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)

October 2019

Approved By

Mr. KS Lee Environmental Team Leader

REMARKS:

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

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

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EXECUTIVE SUMMARY

Introduction

- 1. This is the 36th 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 October 2019.
- 2. During the reporting month, the major site activities undertaken in the reporting month included:

Portion A	- Installation of Traffic Aids			
Portion B	- Construction of Subway A, Internal Finishing & E&M Works			
Portion C	- Installation of Bicycle Parapet, CCTV for Drainage Pipe, Construction of			
	Staircase			
Portion D	- Construction of Drainage Pipe, Construction of RW16A			
Portion E	- Construction of Drainage Pipe, Laying Road Kerb, Paving Block			
Portion F	- Construction of Drainage Pipe, Construction of Boundary Wall, Relocation			
	of Existing Bus Stop, Construction of Resting Station R8			
Portion G	- Remaining Works for Box Culvert C, Relocation of Traffic Sign Gantry			
Portion H	- Construction of RW49, DW1 & DW2 Construction of Drainage Pipe			
Portion I	- Construction of U-channel in Subway D, Internal Finishing, Reinstatement			
	of Carriageway			
Portion J	- Construction of 24A, 24AA, 24C,48, Backfilling for RW 46, Construction			
	of Drainage Pipe, Construction of Road Kerb			
Portion K	- Installation of Traffic Aids			
Portion M	- Backfilling behind RW 30A, 30B, Construction of Road Kerb,			
	Construction of Bridge E's Roofing, Dismantle of Existing Roof			
Portion N	- Construction of Bridge B			

Environmental Monitoring Works

3. Environmental monitoring for the Project shall be performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Site Inspections/Audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.

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

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

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

Key Information in the Reporting Month

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

Table II Summary Table for Key Information in the Reporting Month

	Event I		the Reporting World		
Event	Number	Nature	Action Taken	Status	Remark
Complaint received	0		N/A	N/A	
Reporting Changes	0		N/A	N/A	
Notifications of any summons & prosecutions received	0		N/A	N/A	

No complaint was received in this reporting month.

Environmental License and Permits

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

Future Key Issues

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

1 INTRODUCTION

Background

- 1.1 "Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River" (the EIA Report) is a Schedule 2 Designated Project (DP) under Environmental Impact Assessment Ordinance (EIAO). The Environmental Impact Assessment (EIA) Report (Registered No.: AEIAR-133/2009) and the associated Environmental Monitoring and Audit (EM&A) Manual was approved on 12 March 2009.
- 1.2 Civil Engineering and Development Department (CEDD) implemented the DP in two stages, i.e. Stage 1 and Stage 2. An Environmental Permit (EP) No. EP-450/2013 has been granted for Stage 1 works on 30 May 2013. Pursuant to Section 13 of the EIAO, the Director of Environmental Protection amends the Environmental Permit (No. EP-450/2013) based on the Application No. VEP-478/2015 and the EP (Permit No. EP-450/2013/A) was issued on 25 August 2015 to CEDD as the Permit Holder.
- 1.3 An Environmental Review (ER) Report of the "Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River Stage 2" had been prepared in July 2015 and the Environmental Monitoring and Audit Manual (EM&A Manual) was also included as part of the ER report in the application (Application No.: AEP-501-2015). An Environmental Permit No. EP-501/2015 was issued on 2 September 2015 for Stage 2 works to CEDD as the Permit Holder.
- 1.4 "Agreement No. CE 67/2015 (HY) Cycle Tracks from Tuen Mun to Sheung Shui Remaining Works Design and Construction" (hereinafter called the "Project") covers the Stage 1 (Part) and Stage 2 works of the DP. This Project was commissioned to Sang Hing Kuly Joint Venture (hereinafter called the "Contractor") for "Contract No.: YL/2015/01 Cycle Tracks from Tuen Mun to Sheung Shui Remaining Works". The site location and work programme are shown in **Figure 1a-1h** and **Appendix A** respectively.
- 1.5 Cinotech Consultants Ltd. was designated as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) works for the Project. The construction commencement of the Project was on 23rd November 2016. This is the 36th Monthly EM&A Report summarizing the EM&A works for the Project during October 2019.

Project Organizations

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

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

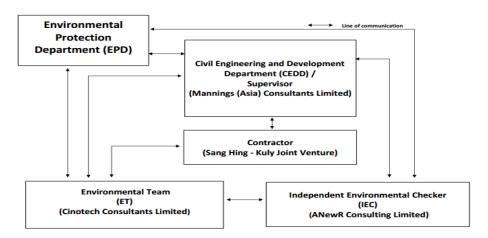


Figure 3 Organization Structure (Environmental Aspects)

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

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Phone No.	Fax No.
CEDD Project Proponent		Mr. Chu Wai Lun, Thomas	2417 6370	2412 0358
Mannings	Supervisor Representative	Mr. Simon Ng	3168 2028	3168 2022
Cinatash	· . 1 F · 1 T	Mr. KS Lee	2151 2091	2107.1200
Cinotech	Environmental Team	Ms. Betty Choi	2151 2072	3107 1388
ANewR	Independent Environmental Checker	Mr. Adi Lee	2618 2836	3007 8648
SKJV	Contractor	Mr. Ma Kin Man	9552 1734	2890 8205

