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)

June 2017

Approved By

(Dr. Priscilla Choy,

Environmental Team Leader)

REMARKS:

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

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

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EXECUTIVE SUMMARY

Introduction

- 1. This is the 8th 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 1 30 June 2017.
- 2. During the reporting month, the major site activities undertaken in the reporting month included:
- Site Clearance in Portions N and J;
- Ground investigation in Portion J;
- Construction of public toilet in Portion J;
- Tree felling in Portions N and J;
- Construction of retaining wall in Portions A, C, D, E and J;
- Construction of subway in Portions B and I;
- Utilities diversion works in Portions G, H and N;
- Earth and drainage works in Portions A, B and K;
- Construction of U-channel and Subway A in Portion B; and
- Construction of rectangular channel in Portion E.

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 Exce	eedance	Action
	Actio	on Level	Limit Level	Taken
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	

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)

Future Key Issues

- 7. The future key environmental issues in the coming two 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 23th November 2016. This is the 8th Monthly EM&A Report summarizing the EM&A works for the Project from 1 30 June 2017.

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**.

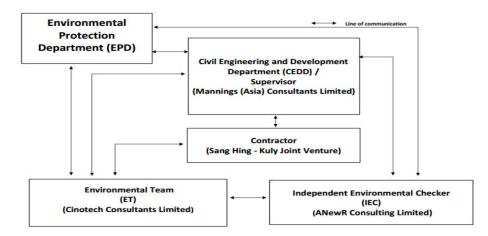


Figure 3 Organization Structure (Environmental Aspects)

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

Table 1.1 Key Project Contacts

1 abic 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	Dr. Priscilla Choy	2151 2089	3107 1388
Cinotech		Ms. Ivy Tam	2151 2090	
ANewR	Independent Environmental Checker	Mr. Adi Lee	2618 2836	3007 8648
SKJV	Contractor	Mr. Michael Wan	9222 3089	N/A

Construction Activities undertaken during the Reporting Month

- 1.9 The major site activities undertaken in the reporting month included:
- Site Clearance in Portions N and J;
- Ground investigation in Portion J;
- Construction of public toilet in Portion J;
- Tree felling in Portions N and J;
- Construction of retaining wall in Portions A, C, D, E and J;
- Construction of subway in Portions B and I;
- Utilities diversion works in Portions G, H and N;
- Earth and drainage works in Portions A, B and K;
- Construction of U-channel and Subway A in Portion B; and
- Construction of rectangular channel in Portion E.

1.10 The construction programme showing the 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	 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 1 30 June 2017.

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** shows the locations of these stations.

Table 4.1 Noise Monitoring 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

- 4.4 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.
- **4.5** 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

	1 · 1	
Equipment	Model and Make	Qty.

Integrating Sound Level Meter	SVAN 955, 957, 977	4
Acoustic Calibrator	SV30A	3

Monitoring Parameters and Frequency

4.6 **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				Façade	
N2	I (20:) ID(A)	0700 1000 1		Façade	
N3	L _{eq} (30 min.) dB(A) L ₁₀ (30 min.) dB(A) L ₉₀ (30 min.) dB(A)		nin.) dB(A) 0700-1900 hrs nin.) dB(A) on normal	On an man vya alr	Free Field
N5		weekdays	Once per week	Free Field	
N6		L90(30 IIIII.) ub (A)	weekdays		Façade
N7				Free Field	

Monitoring Methodology and QA/QC Procedures

- 4.7 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 recalibration 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

4.8 The microphone head of the sound level meter and calibrator were cleaned with a soft

cloth at quarterly intervals.

- 4.9 The sound level meter and calibrator were checked and calibrated at yearly intervals.
- 4.10 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

- 4.11 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**.
- 4.12 The baseline noise level and the Noise Limit Level at each designated noise monitoring stations are presented in **Table 4.4**.
- 4.13 Noise monitoring results and graphical presentations are shown in **Appendix E**.
- 4.14 The other noise sources identified which might affect the noise monitoring results at the designated noise monitoring stations are as follows:

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 4.4
 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
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 or 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)	
M7	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 (June 17), Leq (30min) dB(A)
N1 - HKMLC Wong Chan Sook Ying Memorial School	55-62	62 ⁽¹⁾	58.0 – 62.0
N2 – Bethel High School	57-64	64 ⁽¹⁾	55.9 – 60.1
N3 – No. 159 Mai Po San Tsuen	70-73	74 ⁽²⁾	68.6 – 71.2
N5 – Block 2, Dills Corner Garden	73-75	75 ⁽²⁾	70.5 - 72.2
N6 – Home of Loving Faithfulness	64-73	74 ⁽¹⁾	69.4 – 71.8
N7 – Village House in Shek Wu Wai	N/A ⁽³⁾	70 ⁽²⁾	69.6 – 71.8

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 in the reporting month at monitoring stations N1 and N6 were within the range of predicted mitigated construction noise levels in the EIA Report. The results at N2, N3 and N5 were lower than 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 N1, N2, N3, N5 and N6 were lower than the predicted mitigated worst case construction noise levels in the ERR for Stage 2 Works. The noise monitoring result at monitoring station N7 was slightly higher than 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 7, 14, 20 and 28 June 2017 in the reporting month. IEC joint site inspection was conducted on 20 June 2017. 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
refillt No.	From	To	Details	Status
Environmental Permit	t (EP)			
EP-450/2013/A 25/08/ 15 N/A		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/ 15	02/09/ N/A Construction of Cycle Tracks and the Associated Supporting Facilities from Sha		Valid
Billing Account for Cons	struction	Waste Dispo	osal	
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 Licer	Effluent Discharge License			
WT00027672-2017 WT00027661-2017 WT00027606-2017 WT00027510-2017 WT00027509-2017 WT00027603-2017 WT00027508-2017		31/3/2022	Discharge License for the discharge of wastewater from the construction site including contaminated surface run-off to the communal storm water drain	Valid

Permit No.	Valid Period		Details	Status
From To		Details	Status	
WT00027582-2017		30/6/2018		
WT00027584-2017		31/7/2019		
WT00027605-2017		31/3/2022		Valid
WT00027607-2017		31/3/2022		
Registration of Chemical Waste Producer				
No.:WPN5213-524- K3261-01	1	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
Construction Noise Permit (CNP)				
N/A				

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**.

Table 8.2 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
	31 May, 7, 14, 20 and 28 June 2017	Wheel washing bays in Portion C and K were found silty and containing some litters, the water should be replaced or maintained more frequently to ensure clean water is used for wheel washing of vehicles.	Follow up actions will be reported in the next month.
Water Quality 31 May, 7, 14 and 20 June 2017		Sandbag bund should be provided to prevent silty runoff flowing to pubic roads at Portion E.	Silty runoff entering public area was not observed on 28 June 2017.
E y	31 May, 7, 14 and 20 June 2017	Ponding water should be cleared at Portion A and C.	Ponding water in Portion A and C was cleared on 28 June 2017.
14 and 20 June 2017	Direct discharge of untreated wastewater was found at Portions C and I. The Contractor should provide appropriate and adequate treatment to wastewater prior to discharge.	Sedimentation tank was used for wastewater treatment before discharge on 28 June 2017.	
31 May, 7, 14, 20 and Air Quality 28 June 2017		Tarpaulin coverage should be provided to the stockpiles in Portions A, C and Works Area 3 for dust suppression.	Follow up actions will be reported in the next month.
	31 May 2017	Water spraying should be provided more frequently at Portion I for dust suppression.	Water spraying was provided on 7 June 2017.
Noise	N/A	There was no observation in the reporting period.	N/A
Waste / 31 May, 7, 14 and 20 June 2017		Drip trays should be provided to chemical containers in Portion E, K and WA3.	Chemical containers were removed on 28 June 2017.
Management	31 May, 7, 14 and 20 June 2017	Rubbish bins or waste collectors should be provided in Portion C and K for proper disposal and storage of solid waste.	Rubbish bins were maintained on 28 June 2017.

Parameters	Date	Observations and Recommendations	Follow-up
	20 June 2017	General refuse found in Portion K should be properly cleared. Housekeeping in Portion K should be enhanced.	Housekeeping at Portion K was observed enhanced on 28 June 2017.
	28 June 2017	Drip trays should be provided for chemical containers in Portion C to prevent leakage.	Follow up actions will be reported in the next month.
	/X		Follow up actions will be reported in the next month.
Ecology and Fisheries	N/A	There was no observation in the reporting period.	N/A
Landscape and Visual	31 May, 7, 14 and 20 June 2017	Fencing of tree protection zones in Portion E, K and WA3 should be enhanced to protect all existing trees.	Fencing of tree protection zones were set up on 28 June 2017.
Permits/ Licenses	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.

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

8.11 The summaries of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix J**.

9 FUTURE KEY ISSUES

- 9.1 Major site activities undertaken for the coming two months include:
- Site Clearance in Portions M and N:
- Ground investigation in Portion J;
- Construction of public toilet in Portion L;
- Tree felling in Portions M and N;
- Construction of retaining wall in Portions C, D, E and K;
- Construction of subway in Portions I;
- Utilities diversion works in Portions H and N;
- Earth and drainage works in Portions A, D, E, F, J and K; and
- Construction of U-channel in Portion B;

Key Issues for the Coming Month

- 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. July 2017 to August 2017, are summarized as follows:

Construction Works	Major Impact Prediction	Control Measures	
	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. 	
As mentioned in Section 9.1	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 impa	(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 PMEs on-site; and (l) Use of acoustic barriers and noise enclosure if necessary.
Landscape	and (m) Proper setup of precautionary area for retained
Visual	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 4 times of ET joint weekly environmental site inspections were conducted in the reporting month.

Complaint and Prosecution

- 10.4 No environmental complaints and environmental prosecution was received in the 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

- Wheel washing bays in all Portions within the Site should be maintained as far as practicable by means of removing silty water or using cleaner water in order to enhance the effectiveness of wheel washing in every portion within the Site.
- 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

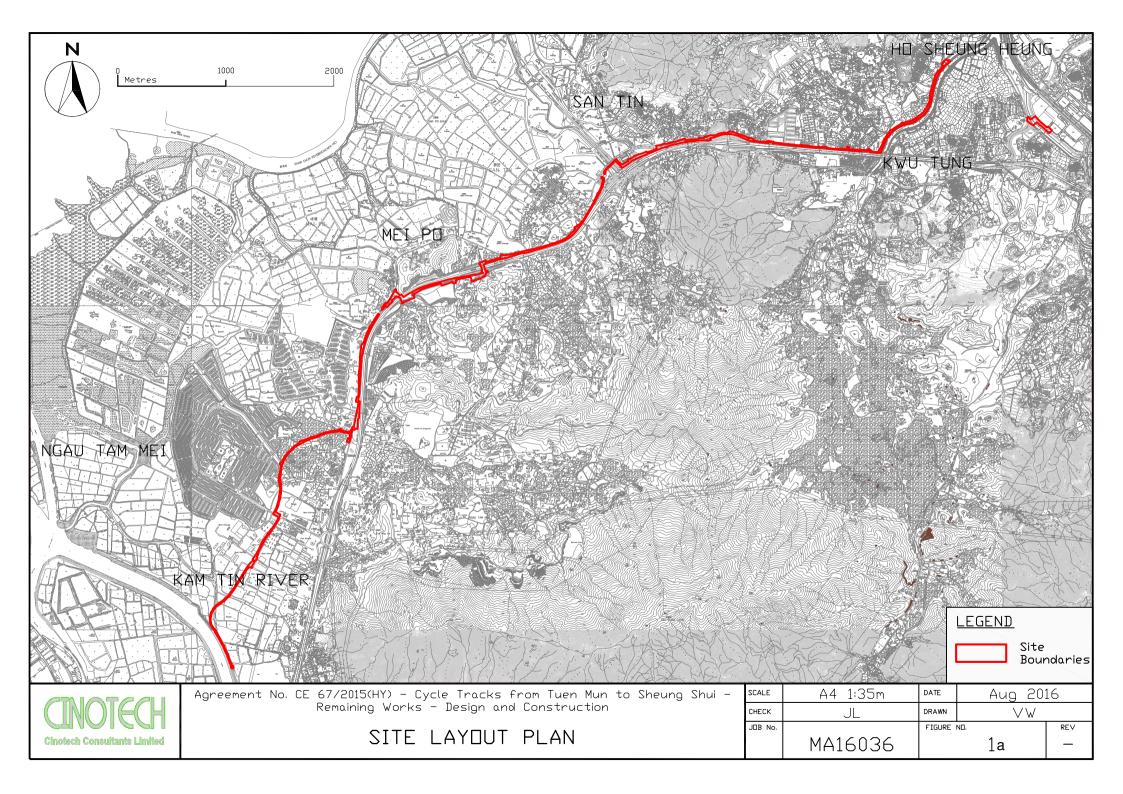
- General refuse should be removed regularly to prevent accumulation on-site.
 Proper enclosed bin should be provided with maintenance for collection of general refuse from workforce.
- Drip tray should be provided to oil/chemical containers and generator to avoid oil leakage. Any oil stain observed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

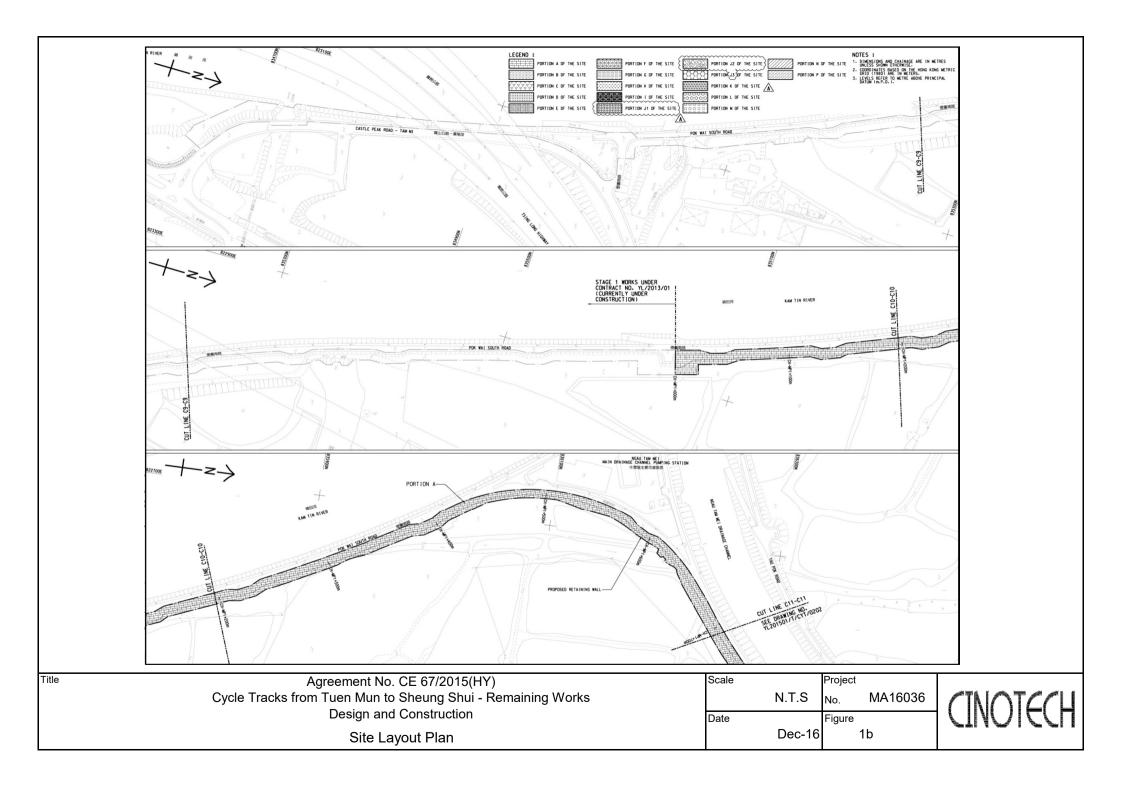
chemical waste.

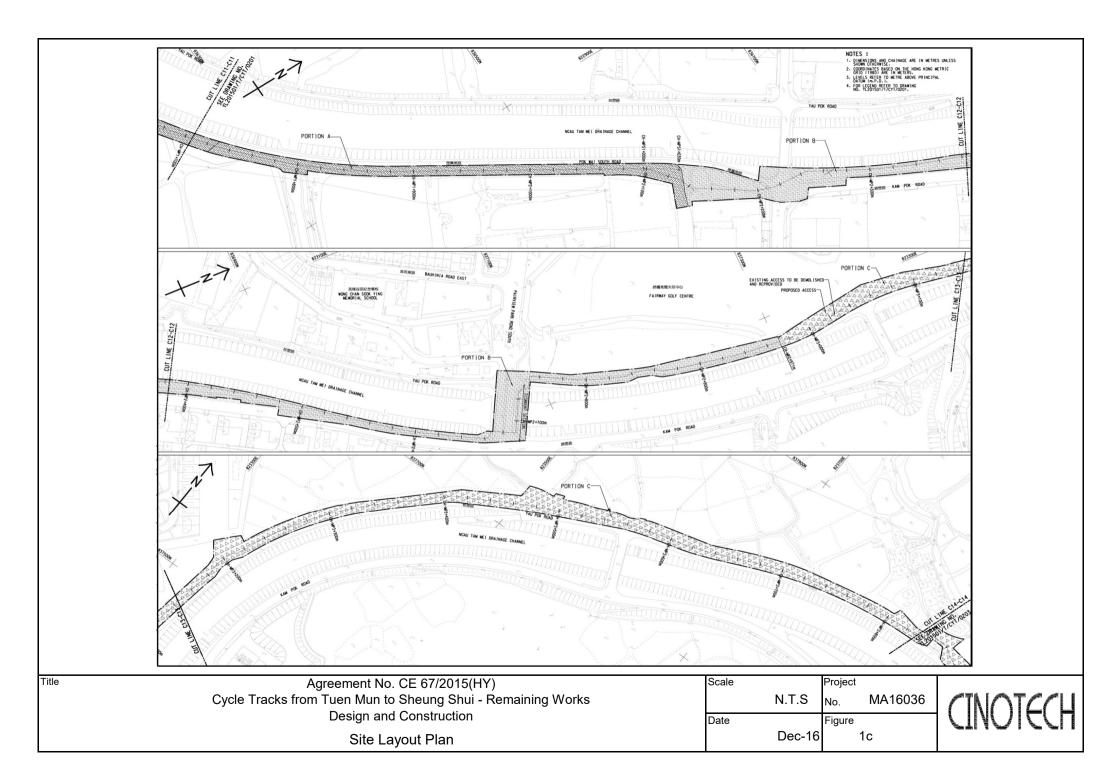
Landscape and Visual

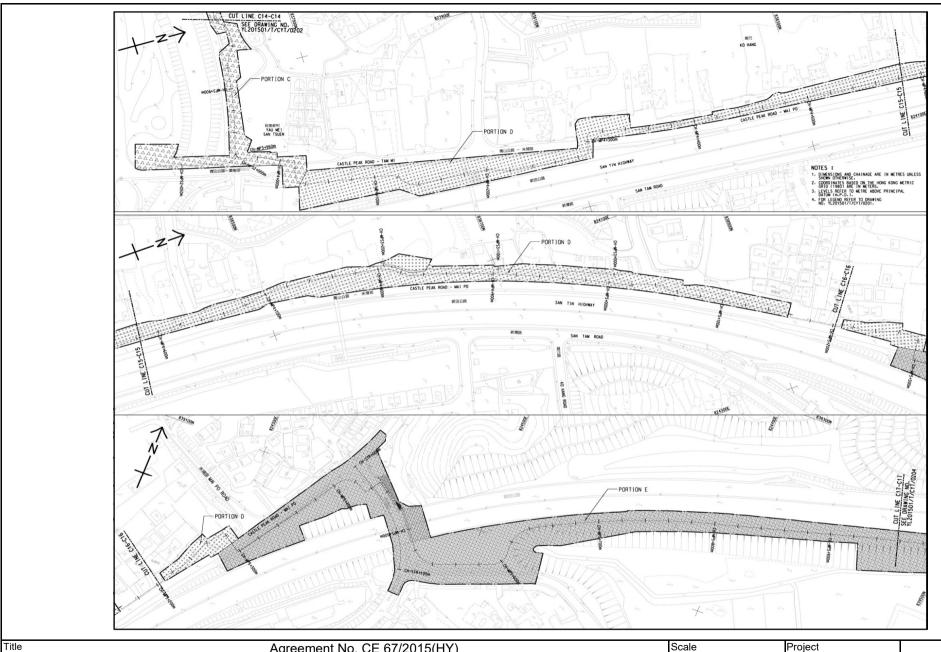
 Adequate tree protection zones should be established to protect retained and existing trees. Conspicuous signs of status of trees should be clearly shown to avoid damage from PMEs or workers.

