

Table B-1 Action and Limit Levels for Construction Noise

Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A) 70dB(A)/65dB(A)*

Remarks: If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed. *70dB(A) and 65dB(A) for schools during normal teaching periods and school examination periods, respectively.

**APPENDIX C
COPIES OF CALIBRATION
CERTIFICATES**

TEST REPORT

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

Test Report No.:	30294
Date of Issue:	2018-11-24
Date Received:	2018-11-23
Date Tested:	2018-11-23
Date Completed:	2018-11-24
Next Due Date:	2019-11-23

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
Equipment No.	: N-08-12

Test conditions:

Room Temperature	: 17-22 degree Celsius
Relative Humidity	: 40-70%

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
Laboratory Manager

TEST REPORT

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

Test Report No.:	C/N/181213/1
Date of Issue:	2018-12-13
Date Received:	2018-12-12
Date Tested:	2018-12-12
Date Completed:	2018-12-13
Next Due Date:	2019-12-12

Page: 1 of 1

Certificate of Calibration

Item for calibration:

Description	: 'SVANTEK' Integrating Sound Level Meter
Manufacturer	: SVANTEK
Model No.	: SVAN 979
Serial No.	: 27189
Microphone No.	: 165399
Equipment No.	: SN-01-01

Test conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 58 %

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 94.0 SPL	94.0	94.0 ± 0.1dB
At 114.0 SPL	114.0	114.0 ± 0.1dB

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
Laboratory Manager

TEST REPORT

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

Test Report No.:	29817A
Date of Issue:	2018-09-29
Date Received:	2018-09-28
Date Tested:	2018-09-28
Date Completed:	2018-09-29
Next Due Date:	2019-09-28

ATTN: Mr. W.K. Tang

Page: 1 of 1

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: SVANTEK
Model No.	: SV30A
Serial No.	: 10965
Equipment No.	: N-09-02

Test conditions:

Room Temperature	: 17-22 degree Celsius
Relative Humidity	: 40-70%

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

TEST REPORT

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

Test Report No.:	30289
Date of Issue:	2018-11-04
Date Received:	2018-11-03
Date Tested:	2018-11-03
Date Completed:	2018-11-04
Next Due Date:	2019-11-03

ATTN: Mr. W.K. Tang

Page: 1 of 1

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: Brüel & Kjær
Model No.	: 4231
Serial No.	: 2326353
Equipment No.	: N-02-01

Test conditions:

Room Temperature	: 17-22 degree Celsius
Relative Humidity	: 40-70 %

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 D
ENVIRONMENTAL MONITORING
SCHEDULES**

Agreement No. CE 67/2015 (HY)
Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works - Design and Construction
Impact Noise Monitoring Schedule (April 2019)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr
		Noise				
7-Apr	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr
		Noise				
14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr
		Noise				
21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr
		Noise				
28-Apr	29-Apr	30-Apr	1-May	2-May	3-May	4-May
		Noise				

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

Noise Monitoring Station

- N1 - HKMLC Wong Chan Sook Ying Memorial School
- N2 - Bethel High School
- N3 - No. 159 Mai Po San Tsuen
- N5 - Dills Corner Garden Block 2
- N6 - Home of Loving Faithfulness
- N7 - Village House in Shek Wu Wai

Agreement No. CE 67/2015 (HY)
Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works - Design and Construction
Tentative Impact Noise Monitoring Schedule (May 2019)

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

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

Noise Monitoring Station

- N1 - HKMLC Wong Chan Sook Ying Memorial School
- N2 - Bethel High School
- N3 - No. 159 Mai Po San Tsuen
- N5 - Dills Corner Garden Block 2
- N6 - Home of Loving Faithfulness
- N7 - Village House in Shek Wu Wai

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

Appendix E - Noise Monitoring Results

(0700-1900 hrs on Normal Weekdays)

Location N1 - HKMLC Wong Chan Sook Ying Memorial School							
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}
2-Apr-19	10:00	Sunny	61.6	63.5	56.9	62.2	61.6 measured \leq Baseline
9-Apr-19	9:00	Sunny	61.4	63.6	56.2		61.4 measured \leq Baseline
16-Apr-19	10:00	Cloudy	60.4	63.2	58.6		60.4 measured \leq Baseline
23-Apr-19	10:00	Sunny	62.1	65.1	58.2		62.1 measured \leq Baseline
30-Apr-19	10:00	Cloudy	61.9	64.2	59.6		61.9 measured \leq Baseline

Location N2 - Bethel High School							
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}
2-Apr-19	11:15	Sunny	56.8	58.2	50.4	55.2	51.7
9-Apr-19	10:00	Sunny	54.2	56.9	50.8		54.2 measured \leq Baseline
16-Apr-19	11:10	Cloudy	54.5	57.2	50.6		54.5 measured \leq Baseline
23-Apr-19	11:30	Sunny	55.6	57.5	53.2		45.0
30-Apr-19	11:30	Cloudy	56.2	59.1	54.6		49.3