Construction Activities undertaken during the Reporting Month

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

Portion A Portion B	Installation of Traffic AidsConstruction of Subway A, Internal Finishing & E&M Works
	• •
Portion C	- Installation of Bicycle Parapet, CCTV for Drainage Pipe, Construction of Staircase
Portion D	- Construction of Drainage Pipe, Construction of RW16A
Portion E	- Construction of Drainage Pipe, Laying Road Kerb, Paving Block
Portion F	- Construction of Drainage Pipe, Construction of Boundary Wall,
	Relocation of Existing Bus Stop, Construction of Resting Station R8
Portion G	- Remaining Works for Box Culvert C, Relocation of Traffic Sign Gantry

Portion H Portion I	 Construction of RW49, DW1 & DW2 Construction of Drainage Pipe Construction of U-channel in Subway D, Internal Finishing,
1 Official 1	Reinstatement of Carriageway
Portion J	- Construction of 24A, 24AA, 24C,48, Backfilling for RW 46,
D IZ	Construction of Drainage Pipe, Construction of Road Kerb
Portion K	- Installation of Traffic Aids
Portion M	- Backfilling behind RW 30A, 30B, Construction of Road Kerb,
	Construction of Bridge E's Roofing, Dismantle of Existing Roof
Portion N	- Construction of Bridge B

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

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

Construction Works	Major Environmental Impact	Control Measures
As mentioned in Section 1.9	Noise, dust impact, water quality and waste generation	 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 October 2019.

2 AIR QUALITY

Monitoring Requirements

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

3 WATER QUALITY

Monitoring Requirements

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

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4 NOISE

Monitoring Requirements

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

Monitoring Locations

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

Table 4.1 Noise Monitoring Stations

Table 4.1 Proise Womtoring 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

Equipment	Model No.	Qty.
Integrating Sound Level Meter/ Sound & Vibration Analyser	SVAN957, SVAN979	3
Acoustic Calibrator	SV30A	1

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

Monitoring Methodology and QA/QC Procedures

- 4.7 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 re-calibration or repair of the equipment.
- At the end of the monitoring period, the L_{eq} , L_{90} and L_{10} 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 4.5**.
- 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:

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

Monitoring Stations	Locations	Other Noise Source(s)
N1	HKMLC Wong Chan Sook Ying	Road traffic noise
INI	Memorial School	Noise from daily school activities
N2	Dathal High Sahaal	Road traffic noise
11/2	Bethel High School	Noise from daily school activities
N3	No. 159 Mai Po San Tsuen	Road traffic noise
N5	Block 2, Dills Corner Garden	Road traffic noise
		Road traffic noise
N6	Home of Loving Faithfulness	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

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

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

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

5 COMPARISON OF EM&A RESULTS WITH EIA PREDICTIONS

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

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

Stations	Predicted Mitigated Construction Noise Levels in EIA (2009), dB(A)	Predicted Mitigated Worst Case Construction Noise Levels in ERR for Stage 2 (2015), dB(A)	Reporting Month (October 19), Leq (30min) dB(A)
N1 - HKMLC Wong Chan Sook Ying Memorial School	55-62	62 ⁽¹⁾	57.4 - 61.5
N2 – Bethel High School	57-64	64 ⁽¹⁾	49.3 - 57.5
N3 – No. 159 Mai Po San Tsuen	70-73	74 ⁽²⁾	65.6 - 70.1
N5 – Block 2, Dills Corner Garden	73-75	75 ⁽²⁾	66.5 - 71.6
N6 – Home of Loving Faithfulness	64-73	74 ⁽¹⁾	62.9 - 72
N7 – Village House in Shek Wu Wai	N/A ⁽³⁾	70 ⁽²⁾	59.2 - 70.1

Remark:

- (1) With adoptions of quiet PMEs, temporary noise barrier and enclosure
- (2) With sub-grouping of construction activities
- (3) No construction noise level was predicted in EIA Report (2009)
- 5.2 When comparing the noise monitoring results to the predicted mitigated construction noise levels in the EIA Report, the results at N1 was within the range of the predicted mitigated construction noise levels in the EIA Report. The results at N2, N3 and N6 were slightly lower than the range of the predicted mitigated construction noise levels, while the results at N5 was 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, while the results at N7 was slightly higher than the predicted mitigated worst case construction noise levels in the ERR for Stage 2 Works.

ECOLOGY AND FISHERIES 6

- 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

- In accordance with the EM&A Manuals for Stage 1 and Stage 2 works in Year 2015, regular 7.1 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. summaries of site audits are attached in **Appendix G**.
- Site audits were conducted on 3, 9, 17, 23 and 30 October 2019 in the reporting month. IEC joint site inspection was conducted on 17 October 2019. No non-compliance was observed during the site audit.