FIGURES





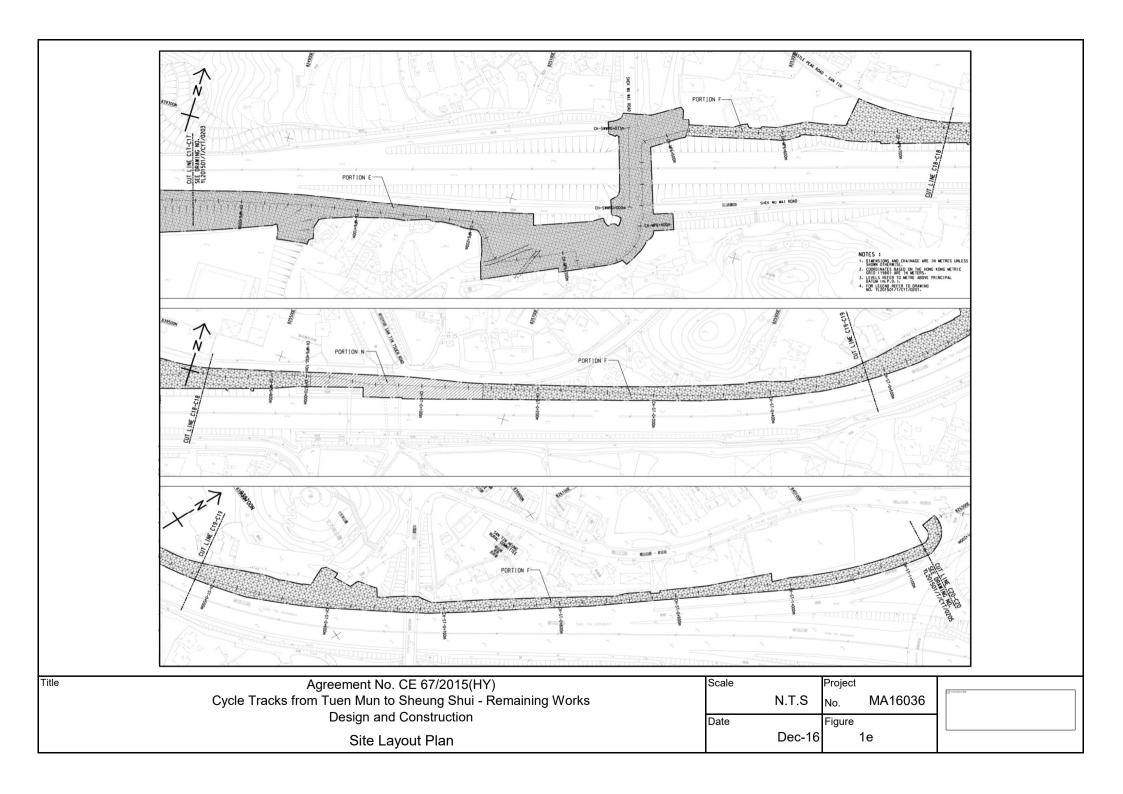


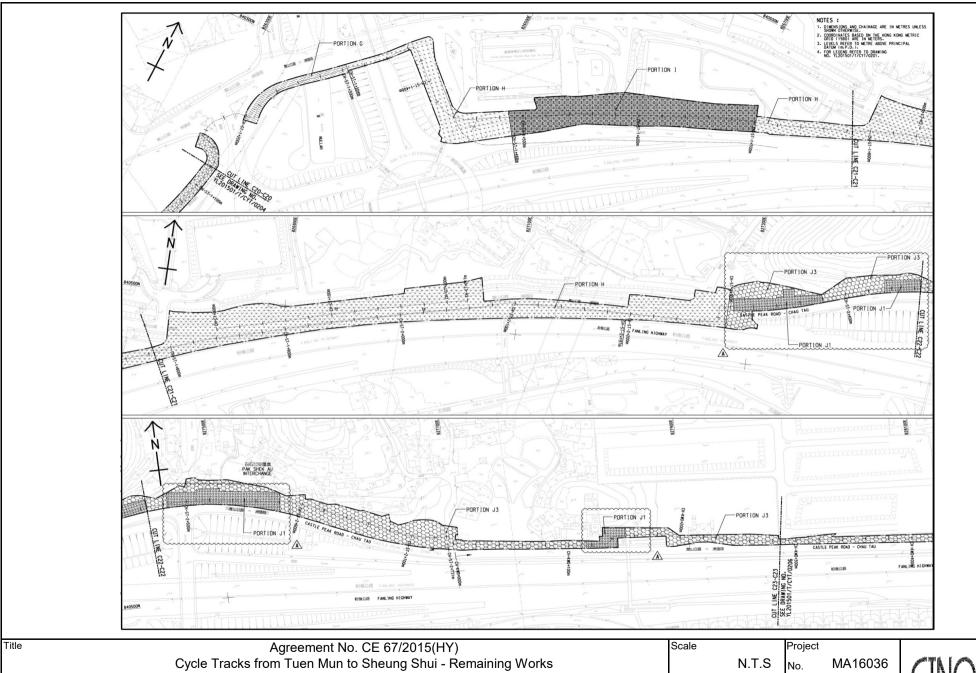


Agreement No. CE 67/2015(HY)
Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
Design and Construction

Site Layout Plan

CINOTECH



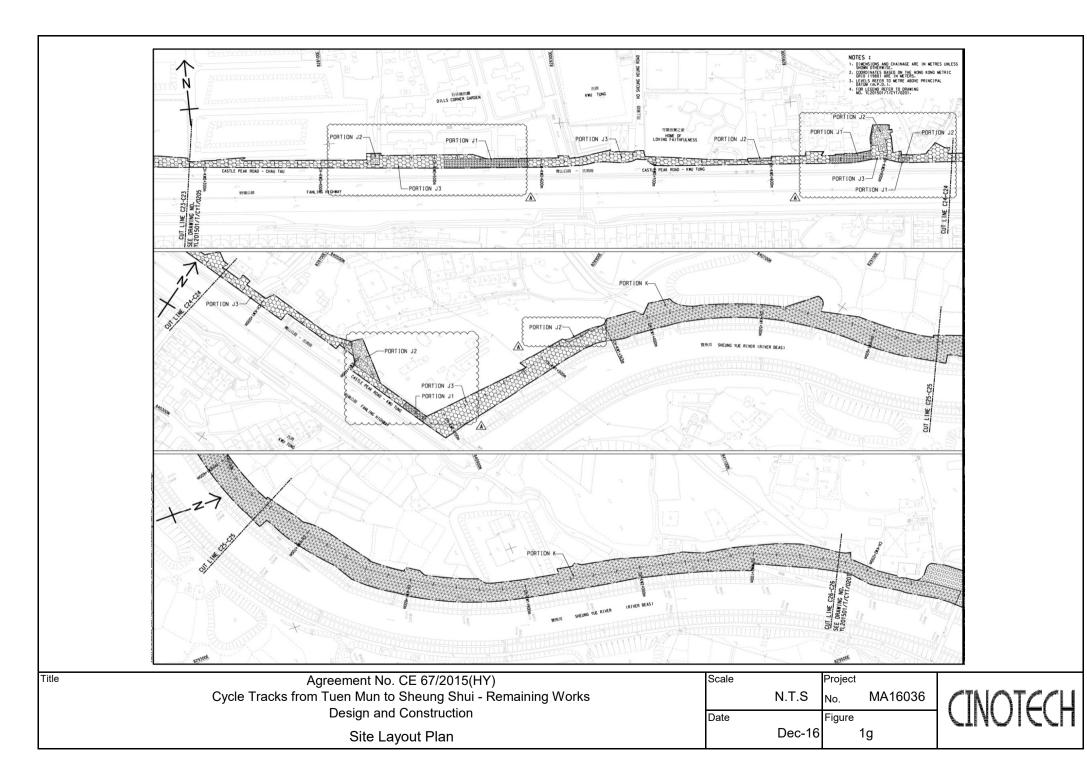


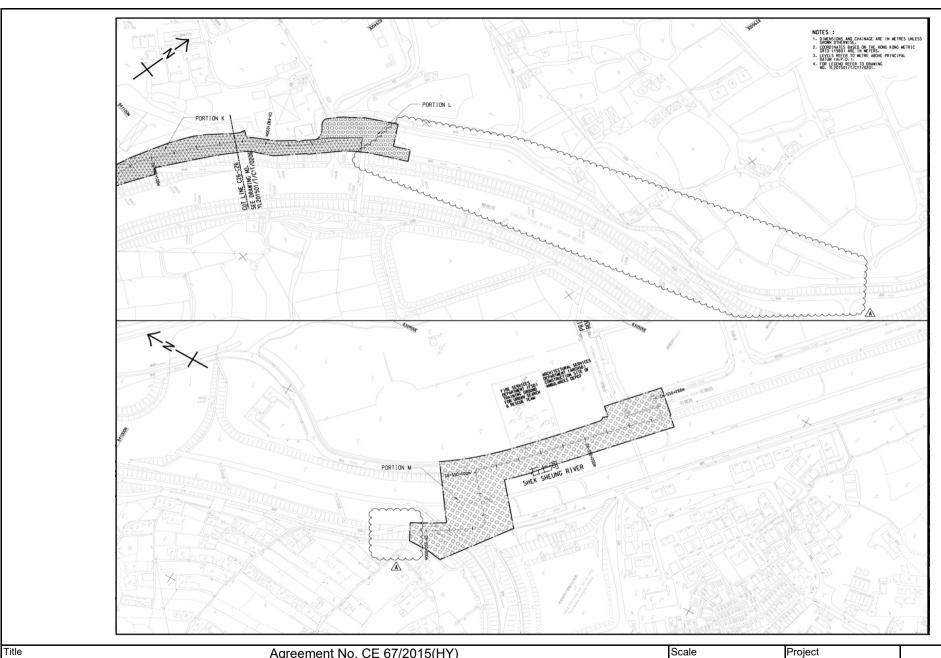
Agreement No. CE 67/2015(HY)
Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
Design and Construction
Site Layout Plan

N.T.S No. MA16036

Date Dec-16 Figure 1f

CINOTECH





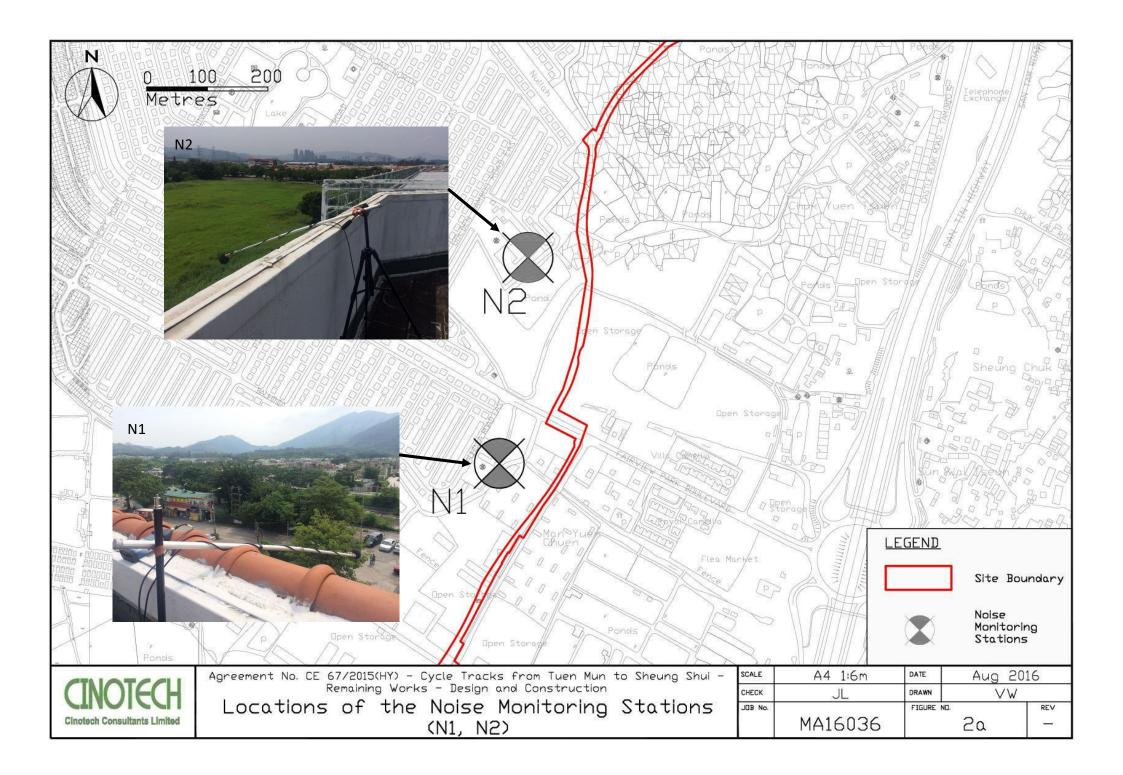
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Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
Design and Construction

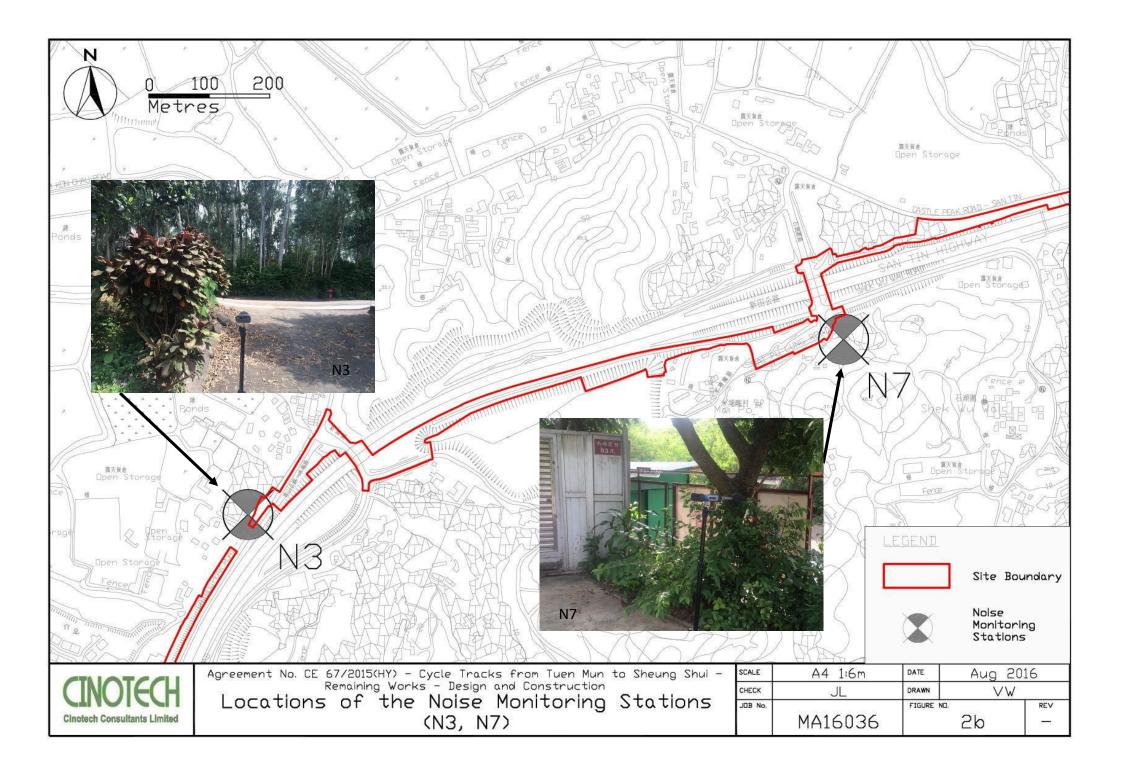
Site Layout Plan

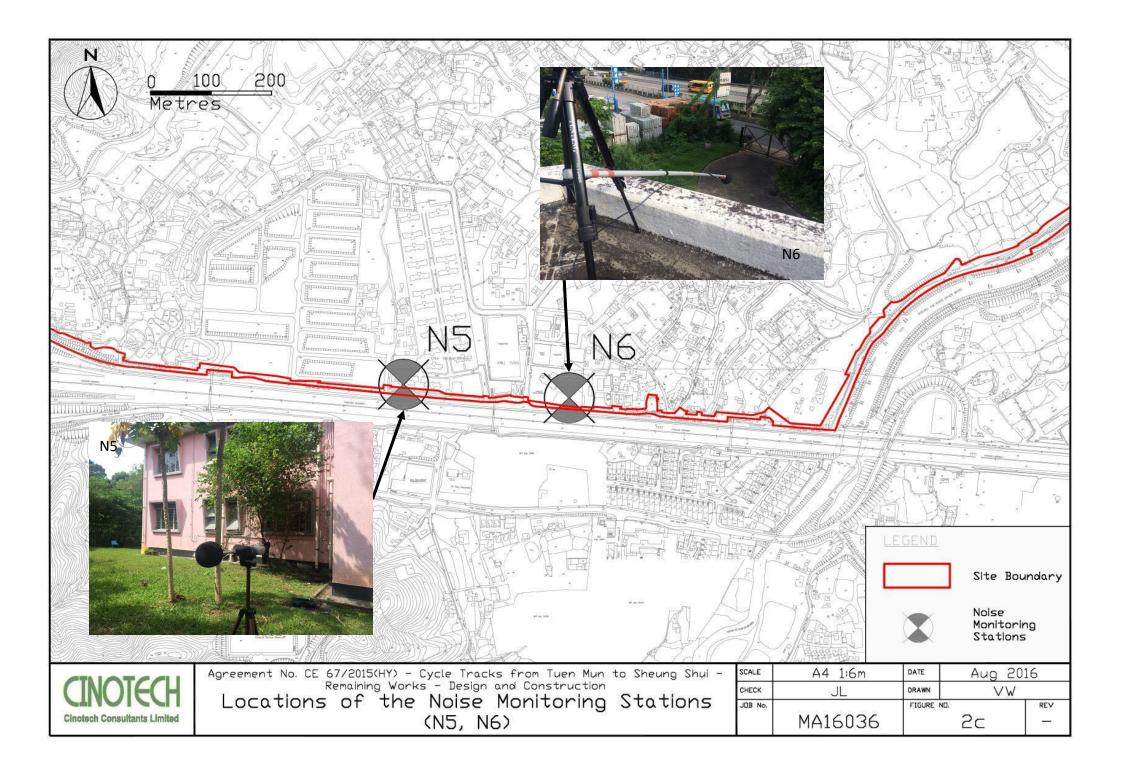
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Date Dec-16 Figure 1h