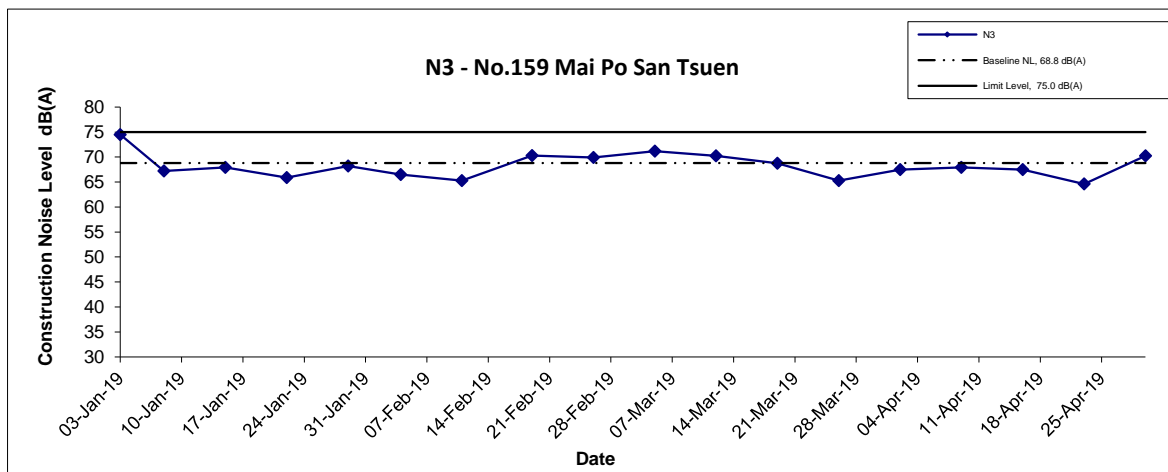
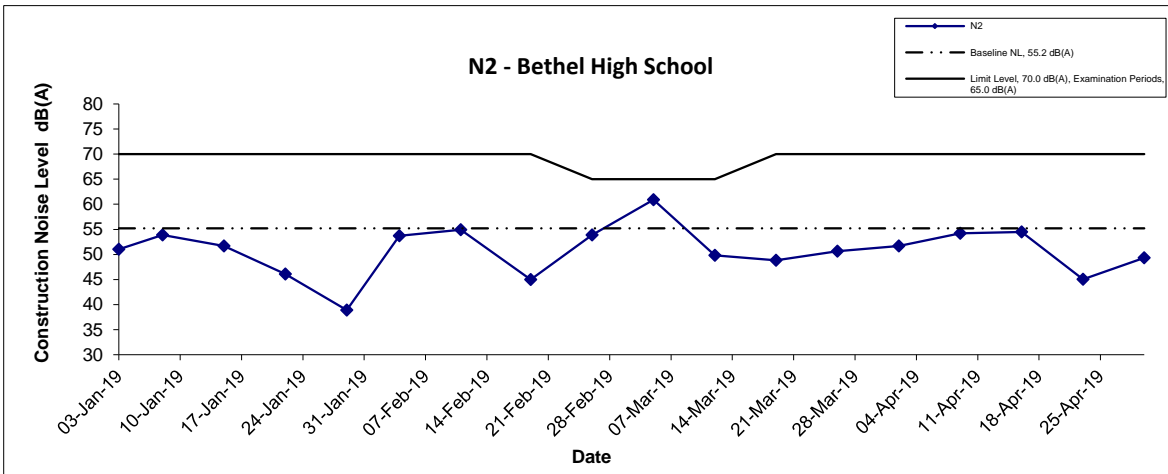
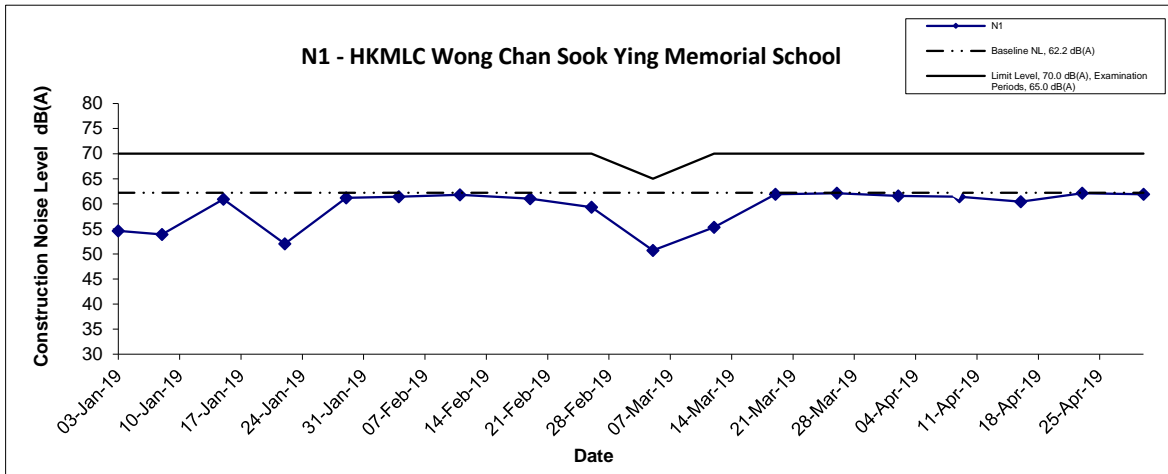
Location N3 - No.159 Mai Po San Tsuen							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
2-Apr-19	13:00	Sunny	71.2	74.6	68.5	68.8	67.5
9-Apr-19	11:30	Sunny	71.4	74.2	68.5		67.9
16-Apr-19	13:00	Cloudy	71.2	74.9	68.6		67.5
23-Apr-19	13:00	Sunny	70.2	72.1	66.5		64.6
30-Apr-19	13:30	Cloudy	72.6	75.2	69.7		70.3

Location N5 - Block 2, Dills Corner Garden							
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}
2-Apr-19	14:00	Sunny	68.1	70.9	66.7	70.7	68.1 measured \leq Baseline
9-Apr-19	14:00	Sunny	69.6	72.1	65.9		69.6 measured \leq Baseline
16-Apr-19	14:15	Cloudy	68.3	70.1	65.4		68.3 measured \leq Baseline
23-Apr-19	14:00	Sunny	70.5	73.2	67.8		70.5 measured \leq Baseline
30-Apr-19	14:30	Cloudy	69.2	71.8	65.4		69.2 measured \leq Baseline

Location N6 - Home of Loving Faithfulness							
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}
2-Apr-19	15:15	Sunny	71.6	73.9	68.7	72.0	71.6 measured \leq Baseline
9-Apr-19	15:30	Sunny	73.6	75.1	70.7		68.5
16-Apr-19	15:30	Cloudy	71.2	74.1	68.6		71.2 measured \leq Baseline
23-Apr-19	15:30	Sunny	72.9	74.1	70.3		65.6
30-Apr-19	16:00	Cloudy	71.4	73.6	69.7		71.4 measured \leq Baseline

Location N7 - Village House in Shek Wui Wai							
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}
2-Apr-19	16:00	Sunny	73.6	76.1	65.4	70.7	70.5
9-Apr-19	16:15	Sunny	73.6	74.8	69.2		70.5
16-Apr-19	16:30	Cloudy	72.5	75.3	67.2		67.8
23-Apr-19	16:30	Sunny	71.4	74.2	69.5		63.1
30-Apr-19	17:00	Cloudy	72.6	74.1	69.8		68.1

Noise Levels



Title Agreement No. CE 67/2015 (HY)
 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works -
 Design and Construction