Review of Environmental Monitoring Procedures

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

Noise Monitoring

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

Statues of Environmental Licensing and Permitting

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

Table 8.1 Summary of Environmental Licensing and Permit Status

Volid Po		Period Pe		Gt t
Permit No.	From To		Details	Status
Environmental Permit (EP)				
EP-450/2013/A	25/08/2015	N/A	Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River – Stage 1	Valid
EP-501/2015	02/09/2015	N/A	Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River – Stage 2	Valid
Billing Account for Cons	struction Wast	te Disposal		
A/C No.: 7025411	N/A	N/A	Billing Account for construction waste disposal under Waste Disposal (Charges for Disposal of Construction Waste) Regulation	Valid
Effluent Discharge Licer	nse		· · · · · · · · · · · · · · · · · · ·	
WT00027672-2017	28/3/2017	31/3/2022	Discharge License for the	
WT00027661-2017	28/3/2017	31/3/2022	discharge of wastewater from the	
WT00027606-2017	27/3/2017	31/3/2022	construction site including	
WT00027510-2017	27/3/2017	31/3/2022	contaminated surface run-off to	
WT00027509-2017	20/3/2017	31/3/2022	the communal storm water drain	
WT00027603-2017	27/3/2017	31/3/2022		
WT00027508-2017	20/3/2017	31/3/2022		Valid
WT00027605-2017	27/3/2017	31/3/2022		vanu
WT00027607-2017	27/3/2017	31/3/2022		
WT00027834-2017	13/4/2017	30/4/2022		
WT00028431-2017	22/6/2017	30/6/2020		
WT00028748-2017	17/08/2017	31/08/2022		
WT00028850-2017	14/08/2017	31/08/2022		
WT00030236-2018	7/02/2018	28/02/2022		
Registration of Chemical Waste Producer				
No.:WPN5213-524- K3261-01		N/A	Registration of chemical waste producer for chemical waste produced during construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River – Stage 2	Valid

Status of Waste Management

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

Implementation Status of Environmental Mitigation Measures

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

Table 8.2 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	8 May – 25 Sept 2019	Drainage system and water treatment facility should be well maintained at Portion D.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Oct 2019.
	4 Sept – 3 Oct 2019	Ponding water should not be pumped out directly and let soak away, a sedimentation tank should be placed at Portion D.	The condition was observed to be improved/rectified by the contractor during the audit session on 9 Oct 2019.
	9, 17 Oct 2019	Groundwater should be pumped out through sediment tank at Subway A.	The condition was observed to be improved/rectified by the contractor during the audit session on 23 Oct 2019.
	17 Oct 2019	Standing water should be pumped out through sedimentation tank at Portion M	The condition was observed to be improved/rectified by the contractor during the audit session on 23 Oct 2019.
	30 Oct 2019	Groundwater should be pumped out discharged via sedimentation tank at Bridge B.	Follow up actions will be reported in the next month.
Air Quality	20, 25 Sept 2019	The stockpile of dusty materials should be covered at Bridge E.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Oct 2019.
	25 Sept 2019	Stockpile of dusty materials should be covered or kept wet at Bridge B.	Follow up actions will be reported in the next month.
	17 Oct 2019	Stockpile of dusty materials should be covered by impervious materials at Portion M.	The condition was observed to be improved/rectified by the contractor during the audit session on 23 Oct 2019.
	23 Oct 2019	Stockpile of dusty materials should be covered or kept wet at Portion D.	Follow up actions will be reported in the next month.

Parameters	Date	Observations and Recommendations	Follow-up
	30 Oct 2019	The excavated of dusty materials or stockpile of dusty materials should be covered tarpaulin at Portion I.	Follow up actions will be reported in the next month.
Noise	N/A	There was no observation in the reporting period.	N/A
Waste/ Chemical Management	20 Sept – 23 Oct 2019	Accumulation of general refuse should be avoided and removed at Subway A.	The condition was observed to be improved/rectified by the contractor during the audit session on 30 Oct 2019.
	25 Sept – 30 Oct 2019	Accumulation of construction waste and general refuse should be avoided and removed at Portion H.	Follow up actions will be reported in the next month.
	3, 9 Oct 2019	Water bottles should be removed at Subway A.	The condition was observed to be improved/rectified by the contractor during the audit session on 17 Oct 2019.
	23 Oct 2019	General refuse should be removed at Portion B.	The condition was observed to be improved/rectified by the contractor during the audit session on 30 Oct 2019.
Ecology and Fisheries	N/A	There was no observation in the reporting period.	N/A
Landscape and Visual	N/A	There was no observation in the reporting period.	N/A
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.

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

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

9 FUTURE KEY ISSUES

9.1 Major site activities undertaken for the coming months include:

Portion A

- 1. CCTV for Drainage Pipe
- 2. Installation of Traffic Aids

Portion B

- 1. Internal Finishing & E&M Works,
- 2. Installation of Steel Roof,
- 3. Construction of Resting Station R6
- 4. Construction of Cycle Track
- 5. Construction of Drainage
- 6. Colour Dressing for Cycle Track

Portion C

- 1. Planting,
- 2. Installation of Traffic Aids

Portion D

- 1. Construction of Retaining Wall RW 16A, PWD1
- 2. Backfilling for Retaining Wall 15D, 15E, 16A & PWD1
- 3. Construction of Drainage Pipe / Channel
- 4. Construction of Road Kerb
- 5. Laying Bituminous Pavement for Cycle Track
- 6. Installation of Bicycle Parapet
- 7. Construction of Cross Road Ducting for Traffic Signal

Portion E

- 1. Construction of Retaining RW D3, D5 & Access Ramp
- 2. Abandon the existing drainage Pipe at San Tam Road
- 3. Realignment of San Tam Road and Mai Po Lung Road
- 4. Construction of Road Kerb
- 5. Laying Bituminous for Cycle Track
- 6. Installation of Bicycle Parapet and Railing
- 7. Construction of Footpath
- 8. Construction of Drainage Pipe / Channel
- 9. CCTV for Drainage Pipe