APPENDIX A WORK PROGRAMME

Task Name		Duration	Allowance	arly Start	Early Finish	Float	% Complete	Predecessors	Start	2016	Helalah	2017	1	2018	D IIElalah	2019	2020 JIFIMAIMJJJAISIO
CONTRACT DURAT	TION (ALL WORKS EXCEPT LANDSCAPING AND ESTABLISHMENT)	1147 days	(days)	Thu 30/6/16	Tue 20/8/19	485 days	35%		Thu 30/6/16	MIAIMIJIJIAISIOINIL	JEWIAIN	INIOINIE	J J F IWI A IWI	JIJIAISIOINII	DISTENSIA	JUNISIONID	JIF IIVIIAIIVII JIJAISIC
COMMENCEMEN	NT OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	0 days	100%	-	Thu 30/6/16	-							
	S AND COMPLETION DATES FOR CONTRACTS	0 days 1097 days		Thu 30/6/16	Mon 1/7/19	0 days	0%		Thu 30/6/16								
	I (PORTION A,B,C & D)	854 days		Sun 28/8/16	Sun 30/12/18	0 days	0%		Sun 28/8/16								
SECTION W1	-1	0 days		Sun 28/8/16	Sun 28/8/16	854 days	0%		Sun 28/8/16	♦ 28/8			2000		III .	_	-
	SS DATE	0 days		Sun 28/8/16	Sun 28/8/16	854 days	0%	2SS+60 days	Sun 28/8/16	28/8							
ACCES		763 days		Sun 27/11/16	Sun 30/12/18	0 days	0%	200100 00,0	Sun 27/11/16						4		
Commence of the second	SS DATE	0 days		Sun 27/11/16	Sun 27/11/16	763 days	0%	2SS+151 days	Sun 27/11/16		27/11						
	LETION DATE	0 days		Sun 30/12/18	Sun 30/12/18	0 days	0%	2FS+913 days,147	Sun 30/12/18						30/12		
	PORTION E, F, G, H, I & N)	1097 days		Thu 30/6/16	Mon 1/7/19	0 days	0%	Li O i O i O dajoji i i	Thu 30/6/16						30/12		
PORTION		0 days		Thu 30/6/16	Thu 30/6/16	1097 days	0%		Thu 30/6/16	♦ 30/6	AND DESCRIPTION		100000000000000000000000000000000000000				
A CONTRACTOR OF THE PARTY OF TH	SS DATE	0 days		Thu 30/6/16	Thu 30/6/16	1097 days	0%	2SS	Thu 30/6/16	30/6							
ACCES	107-107 (19-64)	0 days		Sun 28/8/16	Sun 28/8/16	1037 days	0%	200	Sun 28/8/16	♦ 28/8							
	SS DATE	0 days		Sun 28/8/16	Sun 28/8/16	1037 days	0%	2SS+60 days	Sun 28/8/16	28/8							
PORTION		1		Thu 30/6/16	Mon 1/7/19	0 days	0%	200+00 days	Thu 30/6/16	20/0							
	SS DATE	1097 days			Thu 30/6/16		0%	2SS		30/6		20 10 10 10					
	LETION DATE	0 days		Thu 30/6/16		1097 days	0%		Thu 30/6/16	30/0						1/7	1
	PORTION K, J1)	0 days		Mon 1/7/19	Mon 1/7/19	0 days		2FS+1097 days,303	Mon 1/7/19							""	1
	<u> </u>	914 days		Thu 30/6/16	Sun 30/12/18	0 days	0%		Thu 30/6/16	A 20/0	AL SOUR						1
PORTION		0 days		Thu 30/6/16	Thu 30/6/16	914 days	0%	000	Thu 30/6/16	♦ 30/6							1
	S DATE	0 days	The state of the s	Thu 30/6/16	Thu 30/6/16	914 days	0%	2SS	Thu 30/6/16	30/6	1	C		and the same	Ш		
PORTION	7.	854 days		Sun 28/8/16	Sun 30/12/18	0 days	0%	200 05	Sun 28/8/16								
	S DATE	0 days		Sun 28/8/16	Sun 28/8/16	854 days	0%	2SS+60 days	Sun 28/8/16	28/8							
A STATE OF THE PARTY OF THE PAR	LETION DATE	0 days		Sun 30/12/18	Sun 30/12/18	0 days	0%	2FS+913 days,329	Sun 30/12/18	- Company	Same as	The second state			30/12	71	
SECTION W4		550 days		Thu 30/6/16	Sun 31/12/17	0 days	0%		Thu 30/6/16								
PORTION		550 days	-	Thu 30/6/16	Sun 31/12/17	0 days	0%		Thu 30/6/16					V			
	S DATE	0 days		Thu 30/6/16	Thu 30/6/16	550 days	0%	288	Thu 30/6/16	→ 30/6							
	LETION DATE	0 days		Sun 31/12/17	Sun 31/12/17	0 days	0%	2FS+548 days,344	Sun 31/12/17			þ	31/12			H	
SECTION W5	1.0 4 6 8 8	1097 days		Thu 30/6/16	Mon 1/7/19	0 days	0%	71-2	Thu 30/6/16	-							
PORTION	M ·	1097 days	-	Thu 30/6/16	Mon 1/7/19	0 days	0%		Thu 30/6/16	-							
ACCES	S DATE	0 days		Thu 30/6/16	Thu 30/6/16	1097 days	0%	2SS	Thu 30/6/16	30/6						11	
COMPL	ETION DATE	0 days		Mon 1/7/19	Mon 1/7/19	0 days	0%	2FS+1097 days,388	Mon 1/7/19							1/7	
SECTION W6		367 days		Mon 29/5/17	Thu 31/5/18	0 days	0%		Mon 29/5/17	7	-	-		ηl	100	IT	
PORTION	P	367 days		Mon 29/5/17	Thu 31/5/18	0 days	0%		Mon 29/5/17	1							
ACCES	S DATE	0 days		Mon 29/5/17	Mon 29/5/17	367 days	0%	2SS+334 days	Mon 29/5/17		-	♦ 29/5					
COMPL	ETION DATE	0 days		Thu 31/5/18	Thu 31/5/18	0 days	0%	2FS+701 days,399	Thu 31/5/18				4	31/5	-	41	
SECTION W7		730 days		Tue 7/3/17	Wed 6/3/19	0 days	0%		Tue 7/3/17	-	-		-	7			
INSTRUC	TION TO EXECISE	0 days		Tue 7/3/17	Tue 7/3/17	0 days	0%		Tue 7/3/17		7/3	,					
PORTION	J2 & J3	730 days		Tue 7/3/17	Wed 6/3/19	0 days	0%	-	Tue 7/3/17	-					-		
ACCES	S DATE	0 days		Tue 7/3/17	Tue 7/3/17	0 days	0%	37SS	Tue 7/3/17	-	♦ ♦ 7/3				4		
	ETION DATE	0 days		Wed 6/3/19	Wed 6/3/19	0 days	0%	39FS+730 days,425	Wed 6/3/19	- 1					6/3		
	N FROM SECTION W1 TO SECTION W7	0 days		Mon 1/7/19	Mon 1/7/19	0 days	0%	9,17,23,27,31,35,40,426							1	1/7	
7	The state of the s					1				-							
PLANNED WORK	KS PROGRAMME	1147 days		Thu 30/6/16	Tue 20/8/19	485 days	35%		Thu 30/6/16		44						
	(PORTION A,B,C & D)	954 days		Thu 30/6/16	Fri 8/2/19	678 days	33%		Thu 30/6/16					-			
	DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	0 days	100%	2SS	Thu 30/6/16	30/6							
	ION FOR INDIVIDUAL EXCAVATION PERMIT FOR SECTION W1	230 days		Thu 30/6/16	Tue 14/2/17	1402 days	80%	288	Thu 30/6/16					1 .1			
	A - POK WAI ROAD SOUTH (MP 1+000 - MP 2+130)	879 days	-	Sun 28/8/16	Thu 24/1/19	-25 days	46%		Sun 28/8/16								
	SION OF SITE	0 days	-	Sun 28/8/16	Sun 28/8/16	0 days	100%	45FS+60 days	Sun 28/8/16	28/8							
	SURVEY	60 days	3 days	Mon 29/8/16	Thu 27/10/16	0 days	100%	48	Mon 29/8/16								
TREES		70 days	3 days	Fri 28/10/16	Thu 5/1/17	0 days	100%	49	Fri 28/10/16								
the second secon	ELLING / TRANSPLANTING AND SITE CLEARANCE (FOR NEW DLO	60 days	5 days	Fri 6/1/17	Mon 6/3/17	0 days	100%	50,49	Fri 6/1/17					1 1			
MEMO)	I ON THE STATE OF THE STA	ou dujo	- 54,5			3 00,0	1.00.0	1-1,									
UTILITIE	ES DIVERSION WORKS (CLP & PCCW)	60 days	0 day	Fri 27/1/17	Mon 27/3/17	0 days	100%	51SS	Fri 27/1/17								
	ID INVESTIGATION WORKS (1 NO. BOREHOLE & TRIAL PITS)	28 days	2 days	Tue 1/11/16	Mon 28/11/16	0 days	100%	49	Tue 1/11/16								
	SSION AND APPROVAL OF MONITORING PROPOSAL	21 days	2 days	Tue 1/11/16	Mon 21/11/16	0 days	100%	53SS	Tue 1/11/16								
	LATION OF MONITORING MARKERS		2 days	Tue 29/11/16	Mon 19/12/16	0 days	100%	53,54	Tue 29/11/16								1
		2. days	_ 20,0	100 20/11/10		3 00/3	1,00,0	1-10.	1.20 201.1110								
	Task Summary		\	External Milestor	10 💠	Inactive Sun	nmary	─────────────────────────────────────	Summary Rollup ===		ish-only	3		Progres	SS	-	
	Split Project Su	mmary	φ	Inactive Task		Manual Tasl	(■ Manual	Summary	□ Crit	ical			Deadlin	е	₽	
	Milestone • External T		no mandata de casa pers		e 💠	Duration-onl		Start-or	-		ical Split						

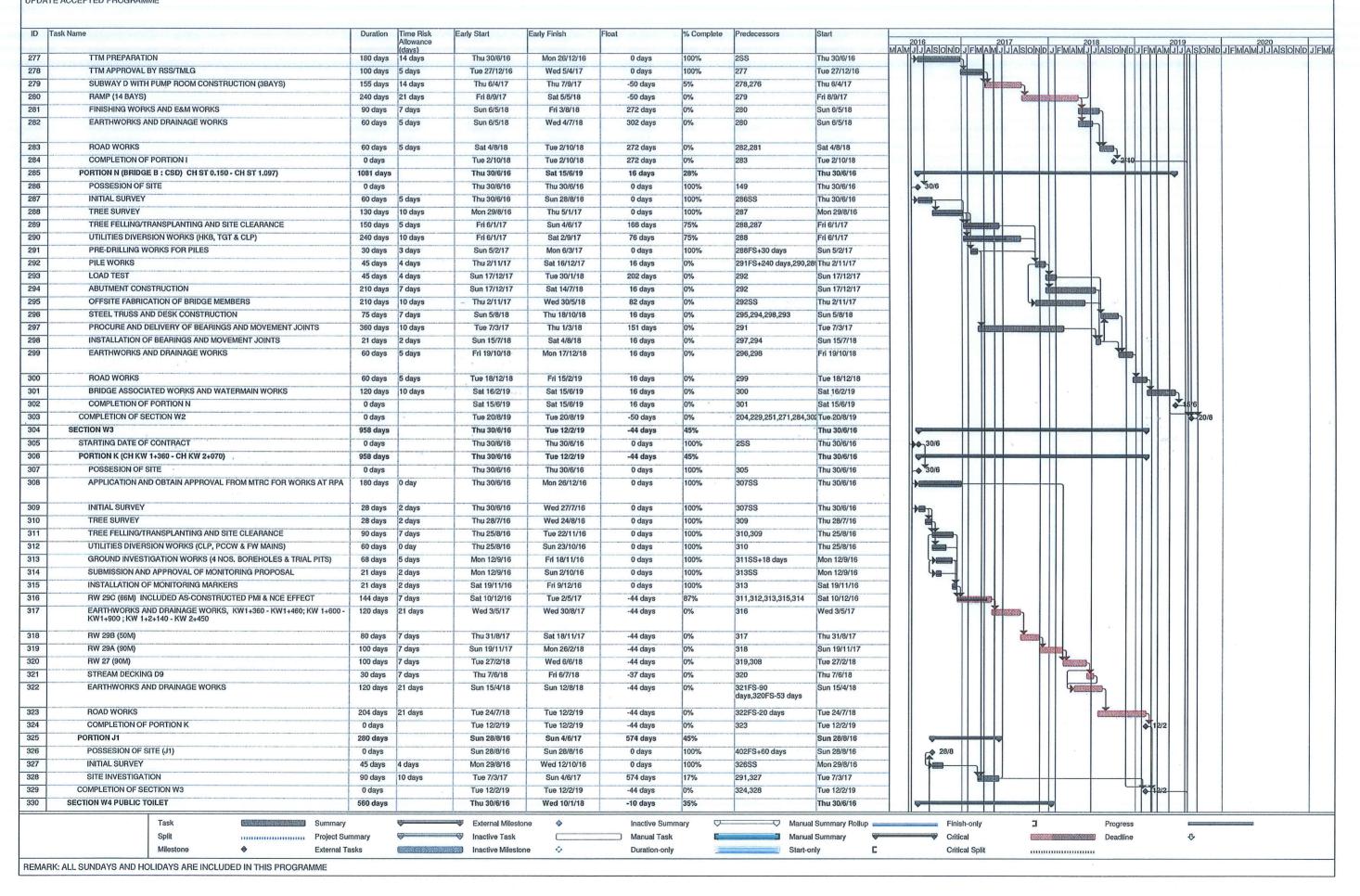
Task Name		Duration	Time Risk Allowance	Early Start	Early Finish	Float	% Complete	Predecessors	Start	201	6	20	17	2018		2019	2020 DJFMAMJJJASOND
RETAINING WALL -	RW 8A (60M) INCLUDED AS-CONSTRUCTED PMI & NCE	147 days	(days) 5 days	Tue 20/12/16	Mon 15/5/17	58 days	77%	55	Tue 20/12/16	MAMJIJ	IAISIOINID .	FMAMU	JIAISIOINID	JIFIMIAIMIJIJI	AISIOINIDIJIFIM	AMJJJAISIONID	DJFMAMJJASOND
RETAINING WALL	RW 8B (40M) INCLUDED AS-CONSTRUCTED PMI & NCE	120 days	5 days	Fri 27/1/17	Fri 26/5/17	159 days	43%	54,51SS+21 days	Fri 27/1/17		1 4						
EARTHWORKS AN	D DRAINAGE WORKS, UTILITIES LAYING BETWEEN 600 (EXCLUDING RETAINING WALL RW7, 7A & 7B)	210 days	10 days	Sun 16/4/17	Sat 11/11/17	-10 days	30%	56FS-25 days,51,52FS-45 days	Sun 16/4/17								
START DATE OF D	SHEET AND	0 days		Wed 1/11/17	Wed 1/11/17	0 days	0%	58,57	Wed 1/11/17	-			21/	11			
RETAINING WALL		30 days	4 days	Thu 2/11/17	Fri 1/12/17	0 days	0%	59	Thu 2/11/17	-							
RETAINING WALL		65 days	7 days	Sat 2/12/17	Sun 4/2/18	0 days	0%	60	Sat 2/12/17					B			
RETAINING WALL		30 days	3 days	Mon 5/2/18	Tue 6/3/18	0 days	0%	61	Mon 5/2/18								
	D DRAINAGE WORKS BETWEEN MP1+600 TO MP 2+100	150 days	10 days	Thu 2/11/17	Sat 31/3/18	0 days	0%	59	Thu 2/11/17				6 556				
STAIRCASE		30 days	3 days	Mon 1/1/18	Tue 30/1/18	60 days	0%	60SS+60 days	Mon 1/1/18				4				
END OF DRY SEAS		0 days		Sat 31/3/18	Sat 31/3/18	0 days	0%	64,63,62FS+25 days	Sat 31/3/18					31/3			
START DATE OF D	RY SEASON	0 days		Thu 1/11/18	Thu 1/11/18	0 days	0%	65	Thu 1/11/18						11/11		
ROAD WORKS		85 days	7 days	Thu 1/11/18	Thu 24/1/19	-25 days	0%	63,66	Thu 1/11/18						4		
COMPLETION OF F		0 days		Thu 24/1/19	Thu 24/1/19	-25 days	0%	67	Thu 24/1/19	_					1 24		
PORTION B (MP 2+13		918 days		Sat 30/7/16	Sat 2/2/19	-34 days	24%	4550 454 1	Sat 30/7/16		1						
POSSESION OF SI	E	0 days	O dovo	Sun 27/11/16	Sun 27/11/16	0 days	100%	45FS+151 days	Sun 27/11/16			1111					
INITIAL SURVEY TREE SURVEY		40 days	3 days	Mon 28/11/16	Fri 6/1/17	0 days	100%	70SS 70SS	Mon 28/11/16								T
	INSPLANTING AND SITE CLEARANCE	40 days 45 days	3 days 4 days	Mon 28/11/16 Sat 7/1/17	Fri 6/1/17 Mon 20/2/17	0 days	100%	72,71	Mon 28/11/16 Sat 7/1/17								
TTM PREPARATIO		150 days	days	Sat 30/7/16	Mon 26/12/16	0 days	100%	2SS+30 days	Sat 30/7/16	-							
	SUPERVISOR/PM/TMLG	82 days	2 days	Tue 27/12/16	· Sat 18/3/17	0 days	100%	7A	Tue 27/12/16								
	ON WORKS (CLP, PCCW & HCL)	60 days	0 day	Mon 6/2/17	Thu 6/4/17	165 days	80%	73SS+30 days	Mon 6/2/17								
	UMP ROOM (4 BAYS) CONSTRUCTION	336 days	o auj	Sat 1/4/17	Fri 2/3/18	-34 days	6%	1000100 days	Sat 1/4/17								
	WORKS (STAGE 1)	15 days	2 days	Sat 1/4/17	Sat 15/4/17	0 days	100%	46,75FS+13 days,73,76				1					
BAY PW8		70 days	7 days	Sun 16/4/17	Sat 24/6/17	-34 days	5%	78	Sun 16/4/17	- 1					1 111		,
BAY PW9		70 days	7 days	Sun 25/6/17	Sat 2/9/17	-34 days	0%	79	Sun 25/6/17								
	WORKS (STAGE 2)	21 days	3 days	Sun 3/9/17	Sat 23/9/17	-34 days	0%	80	Sun 3/9/17						1111		ko grak
BAY PW10 WITH		90 days	7 days	Sun 24/9/17	Fri 22/12/17	-34 days	0%	81	Sun 24/9/17		-						re next
BAY PW11		70 days	7 days	Sat 23/12/17	Fri 2/3/18	-34 days	0%	82	Sat 23/12/17								,
SOUTHERN RAMP	(7 BAYS) CONSTRUCTION	200 days	1	Sun 24/9/17	Wed 11/4/18	45 days	0%		Sun 24/9/17	-							
BAY PW6&7		50 days	5 days	Sun 24/9/17	Sun 12/11/17	45 days	0%	81	Sun 24/9/17								2 7
BAY PW4&5		50 days	5 days	Mon 13/11/17	Mon 1/1/18	45 days	0%	85	Mon 13/11/17								
BAY PW2&3		40 days	4 days	Tue 2/1/18	Sat 10/2/18	45 days	0%	86	Tue 2/1/18								
BAY PW1 AND A	SSOCIATED WORKS	60 days	6 days	Sun 11/2/18	Wed 11/4/18	45 days	0%	87	Sun 11/2/18								
NORTHERN RAMP	(5 BAYS) CONSTRUCTION	149 days		Sat 3/3/18	Sun 29/7/18	-34 days	0%		Sat 3/3/18								
BAY PW12 & 13		50 days	5 days	Sat 3/3/18	Sat 21/4/18	-34 days	0%	83	Sat 3/3/18								
BAY PW14 & 15		50 days	5 days	Sun 22/4/18	Sun 10/6/18	-34 days	0%	90	Sun 22/4/18								
BAY PW16 AND	ASSOCIATED WORKS	49 days	5 days	Mon 11/6/18	Sun 29/7/18	-34 days	0%	91	Mon 11/6/18		1 11			100		1	
FNISHING WORKS	AND E&M WORKS	134 days	10 days	Sat 30/6/18	Sat 10/11/18	-34 days	0%	92FS-30 days,88,83	Sat 30/6/18					9			
EARTHWORKS AN	D DRAINAGE WORKS	384 days	30 days	Fri 7/4/17	Wed 25/4/18	165 days	0%	73,75,76	Fri 7/4/17								
ROAD WORKS		84 days	7 days	Sun 11/11/18	Sat 2/2/19	-34 days	0%	93,94	Sun 11/11/18		1 11						
RESTING STATION		90 days	7 days	Thu 12/4/18	Tue 10/7/18	173 days	0%	88	Thu 12/4/18								
COMPLETION OF P		0 days		Sat 2/2/19	Sat 2/2/19	-34 days	0%	95,96	Sat 2/2/19						2/	P	
PORTION C (MP 2+950		894 days		Sun 28/8/16	Fri 8/2/19	-40 days	37%		Sun 28/8/16								
POSSESION OF SIT	E	0 days		Sun 28/8/16	Sun 28/8/16	0 days	100%	45FS+60 days	Sun 28/8/16		28/8						
INITIAL SURVEY		54 days	4 days	Mon 29/8/16	Fri 21/10/16	0 days	100%	9988	Mon 29/8/16								
TREE SURVEY	NICEL ANTING AND CITE OF EADANGE	75 days	7 days	Sat 22/10/16	Wed 4/1/17	0 days	100%	100	Sat 22/10/16								
	NSPLANTING AND SITE CLEARANCE ON WORKS (CLP & PCCW)	60 days	5 days	Thu 5/1/17 Thu 5/1/17	Sun 5/3/17 Sun 5/3/17	86 days 159 days	90%	101,100	Thu 5/1/17 Thu 5/1/17								
	ATION WORKS (11 NOS. BOREHOLES & TRIAL PITS)	60 days	0 day 5 days	Sat 22/10/16	Tue 20/12/16	0 days	100%	100	Sat 22/10/16								
	APPROVAL OF MONITORING PROPOSAL	21 days	3 days	Wed 21/12/16	Tue 10/1/17	0 days	100%	104	Wed 21/12/16								
	MONITORING MARKERS		2 days	Wed 11/1/17	Tue 24/1/17	0 days	100%	105	Wed 11/1/17								
RETAINING WALL -		50 days	5 days	Thu 14/6/18	Thu 2/8/18	-40 days	0%	109,108	Thu 14/6/18	-				1			
	RW 11B : BAY1 - BAY 6 (60M)	55 days	5 days	Sat 24/2/18	Thu 19/4/18	-40 days	0%	116	Sat 24/2/18								
	RW 11B : BAY 7 - BAY 12 (60M)	55 days	5 days	Fri 20/4/18	Wed 13/6/18	-40 days	0%	108	Fri 20/4/18								
	Task (Company) Summary		—	External Milest	one �	Inactive Sum	nmary 🛡	□ ✓ Manua	I Summary Rollup =		Finish	-only	3		Progress		
	Split Project Su	ımmary	Φ	Inactive Task		Manual Task		Manua	I Summary		Critica	al			Deadline	Ŷ	
	Milestone External T				one 💠												