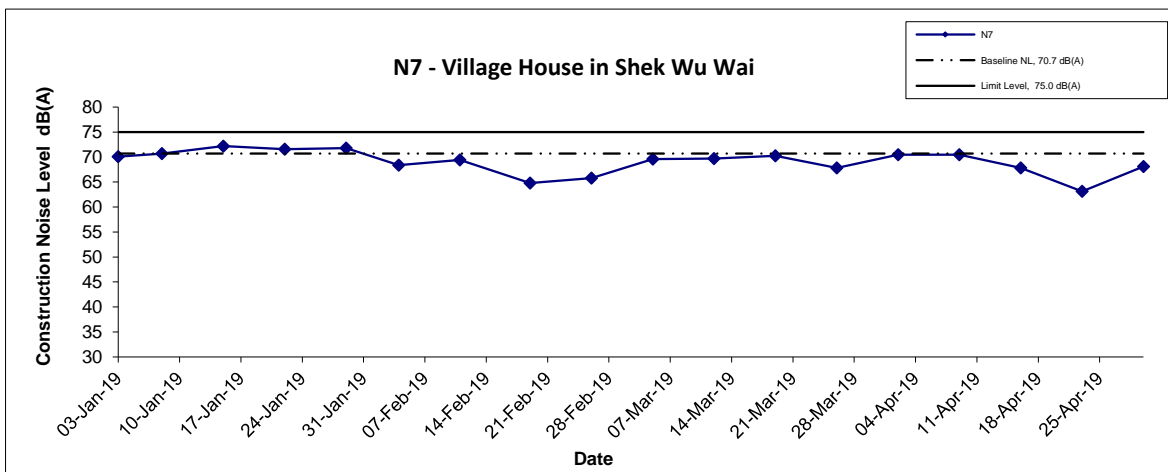
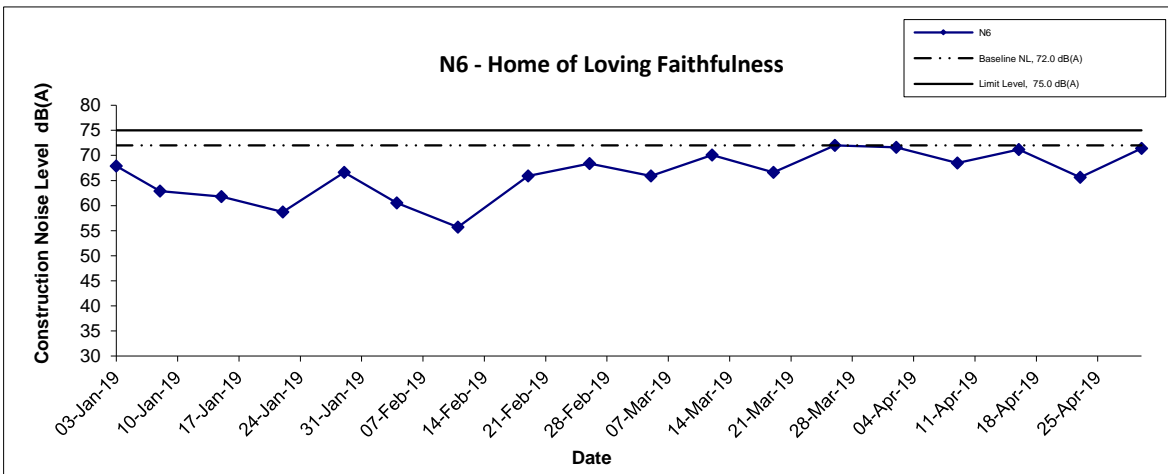
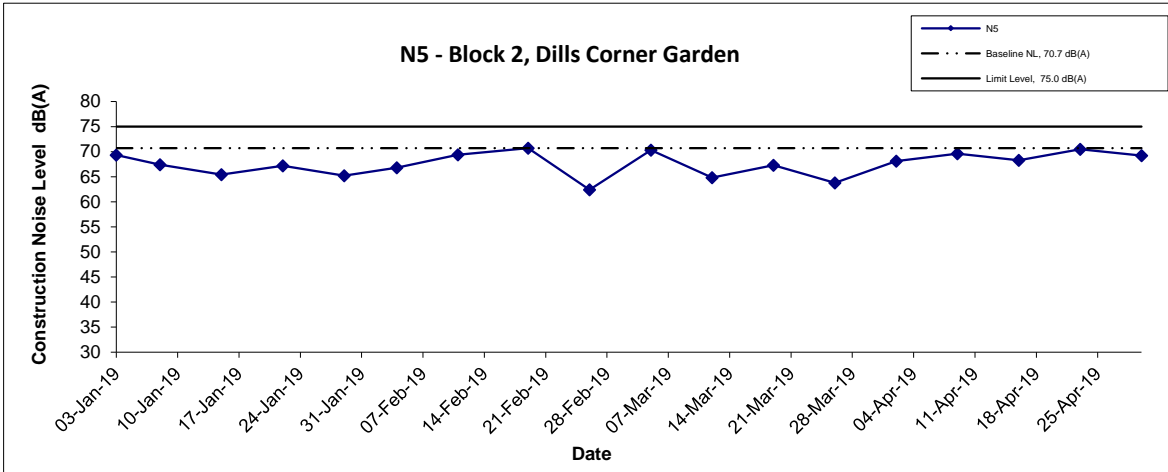
Graphical Presentation of
 Construction Noise Monitoring Results

Scale N.T.S
 Date Apr-19

Project No. MA16036
 Appendix E



Noise Levels



Title Agreement No. CE 67/2015 (HY)
 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works -
 Design and Construction

Graphical Presentation of
 Construction Noise Monitoring Results

Scale N.T.S
 Date Apr-19

Project No. MA16036
 Appendix E



APPENDIX F
SUMMARY OF EXCEEDANCE

Agreement No. CE 67/2015 (HY)

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works – Design and Construction

Appendix F – Summary of Exceedance

Exceedance Report for Contract No. YL/2015/01 – Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

**(A) Exceedance Report for Construction Noise
(NIL in the reporting month)**

**APPENDIX G
SITE AUDIT SUMMARY**

Agreement No. CE 67/2015 (HY)

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works – Design and Construction

Contract No. YL/2015/01

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

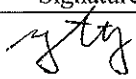

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	190403
Date	3 April 2019 (Wednesday)
Time	09:45 – 12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
190320-R4	B. Water Quality <ul style="list-style-type: none"> At Portion D, u-channel should be kept clean to ensure water flow direction. 	B4
190327-R1 190403-R2	C. Air Quality <ul style="list-style-type: none"> The haul road should be watered regularly to avoid dust generation at Subway A. The haul road should be kept clean at Portion B. 	C5 C3
	D. Construction Noise Impact No environmental deficiency was identified during site inspection.	
190403-F2 190403-R1 190403-R3	E. Waste / Chemical Management <ul style="list-style-type: none"> Clear the oil stains as chemical waste at WA3. The construction waste should be reused where practicable at Portion B. The accumulation of general refuse should be avoided at Portion F. 	E8 E4 E1
	F. Ecology and Fisheries No environmental deficiency was identified during site inspection.	
190403-F1 190306-R2	G. Landscape & Visual <ul style="list-style-type: none"> To set up a proper tree protection zone at WA3. Existing trees should be protected and maintained carefully and set up a proper tree protection zone at Subway A. 	G1, G2 G2
	H. Permits/Licences No environmental deficiency was identified during site inspection.	
	I. Others Follow up on the previous session (Ref. No: 190327), follow up actions are needed to be reviewed for item 190306-R2, 190320-R4, 190327-R1 and 190403-F1& F2. Item 190122-R3, 190314-R1, 190320-R1, R2 & R3, 190327-R2 are rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan		3 April 2019
Checked by	Ms. Jennifer Mok		3 April 2019



Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	190411
Date	11 April 2019 (Thursday)
Time	09:45 – 12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
190320-R4 190411-R1	B. Water Quality	B4 B3,B8
	<ul style="list-style-type: none"> At Portion D, u-channel should be kept clean to ensure water flow direction. Stand water should be avoided and pump out discharged via sediment tanks at Portion F. 	
190327-R1 190403-R2 190411-R2 190411-R3	C. Air Quality	C5 C3 C6 C5
	<ul style="list-style-type: none"> The haul road should be watered regularly to avoid dust generation at Subway A. The haul road should be kept clean at Portion B. 	
	<ul style="list-style-type: none"> Unpaved areas should be watered regularly to avoid dust generation at Portion F. The haul roads should be watered regularly to avoid dust generation at Portion B. 	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
190411-F2 190403-R3	E. Waste / Chemical Management	E8 E1
	<ul style="list-style-type: none"> Clear the oil stains as chemical waste at WA3. The accumulation of general refuse should be avoided at Portion F. 	
190411-F1 190306-R2	F. Ecology and Fisheries	G1, G2 G2
	No environmental deficiency was identified during site inspection.	
	G. Landscape & Visual	
	<ul style="list-style-type: none"> To set up a proper tree protection zone at WA3. Set up a proper tree protection zone at Subway A. 	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	Follow up on the previous session (Ref. No: 190403), follow up actions are needed to be reviewed for item 190306-R2, 190320-R4, 190327-R1, 190403-R2&R3 and 190403-F1& F2. Item 190403-R1 is rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan		11 April 2019
Checked by	Ms. Jennifer Mok		11 April 2019

Agreement No. CE 67/2015 (HY)

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works – Design and Construction