Portion F

- 1. Construction of Boundary Wall and Retaining Wall RW 44
- 2. Backfilling for Retaining Wall
- 3. Construction of Road Kerb
- 4. Laying Bituminous for Cycle Track
- 5. Installation of Bicycle Parapet and Railing
- 6. Construction of Footpath
- 7. Backfilling for Retaining Wall

8. Construction of Drainage Pipe / Channel

Portion G

- 1. Construction of Drainage Pipe / Channel
- 2. Construction of Road Kerb
- 3. Laying bituminous for Cycle Track
- 4. Installation of Traffic Aids

Portion H

- 1. Construction of Retaining Wall RW DW1 & DW2
- 2. Backfilling for Retaining Wall
- 3. Construction of Road Kerb
- 4. Laying Bituminous for Cycle Track
- 5. Installation of Bicycle Parapet and Railing
- 6. Backfilling for Retaining Wall
- 7. Construction of Drainage Pipe / Channel
- 8. Construction of Cross Ducting for Traffic Signal
- 9. Realignment of Castle Peak Road

Portion I

- 1. Internal Finishing & E&M Works for Subway D
- 2. Installation of Steel Roof,
- 3. Installation of Pumping system,
- 4. Reinstate the Existing Slope and Carriageway, Removal of Temporary Steel Bridge of TTA
- 5. Construction of Drainage / Channel

Portion J

- 1. Construction of Retaining Wall RW48
- 2. Backfilling for Retaining Wall
- 3. Construction of Drainage / Channel
- 4. Construction of Road Kerb
- 5. Laying Bituminous Pavement for Cycle Track
- 6. Installation of Bicycle Parapet and Type II Railing

Portion K

1. Installation of Traffic Aids

Portion M

- 1. Installation of Lighting for Bridge E
- 2. Laying Bituminous Pavement for Cycle Track
- 3. Installation of Bicycle Parapet / Railing
- 4. Construction of Road Kerb
- 5. Construction of Drainage / Channel

Portion N

- 1. Construction of Footing and Column of Bridge B
- 2. Construction of Decking for Bridge B
- 3. Construction of Drainage / Channel

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 onsite;
- 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. November to December 2019, are summarized as follows:

Construction Works	Major Impact Prediction	Control Measures
As mentioned in Section 9.1	Air quality impact (dust) Water quality impact (surface run-off)	 (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. (d) Diversion of the collected effluent to de-silting facilities for treatment in compliance with valid Discharge License prior to discharge to public storm water drains; (e) Provision of adequate de-silting facilities for treating surface run-off and other collected effluents prior to discharge; (f) Provision of perimeter protection such as sealing of hoarding footings to avoid run-off from entering the existing storm water drainage system via public road; and (g) Provision of measures to prevent discharge into the stream.
	Noise impact Landscape and	 (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. (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**.