Task I	Name	Duration	Time Risk Allowance (days)	Early Start	Early Finish	Float	% Complete	Predecessors	Start	2016 MAMJIJIAISIONID	JEMA	2017 M.H.IIAIC	ONDI	EMAM I	18 JASONIO	JEMAN	2019 .1 A S O N D	202	JAISION
	RETAINING WALL - RW 11C: BAY 8 - BAY 14 (70M) INCLUDED AS-CONSTRUCTED PMI & NCE EFFECT	85 days	7 days	Wed 25/1/17	Wed 19/4/17	18 days	80%	103SS+7 days,102FS-40 days,104,106,105	Wed 25/1/17	WIAIWIGIGIAIGIGIAIGI					JA JOIOINID		O O O O O	I I I I I I I I I I I I I I I I I I I	MOIOIN
	RETAINING WALL - RW 11C : BAY 1 - BAY 7, STAIRCASE S1 (70M)	60 days	5 days	Wed 5/4/17	Tue 6/6/17	78 days	80%	110,103	Wed 5/4/17		1								
	RETAINING WALL - RW 11C : BAY 15 - BAY 21, STAIRCASE S2 (70M)	70 days	7 days	Wed 7/6/17	Tue 15/8/17	22 days	80%	111	Wed 7/6/17			-	١ ا ا						
-	RETAINING WALL - RW 12 : BAY 1 - BAY 8, STAIRCASE S3 (80M)	90 days	7 days	Thu 20/4/17	Tue 18/7/17	-40 days	20%	110	Thu 20/4/17			200h							
	RETAINING WALL - RW 12: BAY 9 - BAY 16, RAMP AND STAIR - CSR1 (80M	90 days	7 days	Wed 19/7/17	Mon 16/10/17	-40 days	0%	113	Wed 19/7/17										
	RETAINING WALL - RW 13 (40M)	60 days	5 days	Tue 17/10/17	Fri 15/12/17	-40 days	0%	114,112	Tue 17/10/17				SE 23						
	RETAINING WALL - RW 14, STAIRCASE S4 (55M)	70 days	7 days	Sat 16/12/17	Fri 23/2/18	-40 days	0%	115	Sat 16/12/17				OH						
	RETAINING WALL - RW 15A (7.5M)	20 days	2 days	Sat 24/2/18	Thu 15/3/18	100 days	0%	116	Sat 24/2/18					T					
	RAMP NEAR YAU POK ROAD	30 days	2 days	Fri 16/3/18	Sat 14/4/18	116 days	0%	117	Fri 16/3/18						1				
	EARTHWORKS AND DRAINAGE WORKS	130 days	10 days	Fri 3/8/18	Mon 10/12/18	-40 days	0%	114,117,107	Fri 3/8/18										
	ROAD WORKS	60 days	5 days	Tue 11/12/18	Fri 8/2/19	-40 days	0%	119	Tue 11/12/18			1.							
	RESTING STATION R7	144 days	10 days	Sun 15/4/18	Wed 5/9/18	116 days	0%	118	Sun 15/4/18							1			
	COMPLETION OF PORTION C	0 days		Fri 8/2/19	Fri 8/2/19	-40 days	0%	120,121	Fri 8/2/19	_						8/2			
	PORTION D (MP 4+010 - MP 5+280)	792 days		Sun 27/11/16	Mon 28/1/19	-29 days	23%	1000 1011	Sun 27/11/16										
	POSSESION OF SITE	0 days		Sun 27/11/16	Sun 27/11/16	0 days	100%	45FS+151 days	Sun 27/11/16		27/11								
	INITIAL SURVEY	28 days	3 days	Mon 28/11/16	Sun 25/12/16	0 days	100%	124SS	Mon 28/11/16										
	TREE SURVEY	40 days	3 days	Mon 28/11/16	Fri 6/1/17	0 days	100%	12488	Mon 28/11/16										
	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE	60 days	5 days	Sat 7/1/17	Tue 7/3/17	22 days	80%	126,125	Sat 7/1/17			וו							
	UTILITIES DIVERSION WORKS (CLP & HCL)	120 days	0 day	Mon 28/11/16	Mon 27/3/17	2 days	80%	124SS	Mon 28/11/16	_		1		,					
	GROUND INVESTIGATION WORKS (3 NOS, BOREHOLE & TRIAL PITS)	21 days	2 days · ·	Wed 15/2/17	Tue 7/3/17	0 days	100%	127SS+14 days,46	Wed 15/2/17			1							
	SUBMISSION AND APPROVAL OF MONITORING PROPOSAL	21 days	2 days	Wed 15/2/17	Tue 7/3/17	0 days	100%	129SS	Wed 15/2/17										
	INSTALLATION OF MONITORING MARKERS	21 days	2 days	Wed 8/3/17	Tue 28/3/17	-29 days	80%	130	Wed 8/3/17										
	RETAINING WALL - RW 15B (40M)	70 days	7 days	Fri 7/7/17	Thu 14/9/17	-29 days	0%	133,131,130	Fri 7/7/17										
	RETAINING WALL - RW 15C (45M) & STAIRCASE S6	70 days	7 days	Fri 28/4/17	Thu 6/7/17	-29 days	0%	127,128,129,131FS+3											
	STREAM DECKING D1	30 days	3 days	Sun 15/10/17	Mon 13/11/17	-25 days	0%	140SS+30 days	Sun 15/10/17										
	STREAM DECKING D2	30 days	3 days	Tue 14/11/17	Wed 13/12/17	-25 days	0%	134	Tue 14/11/17				1		25				
	STREAM DECKING D3	30 days	3 days	Thu 14/12/17	Fri 12/1/18	-25 days	0%	135	Thu 14/12/17	_					200				
	RAMP PRI CONSTRUCTION	80 days	7 days	Sat 13/1/18	Mon 2/4/18	-25 days	0%	136	Sat 13/1/18					1	5 - X - 3				
	PROVIDE SAFETY ACCESS TO RESIDENT	21 days	2 days	Tue 3/4/18	Mon 23/4/18	-25 days	0%	137	Tue 3/4/18										
	DEMOLITION OF EXISTING STRUCTURE	14 days	2 days	Tue 24/4/18	Mon 7/5/18	-25 days	0%	138	Tue 24/4/18										
	RW16A (80M) (CSD)	120 days	10 days	Fri 15/9/17	Fri 12/1/18	-29 days	0%	132,74	Fri 15/9/17					1					
_	NCE EFFECT ON ADDED SUB SOIL DRAIN	3 days	0 day	Sat 13/1/18	Mon 15/1/18	-29 days	0%	140	Sat 13/1/18										
	NCE EFFECT ON ADDED WATER STOP	7 days		Tue 16/1/18	Mon 22/1/18	-29 days	0%	141	Tue 16/1/18										
	NCE EFFECT ON ADDED CHAMFER EARTHWORKS AND DRAINAGE WORKS	14 days	on davis	Tue 23/1/18 Tue 6/2/18	Mon 5/2/18 Thu 25/10/18	-29 days	0%	142 139FS-95 days,143	Tue 23/1/18 Tue 6/2/18					J	(CONTRACTOR AND				
		262 days				-29 days													
	ROAD WORKS	125 days	14 days	Wed 26/9/18	Mon 28/1/19	-29 days	0%	144FS-30 days	Wed 26/9/18	_					9				
-	COMPLETION OF PORTION D	0 days		Mon 28/1/19	Mon 28/1/19	-29 days	0%	145	Mon 28/1/19							28/1			
	COMPLETION OF SECTION W1	0 days	1	Fri 8/2/19	Fri 8/2/19	-40 days	0%	122,146,68,97	Fri 8/2/19							10/2			
	SECTION W2 (PORTION E, F, G, H, I & N)	1147 days	aays	Thu 30/6/16	Tue 20/8/19	-50 days	37%	000	Thu 30/6/16	0.000		-							
	STARTING DATE OF CONTRACT	0 days	144.4	Thu 30/6/16	Thu 30/6/16	0 days	100%	255	Thu 30/6/16	30/6									
	APPLICATION FOR INDIVIDUAL EXCAVATION PERMIT FOR SECTION W2	240 days		Thu 30/6/16	Fri 24/2/17	44 days	90%	149SS	Thu 30/6/16		T								
	PORTION E (MP 5+280 - MP 6+530)	1120 days	days	Thu 30/6/16	Wed 24/7/19	-23 days	34%	14050 00 1	Thu 30/6/16										
	POSSESION OF SITE	0 days		Sun 28/8/16	Sun 28/8/16	0 days	100%	149FS+60 days	Sun 28/8/16	28/8									
-	INITIAL SURVEY	65 days		Mon 29/8/16	Tue 1/11/16	0 days	100%	15288	Mon 29/8/16										
	TREE SURVEY	1	5 days	Wed 2/11/16	Thu 5/1/17	0 days	100%	153	Wed 2/11/16		1								
	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE	50 days	5 days	Fri 6/1/17	Fri 24/2/17	0 days	100%	154,153	Fri 6/1/17										
	UTILITIES DIVERSION WORKS (GAS MAIN, CLP)	200 days	0 day	Mon 29/8/16	Thu 16/3/17	0 days	100%	15288	Mon 29/8/16							$\Pi \Pi \Pi$			
	GROUND INVESTIGATION WORKS (9 NOS, BOREHOLE & TRIAL PITS)	45 days	4 days	Fri 20/1/17	Sun 5/3/17	0 days	100%	155SS+14 days	Fri 20/1/17										
	SUBMISSION AND APPROVAL OF MONITORING PROPOSAL	21 days	2 days	Fri 20/1/17	Thu 9/2/17	0 days	100%	157SS	Fri 20/1/17 Fri 10/2/17	_	3								
	INSTALLATION OF MONITORING MARKERS	21 days	2 days	Fri 10/2/17	Thu 2/3/17	0 days	100%	158			-								
	TTM APPROVAL BY PROTAILS	76 days	7 days	Thu 30/6/16	Tue 13/9/16	0 days	100%	288	Thu 30/6/16										
	TTM APPROVAL BY RSS/TMLG	90 days	7 days	Wed 14/9/16	Mon 12/12/16	0 days	100%	160	Wed 14/9/16										
	PREPARATION OF TDMP FOR BOX CULVERTS	60 days	5 days	Mon 29/8/16	Thu 27/10/16	0 days	100%	152	Mon 29/8/16										
	APPROVAL OF TDMP BY SUPERVISOR/DSD	30 days	3 days	Fri 28/10/16	Sat 26/11/16	0 days	100%	162	Fri 28/10/16										
	MP 5+465 - MP 5+515	100 days	-	Wed 5/4/17	Thu 13/7/17	0 days	5%		Wed 5/4/17										
	Task Summar	у	\	External Milesto	one 💠	Inactive Sur	mmary 🛡	─────────────────────────────────────	al Summary Rollup	Finis	ish-only		3		Progress	;			
	Split Project S		9	Inactive Task		Manual Tas	k 🗀	■ Manu	ual Summary	Criti	ical				Deadline)	Ŷ		
					ne 💠		100	The second secon											

Tas	sk Name	Duration	Time Risk Allowance (days)	Early Start	Early Finish	Float	% Complete	Predecessors	Start	2020 P10S B10S B10S ALILMAMIL DINOSIALLIMAMIL
5	RETAINING WALL - RW D02 & D04 (80M)	100 days		Wed 5/4/17	Thu 13/7/17	-23 days	5%	155,161,163,157FS+3	0 cWed 5/4/17	WANNED TO STATE OF THE PROPERTY OF THE PROPERT
	MP 5+515 - MP 5+595	200 days		Fri 14/7/17	Mon 29/1/18	-23 days	0%		Fri 14/7/17	
1	RETAINING WALL - RW D05 & D06 (50M)	80 days	7 days	Frì 14/7/17	Sun 1/10/17	-23 days	0%	165	Fri 14/7/17	
	RETAINING WALL - RW D07 (70M)	120 days	10 days	Mon 2/10/17	Mon 29/1/18	-23 days	0%	167,156	Mon 2/10/17	
	MP 5+280 - MP 6+020	175 days		Tue 30/1/18	Mon 23/7/18	-23 days	0%		Tue 30/1/18	
	RETAINING WALL - RW D03 (11M)	30 days	3 days	Tue 30/1/18	Wed 28/2/18	-23 days	0%	168	Tue 30/1/18	
	BOX CULVERT D4	45 days	4 days	Thu 1/3/18	Sat 14/4/18	-23 days	0%	170	Thu 1/3/18	
	EARTHWORKS AND DRAINAGE WORKS	53 days	5 days	Sun 15/4/18	Wed 6/6/18	-23 days	0%	171	Sun 15/4/18	
-	ROAD WORKS FOR REALIGNMENT	32 days	3 days	Thu 7/6/18	Sun 8/7/18	-23 days	0%	172,170	Thu 7/6/18	
-	REALIGNMENT SAN TAM ROAD	15 days	2 days	Mon 9/7/18	Mon 23/7/18	-23 days	0%	173	Mon 9/7/18	
-	MP 5+900 - MP 6+020	136 days		Tue 24/7/18	Thu 6/12/18	-23 days	0%		Tue 24/7/18	
-	RETAINING WALL - RW D15 (113M)	136 days	10 days	Tue 24/7/18	Thu 6/12/18	-23 days	0%	174	Tue 24/7/18	
-	MP 5+ 595 - MP 5+900	140 days		Fri 7/12/18	Thu 25/4/19	-23 days	0%		Fri 7/12/18	
-	RETAINING WALL - RW D10 (50M)	80 days	7 days	Fri 7/12/18	Sun 24/2/19	-23 days	0%	176	Fri 7/12/18	
-	RETAINING WALL - RW D08 (66M)	90 days	8 days	Sat 26/1/19	Thu 25/4/19	-23 days	0%	178FS-30 days,156	Sat 26/1/19	
-	REMAINING EARTHWORKS AND ROAD WORKS	90 days	8 days	Fri 26/4/19	Wed 24/7/19	-23 days	0%	179	Fri 26/4/19	
+	MP 6+420 • MP 6+530	180 days		Wed 5/4/17	Sun 1/10/17	12 days	20%		Wed 5/4/17	
-	RETAINING WALL - RW D25 & D26 (100M) INCLUDED AS-CONSTRUCT PMI & NCE EFFECT		14 days	Wed 5/4/17	Sun 1/10/17	12 days	20%	165SS	Wed 5/4/17	
	MP 6+020 - MP 6+530	216 days	-	Mon 2/10/17	Sat 5/5/18	12 days	0%		Mon 2/10/17	
-	BOX CULVERT D7	216 days		Tue 30/1/18	Wed 28/2/18	12 days	0%	185	Tue 30/1/18	—
-	EARTHWORKS AND DRAINAGE WORKS	30 days		Mon 2/10/17	Mon 29/1/18	12 days	0%	182	Mon 2/10/17	
	EARTHWORNS AND DRAINAGE WORNS	120 days	10 days	IYIUII 2/ 10/ 17	WIUII 23/1/10	12 days	0 /0		1011	
	ROAD WORKS FOR REALIGNMENT	45 days	4 days	Thu 1/3/18	Sat 14/4/18	12 days	0%	184	Thu 1/3/18	
	REALIGNMENT SHEK WU WAI ROAD	21 days	2 days	Sun 15/4/18	Sat 5/5/18	12 days	0%	186	Sun 15/4/18	
	MP 6+020 - MP 6+160	215 days		Sun 9/9/18	Thu 11/4/19	0 days	5%		Sun 9/9/18	
	RETAINING WALL - RW D18 (98M)	125 days	10 days	Sun 9/9/18	Fri 11/1/19	12 days	0%	193	Sun 9/9/18	
	RETAINING WALL - RW D17 (65M)	120 days	10 days	Thu 13/12/18	Thu 11/4/19	-23 days	10%	189FS-30 days	Thu 13/12/18	
	MP 6+160 - MP 6+230	126 days		Sun 6/5/18	Sat 8/9/18	12 days	0%		Sun 6/5/18	
1	RETAINING WALL - RW D19A, B (53M)	76 days	7 days	Sun 6/5/18	Fri 20/7/18	12 days	0%	187,202FS+26 days	Sun 6/5/18	
	RETAINING WALL - RW D20 (U) (22M)	50 days	5 days	Sat 21/7/18	Sat 8/9/18	12 days	0%	192	Sat 21/7/18	
	MP 6+230 - MP 6+330	389 days		Fri 6/1/17	Mon 29/1/18	12 days	56%		Fri 6/1/17	
1	RECTANGULAR CHANNEL	150 days	10 days	Frì 6/1/17	Sun 4/6/17	93 days	90%	154	Fri 6/1/17	
_	BOX CULVERT D5	45 days	4 days	Wed 1/11/17	Fri 15/12/17	52.5 days	90%	200FS+4 days	Wed 1/11/17	
-	RETAINING WALL - RW D21(U) (26M)	50 days	4 days	Mon 5/6/17	Mon 24/7/17	93 days	0%	195	Mon 5/6/17	
-	BOX CULVERT D6	45 days	4 days	Sat 16/12/17	Mon 29/1/18	12 days	90%	196	Sat 16/12/17	
1	RETAINING WALL - RW D22 (U) (26M)	45 days	4 days	Tue 25/7/17	Thu 7/9/17	93 days	0%	197	Tue 25/7/17	
-	RETAINING WALL - RW D23 (U) (21M)	50 days	4 days	Fri 8/9/17	Fri 27/10/17	93 days	0%	199	Fri 8/9/17	
+-	MP 6+372 - MP 6+410	70 days		Tue 30/1/18	Mon 9/4/18	12 days	0%		Tue 30/1/18	
+	RETAINING WALL - RW D24 (44M)	70 days	7 days	Tue 30/1/18	Mon 9/4/18	12 days	0%	198	Tue 30/1/18	
-	REMAINING EARTHWORKS AND ROAD WORKS	104 days		Fri 12/4/19	Wed 24/7/19	-23 days	0%	190	Fri 12/4/19	
-	COMPLETION OF PORTION E	0 days		Wed 24/7/19	Wed 24/7/19	-23 days	0%	203,180	Wed 24/7/19	
+	PORTION F (MP 6+530 - MP 6+850, CH ST 0+150 - CH ST 1+150)	1020 days		Thu 30/6/16	Mon 15/4/19	77 days	37%		Thu 30/6/16	
-	POSSESION OF SITE	0 days		Sun 27/11/16	Sun 27/11/16	0 days	100%	149FS+151 days	Sun 27/11/16	27/11
-	INITIAL SURVEY	40 days	4 days	Mon 28/11/16	Fri 6/1/17	0 days	100%	206SS	Mon 28/11/16	
-	TREE SURVEY	40 days	4 days	Mon 28/11/16	Fri 6/1/17	0 days	100%	206SS	Mon 28/11/16	
-	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE	60 days	5 days	Sat 7/1/17	Tue 7/3/17	59.2 days	80%	208,207	Sat 7/1/17	
	UTILITIES DIVERSION WORKS (CLP, CATV, NTT, TOWN GAS, HKBB & TG			Mon 28/11/16	Mon 27/3/17	116 days	80%	206SS	Mon 28/11/16	
-	INSTRUCTION FOR SITE INVESTIGATION FOR CONTAMINATED SITE	250 days		Thu 30/6/16	Mon 6/3/17	0 days	100%	288	Thu 30/6/16	
-	ARRANGEMENT OF SITE INVESTIGATION WORKS	21 days	2 days	Tue 7/3/17	Mon 27/3/17	0 days	100%	211	Tue 7/3/17	
-	SITE INVESTIGATION WORKS AND TESTING	49 days	3 days	Tue 28/3/17	Mon 15/5/17	-45 days	80%	212,209	Tue 28/3/17	
-	INSTRUCTION FOR REMEDIAL WORK FOR CONTAMINATED SOIL	14 days	2 days	Tue 16/5/17	Mon 29/5/17	-45 days	0%	213	Tue 16/5/17	
-	ARRANGEMENT OF REMEDIAL WORKS	30 days	3 days	Tue 30/5/17	Wed 28/6/17	-45 days	0%	214	Tue 30/5/17	
-	IMPLEMENTATION OF REMEMBIAL WORKS	68 days	5 days	Thu 29/6/17	Mon 4/9/17	-45 days	0%	215	Thu 29/6/17	
-	GROUND INVESTIGATION WORKS (1 NO. BOREHOLE & TRIAL PITS)	14 days	2 days	Tue 28/3/17	Mon 10/4/17	0 days	100%	210	Tue 28/3/17	
+	SUBMISSION AND APPROVAL OF MONITORING PROPOSAL	21 days	2 days	Tue 28/3/17	Mon 17/4/17	0 days	100%	217SS	Tue 28/3/17	
+	INSTALLATION OF MONITORING MARKERS	21 days		Tue 18/4/17	Mon 8/5/17	0 days	100%	217,218	Tue 18/4/17	
	Task (Carantal Summa	гу	\rightarrow	External Milest	tone 💠	Inactive Su	mmary	Manu	ual Summary Rollup	
	Split Project	Summary	9	Inactive Task		Manual Tas	sk 💴	3 Manu	al Summary	Critical Deadline
		Tasks		Inactive Milest	one 💠	Duration-on		Start		Critical Split