Contract No. YL/2015/01

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

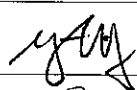

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	190417
Date	17 April 2019 (Wednesday)
Time	09:45 – 12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
190320-R4 190417-R3	<ul style="list-style-type: none"> At Portion D, u-channel should be kept clean to ensure water flow direction. Standing water should be pumped out discharged via sediment tanks at Portion J. 	B4 B3
	C. Air Quality	
190327-R1 190403-R2 190411-R3 190417-R1	<ul style="list-style-type: none"> The haul road should be watered regularly to avoid dust generation at Subway A. The haul road should be kept clean at Portion B. The haul roads should be watered regularly to avoid dust generation at Portion B. The excavated dusty materials or stockpile of dusty materials covered by impervious materials at Portion B. 	C5 C3 C5 C7
190417-R2	<ul style="list-style-type: none"> The site vehicles wheels should be washed at the site exits at Portion D. 	C8
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
190417-F2 190403-R3	<ul style="list-style-type: none"> Clear the oil stains as chemical waste at WA3. The accumulation of general refuse should be avoided at Portion F. 	E8 E1
	F. Ecology and Fisheries	
	No environmental deficiency was identified during site inspection.	
	G. Landscape & Visual	
190417-F1 190306-R2	<ul style="list-style-type: none"> To set up a proper tree protection zone at WA3. Set up a proper tree protection zone at Subway A. 	G1, G2 G2
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	Follow up on the previous session (Ref. No: 190411), follow up actions are needed to be reviewed for item 190306-R2, 190320-R4, 190327-R1, 190403-R2&R3, 190411-R3 and 190411-F1& F2. Item 190411-R1&R2 are rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan		17 April 2019
Checked by	Ms. Jennifer Mok		17 April 2019

Agreement No. CE 67/2015 (HY)

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works – Design and Construction

Contract No. YL/2015/01

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

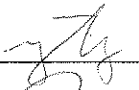

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	190424
Date	24 April 2019 (Wednesday)
Time	09:45 – 12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
190320-R4	• At Portion D, u-channel should be kept clean to ensure water flow direction.	B4
190417-R3	• Standing water should be pumped out discharged via sediment tanks at Portion J.	B3
190424-R1	• Stand water should be avoided at Portion D.	B8
190424-R2	• Stand water should be avoided at Portion F.	B8
	C. Air Quality	
190327-R1	• The haul road should be watered regularly to avoid dust generation at Subway A.	C5
190411-R3	• The haul roads should be watered regularly to avoid dust generation at Portion B.	C5
190417-R1	• The excavated dusty materials or stockpile of dusty materials covered by impervious materials at Portion B.	C7
190424-R3	• The public road around the site entrance should be kept clean at Portion F.	C3
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
190424-F2	• Clear the oil stains as chemical waste at WA3.	E8
	F. Ecology and Fisheries	
	No environmental deficiency was identified during site inspection.	
	G. Landscape & Visual	
190424-F1	• To set up a proper tree protection zone at WA3.	G1, G2
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	Follow up on the previous session (Ref. No: 190417), follow up actions are needed to be reviewed for item 190320-R4, 190327-R1, 190411-R3, 190417-R1&R3 and 190417-F1& F2. Item 190306-R2, 190403-R2&R3, 190417-R2 are rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan		24 April 2019
Checked by	Ms. Jennifer Mok		24 April 2019

Agreement No. CE 67/2015 (HY)

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works – Design and Construction

Contract No. YL/2015/01

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

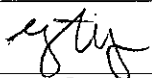

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	190430
Date	30 April 2019 (Tuesday)
Time	09:45 – 12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
190417-R3	• Standing water should be pumped out discharged via sediment tanks at Portion J.	B3
190424-R2	• Stand water should be avoided at Portion F.	B8
190430-R1	• Sediment control measures should be inspected and maintained after rain storms at Portion J.	B11
190430-R2	• Stand water should be avoided at Portion D.	B8
	C. Air Quality	
190327-R1	• The haul road should be watered regularly to avoid dust generation at Subway A.	C5
190417-R1	• The excavated dusty materials or stockpile of dusty materials covered by impervious materials at Portion B.	C7
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
190430-F2	• Clear the oil stains as chemical waste at WA3.	E8
	F. Ecology and Fisheries	
	No environmental deficiency was identified during site inspection.	
	G. Landscape & Visual	
190430-F1	• To set up a proper tree protection zone at WA3.	G1, G2
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	Follow up on the previous session (Ref. No: 190424), follow up actions are needed to be reviewed for item 190320-R4, 190327-R1, 190417-R1&R3, 190424-R2 and 190424-F1& F2. Item 190424-R1&R3, 190411-R3, 190320-R4 are rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan		30 April 2019
Checked by	Ms. Jennifer Mok		30 April 2019

APPENDIX H
EVENT AND ACTION PLANS

Appendix H - Event and Action Plans

Event and Action Plan for Construction Noise

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

Appendix H - Event and Action Plans

	<p>7. Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results;</p> <p>8. If exceedance stops, cease additional monitoring</p>		<p>work is responsible and instruct the Contractor to stop that portion of the work until the exceedance is abated.</p>	
--	--	--	---	--

**APPENDIX I
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE (EMIS)**

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Construction Air Quality			
S.3.6.2	S.3.2.3	All the dust control measures as recommended in the Air Pollution Control (Construction Dust) Regulation, where applicable, should be implemented. Typical dust control measures include:	^
S.3.6.2	S.3.2.3	● The works area for site clearance shall be sprayed with water before, during and after the operation so as to maintain the entire surface wet	*
S.3.6.2	S.3.2.3	● Restricting heights from which materials are to be dropped, as far as practicable to minimize the fugitive dust arising from unloading/ loading	^
S.3.6.2	S.3.2.3	● Immediately before leaving a construction site, all vehicles shall be washed to remove any dusty materials from the bodies and wheels. However, all spraying of materials and surfaces should avoid excessive water usage	^
S.3.6.2	S.3.2.3	● Where a vehicle leaving a construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials will not leak from the vehicle	^
S.3.6.2	S.3.2.3	● Travelling speeds should be controlled to reduce traffic induced dust dispersion and re-suspension within the site from the operating haul trucks	^
S.3.6.2	S.3.2.3	● Erection of hoarding of not less than 2.4 m high from ground level along the site boundary, where appropriate	^
S.3.6.2	S.3.2.3	● Any stockpile of dusty materials shall be covered entirely by impervious sheeting; and/or placed in an area sheltered on the top and 4 sides	#
S.3.6.2	S.3.2.3	● All dusty materials shall be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet	*