CONCLUSIONS AND RECOMMENDATIONS 10

Conclusions

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

Construction Noise Monitoring

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

Site Audit

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

Complaint and Prosecution

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

Recommendations

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

Air Quality

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

Water Quality

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

Waste/Chemical Management

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

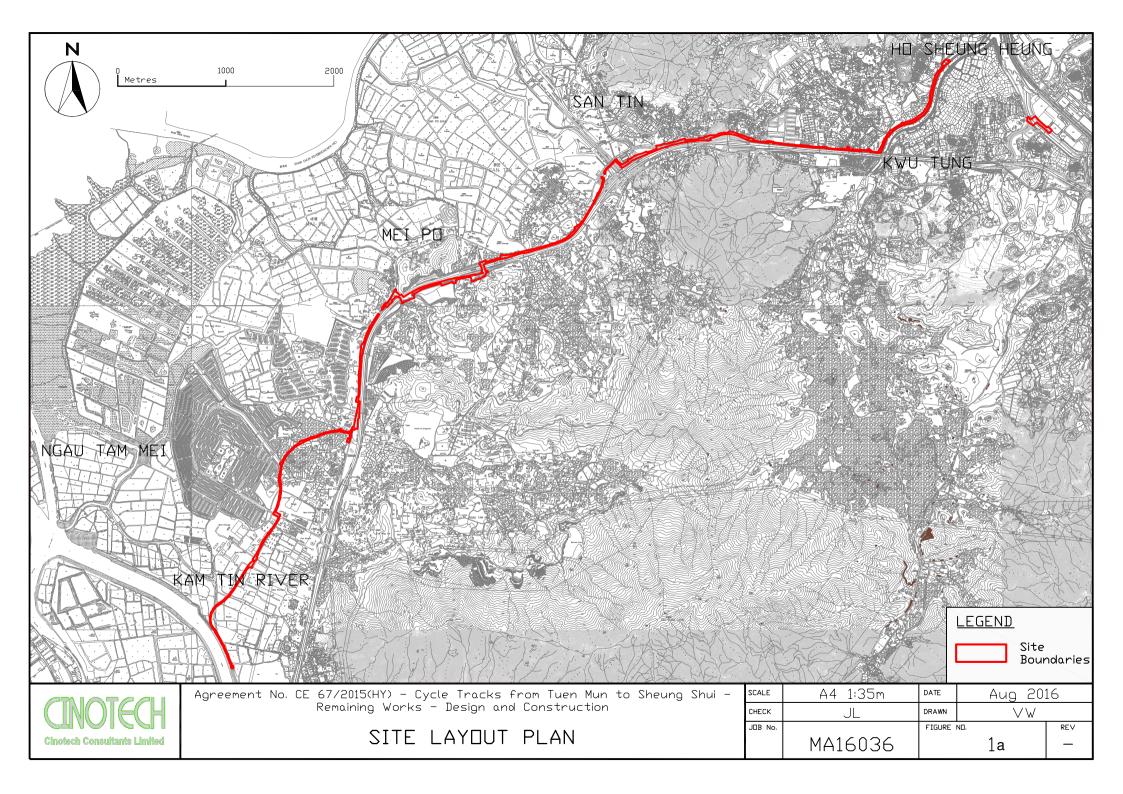
Landscape and Visual

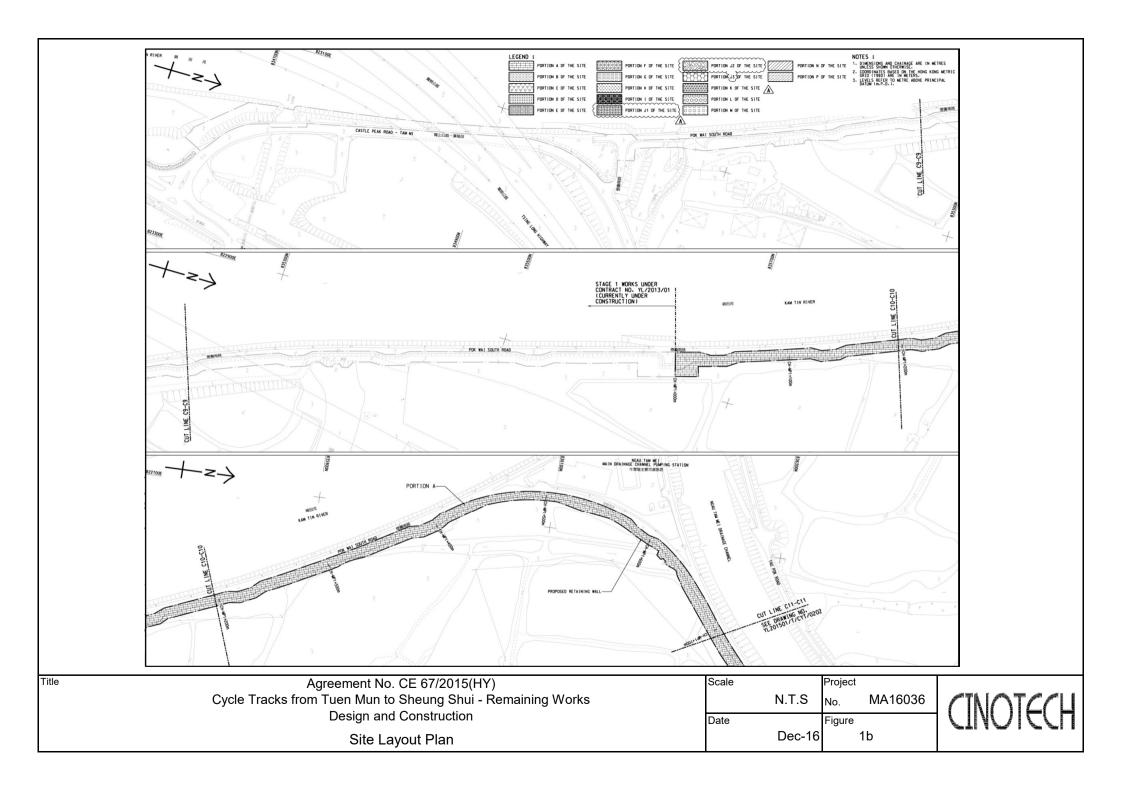
• Adequate tree protection zones should be established to protect retained and existing trees. Conspicuous signs of status of trees should be clearly shown to avoid damage from PMEs or workers.