0	RW 42 (60M) RW 43 (50M) RW 44 (36M U) NCE EFFECT ON ADDED WATER STOP (RW43, 44 ONLY) NCE EFFECT ON ADDED CHAMFER (RW43, 44 ONLY) RAMP PR3 CONSTRUCTION EARTHWORKS AND DRAINAGE WORKS ROAD WORKS (1.3 KM) RESTING STATION R8 COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE INITIAL SURVEY	60 days 60 days 12 days 6 days 30 days 240 days 120 days 0 days	(Idays) 7 days 5 days 5 days 3 days 21 days	Tue 5/9/17 Mon 4/12/17 Fri 2/2/18 Tue 3/4/18 Sun 15/4/18 Sat 21/4/18 Sat 21/4/18	Sun 3/12/17 Thu 1/2/18 Mon 2/4/18 Sat 14/4/18 Fri 20/4/18 Sun 20/5/18	-45 days 77 days 77 days 77 days	0% 0% 0%	210,219,216,150 210,220	Tue 5/9/17 Mon 4/12/17	2016 MAIMJJAISIOINDIJI	INIMINIJIJIAI	DIND JIFIMA	IMIOINIL	JI WIAWIJJJ	TI O O INI DI O I FIN	AILTIVII O JA JA
1 2 3 3 4 4 5 5 6 6 6 7 7 8 8 9 9 0 0 1 1 2 2 3 3 4 4	RW 43 (50M) RW 44 (36M U) NCE EFFECT ON ADDED WATER STOP (RW43, 44 ONLY) NCE EFFECT ON ADDED CHAMFER (RW43, 44 ONLY) RAMP PR3 CONSTRUCTION EARTHWORKS AND DRAINAGE WORKS ROAD WORKS (1.3 KM) RESTING STATION RB COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE	60 days 60 days 12 days 6 days 30 days 240 days 120 days 240 days 0 days	5 days 5 days 3 days 21 days	Mon 4/12/17 Fri 2/2/18 Tue 3/4/18 Sun 15/4/18 Sat 21/4/18	Thu 1/2/18 Mon 2/4/18 Sat 14/4/18 Fri 20/4/18	77 days 77 days	0% 0%		Mon 4/12/17							
2 3 3 4 4 5 5 6 6 7 8 8 9 9 0 0 1 1 2 2 3 3 4 4 4 4 4 4 4 4 6 1 7 1 1 1 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	RW 44 (36M U) NCE EFFECT ON ADDED WATER STOP (RW43, 44 ONLY) NCE EFFECT ON ADDED CHAMFER (RW43, 44 ONLY) RAMP PR3 CONSTRUCTION EARTHWORKS AND DRAINAGE WORKS ROAD WORKS (1.3 KM) RESTING STATION RB COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE	60 days 12 days 6 days 30 days 240 days 120 days 240 days 0 days	5 days 3 days 21 days	Tue 3/4/18 Sun 15/4/18 Sat 21/4/18	Sat 14/4/18 Fri 20/4/18							Y				
4 5 6 6 7 7 8 8 9 9 9 0 0 1 1 2 2 3 3 4 4	NCE EFFECT ON ADDED CHAMFER (RW43, 44 ONLY) RAMP PR3 CONSTRUCTION EARTHWORKS AND DRAINAGE WORKS ROAD WORKS (1.3 KM) RESTING STATION R8 COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE	12 days 6 days 30 days 240 days 120 days 240 days 0 days	21 days	Sun 15/4/18 Sat 21/4/18	Fri 20/4/18	77 days		221	Fri 2/2/18	11 11 11						
5 6 6 7 8 8 9 9 0 0 1 1 2 2 3 3 4	RAMP PR3 CONSTRUCTION EARTHWORKS AND DRAINAGE WORKS ROAD WORKS (1.3 KM) RESTING STATION R8 COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE	30 days 240 days 120 days 240 days 0 days	21 days	Sat 21/4/18		The second section is a second section of the second section of the second section is a second section of the section	0%	222	Tue 3/4/18							
5 6 6 7 8 8 9 9 0 0 1 1 2 2 3 3 4	EARTHWORKS AND DRAINAGE WORKS ROAD WORKS (1.3 KM) RESTING STATION R8 COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE	30 days 240 days 120 days 240 days 0 days	21 days		Sun 20/5/18	77 days	0%	223	Sun 15/4/18							
6 7 8 9 0 1 1 2 3 3 4 4	EARTHWORKS AND DRAINAGE WORKS ROAD WORKS (1.3 KM) RESTING STATION R8 COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE	240 days 120 days 240 days 0 days	21 days	Sat 21/4/18	2011 2010110	77 days	0%	224	Sat 21/4/18							
7 8 9 0 1 1 2 3 4	RESTING STATION R8 COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE	120 days 240 days 0 days	10 days		Sun 16/12/18	77 days	0%	222,225FS-30 days	Sat 21/4/18			9		11111		
8 9 0 1 1 2 3 3 4 4	RESTING STATION R8 COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE	240 days 0 days	10 days													
9 0 1 1 2 3 4	COMPLETION OF PORTION F PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE	0 days		Mon 17/12/18	Mon 15/4/19	77 days	0%	226	Mon 17/12/18							
0 1 2 3 4	PORTION G - (BRIDGE C) CH ST 1+210 - CH ST 1+310) POSSESION OF SITE		21 days	Fri 20/7/18	Sat 16/3/19	107 days	0%	227FF-30 days	Fri 20/7/18				(Sec. 815.1)			
1 2 3 4	POSSESION OF SITE			Mon 15/4/19	Mon 15/4/19	77 days	0%	227,228	Mon 15/4/19					15/4		
2 3 4		975 days		Thu 30/6/16	Fri 1/3/19	122 days	39%		Thu 30/6/16					++		
3	INITIAL SURVEY	0 days		Thu 30/6/16	Thu 30/6/16	0 days	100%	149	Thu 30/6/16	→ 30/6						
4	HATTAL BOTTALT		5 days	Thu 30/6/16	Sun 28/8/16	0 days	100%	231SS	Thu 30/6/16	*						
4	TREE SURVEY	130 days	10 days	Mon 29/8/16	Thu 5/1/17	0 days	100%	232	Mon 29/8/16							
	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE	120 days	10 days	Fri 6/1/17	Fri 5/5/17	0 days	100%	233,232	Fri 6/1/17			HIII				
	UTILITIES DIVERSION WORKS (HKB & TGT)		0 day	Fri 6/1/17	Sun 4/6/17	0 days	100%	232,233	Fri 6/1/17			HIIII				
3	PREPARATION OF TDMP FOR PRE-DRILLING WORKS	100 days	10 days	Thu 30/6/16	Fri 7/10/16	0 days	100%	231SS	Thu 30/6/16							
-	APPROVAL OF TDMP BY SUPERVISOR/DSD		2 days	Sat 8/10/16	Fri 21/10/16	0 days	100%	236	Sat 8/10/16							
3	PREDRILLING WORKS FOR PILES		3 days	Sat 20/5/17	Sun 18/6/17	0 days	100%	328,237	Sat 20/5/17							
9	STARTING DATE OF DRY SEASON	0 days	-	Wed 1/11/17	Wed 1/11/17	0 days	0%	238	Wed 1/11/17			1/11				
0	PRE-BORE H-PILE (8 NOS)		5 days	Wed 1/11/17	Sat 30/12/17	0 days	0%	239,234,235	Wed 1/11/17							
1	LOAD TEST		5 days	Sun 31/12/17	Tue 13/2/18	36 days	0%	240	Sun 31/12/17							
2	ABUTMENT CONSTRUCTION		7 days	Sun 31/12/17	Wed 21/3/18	0 days	0%	240	Sun 31/12/17							
3	REMOVAL OF DRAINAGE DIVERSION WORKS	10 days	2 days	Thu 22/3/18	Sat 31/3/18	0 days	0%	242,241	Thu 22/3/18							
4	END DATE OF DRY SEASON	0 days		Sat 31/3/18	Sat 31/3/18	0 days	0%	243	Sat 31/3/18				31/3			
5	PRECURE AND DELIVERY OF BEARINGS AND MOVEMNT JOINTS		21 days	Mon 19/6/17	Wed 13/6/18	122 days	0%	238	Mon 19/6/17	1 12						
6	INSTALLATION OF BEARINGS AND MOVEMENT JOINTS			Thu 14/6/18	Wed 4/7/18	122 days	0%	245,244	Thu 14/6/18		1		*			
	BRIDGE DECK CONSTRUCTION		2 days	Thu 5/7/18	Sun 2/9/18	122 days	0%	246	Thu 5/7/18							
7			5 days	Mon 3/9/18	Tue 2/10/18		0%	247	Mon 3/9/18							
8	EARTH WORKS AND DRAINAGE WORKS ROAD WORKS		2 days		Fri 1/3/19	122 days	0%	247	Wed 3/10/18							
9			10 days	Wed 3/10/18	Thu 1/11/18	122 days 242 days	0%	246	Thu 5/7/18				1			
0	BRIDGE ASSOCIATED WORKS, WATERMAIN WORKS		10 days	Thu 5/7/18										1/2		
1	COMPLETION OF PORTION G	0 days		Fri 1/3/19	Fri 1/3/19	122 days	0%	250,249	Fri 1/3/19					1 1 113		
2	PORTION H (CH ST 1+310 - 1+525, 1+700 - 2+270)	1087 days		Sun 28/8/16	Tue 20/8/19	-50 days	28%	44050 00 /	Sun 28/8/16	1 20/0						
3	POSSESION OF SITE	0 days		Sun 28/8/16	Sun 28/8/16	0 days	100%	149FS+60 days	Sun 28/8/16	28/8						
4	INITIAL SURVEY	65 days	4 days	Mon 29/8/16	Tue 1/11/16	0 days	100%	253SS	Mon 29/8/16	7						
5	TREE SURVEY	65 days	4 days	Wed 2/11/16	Thu 5/1/17	0 days	100%	254	Wed 2/11/16							
3	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE		7 days	Fri 6/1/17	Wed 5/4/17	152 days	80%	255	Fri 6/1/17		Ţ					
7	APPLIED TTA APPROVAL FOR REALIGNMENT		14 days	Thu 6/4/17	Mon 2/10/17	135 days	20%	256	Thu 6/4/17							
3	UTILITIES DIVERSION WORKS (HKB, TGT & CLP)	300 days		Wed 2/11/16	Mon 28/8/17	7 days	40%	254	Wed 2/11/16			$H \mid \mid \mid \mid \mid$				
)	GROUND INVESTIGATION WORKS (6 NOS. BOREHOLE & TRIAL PITS)		4 days	Sun 5/2/17	Mon 15/5/17	103.6 days	88%	256SS+30 days	Sun 5/2/17	\		$H \mid \mid \mid \mid \mid$				
)	SUBMISSION AND APPROVAL OF MONITORING PROPOSAL		2 days	Sun 5/2/17	Sat 25/2/17	0 days	100%	259SS	Sun 5/2/17	4		$H \mid \mid \mid \mid \mid$				
1	INSTALLATION OF MONITORING MARKERS	21 days	2 days	Tue 16/5/17	Mon 5/6/17	91 days	60%	259	Tue 16/5/17		9	#				
2	RW 49 (130M)	163 days	12 days	Fri 20/10/17	Sat 31/3/18	-45 days	0%	258,256,259,261,260,				X				
3	RW 45A (73M)	120 days	10 days	Sun 17/6/18	Sun 14/10/18	-50 days	0%	262,280FS+42 days	Sun 17/6/18							
	RW 45B (58M)	103 days	10 days	Mon 15/10/18	Fri 25/1/19	-50 days	0%	263	Mon 15/10/18				1 1	#h		
5	DW1 & DW1A (130M)	112 days	10 days	Fri 15/6/18	Thu 4/10/18	-45 days	0%	269	Fri 15/6/18							
3	DW2 (92M)	110 days	10 days	Fri 5/10/18	Tue 22/1/19	-45 days	0%	265	Fri 5/10/18				81631 23			
7	EARTHWORKS AND DRAINAGE WORKS	147 days	14 days	Sat 26/1/19	Fri 21/6/19	-50 days	0%	264,266FS-2 days	Sat 26/1/19							

3	PART OF ROAD WORKS FOR RE-ALIGNMENT CARRIAGEWAY	45 days	4 days	Sun 1/4/18	Tue 15/5/18	-45 days	0%	262,257	Sun 1/4/18							
9	REALIGNMENT CARRIAGEWAY		3 days	Wed 16/5/18	Thu 14/6/18	-45 days	0%	268	Wed 16/5/18							
	ROAD WORKS		5 days	Sat 22/6/19	Tue 20/8/19	-50 days	0%	267	Sat 22/6/19						the l	
	COMPLETION OF PORTION H	0 days		Tue 20/8/19	Tue 20/8/19	-50 days	0%	270	Tue 20/8/19						20/8	
	PORTION I (CH ST 1.525 - CH ST 1.70)	825 days	1	Thu 30/6/16	Tue 2/10/18	272 days	54%		Thu 30/6/16							
	POSSESSION OF SITE	0 days		Thu 30/6/16	Thu 30/6/16	0 days	100%	2SS	Thu 30/6/16	30/6						
	INITIAL SURVEY		14 days	Thu 30/6/16	Mon 26/12/16	0 days	100%	273SS	Thu 30/6/16							
5	TREE SURVEY			Thu 30/6/16	Thu 5/1/17	0 days	100%	274SS	Thu 30/6/16							
	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE		14 days	Fri 6/1/17	Sat 4/2/17	0 days	100%	275,274	Fri 6/1/17							
6	THEE PELLING/THANSPLANTING AND SITE CLEARANCE	30 days	2 days	FII 0/ 1/17	3a(4/2/1/	0 days	100%	210,214	1.110/1/1/							
	Task (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	ary	—	External Milest	one 💠	Inactive Sur	mmary 🛡	Manu	al Summary Rollup	Finish-	only	3	Progres	S		(messessess)
	Split Project	Summary	—	Inactive Task		Manual Tas	sk 🖺	Manu	al Summary	Critical			Deadlin	Э	$\hat{\Phi}$	
	Milestone ♦ Externa			Inactive Milesto	one 💠	Duration-on	nly	Start	only C	Critical	Split		minn			