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Construction Noise Impact			
S5.5.11	S4.2.17 (Stage 1 only)	In order to prevent potential cumulative construction noise impacts to NSRs at Mai Po San Tsuen and Palm Springs, the works at the cycle track section (near CHMP5+100m) are recommended to be scheduled to avoid works at the areas near Castle Peak Road of the Proposed Comprehensive Development at Wo Shang Wai (CDWSW) project if the works site of the CDWSW project is less than 300 m away from Castle Peak Road.	N/A
S.5.5.14	S.4.2.2 (Stage 1 only)	The contractor shall liaise with the Yuen Long and Kam Tin Sewerage and Sewage Disposal Stage 2 (YLKTSSD2) and North West New Territories Salt Water Supply (NWNTSWS) works contractors so as to avoid undertaking works concurrently with the works when they are in the close proximity as far as practicable. As a conservative approach, works for the cycle track shall be carried out when the works from the other projects are over 300 m away. The requirements shall be included in the works contracts.	N/A
N/A	N/A (Stage 2 only)	The contractor shall liaise with Yuen Long and Kam Tin Sewerage and Sewage Disposal (YLKSSD), Construction of Cycle Tracks and the associated Supporting Facilities at Nam Sang Wai, Yuen Long (NSWCT), Drainage Improvement at Northern NT - Package A – Drainage Improvement Works in San Tin (Remaining Works) - Investigation, North East New Territories New Development Areas Planning and Engineering Study (Investigation) (NENTNDA) and the Proposed Residential cum Passive Recreational Development within “Recreation” (“REC”) zone and “Residential (Group C)” Zone at Various Lots in DD 104, Yuen Long, N.T. (RCPRD) contractors so as to avoid undertaking works concurrently with their works (refer to S. 4.2.2 of the EM&A Manual for Stage 2 Works).	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Table 5-7	S.4.2.19	Use of quiet plant (PME): - mini excavator - mobile crane - dump truck - hand-held electric circular saw - concrete lorry mixer - lorry - vibratory poker - asphalt paver - crane mounted auger - road roller - road ripper, excavator mounted	^
S.5.6.2 Table 5-8	S.4.2.19	Noise barrier in the form of site hoarding shall be used for the following PMEs where practicable: - mini excavator - mobile crane - dump truck - hand-held electric circular saw - bar bender - vibrating hammer - generator - concrete lorry mixer - lorry - vibratory poker - asphalt paver - compactor - road roller	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		<ul style="list-style-type: none"> - crane mounted auger - grout mixer - grout pump - drill - road ripper, excavator mounted 	
S.5.6.2	S.4.2.19	Noise enclosure shall be used for the following PME's where practicable: <ul style="list-style-type: none"> - air compressor - hand-held breaker 	N/A (1)
S.5.6.2	S.4.2.19	The barrier / enclosure material's surface mass shall be in excess of 7 kg/m ² .	^
S.5.6.6	S.4.2.19	Use of alternative quieter plant such as road ripper, excavator mounted instead of handheld breaker during levelling/excavation works.	^
S.5.6.8	S.4.2.19	The Contractor shall adopt the Code of Practice on Good Management Practice to Prevent Violation of the Noise Control Ordinance (Chapter 400) (for Construction Industry) published by EPD	^
S.5.6.8	S.4.2.19	The Contractor shall observe and comply with the statutory and non-statutory requirements and guidelines	^
S.5.6.8	S.4.2.19	Before commencing any work, the Contractor shall submit to the project Engineer for approval the method of working, equipment and noise mitigation measures intended to be used at the site	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.5.6.8	S.4.2.19	The Contractor shall devise and execute working methods to minimize the noise impact on the surrounding sensitive uses, and provide experienced personnel with suitable training to ensure that those methods are implemented	^
S.5.6.8	S.4.2.19	Noisy equipment and noisy activities should be located as far away from the NSRs as is practical	^
S.5.6.8	S.4.2.19	Unused equipment should be turned off. PME should be kept to a minimum and the parallel use of noisy equipment / machinery should be avoided	^
S.5.6.8	S.4.2.19	Regular maintenance of all plant and equipment	^
S.5.6.8	S.4.2.19	Material stockpiles and other structures should be effectively utilised as noise barriers, where practicable	N/A
S.5.6.8	S.4.2.19	The Contractor shall liaise with the schools that are located near the works sites regarding their examination period and schedule the noisy works to avoid the examination period as far as possible.	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Construction Water Quality			
S.6.6.1	S.5.2.4	Mitigation measures should be implemented to prevent the uncontrolled discharge of wastewater from the construction site in accordance with Practice Note for Professional Persons ProPECC PN1/94 - Construction Site Drainage	#
S.6.6.1	S.5.2.4	Surface run-off from the construction sites will be directed into storm drains via adequately designed wastewater treatment facilities such as sand traps, silt traps and sediment settling basins. This is important for works immediately along the Kam Tin River, Ngau Tam Mei Main Drainage Channel, River Beas and Shek Sheung River	*
S.6.6.1	S.5.2.4	Channels, earth bunds or sand bag barriers will be provided on-site to properly direct stormwater to the above-mentioned facilities	^
S.6.6.1	S.5.2.4	Existing silt removal facilities, channels and manholes along roads and pedestrian walkways will be maintained and the deposited silt and grit will be removed regularly, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times	*
S.6.6.1	S.5.2.4	Other manholes (including any newly constructed ones) will be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system	^
S.6.6.1	S.5.2.4	Open stockpiles of materials on site will be avoided or where unavoidable covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system	^
S.6.6.1	S.5.2.4	Where possible, works entailing soil excavation will be minimized during the rainy season (i.e. April to September);	^
S.6.6.1	S.5.2.4	Where applicable, final earthworks surfaces/ slopes will be well compacted and hydro-seeded following completion to prevent erosion	N/A

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.6.6.1	S.5.2.4	During construction works, chemical toilets will be provided for the use of site staff. These will be provided by a licensed contractor, who will be responsible for appropriate disposal and maintenance of the effluent	^
S.6.6.1	S.5.2.4	Works adjacent to the fishponds near Mai Po San Tsuen should be avoided as far as possible during the wet season to avoid runoff into the fishponds	^
S.6.6.1	S.5.2.4	Wastewater from site facilities (such as toilets) should be discharged to foul sewer, where available. Chemical toilets will be considered where there is no foul sewer connection. There is not expected to be a temporary canteen.	^
S.6.6.1	S.5.2.4	All site discharges within Water Control Zones must comply with the terms and conditions of a valid discharge licence issued by EPD	^
S.6.6.1	S.5.2.4	Vehicle wheel washing facilities should be provided, where applicable, at the site exit such that mud, debris, etc. deposited onto the vehicle wheels or body can be washed off before the vehicles are leaving the site area	^
S.6.6.1	S.5.2.4	Section of the road between the wheel washing bay and the public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains	^
S.6.6.1	S.5.2.4	The project may occasionally involve the handling of fuel and generates chemical wastes. It must be ensured that all fuel tanks and chemical storage are sited on sealed areas and provided with locks	^
S.6.6.1	S.5.2.4	The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent accidentally spilled oil, fuel or chemicals from reaching the receiving waters	*
S.6.6.1	S.5.2.4	Oil and grease removal facilities will be provided where appropriate, for example, in area near plant workshop/ maintenance areas	N/A
S.6.6.1	S.5.2.4	Chemical waste arising from the site should be properly stored, handled, treated and disposed of in compliance with the requirements stipulated under the Waste Disposal	*