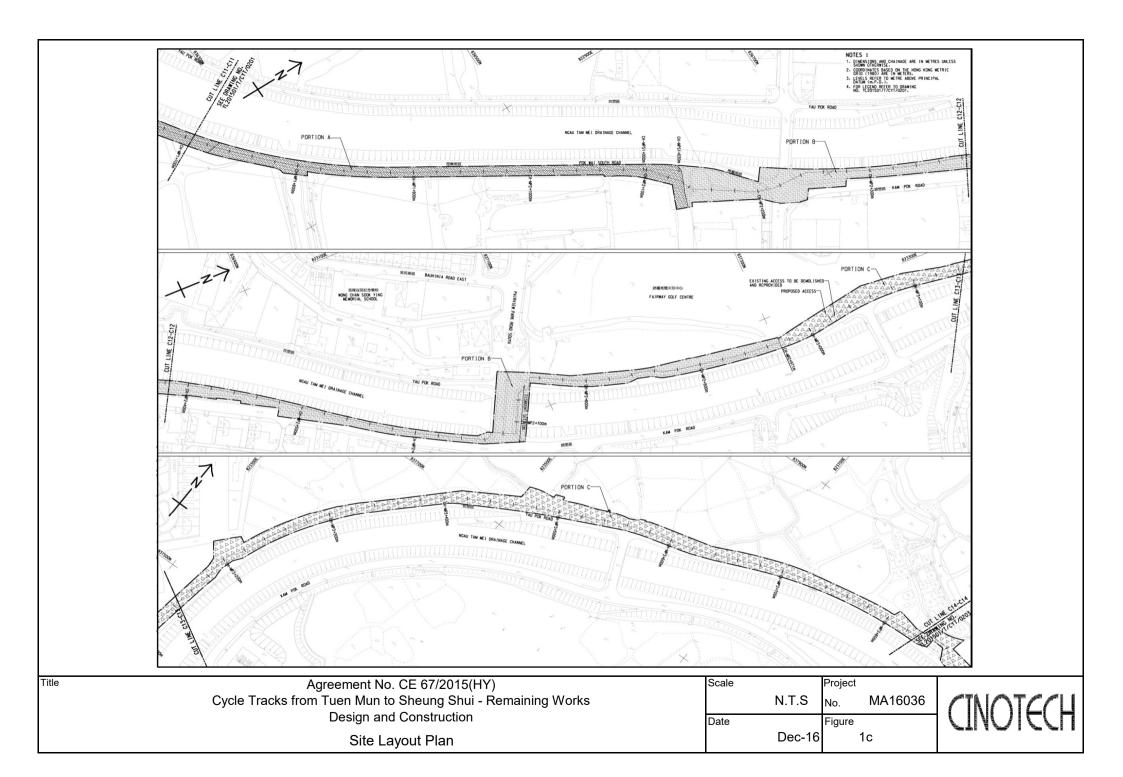
Permits/Licences

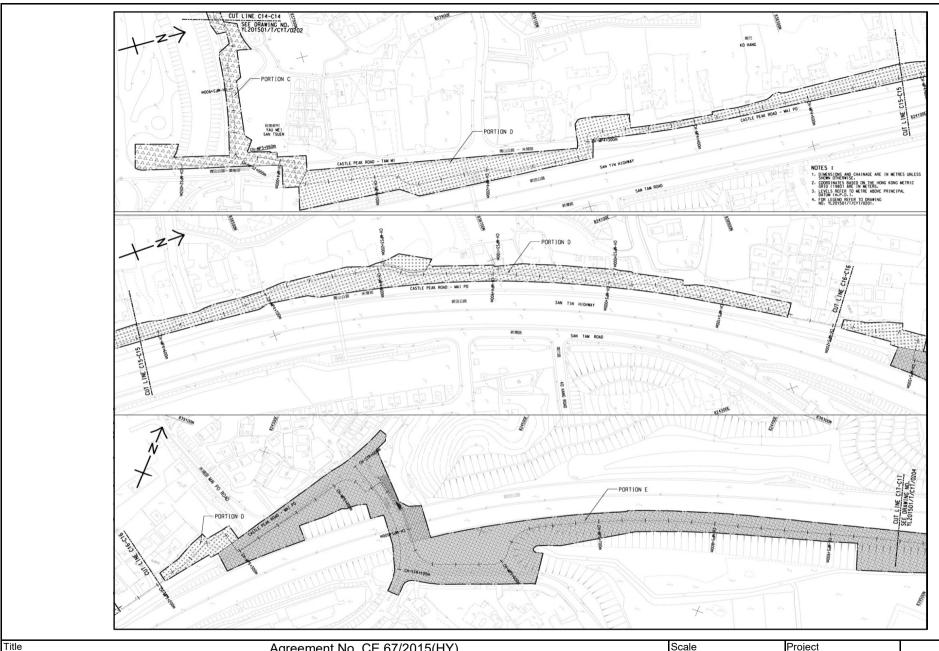
• Environmental licences should be properly displayed at every entrance.