ID	Task Name	Duration	Time Risk Ea	arly Start	Early Finish	Float	% Complete	Predecessors	Start	2016	John Jan	2017	lalula del d	2018	2	2019	2020 DJFIMAIMJJAISIO
331	STARTING DATE OF CONTRACT	0 days	(days)	Thu 30/6/16	Thu 30/6/16	0 days	100%	288	Thu 30/6/16	MAMJIJIAIS	OND JE	VIAMIJIJIAIS	ONDJEMA	MIJIJIAISIOIN	DIJIFIMAM.	JIJIAISIOINIE	DIJIFIMIAIMIJIJIAISIOI
32	PORTION L	560 days		Thu 30/6/16	Wed 10/1/18	-10 days	35%	-	Thu 30/6/16								
33	POSSESION OF SITE	0 days	-	Thu 30/6/16	Thu 30/6/16	0 days	100%	331	Thu 30/6/16	30/6							
34	DOCUMENT SUBMISSION		7 days	Thu 30/6/16	Fri 7/10/16	0 days	100%	333	Thu 30/6/16		3						
35	R.C. STRUCTURE	210 days	10 days	Sat 8/10/16	Fri 5/5/17	-10 days	80%	334	Sat 8/10/16								
36	EQUILIZATION TANL	45 days	4 days	Sat 6/5/17	Mon 19/6/17	-5 days	0%	335	Sat 6/5/17								
37	SLUDGE HOLDING TANK	45 days	4 days	Tue 20/6/17	Thu 3/8/17	-5 days	0%	336	Tue 20/6/17								
38	BIO-TREATMENT FACILITY	60 days	5 days	Fri 4/8/17	Mon 2/10/17	-5 days	0%	337	Fri 4/8/17			ess.	3n				
39	STEEL HOLLOW SECTION AT ROOF	60 days	5 days	Wed 5/7/17	Sat 2/9/17	25 days	0%	340	Wed 5/7/17								
10	INTERNAL FINISHES	60 days	5 days	Sat 6/5/17	Tue 4/7/17	-10 days	0%	335	Sat 6/5/17		- 11	Town T					
11	E&M. WORKS AND PD INSTALLATION	95 days	7 days	Wed 5/7/17	Sat 7/10/17	-10 days	0%	340	Wed 5/7/17			2500000	8				
12	EXTERNAL FINISHES AND SURROUNDING AREA	95 days	7 days	Sun 8/10/17	Wed 10/1/18	-10 days	0%	341,339,338	Sun 8/10/17								
13	COMPLETION OF PORTION L	0 days		Wed 10/1/18	Wed 10/1/18	-10 days	0%	342	Wed 10/1/18				10/1				
14	COMPLETION OF SECTION W4	0 days		Wed 10/1/18	Wed 10/1/18	-10 days	0%	343	Wed 10/1/18				♦ 10/1	_	+++++	\dashv	
15	SECTION W5 (SS 0.0 - 270)	1097 days		Thu 30/6/16	Mon 1/7/19	0 days	27%		Thu 30/6/16							-	
16	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	0 days	100%	288	Thu 30/6/16	30/6	3						
17	APPLICATION OF EXCAVATION PERMIT	180 days	0 day	Thu 30/6/16	Mon 26/12/16	0 days	100%	288	Thu 30/6/16	1							
8	PORTION M (BRIDGE E)	1097 days		Thu 30/6/16	Mon 1/7/19	0 days	19%		Thu 30/6/16						+		
9	POSSESION OF SITE	0 days		Thu 30/6/16	Thu 30/6/16	0 days	100%	346SS	Thu 30/6/16	30/6	6						
50	INITIAL SURVEY		2 days	Thu 30/6/16	Wed 27/7/16	0 days	100%	349SS	Thu 30/6/16		_ III						
51	TREE SURVEY		2 days	Thu 30/6/16	Wed 27/7/16	0 days	100%	349SS	Thu 30/6/16								
52	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE		5 days	Thu 28/7/16	Sun 25/9/16	672 days	40%	351	Thu 28/7/16			-					
53	PREPARATION TDMP FOR PRE-DRILLING WORKS	45 days	4 days	Thu 30/6/16	Sat 13/8/16	0 days	100%	349SS	Thu 30/6/16	4							
54	APPROVAL OF TDMP BY SUPERVISOR/DSD	14 days	2 days	Sun 14/8/16	Sat 27/8/16	0 days	100%	353	Sun 14/8/16								
55	STARTING DATE OF 1ST DRY SEASON	0 days	ļ	Tue 1/11/16	Tue 1/11/16	0 days	100%	354	Tue 1/11/16		1/1						
6	TEMPORARY DRAINAGE WORKS	30 days	4 days	Tue 1/11/16	Wed 30/11/16	0 days	100%	355,350,352SS+10 day	s Tue 1/11/16	- 4							P
57	PRE-DRILLING WORKS FOR PILES AT GRID 2	7 days	4 days	Thu 1/12/16	Wed 7/12/16	· 0 days	100%	356	Thu 1/12/16		Y THE	11					
8	PRE-DRILLING WORKS FOR PILES AT GRID 3	7 days	4 days	Sun 15/1/17	Sat 21/1/17	0 days	100%	357,347	Sun 15/1/17					-			
9	PRE-DRILLING WORKS FOR PILES AT GRID 1	7 days	4 days	Wed 1/3/17	Tue 7/3/17	0 days	100%	358	Wed 1/3/17		11-						Art II
0	REMOVAL OF TEMPORARY DRAINAGE WORK		2 days	Wed 8/3/17	Fri 31/3/17	0 days	100%	358FS+7 days	Wed 8/3/17		11.						
31	END DATE OF 1ST DRY SEASON	0 days		Fri 31/3/17	Fri 31/3/17	0 days	100%	360	Fri 31/3/17			31/3					
62	PREPARATION OF TDMP FOR PILING WORKS		7 days	Mon 10/4/17	Mon 7/8/17	35 days	90%	361,359	Mon 10/4/17								
63	PROCURE AND DELIVERY OF BEARINGS AND MOVEMENT JOINTS		30 days	Sat 1/4/17	Mon 26/3/18	219 days	0%	360	Sat 1/4/17								1
34	APPROVAL OF TDMP BY SUPERVISOR/DSD		2 days	Tue 8/8/17	Tue 26/9/17	35 days	0%	362	Tue 8/8/17	- 1 1							
35	STARTING DATE OF 2ND DRY SEASON	0 days	Lunjo	Wed 1/11/17	Wed 1/11/17	0 days	0%	364	Wed 1/11/17	-		l um	1/11				
66	TEMPORARY DRAINAGE WORKS (2ND DRY SEASON)		2 days	Wed 1/11/17	Tue 21/11/17	0 days	0%	365	Wed 1/11/17	-		11					
37	PILING WORKS AT GRID 2	45 days	4 days	Wed 22/11/17	Fri 5/1/18	0 days	0%	366	Wed 22/11/17								
68	PILE CAP AT GRID 2		3 days	Sat 6/1/18	Sun 4/2/18	0 days	0%	367	Sat 6/1/18	_							
69	PIER CONSTRUCTION AT GRID 2	45 days	4 days	Mon 5/2/18	Wed 21/3/18	0 days	0%	368	Mon 5/2/18								
70	PILING WORKS AT GRID 3	45 days	4 days	Sat 6/1/18	Mon 19/2/18	0 days	0%	367	Sat 6/1/18								
1	PILE CAP AT GRID 3		3 days	Tue 20/2/18	Wed 21/3/18	0 days	0%	370	Tue 20/2/18								
2	REMOVAL OF TEMPORARY DRAINAGE WORK		2 days	Thu 22/3/18	Sat 31/3/18	0 days	0%	371,369	Thu 22/3/18	-							
73	END DATE OF 2ND DRY SEASON		L uays	Sat 31/3/18	Sat 31/3/18 Sat 31/3/18	0 days	0%	371,369	Sat 31/3/18	_				31/3			
74	PILING WORKS AT GRID 1 WITH ALL PILE LOAD TESTING	0 days 100 days	7 days	Thu 22/3/18	Fri 29/6/18	0 days	0%	371	Thu 22/3/18	_							
75	PILE CAP AT GRID 1			Sat 30/6/18	Sun 29/7/18	0 days	0%	374	Sat 30/6/18								
76	ABUTMENT AT GRID 1		3 days	Mon 30/7/18	Wed 31/10/18		0%	375,352	Mon 30/7/18	_				D			
77	STARTING DATE OF 3RD DRY SEASON		7 days	Thu 1/11/18	Thu 1/11/18	0 days	0%	375,352 376,373FS+214 days	Thu 1/11/18	_					1/11		
_	BRIDGE DECK CONSTRUCTION WITH TEMPORARY DRAINAGE WORKS	0 days	10 days	Thu 1/11/18	Thu 1/1/18		0%	377,363	Thu 1/11/18	- 1							
78	ABUTMENT AND MOVEMENT JOINT AT GRID 3		10 days			0 days	0%										
79	REMOVAL OF TEMPORARY DRAINAGE WORK		4 days	Thu 1/11/18	Sat 15/12/18	96 days	0%	378SS	Thu 1/11/18 Fri 22/3/19					7			
_	END DATE OF 3RD DRY SEASON	-	2 days	Fri 22/3/19	Sun 31/3/19	0 days		378		-					3	1/3	
11	RAMP	0 days	E days	Sun 31/3/19	Sun 31/3/19	0 days	0%	380	Sun 31/3/19						3	"	
2			5 days	Fri 22/3/19	Wed 15/5/19	0 days	0%	378,379,352	Fri 22/3/19	_					1		
3	STEEL STRUCTURAL ROOF WORKS		5 days	Fri 22/3/19	Mon 20/5/19	0 days		378,381FS-10 days	Fri 22/3/19	_							
4	EARTHWORKS AND DRAINAGE WORKS		4 days	Mon 1/4/19	Wed 15/5/19	0 days	0%	380	Mon 1/4/19								
5	ROAD WORKS		4 days	Thu 16/5/19	Mon 1/7/19	0 days	0%	384,382	Thu 16/5/19								
6	BRIDGE ASSOCIATED WORKS AND WATERMAIN WORKS		7 days	Sun 21/4/19	Mon 1/7/19	0 days	0%	378FS+30 days,383FS									
87	COMPLETION OF PORTION M	0 days		Mon 1/7/19	Mon 1/7/19	0 days	0%	385,386	Mon 1/7/19							17	
88	COMPLETION OF SECTION W5	0 days		Mon 1/7/19	Mon 1/7/19	0 days	0%	387	Mon 1/7/19							• 11/1	
	Task Summa	агу	~	External Milestor	18 💠	Inactive Sum	nmary 🛡	─────────────────────────────────────	Summary Rollup =		Finish-on	ly	3	Progre	SS	Leading-sources	
	Split Project	Summary	Ø 9	Inactive Task		Manual Task		Manua	Summary §	· · · · · · · · · · · · · · · · · · ·	Critical		Section 1	Deadlin		4	
		al Tasks			e 💠	Duration-only		Start-o									

ID T	Task Name	Duration	Time Risk Allowance (days)	Early Start	Early Finish	Float	% Complete	Predecessors	Start	2016 MAIMJJJASOND	JEMA	2017 MJJJAISIOIN	DJFMAMJI.	8 JASOND JEM	2019 AMJJJAISIONI	2020 DJFMAMJJA	Sloln
389	SECTION W6 (TM0.0 - 960)	701 days	(dujo)	Thu 30/6/16	Thu 31/5/18	0 days	56%		Thu 30/6/16								
90	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	0 days	100%	2SS	Thu 30/6/16	30/6	H						
391	APPLICATION OF EXCAVATION PERMIT	300 days	10 days	Thu 30/6/16	Tue 25/4/17	0 days	100%	390SS	Thu 30/6/16	1		h					
92	APPLICATION AND OBTAIN APPROVAL FROM MTRC FOR WORKS AT RP.	A 300 days	10 days	Thu 30/6/16	Tue 25/4/17	34 days	80%	390SS	Thu 30/6/16	1		H					
393	PORTION P	367 days		Mon 29/5/17	Thu 31/5/18	0 days	0%		Mon 29/5/17				-				
394	POSSESION OF SITE	0 days		Mon 29/5/17	Mon 29/5/17	0 days	0%	390FS+334 days,392	Mon 29/5/17			29/5					
395	DOCUMENT SUBMISSION	60 days	5 days	Tue 30/5/17	Fri 28/7/17	0 days	0%	394,391,392	Tue 30/5/17			2000					
396	DRAINAGE WORKS	157 days	10 days	Sat 29/7/17	Mon 1/1/18	0 days	0%	395	Sat 29/7/17								
397	ROAD WORKS	150 days	10 days	Tue 2/1/18	Thu 31/5/18	0 days	0%	396	Tue 2/1/18			* saacarado					
398	COMPLETION OF PORTION P	0 days		Thu 31/5/18	Thu 31/5/18	0 days	0%	397	Thu 31/5/18	1			3	1/5			
399	COMPLETION OF SECTION W6	0 days		Thu 31/5/18	Thu 31/5/18	0 days	0%	398	Thu 31/5/18				1	1/5			
100	SECTION W7 (ST2.27 - 2.73, KW 0 - 1.35)	980 days		Thu 30/6/16	Wed 6/3/19	652 days	20%		Thu 30/6/16								
102	STARTING DATE OF CONTRACT			Thu 30/6/16	Thu 30/6/16	1632 days	0%	258	Thu 30/6/16	30/6		10 July 20 20 20 20 20 20 20 20 20 20 20 20 20					
103	PORTION J2, J3	0 days 730 days		Tue 7/3/17	Wed 6/3/19	0 days	20%	200	Tue 7/3/17								
										-	0 7/						
04	INSTRUCTION TO EXECISE	0 days		Tue 7/3/17	Tue 7/3/17	506 days	0%	10100 100	Tue 7/3/17	-							
05	POSSESSION OF SITE (J2, J3)	0 days		Tue 7/3/17	Tue 7/3/17	0 days	100%	404\$\$,402	Tue 7/3/17		7/						
106	APPLICATION OF EXCAVATION PERMIT	180 days	0 day	Tue 7/3/17	Sat 2/9/17	362 days	80%	404SS	Tue 7/3/17			1					
07	CONDITION SURVEY FOR PERMANENT STRUCTURE ADJACENT TO 2 STORIES HEIGHT TEMP. BLDG	60 days	2 days	Tue 7/3/17	Fri 5/5/17	60 days	0%	405SS	Tue 7/3/17			\Box					
108	INITIAL SURVEY	60 days	2 days	Tue 7/3/17	Fri 5/5/17	0 days	90%	405SS	Tue 7/3/17	-	1						
109	TREE SURVEY	60 days	2 days	Tue 7/3/17	Fri 5/5/17	0 days	100%	405SS	Tue 7/3/17		4						
110	TREE FELLING/TRANSPLANTING AND SITE CLEARANCE	30 days	3 days	Sat 6/5/17	Sun 4/6/17	0 days	0%	409,408	Sat 6/5/17								
111	RW 46 (67M)	90 days	7 days	Thu 3/5/18	Tue 31/7/18	0 days	0%	413	Thu 3/5/18					<u> </u>			
112	RW 47 (83 NOS OF SOILDER PILES)	180 days		Sat 13/1/18	Wed 11/7/18	50 days	0%	414	Sat 13/1/18								
13	RW 48 (110M)	110 days		Sat 13/1/18	Wed 2/5/18	0 days	0%	414	Sat 13/1/18	- 1							
14	RW 24A (20M)	· 21 days	2 days	Sat 23/12/17	Fri 12/1/18	0 days	0%	415	Sat 23/12/17	- 1		1111.	T				
115	RW 24B (18M)			Sat 2/12/17	Fri 22/12/17	0 days	0%	416	Sat 2/12/17	-			j				
		21 days	2 days		Fri 1/12/17			417	Mon 18/9/17	-		- Committee	7				
116	RW 24C (82M)	75 days	7 days	Mon 18/9/17		0 days	0%		Wed 5/7/17	-			7				
117	RW 25 (83M)	75 days	7 days	Wed 5/7/17	Sun 17/9/17	0 days		418,407	Mon 5/6/17								
118	RW 26 (20M)	30 days	2 days	Mon 5/6/17	Tue 4/7/17	0 days	0%	408,410						1			
119	STREAM DECKING D8	30 days	2 days	Wed 1/8/18	Thu 30/8/18	0 days	0%	411	Wed 1/8/18	4 1							
120	PROVIDE SAFETY ACCESS TO RESIDENT	21 days	2 days	Sat 2/12/17	Fri 22/12/17	230 days	0%	416	Sat 2/12/17	_							
121	DEMOLITION OF EXISTING STRUCTURE	21 days	3 days	Sat 23/12/17	Fri 12/1/18	230 days	0%	420	Sat 23/12/17		11 1						
122	EARTHWORKS AND DRAINAGE WORKS	150 days	10 days	Fri 31/8/18	Sun 27/1/19	0 days	0%	421,419,412,406	Fri 31/8/18								
23	ROAD WORKS	90 days	7 days	Fri 7/12/18	Wed 6/3/19	0 days	0%	422FS-52 days	Fri 7/12/18					9			
24	COMPLETION OF PORTION J	0 days		Wed 6/3/19	Wed 6/3/19	0 days	0%	423	Wed 6/3/19						6/3		
25	COMPLETION OF SECTION W7	0 days		Wed 6/3/19	Wed 6/3/19	0 days	0%	424,405FS+730 days	Wed 6/3/19						6/3		
126	COMPLETION FROM SECTION W1 TO SECTION W7	0 days		Tue 20/8/19	Tue 20/8/19	-50 days	0%	425,399,388,344,329,3	00 Tue 20/8/19						20/8		
27	LANDSCADING COETWORKS AND SCHADI ISLAMENT WORK	1600 days		Th.: 20/6/16	Th.: 17/10/20	O dava	00/		Thu 30/6/16								
	LANDSCAPING SOFTWORKS AND ESTABLISHMENT WORK	1632 days		Thu 30/6/16	Thu 17/12/20	0 days	0%										
29	ACCESS DATES AND COMPLETION DATES FOR CONTRACTS	1332 days		Tue 7/3/17	Wed 28/10/20	0 days	0%		Tue 7/3/17								
30	SECTION W8A	90 days		Sun 30/12/18	Sat 30/3/19	0 days	0%		Sun 30/12/18					1301	ስ		
31	ACCESS DATE	0 days		Sun 30/12/18	Sun 30/12/18	0 days	0%	4	Sun 30/12/18					301	<i>i</i>		
32	COMPLETION DATE	0 days		Sat 30/3/19	Sat 30/3/19	0 days	0%	431FS+90 days	Sat 30/3/19						30/3		
33	SECTION W8B	120 days		Mon 1/7/19	Tue 29/10/19	0 days	0%		Mon 1/7/19							1	
34	ACCESS DATE	0 days		Mon 1/7/19	Mon 1/7/19	0 days	0%	10	Mon 1/7/19						♦ 1/7		
35	COMPLETION DATE	0 days		Tue 29/10/19	Tue 29/10/19	0 days	0%	434FS+120 days	Tue 29/10/19							29/10	
36	SECTION W8C	30 days		Sun 30/12/18	Tue 29/1/19	0 days	0%		Sun 30/12/18						A + A + A	-	
37	ACCESS DATE	0 days		Sun 30/12/18	Sun 30/12/18	0 days	0%	18	Sun 30/12/18					301	e		
38	COMPLETION DATE	0 days		Tue 29/1/19	Tue 29/1/19	0 days	0%	437FS+30 days	Tue 29/1/19					\$ 29	y1		
39	SECTION W8D	30 days		Sun 31/12/17	Tue 30/1/18	0 days	0%	-	Sun 31/12/17	-					a + 1 + 1		
40	ACCESS DATE	0 days		Sun 31/12/17	Sun 31/12/17	0 days	0%	24	Sun 31/12/17	-			3 /12		1 1 1 1		
41	COMPLETION DATE	0 days		Tue 30/1/18	Tue 30/1/18	0 days	0%	440FS+30 days	Tue 30/1/18	-			30/1		A + A + A		
42	SECTION WSE						0%	.101 0100 0010	Mon 1/7/19	-							
		30 days		Mon 1/7/19	Wed 31/7/19	0 days		00		_							
43	ACCESS DATE	0 days	Control	Mon 1/7/19	Mon 1/7/19	0 days	0%	28	Mon 1/7/19	_					1 4		
44	COMPLETION DATE	0 days	To the same of the	Wed 31/7/19	Wed 31/7/19	0 days	0%	443FS+30 days	Wed 31/7/19	1 1							
-	Task (magazina) Sum	marv	—	External Milest	tone �	Inactive Sur	nmary 🛡	— ♥ Manua	I Summary Rollup ===	Fini	sh-only	3		Progress			
		ect Summary		Inactive Task		Manual Tas			Summary Wolldp	Crit				T 20 20	Φ.		
			4						_		ical Split				~		
	I IVIIIESIONE 😝 EXTE	rnal Tasks		Inactive Mileste	one 💠	Duration-onl	IV.	Start-o	IIIV L								