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		(Chemical Waste) (General) Regulation	
-	S.5.2.7 (Stage 1 only)	The construction work of cycle bridge at Shek Sheung River is not recommended to be carried out during wet seasons (April to October), and the dry weather flow will be diverted to avoid entering the works area. In order to further protect the river water quality from disturbance, the construction work especially excavation works, will be surrounded by cofferdams to ensure the works will be carried out in a dry condition to prevent water pollution to the river.	^
N/A	S.5.2.4 (Stage 2 only)	Stream decking is recommended to be carried out during dry weather condition. To prevent disturbance to the river water quality, measures will be taken to ensure the works to be carry out in a dry condition to prevent water pollution to the river, such as sandbag barriers.	^
N/A	S.5.2.6 (Stage 2 only)	Based on the current available information, the tentative programmes of some construction works for the Agreement No. CE 57/2011 (DS) Drainage Improvement at Northern NT - Package A Drainage Improvement Works in San Tin (Remaining Works) - Investigation (DIST) and the Construction of Cycle Tracks and the associated Supporting Facilities at Nam Sang Wai, Yuen Long (NSWCT) projects may overlap with Stage 2 cycle track construction works. It is recommended that the Contractor should liaise with the project contractor(s) of the DIST and the NSWCT projects to schedule the construction works and allow programme phrasing to avoid major concurrent activities to be undertaken simultaneously in the vicinity.	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Construction Waste Management			
S.7.4.1	S.6.2.1 – S.6.2.4	An on-site environmental co-ordinator employed by the Contractor should be identified at the outset of the works. Prior to commencement of Project works, the co-ordinator shall prepare a WMP in accordance with the requirements set out in the ETWB TCW No. 19/2005, Waste Management on Construction Sites, for the ER’s approval. The WMP shall include monthly and yearly Waste Flow Tables (“WFT”) that indicate the amounts of waste generated, recycled and disposed of (including final disposal site), and which should be regularly updated;	^
S.7.4.1	S.6.2.6	Given the potential for secondary environmental impacts (dust, noise, water quality and visual impacts), mitigation measures are required to ensure proper handling, storage, transportation and disposal of materials at the outset and throughout the construction phase of the project	^
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● The reuse/ recycling of all materials on site shall be investigated and exhausted prior to treatment/ disposal off-site 	^
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● Good site practices shall be adopted from the commencement of works to avoid the generation of waste, reduce cross contamination of waste and to promote waste minimisation 	*
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● All waste materials shall be sorted on-site into inert and non-inert C&D materials, and where the materials can be recycled or reused, they shall be further segregated. Inert material, or public fill will comprise stone, rock, masonry, brick, concrete and soil which is suitable for land reclamation and site formation whilst non-inert materials include all other wastes generated from the construction process such as plastic packaging and vegetation (from site clearance) 	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● The Contractor shall be responsible for identifying what materials can be recycled/reused, whether on-site or off-site. In the event of the latter, the Contractor shall make arrangements for the collection of the recyclable materials. Any remaining non-inert waste shall be collected and disposed of to the Public Filling Areas whilst any inert C&D materials shall be re-used on site as far as possible. Alternatively, if no use of the inert material can be found onsite, the materials can be delivered to a Public Fill Area or Public Fill Bank after obtaining the appropriate licence 	^
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● In order to monitor the disposal of C&D material and solid wastes at public filling facilities and landfills, and control fly-tipping, a trip-ticket system shall be implemented by the Contractor, in accordance with the contract and the requirements of DEVB Technical Circular (Works) No. 6/2010 “Trip Ticket System for Disposal of Construction and Demolition Material”. 	^
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● Under the Waste Disposal (Chemical Waste) (General) Regulation, the Contractor shall register as a Chemical Waste Producer if chemical wastes such as spent lubricants and paints are generated on site. Only licensed chemical waste collectors shall be employed to collect any chemical waste generated at site. The handling, storage, transportation and disposal of chemical wastes shall be conducted in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes and A Guide to the Chemical Waste Control Scheme both published by EPD; 	*

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● A sufficient number of covered bins shall be provided on site for the containment of general refuse to prevent visual impacts and nuisance to the sensitive surroundings. These bins shall be cleared daily and the collected waste disposed of to the refuse transfer station. Further to the issue of ETWB Technical Circular (Works) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness, the Contractor is required to maintain a clean and hygienic site throughout the project works; 	^
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● All chemical toilets, if any, shall be regularly cleaned and the night-soil collected and transported by a licensed contractor to a Government Sewage Treatment Works facility for disposal; and 	^
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● Toolbox talks should be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling. 	^
S.7.4.1	S.6.2.6	<ul style="list-style-type: none"> ● The Contractor shall comply with all relevant statutory requirements and guidelines and their updated versions that may be issued during the course of project construction. 	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Land Contamination			
S.8.7.2 – S.8.7.3	S.7.2.2	Preparation of Contamination Assessment Plan (CAP), which should be submitted to EPD for endorsement, prior to investigation. Site investigation and sampling works in accordance with the approved CAP. If contamination is identified, Contamination Assessment Report (CAR) and Remediation Action Plan (RAP) shall be prepared and submitted for EPD’s approval.	^
S.8.7.5	S.7.3.1	The following control measures should be implemented when handling identified contaminated materials: <ul style="list-style-type: none"> ▪ General site safety shall be enforced to include basic practices such as the use of safety boots, hard hats, coveralls, gloves and eye protection; ▪ Avoid skin contact, ingestion and inhalation of excavated contaminated soils. Basic personal protective equipment should be used; ▪ Site staff and workers shall be given adequate training and instructions specific to the potential hazards, their health and safety responsibilities and safe working practice including basic personal hygiene; ▪ Measures shall be implemented to prevent non-workers from approaching the identified works areas in order to avoid exposure to contaminants. 	N/A
S.8.7.5	S.7.3.1	<u>Management of Contaminated Soils</u> <ul style="list-style-type: none"> ▪ Where appropriate, the use of bulk handling equipment should be maximised to reduce the potential contacts between excavated contaminated materials and associated workers; ▪ The plants for excavation and transportation of the material shall be cleaned prior to leaving the Site; ▪ All temporary stockpiles of the materials shall be completely covered with plastic/ tarpaulin sheets, particularly during heavy rainstorms. The stockpiling areas should be concrete-paved or lined with its perimeter constructed of a concrete bund 	N/A

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		where appropriate in order to avoid any leachate from migrating out of the area; <ul style="list-style-type: none"> ▪ Any vehicles transporting the material shall be suitably covered to limit potential dust emissions; ▪ Surface waters shall be diverted around any contaminated areas or stockpiles to minimize potential runoff into excavations, as runoff might increase the volume of contaminated water requiring disposal and suspended solids in the wastewater stream 	

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Ecological & Fisheries Impact			
S.9.11.4	S.8.2.2	Prior to tree felling, survey inspections should be made for their suitability for roosting bats. Once these trees have been highlighted, then appropriate checks of each tree for bats should be made prior to removal as a precautionary measure.	^
S.9.11.7	S.8.2.3 (Stage 1 only)	<i>In situ</i> compensation planting at the Information Kiosk and R9 should occur to provide continuing function of the bamboo and plantation (see Figure 8-1 of EM&A Manual for Stage 1 Works (Year 2015)). It is recommended that the Information Kiosk and Resting Station R9 should be designed sympathetically to the natural surroundings. Compensation planting along the Sheung Yue River and Shek Sheung River including at R9 and Information Kiosk could be implemented as appropriate.	N/A
S.9.11.17 – S.9.11.19	S.8.2.4 (Stage 1) S.8.2.3 (Stage 2)	For the Kam Tin section and the Long Valley section of the Project, construction works shall not be carried out during the wet season (April to October) which is considered to have no significant impact to wildlife and to avoid the breeding season of Greater Painted-snipes at Long Valley. This is also to prevent any site run-off to adjacent water channels and fishponds including those fishponds along San Tin Tsuen Road.	^
S.9.11.23	S.8.2.4 (Stage 2 only)	Construction of the section in the vicinity of Mai Po Village SSSI shall be undertaken beyond the recognised breeding seasons for ardeids in Hong Kong to prevent any potential disturbance to the nesting birds, i.e., from September to February.	^
-	S.8.2.5 (Stage 1 only)	In order to avoid any adverse impact to the healthiness of the bamboo grove from dust-coating on leave next to the R9 and hence affect the breeding habitat of the very rare Dark Brown Ace, a dust barrier should be installed between the bamboo and the construct site.	N/A