FIGURES

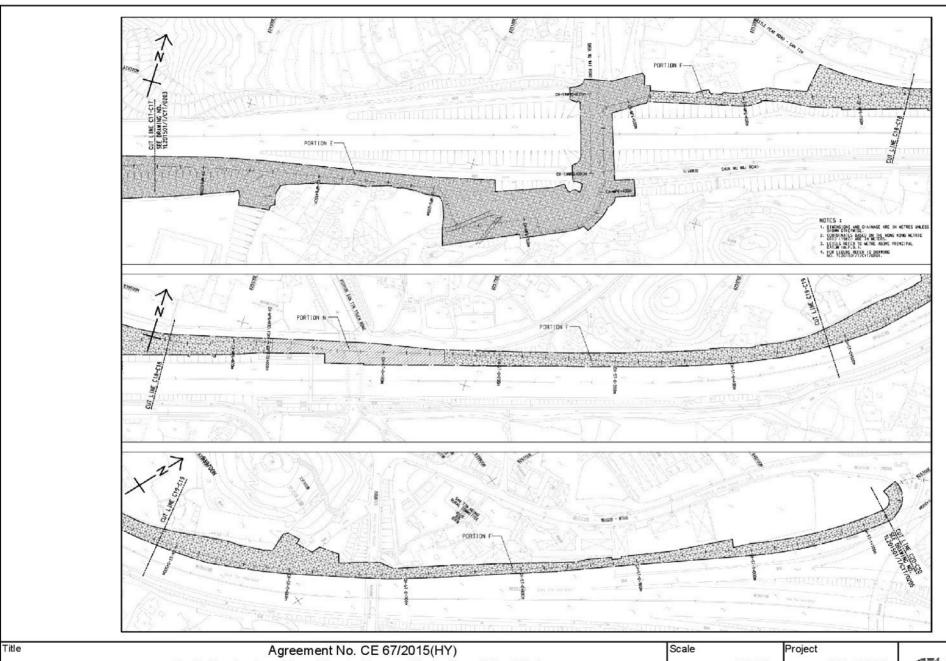




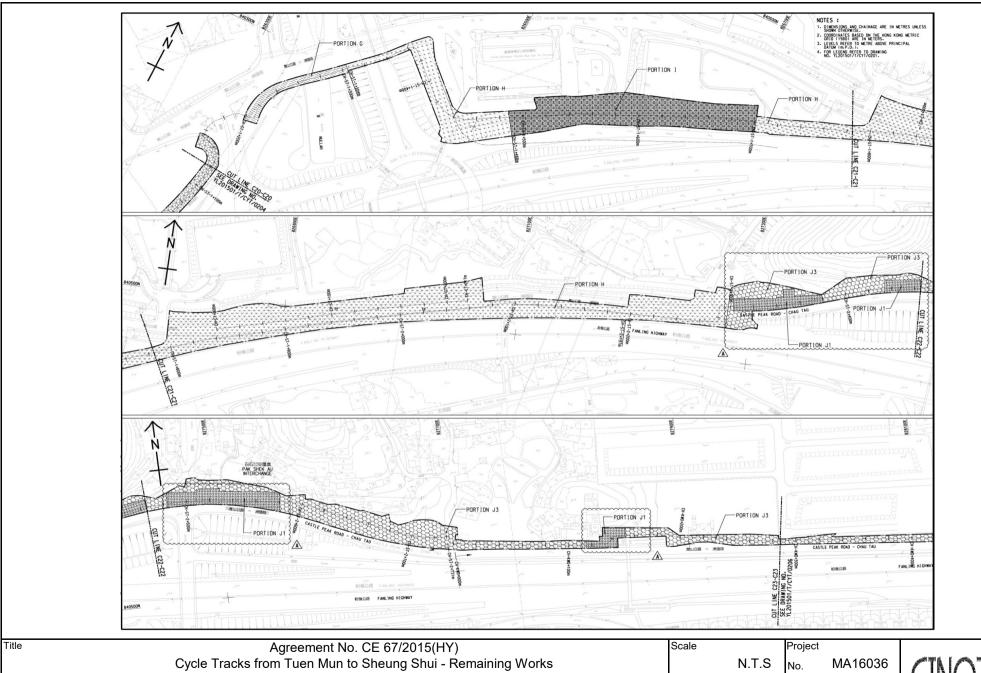




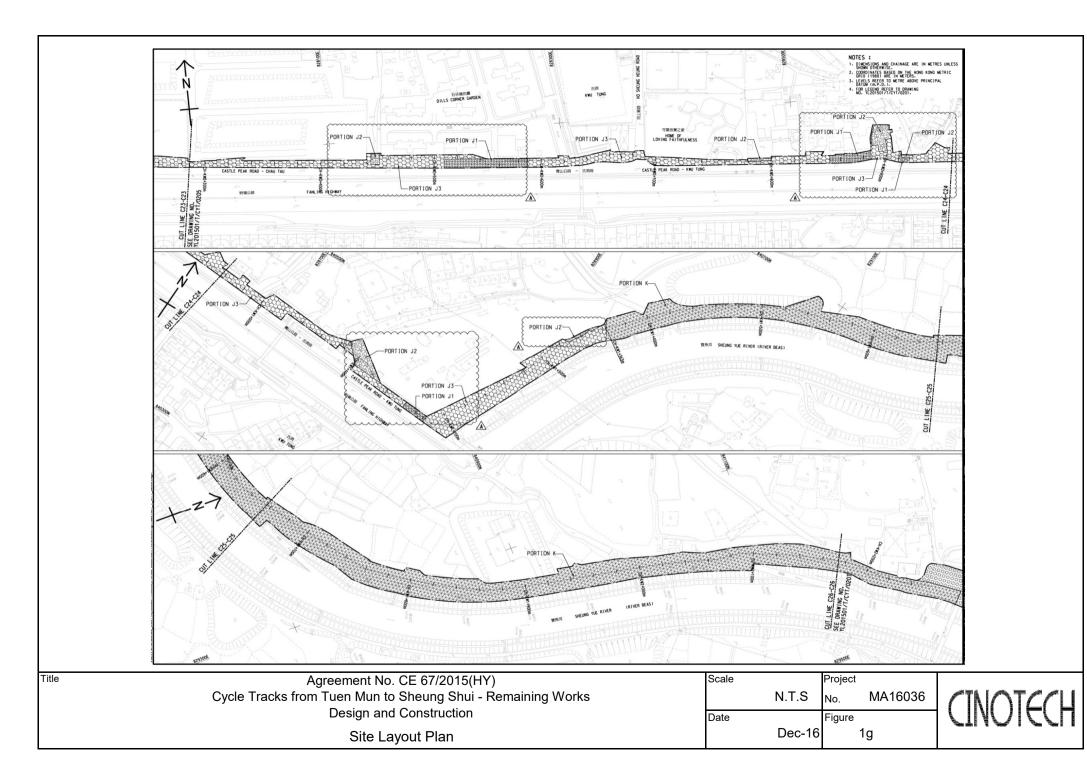
Agreement No. CE 67/2015(HY)
Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
Design and Construction
Site Layout Plan