Task Name		Duration	Time Risk Allowance (days)	Early Start	Early Finish	Float	% Complete	Predecessors	Start	2016 MAM I HAISIONI	DIJEMAN	2017 2018	ASOND JEMA	2019 AMJJJASONDJEMAMJJJAS
SECTION W8F		30 days	Ισαγοί	Thu 31/5/18	Sat 30/6/18	0 days	0%		Thu 31/5/18	WININIAIAIAIAIAI	U I I I I I I I I I I I I I I I I I I I	I I I I I I I I I I I I I I I I I I I	INISIOINIDISIFIMIA	
ACCESS DATE		0 days		Thu 31/5/18	Thu 31/5/18	0 days	0%	32	Thu 31/5/18			→ 3	/5	
7 COMPLETION DATE		0 days		Sat 30/6/18	Sat 30/6/18	0 days	0%	446FS+30 days	Sat 30/6/18				30/6	
8 SECTION W8G		820 days		Tue 7/3/17	Tue 4/6/19	0 days	0%		Tue 7/3/17					
ACCESS DATE		0 days		Tue 7/3/17	Tue 7/3/17	730 days	0%	37	Tue 7/3/17		♦ 7/3			h
COMPLETION DATE		0 days		Tue 4/6/19	Tue 4/6/19	0 days	0%	449FS+90 days	Tue 4/6/19					46
SECTION W9A	The second secon	365 days		Sat 30/3/19	Sun 29/3/20	0 days	0%		Sat 30/3/19					
2 ACCESS DATE		0 days		Sat 30/3/19	Sat 30/3/19	0 days	0%	430	Sat 30/3/19					30/3
COMPLETION DATE		0 days		Sun 29/3/20	Sun 29/3/20	0 days	0%	452FS+365 days	Sun 29/3/20					29/3
SECTION W9B		365 days		Tue 29/10/19	Wed 28/10/20	0 days	0%		Tue 29/10/19					
ACCESS DATE		0 days		Tue 29/10/19	Tue 29/10/19	0 days	0%	433	Tue 29/10/19					29/10
COMPLETION DATE		0 days		Wed 28/10/20	Wed 28/10/20	0 days	0%	455FS+365 days	Wed 28/10/20					
SECTION W9C		365 days		Tue 29/1/19	Wed 29/1/20	0 days	0%		Tue 29/1/19					
ACCESS DATE		0 days		Tue 29/1/19	Tue 29/1/19	0 days	0%	436	Tue 29/1/19				♦ • • • • • • • • • • • • • • • • • • •	4
COMPLETION DATE		0 days		Wed 29/1/20	Wed 29/1/20	0 days	0%	458FS+365 days	Wed 29/1/20					29/1
SECTION W9D		365 days		Tue 30/1/18	Wed 30/1/19	0 days	0%		Tue 30/1/18					
ACCESS DATE		0 days	-	Tue 30/1/18	Tue 30/1/18	0 days	0%	439	Tue 30/1/18			30/1		
COMPLETION DATE		0 days	-	Wed 30/1/19	Wed 30/1/19	0 days	0%	461FS+365 days	Wed 30/1/19				30	n
SECTION W9E		365 days	-	Wed 31/7/19	Thu 30/7/20	0 days	0%		Wed 31/7/19					
ACCESS DATE		0 days		Wed 31/7/19	Wed 31/7/19	0 days	0%	442	Wed 31/7/19					31/7
COMPLETION DATE		0 days	-	Thu 30/7/20	Thu 30/7/20	0 days	0%	464FS+365 days	Thu 30/7/20					
SECTION W9F		365 days	-	Sat 30/6/18	Sun 30/6/19	0 days	0%	1341 01000 days	Sat 30/6/18					
								445		_			30/6	Y
		0 days		Sat 30/6/18	Sat 30/6/18	0 days	0%		Sat 30/6/18	_			-	30/6
		0 days	 	Sun 30/6/19	Sun 30/6/19	0 days	0%	467FS+365 days	Sun 30/6/19					30/6
SECTION W9G		365 days		Tue 4/6/19	Wed 3/6/20	0 days	0%	140	Tue 4/6/19		- 24			
ACCESS DATE		0 days		Tue 4/6/19	Tue 4/6/19	0 days	0%	448	Tue 4/6/19					146
COMPLETION DATE		0 days		Wed 3/6/20	Wed 3/6/20	0 days	0%	470FS+365 days	Wed 3/6/20					3/6
PLANNED WORK PROGR	AMME	1632 days		Thu 30/6/16	Thu 17/12/20	0 days	0%		Thu 30/6/16					
SECTION W8A		1044 days		Thu 30/6/16	Thu 9/5/19	5 days	0%		Thu 30/6/16					-
STARTING DATE OF	CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	959 days	0%	288	Thu 30/6/16	30/6				
LANDSCAPING SOF	TWORKS	90 days	7 days	Sat 9/2/19	Thu 9/5/19	5 days	0%	147,475	Sat 9/2/19					
7 COMPLETION OF S	ECTION W8A	0 days		Thu 9/5/19	Thu 9/5/19	5 days	0%	476	Thu 9/5/19	-				9/5
SECTION W8B		1267 days	-	Thu 30/6/16	Wed 18/12/19	0 days	0%		Thu 30/6/16					
STARTING DATE O	CONTRACT	0 days	+	Thu 30/6/16	Thu 30/6/16	1147 days	0%	288	Thu 30/6/16	30/6				
LANDSCAPING SOI		120 days	10 days	Wed 21/8/19	Wed 18/12/19	0 days	0%	479,303	Wed 21/8/19					
COMPLETION OF S		0 days		Wed 18/12/19	Wed 18/12/19	0 days	0%	480	Wed 18/12/19					18/12
SECTION W8C		1048 days	-	Thu 30/6/16	Mon 13/5/19	0 days	0%	-	Thu 30/6/16					
STARTING DATE O	CONTRACT	0 days	1	Thu 30/6/16	Thu 30/6/16	958 days	0%	2SS	Thu 30/6/16	30/6				
LANDSCAPING SOI			7 dovo	Wed 13/2/19	Mon 13/5/19	0 days	0%		Wed 13/2/19	- DO 0010			1	
COMPLETION OF S		90 days	uays				0%	329,483 484	Mon 13/5/19					13/5
	LOTION WOO	0 days	ļ	Mon 13/5/19	Mon 13/5/19	0 days	0%	104						713/15
SECTION W8D	CONTRACT	590 days	-	Thu 30/6/16	Fri 9/2/18	5 days	0%	000	Thu 30/6/16					
STARTING DATE O		0 days		Thu 30/6/16	Thu 30/6/16	565 days	0%	288	Thu 30/6/16	▶ ♦ 30/6				
LANDSCAPING SOI		30 days	3 days	Thu 11/1/18	Fri 9/2/18	5 days	0%	344,487	Thu 11/1/18					
COMPLETION OF S	ECTION W8D	0 days		Fri 9/2/18	Fri 9/2/18	5 days	0%	488	Fri 9/2/18			9/2		
SECTION W8E		1127 days		Thu 30/6/16	Wed 31/7/19	5 days	0%		Thu 30/6/16					
STARTING DATE O	3 3 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 days		Thu 30/6/16	Thu 30/6/16	1102 days	0%	255	Thu 30/6/16	→ 30/6	+			
LANDSCAPING SOI		30 days	3 days	Tue 2/7/19	Wed 31/7/19	5 days	0%	388,491	Tue 2/7/19					
COMPLETION OF S	ECTION W8E	0 days		Wed 31/7/19	Wed 31/7/19	5 days	0%	492	Wed 31/7/19					31/7
SECTION W8F		731 days		Thu 30/6/16	Sat 30/6/18	5 days	0%		Thu 30/6/16					
STARTING DATE OF	CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	706 days	0%	2SS	Thu 30/6/16	▶♦ 30/6	+			
LANDSCAPING SOF	TWORKS	30 days	3 days	Fri 1/6/18	Sat 30/6/18	5 days	0%	495,399	Fri 1/6/18					
COMPLETION OF SI	CTION W8F	0 days		Sat 30/6/18	Sat 30/6/18	5 days	0%	496	Sat 30/6/18			1 2	30/6	
SECTION W8G		820 days		Tue 7/3/17	Tue 4/6/19	5 days	0%		Tue 7/3/17					
INSTRUCTION TO E	KECISE	0 days		Tue 7/3/17	Tue 7/3/17	735 days	0%	37SS	Tue 7/3/17		▶ ♦ 7/3			
LANDSCAPING SOF	TWORKS	90 days	7 days	Thu 7/3/19	Tue 4/6/19	5 days	0%	425,499	Thu 7/3/19					
COMPLETION OF SE		0 days		Tue 4/6/19	Tue 4/6/19	5 days	0%	500	Tue 4/6/19				Santa Santa	4/6
SECTION W9A		1409 days		Thu 30/6/16	Fri 8/5/20	5 days	0%		Thu 30/6/16					
	Task	Summary		External Mileston	ne �	Inactive Sumr	mary [*I	— ♥ Man	ıal Summary Rollun —	Cir	nish-only	3	Progress	
		Project Summary		Inactive Task		Manual Task	maly V		ual Summary		itical	ALIANS I	_	₽.
	Milestone	External Tasks			ie 💠	Duration-only		Start			itical Split		Dodding	•
	Milestolle	External rasks	County State of the Land	mactive willestor	e ·	Duralion-only	1400000	Olail				111111111111111111111111111111111111111		

ID T	Task Name		Time Risk Allowance	Early Start	Early Finish	Float	% Complete	Predecessors	Start	2016 MAIMJJJAISIOIN	20	7	2018		2019	202	0
503	STARTING DATE OF CONTRACT	0 days	(days)	Thu 30/6/16	Thu 30/6/16	1049 days	0%	2SS	Thu 30/6/16	30/6	DISTRIVITATIVIST	JIAISIUINIUL	JIFINIANIJIJIAISI	OINIDISTRIMIAIN	JAISIOINI	DISTRIMINISTS	MAISIOINIDISTEIN
504	ESTABLISHMENT WORKS	365 days	30 days	Fri 10/5/19	Fri 8/5/20	5 days	0%	477,503	Fri 10/5/19								
505	COMPLETION OF SECTION W9A	0 days		Fri 8/5/20	Fri 8/5/20	5 days	0%	504	Fri 8/5/20							8/5	<i>i</i>
506	SECTION W9B	1632 days		Thu 30/6/16	Thu 17/12/20	0 days	0%		Thu 30/6/16	-		-					
507	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	1267 days	0%	288	Thu 30/6/16	♦♦ 30/6					1 2		
508	ESTABLISHMENT WORKS	365 days	30 days	Thu 19/12/19	Thu 17/12/20	0 days	0%	481,507,505FF+218	day: Thu 19/12/19							SERVICE STATE OF THE SERVICE S	
509	COMPLETION OF SECTION W9B	0 days		Thu 17/12/20	Thu 17/12/20	0 days	0%	508	Thu 17/12/20								17/1
510	SECTION W9C	1413 days		Thu 30/6/16	Tue 12/5/20	0 days	0%		Thu 30/6/16	Ç-							-
511	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	1048 days	0%	288	Thu 30/6/16	▶♦ 30/6							
512	ESTABLISHMENT WORKS	365 days	30 days	Tue 14/5/19	Tue 12/5/20	0 days	0%	485,511	Tue 14/5/19					1		- Company	
513	COMPLETION OF SECTION W9C	0 days		Tue 12/5/20	Tue 12/5/20	0 days	0%	512	Tue 12/5/20							12	<u>4</u> 5
514	SECTION W9D	955 days		Thu 30/6/16	Sat 9/2/19	5 days	0%		Thu 30/6/16	-	+						
515	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	595 days	0%	288	Thu 30/6/16	♦♦ 30/6				4 1			
516	ESTABLISHMENT WORKS	365 days	30 days	Sat 10/2/18	Sat 9/2/19	5 days	0%	489,515	Sat 10/2/18								
517	COMPLETION OF SECTION W9D	0 days		Sat 9/2/19	Sat 9/2/19	5 days	0%	516	Sat 9/2/19					9/2			
518	SECTION W9E	1492 days		Thu 30/6/16	Thu 30/7/20	5 days	0%		Thu 30/6/16	-							⇒
519	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	1132 days	0%	2SS	Thu 30/6/16	▶♦ 30/6					\rightarrow		
520	ESTABLISHMENT WORKS	365 days	30 days	Thu 1/8/19	Thu 30/7/20	5 days	0%	493,519	Thu 1/8/19								P 1
521	COMPLETION OF SECTION W9E	0 days		Thu 30/7/20	Thu 30/7/20	5 days	0%	520	Thu 30/7/20						1		30/7
522	SECTION W9F	1096 days		Thu 30/6/16	Sun 30/6/19	5 days	0%	1	Thu 30/6/16						-		
523	STARTING DATE OF CONTRACT	0 days		Thu 30/6/16	Thu 30/6/16	736 days	0%	288	Thu 30/6/16	30/6							
524	ESTABLISHMENT WORKS	365 days	30 days	Sun 1/7/18	Sun 30/6/19	5 days	0%	497,523	Sun 1/7/18						—		
525	COMPLETION OF SECTION W9F	0 days		Sun 30/6/19	Sun 30/6/19	5 days	0%	524	Sun 30/6/19						30/6	27 022 2020 2020	
526	SECTION W9G	1185 days		Tue 7/3/17	Wed 3/6/20	5 days	0%		Tue 7/3/17							-	
527	INSTRUCTION TO EXECISE	0 days		Tue 7/3/17	Tue 7/3/17	825 days	0%	37SS	Tue 7/3/17		7/3						
528	ESTABLISHMENT WORKS	365 days	30 days	Wed 5/6/19	Wed 3/6/20	5 days	0%	501,527	Wed 5/6/19								
529	COMPLETION OF SECTION W8A	0 days		Wed 3/6/20	Wed 3/6/20	5 days	0%	528	Wed 3/6/20					2.4		*	3/6

APPENDIX B ACTION AND LIMIT LEVELS FOR NOISE

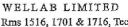
Appendix B - Action and Limit Levels

 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





Rms 1516, 1701 & 1716, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

Cinotech Consultants Limited APPLICANT:

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/N/160917C
Date of Issue:	2016-09-19
Date Received:	2016-09-17
Date Tested:	2016-09-17
Date Completed:	2016-09-19
Next Due Date:	2017-09-18
- m	

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. Serial No.

: SVAN 955 : 12563

Microphone No.

: 34377

Equipment No.

: N-08-03

Test conditions:

Room Temperatre

: 24 degree Celsius

Relative Humidity

: 57%

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.



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

Website: www.wellab.com.hk

TEST REPORT

Cinotech Consultants Limited APPLICANT:

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/N/161230 Date of Issue: 2017-01-03 Date Received: 2016-12-30 Date Tested: 2016-12-30 Date Completed: 2017-01-03 Next Due Date: 2018-01-02

ATTN:

Mr. W. K. Tang

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description

: 'SVANTEK' Integrating Sound Level Meter

Manufacturer Model No.

: SVANTEK : SVAN 955

Serial No.

: 14303

Microphone No. Equipment No.

: 35222 : N-08-05

Test conditions:

Room Temperatre

: 21 degree Celsius

Relative Humidity

: 62 %

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	

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



WELLAB LIMITED

Rms 816, 1516 & 1701, Technology Park, 18 On Lai Street, Shatin, N.T, Hong Kong. Tel: 2898 7388 Fax: 2898 7076

Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/N/160826A
Date of Issue:	2016-08-29
Date Received:	2016-08-26
Date Tested:	2016-08-26
Date Completed:	2016-08-29
Next Due Date:	2017-08-28

ATTN:

Mr. W.K. Tang

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description

: 'SVANTEK' Integrating Sound Level Meter

Manufacturer Model No.

: SVANTEK : SVAN 957

Serial No.

: 21455

Microphone No. Equipment No.

: 43730 : N-08-07

Test conditions:

Room Temperatre

: 25 degree Celsius

Relative Humidity

: 57%

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

Lubbi aibi y Munager



WELLAB LIMITED

Rms 1516, 1701 & 1716, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076

Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

-		
Test Report No.:	C/N/160919	
Date of Issue:	2016-09-21	
Date Received:	2016-09-19	
Date Tested:	2016-09-19	
Date Completed:	2016-09-21	
Next Due Date:	2017-09-20	
· V _{ictor}		

ATTN:

Mr. W.K. Tang

Page:

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Certificate of Calibration

Item for calibration:

Description

: 'SVANTEK' Integrating Sound Level Meter

Manufacturer · Model No.

: SVANTEK : SVAN 977

Serial No.

: 45482

Microphone No. Equipment No.

: 63626 : N-08-14

Test conditions:

Room Temperatre

: 22 degree Celsius

Relative Humidity

: 56%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

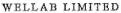
Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

FATRICK TSELaboratory Manager





Rms 1516, 1701 & 1716, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/N/160930A
Date of Issue:	2016-10-03
Date Received:	2016-09-30
Date Tested:	2016-09-30
Date Completed:	2016-10-03
Next Due Date:	2017-10-02

ATTN:

Mr. W.K. Tang

Page:

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Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: SVANTEK

Model No. Serial No. : SV30A : 24803

Equipment No.

: N-09-03

Test conditions:

Room Temperatre

: 25 degree Celsius

Relative Humidity

: 60%

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



WELLAB LIMITED

Rms 1516, 1701 & 1716, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT:

Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/N/160930B
Date of Issue:	2016-10-03
Date Received:	2016-09-30
Date Tested:	2016-09-30
Date Completed:	2016-10-03
Next Due Date:	2017-10-02

ATTN:

Mr. W.K. Tang

Page:

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Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: SVANTEK

Model No.

: SV30A

Serial No.

: 24791

Equipment No.

: N-09-04

Test conditions:

Room Temperatre

: 25 degree Celsius

Relative Humidity

: 60%

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.

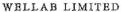
Results:

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





Rms 1516, 1701 & 1716, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT:

Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/N/160930C
Date of Issue:	2016-10-03
Date Received:	2016-09-30
Date Tested:	2016-09-30
Date Completed:	2016-10-03
Next Due Date:	2017-10-02

ATTN:

Mr. W.K. Tang

Page:

1 of 1

Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: SVANTEK

Model No.

: SV30A

Serial No.

: 24780

Equipment No.

: N-09-05

Test conditions:

Room Temperatre

: 25 degree Celsius

Relative Humidity

: 60%

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	$94.0 \pm 0.1 \text{ dB}$
At 114 dB SPL	114.0	$114.0 \pm 0.1 \mathrm{dB}$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

APPENDIX D ENVIRONMENTAL MONITORING SCHEDULES

Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works - Design and Construction Impact Noise Monitoring Schedule (June 2017)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Jun	2-Jun	3-Jun
					Noise	
4-Jun	5-Jun	6-Jun	7-Jun	8-Jun	9-Jun	10-Jun
				Noise		
11 7	12.1	12.1	14.1	15 T	16.1	17.1
11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun	17-Jun
			Noise			
18-Jun	19-Jun	20-Jun	21-Jun	22-Jun	23-Jun	24-Jun
10 gun	17 0411	20 0 411	21 0 0.11	22 (411	25 (411	210411
		Noise				
25-Jun	26-Jun	27-Jun	28-Jun	29-Jun	30-Jun	
					Noise	
					NOISE	

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

Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works - Design and Construction Tentative Impact Noise Monitoring Schedule (July 2017)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Jul
2-Jul	3-Jul	4-Jul	5-Jul	6-Jul	7-Jul	8-Jul
		Noise				
9-Jul	10-Jul	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul
			Noise			
16 7 1	17.1.1	10.7.1	10.1.1	20.1.1	21.1.1	22.1.1
16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul
		Noise				
23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul
25-Jui	24-341	25-Jul	20-341	27-341	20-341	2)-Jui
	Noise					
30-Jul	31-Jul					
	, , , , ,					

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									
					Unit:	dB (A) (30-min)			
Date	Time	Weather	Mea	sured Noise I	₋evel	Baseline Level	Construction Noise Level		
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}		
2-Jun-17	9:00	Sunny	61.6	63.6	55.5		61.6 Measured ≦ Baseline		
8-Jun-17	9:10	Sunny	63.6	65.9	58.8		58.0		
14-Jun-17	9:15	Cloudy	62.0	63.6	57.2	62.2	62.0 Measured ≦ Baseline		
20-Jun-17	9:00	Cloudy	60.9	63.3	57.2		60.9 Measured ≦ Baseline		
30-Jun-17	9:00	Sunny	61.9	64.3	60.2		61.9 Measured ≦ Baseline		

ocation N2 - Bethel High School								
					Unit:	dB (A) (30-min)		
Date	Time	Time Weather		Measured Noise Level			Construction Noise Level	
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}	
2-Jun-17	9:45	Sunny	61.3	63.6	52.2		60.1	
8-Jun-17	10:10	Sunny	60.3	62.1	56.9		58.7	
14-Jun-17	10:05	Cloudy	59.2	62.5	57.1	55.2	57.0	
20-Jun-17	9:45	Cloudy	58.6	60.4	55.4		55.9	
30-Jun-17	9:15	Sunny	59.2	60.4	52.3		57.0	

Location N3 - N	ocation N3 - No.159 Mai Po San Tsuen									
					Unit:	dB (A) (30-min)				
Date	Time Weather		Mea	Measured Noise Level			Construction Noise Level			
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}			
2-Jun-17	10:30	Sunny	73.2	74.2	65.0		71.2			
8-Jun-17	13:45	Sunny	72.9	74.3	69.6		70.8			
14-Jun-17	10:50	Cloudy	71.7	73.2	68.9	68.8	68.6			
20-Jun-17	10:30	Cloudy	72.4	74.4	68.7		69.9			
30-Jun-17	10:00	Sunny	72.4	74.9	66.8		69.9			

Location N5 - Block 2, Dills Corner Garden									
					Unit:	dB (A) (30-min)			
Date	Time Weather		Measured Noise Level			Baseline Level	Construction Noise Level		
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}		
2-Jun-17	15:00	Sunny	74.1	75.8	70.1		71.4		
8-Jun-17	14:40	Sunny	74.2	76.2	70.3		71.6		
14-Jun-17	13:10	Cloudy	73.6	75.8	69.9	70.7	70.5		
20-Jun-17	13:00	Cloudy	74.5	76.8	72.1		72.2		
30-Jun-17	11:00	Sunny	74.4	79.3	74.8		72.0		