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
-	S.8.2.6 (Stage 1 only)	For the lower Shek Sheung River, construction works should be scheduled in dry season to minimize the disturbance to the foraging ardeids and the Quiet PME shall be implemented practicable to minimize the noise disturbance to the foraging ardeids.	^
S.10.5.4	S.8.2.7 (Stage 1) S.8.2.5 (Stage 2)	To prevent any negative impact to water quality as a result of site run-off, good site practice must be employed at all times, particularly in the areas close to fishponds. Practice Note for Professional Persons ProPECC PN1/94 – Construction Site Drainage shall be implemented.	^
S.10.5.4	S.8.2.8 (Stage 1) S.8.2.6 (Stage 2)	Along Pok Wai South Road, once the final construction sequencing is known, liaison with local residents and aquaculturists should be implemented in order to minimise temporary road blockages and to identify the best timing for works along this area.	N/A
S.10.5.3	S.8.2.9 (Stage 1) S.8.2.7 (Stage 2)	During wet seasons, surface run-off from the construction sites will need to be directed into storm drains via adequately designed wastewater treatment facilities such as sand traps, silt traps, oil interceptors and sediment settling basins. Works adjacent to the fishponds near NTMDC inside the Wetland Conservation Area (WCA) and Mai Po San Tsuen should be avoided, as far as practicable, during the wet season to avoid runoff into the fishponds.	^
-	S.8.2.10 (Stage 1 only)	The use of signage at the Resting Stations to indicate that wildlife may be present and that noise levels and activities should be kept to a minimum could be implemented. This may help to reduce any potential disturbance to wildlife from human activity. At Long Valley, to mitigate against potential indirect human disturbance to Greater Painted-snipe, planting could be undertaken as appropriate along the proposed cycle track at meander 8 to act as screening.	N/A

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.9.11.27	S.8.2.11 (Stage 1) S.8.2.9 (Stage 2)	<p>The following good work practices are recommended: ■</p> <ul style="list-style-type: none"> Avoid soil storage against trees; ■ Fence off any potentially ecologically sensitive areas; ■ Delineation of works area to prevent encroachment onto adjacent habitats; ■ Reinstatement of habitat after works; ■ No on-site burning of waste; Waste and refuse in appropriate receptacles; ■ Staff training/toolbox talks for site work near Long Valley and WCA – important areas for birds therefore staff should reduce amount of noise whilst working and during breaks where possible; ■ Regular ecological checks; and ■ Silt/ Sediment/ Oil traps for drainage to prevent site run-off 	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Cultural Heritage Impact			
S.11.5.1	S.9.2.1	Care should be taken during the construction stage to report any signs of possible discovery of artefacts.	N/A
Landscape and Visual			
<i>Detailed Design Phase</i>			
Table 12-11	CP1	A detailed tree survey to be carried out by the IDC Consultant during the detailed design stage. The recommendations of the preliminary tree survey shall be reviewed and confirmed during the detailed survey. Should tree felling be required, tree felling application is required in accordance with DEVB Technical Circular (Works) No. 10/2013 Tree Preservation	^
S.12.9.3	CP6	It has been agreed that the proposed landscape areas under DSD's 4215DS project which falls within the cycle track works area will be implemented by Project proponent of this Project in form of roadside amenity areas after completion of the cycle track. During the detailed design, the works programme of this Project shall be coordinated with the above-mentioned DSD project in order to avoid abortive planting works and impact on landscape resources between the interface of different public works. The proposed landscape areas under 4215DS falled within the cycle track works area shall be incorporated in the final landscape design of this Project.	^
S.12.10.1	OP1	The Design Concept Drawings and Conceptual Landscape Master Plan of cycle track and associated facilities demonstrate landscape and visual mitigation strategies and design measures including integrated design approach, amenity and compensatory planting proposals and treatment of retaining structure and slopes have been recommended in the EIA. More detailed landscape and compensatory planting proposals shall be developed by IDC consultants at later stage during detailed design and construction phase of this project following the completion of the detailed Tree	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		Survey Report and approval from relevant departments at that stage	
<i>Construction Phase</i>			
Table 12-11	CP1.1	To retain trees, which have high amenity or ecology value and contribute most to the landscape and visual amenity of the site and its immediate environs.	^
	CP1.2	Creation of precautionary area around trees to be retained equal to half of the trees canopy diameter. Precautionary area to be fenced.	#
	CP1.3	Prohibition of the storage of materials including fuel, the movement of construction vehicles, and the refuelling and washing of equipment including concrete mixers within the precautionary area.	^
	CP1.4	Phased segmental root pruning for trees to be retained and transplanted over a suitable period (determined by species and size) prior to lifting or site formation works which affect the existing rootball of trees identified for retention. The extent of the pruning will be based on the size and the species of the tree in each case.	^
	CP1.5	Pruning of the branches of existing trees identified for transplantation and retention to be based on the principle of crown thinning maintaining their form and amenity value.	^
	CP1.6	The watering of existing vegetation particularly during periods of excavation when the water table beneath the existing vegetation is lowered.	^
	CP1.7	The rectification and repair of damaged vegetation following the construction phase to its original condition prior to the commencement of the works or replacement using specimens of the same species, size and form where appropriate to the design intention of the area affected.	N/A

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
	CP1.8	All works affecting the trees identified for retention and transplantation will be carefully monitored. This includes the key stages in the preparation of the trees, the implementation of protection measures and health monitoring throughout the construction period.	^
	CP1.9	Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval under the lease conditions and in accordance with ETWB TCW No. 2/2004 and WB Technical Circular No. 14/2002.	N/A
	CP2.0	The tree preservation works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree protection specification would be included within the contract documents.	^
	CP2.1	Topsoil disturbed during the construction phase should be tested using a standard soil testing methodology and where it is found to be worthy of retention stored for re-use.	^
	CP2.2	The soil will be stockpiled to a maximum height of 2m and will be either temporarily vegetated with hydroseeded grass during construction or covered with a waterproof covering to prevent erosion.	^
	CP2.3	The stockpile should be turned over on a regular basis to avoid acidification and the degradation of the organic material, and reused after completion. Alternatively, if this is not practicable, it should be considered for use elsewhere, including other projects.	^
	CP3.1	Where appropriate to the final design the landscape of these works areas should be restored following the completion of the construction phase.	N/A
	CP3.2	Construction site controls should be enforced including the storage of materials, the location and appearance of site accommodation and the careful design of site lighting to prevent light spillage.	^

Appendix I - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
	CP3.3	Screen the works area during the construction phase through the use of decorative hoarding along the site boundary facing adjacent VSRs	^
	CP4.1	Replanting of disturbed vegetation should be undertaken at the earliest possible stage of the construction phase	^
	CP4.2	Use of native plant species predominantly in the planting design for the buffer areas.	^
	CP4.3	The tree planting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree planting specification would be included within the contract documents	^
	CP5.1	The tree transplanting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree protection / transplanting specification would be included within the contract documents.	^
	CP5.2	The implementation program should reserve enough time for advance tree transplanting preparation.	^

Remarks:	EM&A Manual for Stage 1 Works under EP-450/2013/A (App No.: VEP-478/2015) EM&A Manual for Stage 2 Works under EP-501/2015 (App No.: AEP-501/2015)	
	^ Compliance of mitigation measure;	X Non-compliance of mitigation measure;
	N/A Not Applicable at this stage; N/A(1) Not observed;	● Non-compliance but rectified by the contractor;
	* Recommendation was made during site audit but improved/rectified by the contractor.	# Recommendation was made during site audit but not yet improved/rectified by the contractor.