Location N6 - Home of Loving Faithfulness									
					Unit:	dB (A) (30-min)			
Date	Time	Weather	Meas	sured Noise L	₋evel	Baseline Level	Construction Noise Level		
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}		
2-Jun-17	15:45	Sunny	71.2	72.9	68.0		71.2 Measured ≦ Baseline		
8-Jun-17	15:30	Sunny	71.5	73.8	69.4		71.5 Measured ≦ Baseline		
14-Jun-17	14:00	Cloudy	71.7	73.2	69.2	72.0	71.7 Measured ≦ Baseline		
20-Jun-17	13:45	Cloudy	73.9	75.2	70.1		69.4		
30-Jun-17	11:30	Sunny	71.8	73.9	68.0		71.8 Measured ≦ Baseline		

Location N7 - V	Location N7 - Village House in Shek Wui Wai									
					Unit:	dB (A) (30-min)				
Date	Time	Time Weather		Measured Noise Level			Construction Noise Level			
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}			
2-Jun-17	11:15	Sunny	74.3	75.2	66.8		71.8			
8-Jun-17	13:00	Sunny	74.1	77.2	70.5		71.4			
14-Jun-17	11:30	Cloudy	73.2	75.4	70.0	70.7	69.6			
20-Jun-17	11:15	Cloudy	74.3	75.2	67.0		71.8			
30-Jun-17	10:15	Sunny	73.4	74.0	69.1		70.1			

MA16036/App E - Noise Cinotech

Noise Levels - N1 N1 - HKMLC Wong Chan Sook Ying Memorial School Limit Level, 70.0 dB(A), Examination Periods, 65.0 dB(A) Construction Noise Level dB(A) 80 75 70 65 60 55 50 45 40 35 30 Date - Baseline NL, 68.1 dB(A) N2 - Bethel High School Limit Level, 70.0 dB(A), Examination Periods, 65.0 dB(A) Construction Noise Level dB(A) 80 75 70 65 60 55 50 45 40 35 30 Date - Baseline NL, 68.8 dB(A) N3 - No.159 Mai Po San Tsuen Limit Level, 75.0 dB(A) Construction Noise Level dB(A) 80 75 70 65 60 55 50 45 40 35 30 Title Agreement No. CE 67/2015 (HY) Scale Project Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works -No. MA16036 N.T.S Design and Construction

Date

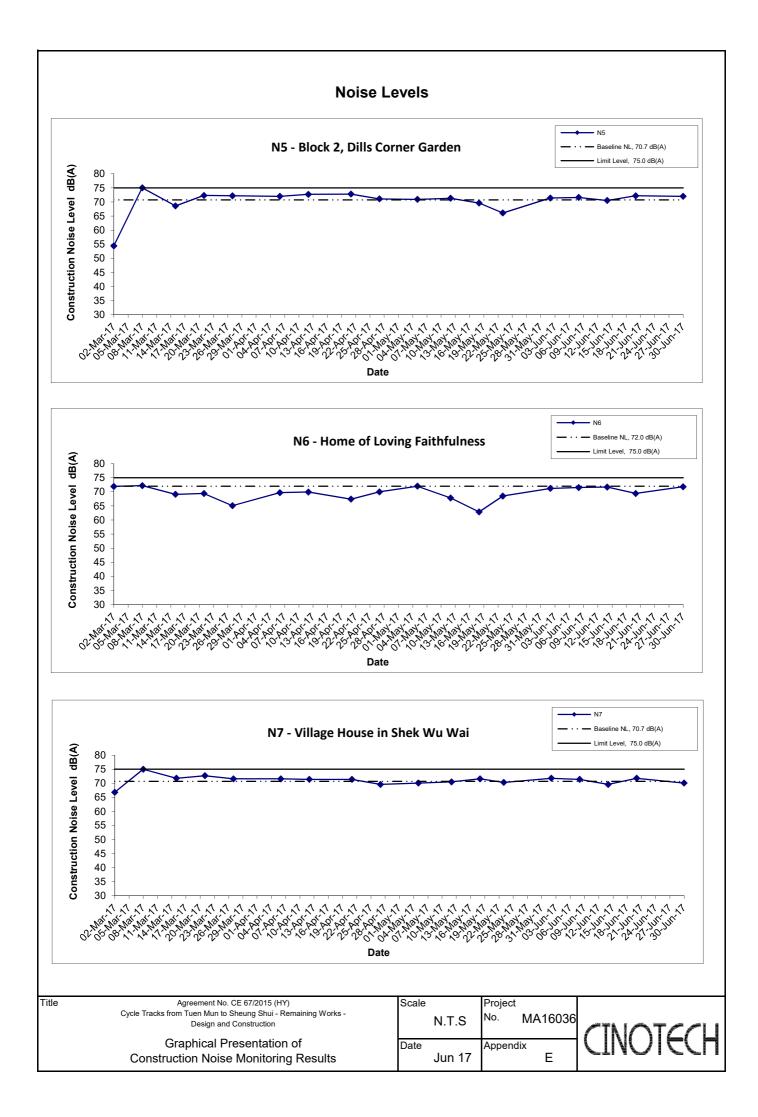
Jun 17

Appendix

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Graphical Presentation of

Construction Noise Monitoring Results



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

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	170607	
Date	7 June 2017 (Wednesday)	
Time	09:30-11:30	

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
170607-F01 170607-F07	 Ponding water observed at Portion A and C should be cleared. Sandbag bund should be enhanced in Portion E to prevent silty runoff entering public roads. 	B 8 B 11i
170607-F05	Wheel washing bays in Portion C, I and K should be maintained more frequently.	B 10iii & iv
170607-F04	 C. Air Quality Stockpiles in Portion A and Works Area 3 should be properly covered by impervious materials to prevent dust generation. 	C 7
	D. Construction Noise Impact No environmental deficiency was identified during site inspection.	
170607-F03	E. Waste / Chemical Management • General refuse in Portion A, C, I and K should be disposed of properly to avoid accumulation. Receptacles should be provided for waste collection in Portion C and I.	E li
170607-F06	Drip trays should be provided for chemical containers in Portion I and K to prevent leakage.	E 8
	F. Ecology and Fisheries No environmental deficiency was identified during site inspection.	
	G. Landscape & Visual	
170607-F02	• Non-intrusion zones should be set up with fencing to protect existing trees at Portion A and Works Area 3.	G2
	 H. Permits/Licences No environmental deficiency was identified during site inspection. 	
	I. Others No environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Kelvin Koo		7 June 2017
Checked by	Dr. Priscilla Choy	WZ	7 June 2017

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	170614
Date	14 June 2017 (Wednesday)
Time	09:30-11:30

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
170614-O01	• Direct discharge of untreated wastewater was found at Portions C and I. The Contractor should provide appropriate and adequate treatment to wastewater prior to discharge.	В3
170614-F02 170614-F08	 Ponding water observed at Portion A and C should be cleared. Sandbag bund should be enhanced in Portion E to prevent silty runoff entering public roads. 	В 8 В 11i
170614-F08	Wheel washing bays in Portion A and C should be maintained more frequently.	B 10iii &
170614-F05	C. Air Quality Stockpiles in Portion A and Works Area 3 should be properly covered by impervious materials to prevent dust generation.	C 7
	D. Construction Noise Impact No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	_
170614-F04	• General refuse in Portion A, C, I and K should be disposed of properly to avoid	E 1i
170614-F07	 accumulation. Receptacles should be provided for waste collection in Portion C and I. Drip trays should be provided for chemical containers in Portion I to prevent leakage. 	E 8
	F. Ecology and Fisheries • No environmental deficiency was identified during site inspection.	
	G. Landscape & Visual	
170614-F03	• Non-intrusion zones should be set up with fencing to protect existing trees at Portion A and Works Area 3.	G2
	H. Permits/Licences • No environmental deficiency was identified during site inspection.	
	I. Others No environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Kelvin Koo	4	14 June 2017
Checked by	Dr. Priscilla Choy	WI	14 June 2017

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	170620	
Date	20 June 2017 (Tuesday)	60° (A 100°) A 100°
Time	09:30-12:00	

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

Ref. No.	Remarks/Observations	
	B. Water Quality	Item No.
170620-O04	Direct discharge of wastewater was observed in Portion I. The Contractor was reminded	В3
4=0.400 =0.4	to provide adequate water treatment to wastewater before discharge.	
170620-F06 170620-F10	 Ponding water observed at Portion A and C should be cleared. Sandbag bund should be enhanced in Portion E to prevent silty runoff entering public 	B 8 B 11i
170020-110	roads.	DIII
170620-F09	Wheel washing bays in Portion A and C should be maintained more frequently.	B 10iii & iv
170620-F08	 C. Air Quality Stockpiles in Portion A and Works Area 3 should be properly covered by impervious materials to prevent dust generation. 	C 7
The sale	D. Construction Noise Impact No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
170620-O01	General refuse found in Portion K should be properly cleared. Housekeeping in Portion K should be enhanced.	E li & lii
170620-O03 170620-O02	 Drip trays should be provided for chemical containers in Portion K to prevent leakage. Rubbish bins in Portion K should be maintained more frequently. 	E8 Eli
	 F. Ecology and Fisheries No environmental deficiency was identified during site inspection. 	
170620-O05	G. Landscape & Visual	0.0
170620-003	 Fencing of tree protection zones should be established in Portion I to prevent damages to all retained trees. 	G 2
170620-F07	 Non-intrusion zones should be set up with fencing to protect existing trees at Portion A and Works Area 3. 	G 2
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	No environmental deficiency was identified during site inspection.	8

	Name	Signature	Date
Recorded by	Kelvin Koo		20 June 2017
Checked by	Dr. Priscilla Choy	12 1/2	20 June 2017

1

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	170628
Date	28 June 2017 (Wednesday)
Time	09:30-12:00

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

Ref. No.	Remarks/Observations	Related Item No.
170628-F04	B. Water Quality Wheel washing bays in Portion A and C should be maintained more frequently.	B 10iii & iv
170628-F03	 C. Air Quality Stockpiles in Portion A should be properly covered by impervious materials to prevent dust generation. 	C 7
	D. Construction Noise Impact No environmental deficiency was identified during site inspection.	
170628-O01	E. Waste / Chemical Management Drip trays should be provided for chemical containers in Portion C to prevent leakage.	E li & lii
170628-O02	General refuse found at Portion C should be properly cleared.	E li
	 F. Ecology and Fisheries No environmental deficiency was identified during site inspection. 	
	G. Landscape & Visual	
	No environmental deficiency was identified during site inspection.	
	 H. Permits/Licences No environmental deficiency was identified during site inspection. 	
	I. Others No environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Kelvin Koo		28 June 2017
Checked by	Dr. Priscilla Choy	wh	28 June 2017

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	1. Notify IC(E) and Contractor;	1. Review the analysed results	1. Confirm receipt of	1. Submit noise mitigation	
being	2. Carry out investigation;	submitted by the ET;	notification of failure in	proposals to IC(E);	
exceeded	3. Report the results of investigation to	2. Review the proposed remedial	writing;	2. Implement noise mitigation	
	the IC(E) and Contractor;	measures by the Contractor and	2. Notify Contractor;	proposals.	
	4. Discuss with the Contractor and	advise the ER accordingly;	3. Require Contractor to		
	formulate remedial measures;	3. Supervise the implementation	propose remedial measures		
	5. Increase monitoring frequency to	of remedial measures.	for the analysed noise		
	check mitigation effectiveness.		problem;		
			4. Ensure remedial measures		
			are properly implemented.		
Limit Level	1. Notify IC(E), ER, EPD and	1. Discuss amongst ER, ET, and	1. Confirm receipt of	1. Take immediate action to	
being	Contractor;	Contractor on the potential	notification of failure in	avoid further exceedance;	
exceeded	2. Identify source;	remedial actions;	writing;	2. Submit proposals for remedial	
	3. Repeat measurement to confirm	2. Review Contractor's remedial	2. Notify Contractor;	actions to IC(E) within 3 working	
	findings	actions whenever necessary to	3. Require Contractor to	days of notification;	
	4. Increase monitoring frequency;	assure their effectiveness and	propose remedial measures	3. Implement the agreed	
	5. Carry out analysis of Contractor's	advise the ER accordingly.	for the analysed noise	proposals;	
	working procedures to determine	3. Supervise the implementation	problem;	4. Resubmit proposal if problem	
	possible mitigation to be implemented;	of remedial measures	4. Ensure remedial measures	still not under control;	
	6. Inform IC(E), ER and EPD the		are properly implemented;	5. Stop the relevant portion of	
	causes & actions taken for the		5. If exceedance continues,	works as determined by the ER	
	exceedances;		consider what portion of the	until the exceedance is abated.	

Appendix H - Event and Action Plans

7. Assess effectiveness of		work is responsible and	
Contractor's remedial actions ar	nd	instruct the Contractor to stop	
keep IC(E), EPD and ER inform	ed of	that portion of the work until	
the results;		the exceedance is abated.	
8. If exceedance stops, cease			
additional monitoring			

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		<u> </u>
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:	۸
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	۸
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	۸
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	۸
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	۸
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	۸
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 	*

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
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 	^
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 CH-MP5+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).	^

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	S.4.2.19	Noise barrier in the form of site hoarding shall be used for the following PMEs	^
Table 5-8		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	
		- crane mounted auger	

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		- 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 PMEs where practicable:	N/A(1)
		- air compressor	
		- hand-held breaker	
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	
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	٨
S.5.6.8	S.4.2.19	Material stockpiles and other structures should be effectively utilised as noise	N/A
		barriers, where practicable	

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
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	^
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	٨
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	۸
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	٨
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	٨
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);	٨
S.6.6.1	S.5.2.4	Where applicable, final earthworks surfaces/ slopes will be well compacted and	N/A

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		hydro-seeded following completion to prevent erosion	
S.6.6.1	S.5.2.4	During construction works, chemical toilets will be provided for the use of site staff.	٨
		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	٨
		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	٨
		paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from	
0.664	0.504	entering public road drains	
S.6.6.1	S.5.2.4	The project may occasionally involve the handling of fuel and generates chemical	٨
		wastes. It must be ensured that all fuel tanks and chemical storage are sited on sealed	
0.6.6.1	0.504	areas and provided with locks	٨
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	
0 ((1	0.504	chemicals from reaching the receiving waters	DT/A
S.6.6.1	S.5.2.4	Oil and grease removal facilities will be provided where appropriate, for example, in	N/A
S.6.6.1	2524	area near plant workshop/ maintenance areas Chamical wests origins from the site should be properly stored, handled, treated and	Λ
3.0.0.1	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	
		(Chemical Waste) (General) Regulation	

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
-	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.	^
Construction	Waste Managem	ent	
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	٨

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		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	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	 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 	۸
S.7.4.1	S.6.2.6	 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) 	٨
S.7.4.1	S.6.2.6	• 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	٨
S.7.4.1	S.6.2.6	• 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".	٨

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.7.4.1	S.6.2.6	• 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;	*
S.7.4.1	S.6.2.6	• 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	• 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	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	• 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.	۸
Land Contam	ination		
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.	^

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		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:	N/A
		■ 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.	
S.8.7.5	S.7.3.1	Management of Contaminated Soils	N/A
		■ 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 where appropriate in order to avoid any leachate from migrating out of the area;	
		 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	

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		contaminated water requiring disposal and suspended solids in the wastewater stream	1
Ecological & 1	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)	In situ 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.	٨
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.	٨
-	S.8.2.5 (Stage 1 only)	In order to avoid any adverse impact to the healthiness of the bamboo groove 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
-	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	٨

EIA Ref.	EM&A Ref.	Mitigation Measures	Status	
		be implemented practicable to minimize the noise disturbance to the foraging ardeids.		
S.10.5.4	S.8.2.7	To prevent any negative impact to water quality as a result of site run-off, good site	٨	
	(Stage 1)	practice must be employed at all times, particularly in the areas close to fishponds.		
	S.8.2.5	Practice Note for Professional Persons ProPECC PN1/94 – Construction Site		
	(Stage 2)	Drainage shall be implemented.		
S.10.5.4	S.8.2.8	Along Pok Wai South Road, once the final construction sequencing is known, liaison	N/A	
	(Stage 1)	with local residents and aquaculturists should be implemented in order to minimise		
	S.8.2.6	temporary road blockages and to identify the best timing for works along this area.		
	(Stage 2)			
S.10.5.3	S.8.2.9	During wet seasons, surface run-off from the construction sites will need to be	٨	
	(Stage 1)	directed into storm drains via adequately designed wastewater treatment facilities		
	S.8.2.7	such as sand traps, silt traps, oil interceptors and sediment settling basins. Works		
	(Stage 2)	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	The use of signage at the Resting Stations to indicate that wildlife may be present	N/A	
	(Stage 1 only)	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.		
S.9.11.27	S.8.2.11	The following good work practices are recommended:	٨	
	(Stage 1)	■ Avoid soil storage against trees;		
	S.8.2.9	■ Fence off any potentially ecologically sensitive areas;		
	(Stage 2)	■ Delineation of works area to prevent encroachment onto adjacent habitats;		
		■ Reinstatement of habitat after works;		
		■ No on-site burning of waste;		

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		 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 	
Cultural Heri	tage Impact	The state of the s	
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 an	d Visual		
Detailed Desig	gn Phase		
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	٨

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		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	
		Survey Report and approval from relevant departments at that stage	
Construction I			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.	٨
	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.	۸
	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
	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	٨

EIA Ref.	EM&A Ref.	Mitigation Measures						
		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	N/A					
		government departments for approval under the lease conditions and in accordance						
		with ETWB TCW No. 2/2004 and WB Technical Circular No. 14/2002.						
	CP2.0	The tree preservation works should be implemented by approved Landscape	٨					
		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	٨					
		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	٨					
		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	٨					
		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	N/A					
		restored following the completion of the construction phase.	_					
	CP3.2	Construction site controls should be enforced including the storage of materials, the	٨					
		location and appearance of site accommodation and the careful design of site lighting						
	GD2.2	to prevent light spillage.						
	CP3.3	Screen the works area during the construction phase through the use of decorative	٨					
	GD / /	hoarding along the site boundary facing adjacent VSRs						
	CP4.1	Replanting of disturbed vegetation should be undertaken at the earliest possible stage	٨					
	GD 4.2	of the construction phase						
	CP4.2	Use of native plant species predominantly in the planting design for the buffer areas.	٨					
	CP4.3	The tree planting works should be implemented by approved Landscape Contractors	^					

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		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.	۸
	CP5.2	The implementation program should reserve enough time for advance tree transplanting preparation.	۸

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.

APPENDIX J SUMMARIES 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

 $\label{eq:linear_summary} \textbf{Appendix} \ \textbf{J} - \textbf{Summary} \ \textbf{of} \ \textbf{environmental} \ \textbf{complaint}, \ \textbf{warning}, \ \textbf{summon} \ \textbf{and} \ \textbf{notification} \ \textbf{of} \ \textbf{successful} \ \textbf{prosecution}$

Reporting Month: June 2017

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
N/A	N/A	N/A	N/A	N/A	N/A

Remarks: No environmental complaint/warning/summon and prosecution were received in the reporting period.

APPENDIX K SUMMARY OF WASTE GENERATION AND DISPOSAL RECORDS Name of Department: CEDD Contract No.: YL/2015/01

Monthly Summary Waste Flow Table for 2017 (Year)

	Tronging Summary Wasterlaw Tuble for (Teal)											
	Α	Actual Quantities	of Inert C&D	Materials Gene	Materials Generated Monthly			Actual Quantities of C&D Wastes Generated Monthly				
Month	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	-	1	-	0.04	0.124	0.05	0.05	0.05	-	0.06	
Feb	0.02	-	ı	-	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	
Sub-total	4.28	-	-	-	4.28	0.493	0.3	0.3	0.3	-	0.14	
July	_	-	-	-	-	-	-	-	-	-	-	
Aug	-	-	-	-	-	-	-	-	-	-	-	
Sept	-	-	-	-	-	-	-	-	-	-	-	
Oct	-	-	-	-	-	-	-	-	-	-	-	
Nov	-	-	-	-	-	-	-	-	-	-	-	
Dec	-	-	-	-	-	-	-	-	-	-	-	
Total	4.28	-	-	-	4.28	0.493	0.3	0.3	0.3	-	0.14	

^{*}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	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].