**APPENDIX J
RECORD OF ENVIRONMENTAL
COMPLAINT, WARNING, SUMMON
AND NOTIFIATION OF SUCCESSFUL
PROSECUTION**

Agreement No. CE 67/2015 (HY)

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works – Design and Construction

Appendix J – Record of environmental complaint, warning, summon and notification of successful prosecution

Reporting Month: April 2019

Contract No. YL/2015/01

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Investigation/Mitigation Action	Status
1	Pok Wai South Road	8 th November 2018	The complaint is filed against extensive dusty stockpile being placed at the works site of Pok Wai South Road (Portion A), causing dust nuisance and affecting the passer-by and residents.	<ul style="list-style-type: none"> • Cover all the stockpile when stockpiling works was not being conducted; • Arrange on-site personnel to wash the wheels of the vehicles immediately before they leave the site area; and • Increase the frequency of water spraying on the stockpiles to dampen the dusty surface. 	CIR was submitted in December
2	Mai Po San Tsuen (Portion D)	20 th December 2018	The complaint is filed against extensive dust nuisance by construction activities generated sand and dust, and may have caused the nearby village roads to look dusty and unclean.	<ul style="list-style-type: none"> • Increase the frequency of water spraying on the paved roads to minimize the dust generation; and • Cover the temporary cut slopes by tarpaulin before any excavation works commence. 	CIR was submitted in December
3	Mai Po San Tsuen (Portion D)	21 st December 2018	The complaint is filed against site effluent being pumped and discharge into the nearby surface channel from the same construction site.	<ul style="list-style-type: none"> • Cover the temporary cut slopes by tarpaulin before any excavation works commence. • Clean the water in the channel and all broken covers are replaced by new decking covers • 3 weirs have been installed at the downstream • Use of sedimentation tank prior to discharge • New cut-off plate next to the channel will be raised 200mm to prevent potential run-off • A filter with aggregate is placed at the side channel 	CIR was submitted in February

Agreement No. CE 67/2015 (HY)

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works – Design and Construction

Appendix J – Record of environmental complaint, warning, summon and notification of successful prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Investigation/Mitigation Action	Status
				<ul style="list-style-type: none">• Water and wastewater filtration system is installed to treat the site effluent.	

Remarks: Three environmental complaints were received in the previous reporting period. No environmental complaint was received in this reporting period.

**APPENDIX K
SUMMARY OF WASTE GENERATION
AND DISPOSAL RECORDS**

Sang Hing – Kuly Joint Venture
Environmental Management Plan for Contract No. YL/2015/01
Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

Name of Department: CEDD

Contract No.: YL/2015/01

--

Monthly Summary Waste Flow Table for 2016 (Year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill*	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
June	-	-	-	-	-	-	-	-	-	-	-
July	-	-	-	-	-	-	0.01	0.01	0.01	-	0.01
Aug	-	-	-	-	-	-	0.01	0.01	0.01	-	0.01
Sept	0.005	-	-	-	0.005	-	0.01	0.01	0.01	-	0.06
Oct	-	-	-	-	-	-	0.05	0.05	0.05	-	0.04
Nov	0.35	-	-	-	0.35	-	0.05	0.05	0.05	-	0.05
Dec	0.4	-	-	-	0.4	-	0.05	0.05	0.05	-	0.05
Total	0.755	-	-	-	0.755	-	0.18	0.18	0.18	-	0.22

*Remark: Imported Fill not taken into account of Total Quantity Generated

#Revised Figure

Sang Hing – Kuly Joint Venture
 Environmental Management Plan for Contract No. YL/2015/01
 Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

Name of Department: CEDD

Contract No.: YL/2015/01

Monthly Summary Waste Flow Table for 2017 (Year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill*	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
Jan	0.04	-	-	-	0.04	0.124	0.05	0.05	0.05	-	0.06
Feb	0.02	-	-	-	0.02	-	0.05	0.05	0.05	-	0.01
Mar	1.15	-	-	-	1.15	0.369	0.05	0.05	0.05	-	0.02
Apr	0.65	-	-	-	0.65	-	0.05	0.05	0.05	-	0.02
May	0.79	-	-	-	0.79	-	0.05	0.05	0.05	-	0.01
June	1.63	-	-	-	1.63	-	0.05	0.05	0.05	-	0.02
July	1.25	-	-	-	1.25	-	0.05	0.05	0.05	-	0.01
Aug	1.49	-	-	-	1.49	-	0.05	0.05	0.05	-	0.01
Sep	1.15	-	-	-	1.14	0.493	0.05	0.05	0.05	-	0.01
Oct	1.19	-	-	-	1.19	-	0.05	0.05	0.05	-	0.01
Nov	0.79	-	-	-	0.76	-	0.05	0.05	0.05	-	0.03
Dec	3.09	-	-	-	3.07	-	0.05	0.05	0.05	-	0.01
Total	13.24	-	-	-	13.18	0.986	0.6	0.6	0.6	-	0.22

*Remark: Imported Fill not taken into account of Total Quantity Generated

#Revised Figure

Sang Hing – Kuly Joint Venture
 Environmental Management Plan for Contract No. YL/2015/01
 Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

Name of Department: CEDD

Contract No.: YL/2015/01

Monthly Summary Waste Flow Table for 2018 (Year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill*	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
Jan	4.37	-	-	-	4.36	-	0.05	0.05	0.05	-	0.01
Feb	1.66	-	-	-	1.64	-	0.05	0.05	0.05	-	0.01
Mar	1.85	-	-	-	1.82	-	0.05	0.05	0.05	-	0.01
Apr	3.35	-	-	-	3.31	-	0.05	0.05	0.05	-	0.01
May	0.84	-	-	-	0.82	-	0.01	0.01	0.01	-	0.01
June	0.04	-	-	-	-	-	0.01	0.01	0.01	-	0.04
July	2.75	-	-	-	2.72	-	0.01	0.01	0.01	-	0.03
Aug	1.34	-	-	-	1.32	-	0.01	0.01	0.01	-	0.02
Sept	0.69	-	-	-	0.68	-	0.01	0.01	0.01	-	0.01
Oct	2.99	-	-	-	2.97	-	0.01	0.01	0.01	-	0.01
Nov	4.62	-	-	-	4.61	-	0.01	0.01	0.01	-	0.01
Dec	6.49	-	-	-	6.45	-	0.01	0.01	0.01	-	0.05
Total	30.99	-	-	-	30.70	-	0.28	0.28	0.28	-	0.22
.
.
Total	44.985	-	-	-	44.635	0.986	1.06	1.06	1.06	-	0.66

*Remark: Imported Fill not taken into account of Total Quantity Generated

#Revised Figure

Sang Hing – Kuly Joint Venture
 Environmental Management Plan for Contract No. YL/2015/01
 Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

Name of Department: CEDD

Contract No.: YL/2015/01

Monthly Summary Waste Flow Table for 2019 (Year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill*	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
Jan	1.13	-	-	-	1.08	-	0.05	0.05	0.05	-	0.05
Feb	0.04	-	-	-	-	-	0.05	0.05	0.05	-	0.04
Mar	0.06	-	-	-	-	-	0.05	0.05	0.05	-	0.06
Apr	0.05	-	-	-	0.03	-	0.05	0.05	0.05	-	0.02
Sub-total	1.28	-	-	-	1.11	-	0.20	0.20	0.20	-	0.17
May	-	-	-	-	-	-	-	-	-	-	-
June	-	-	-	-	-	-	-	-	-	-	-
July	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sept	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
.
.
Total	46.265	-	-	-	45.745	0.986	1.26	1.26	1.26	-	0.83

*Remark: Imported Fill not taken into account of Total Quantity Generated

#Revised Figure

Sang Hing – Kuly Joint Venture
Environmental Management Plan for Contract No. YL/2015/01
Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

Forecast of Total Quantities of C&D Materials to be Generated from the Contract*										
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
5	2	1	1	1	10	3	3	1	1	3

*Remark: Figure to be revised if necessary

Notes:

- (1) The performance targets are given in ETWB Technical Circular PS Clause 6(14).
- (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
- (4) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m³. (ETWB Technical Circular PS Clause 5(4)(b) refers). [Delete Note (4) and the table above on the forecast, where inapplicable].