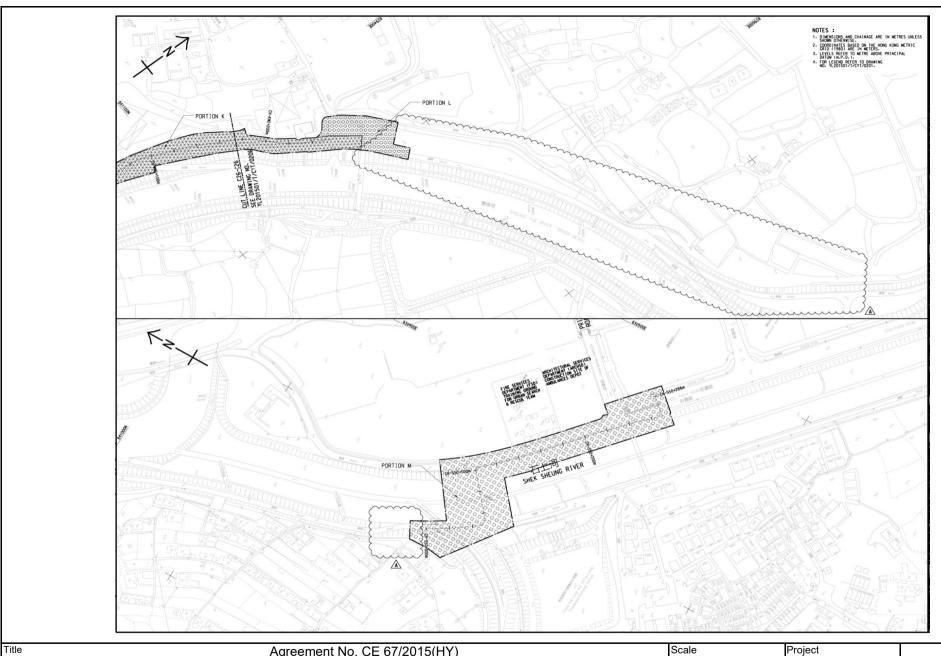


Agreement No. CE 67/2015(HY)
Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
Design and Construction
Site Layout Plan



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

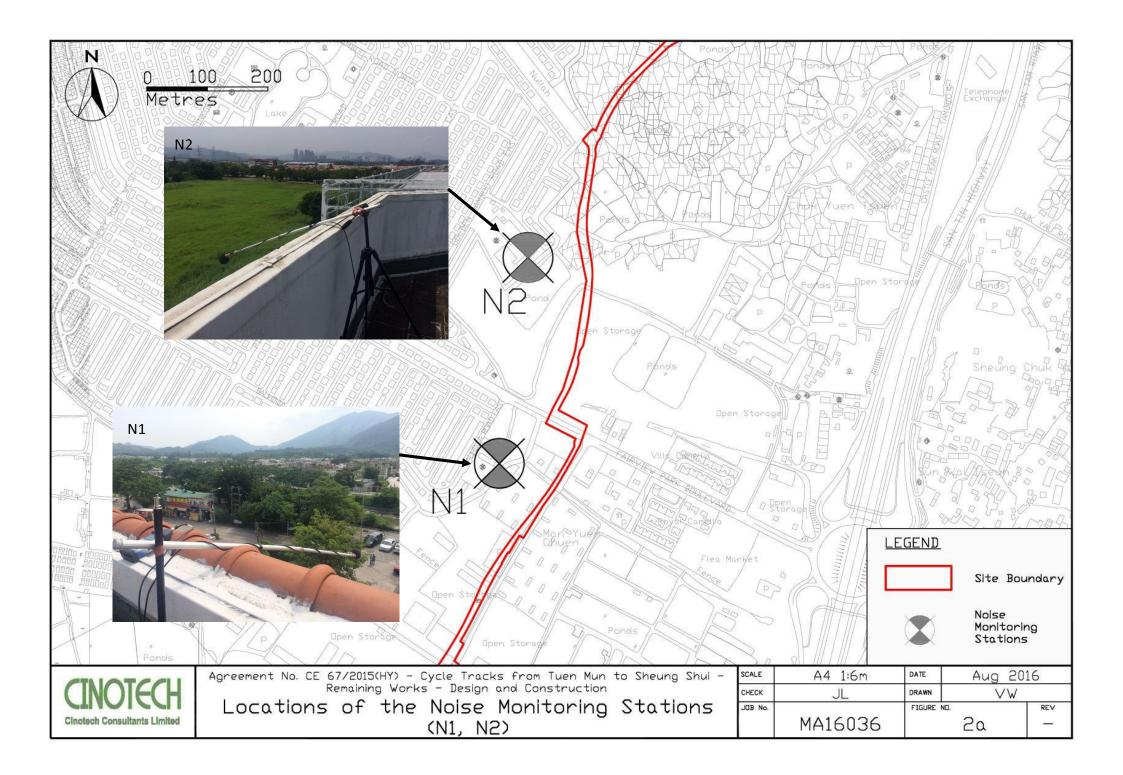


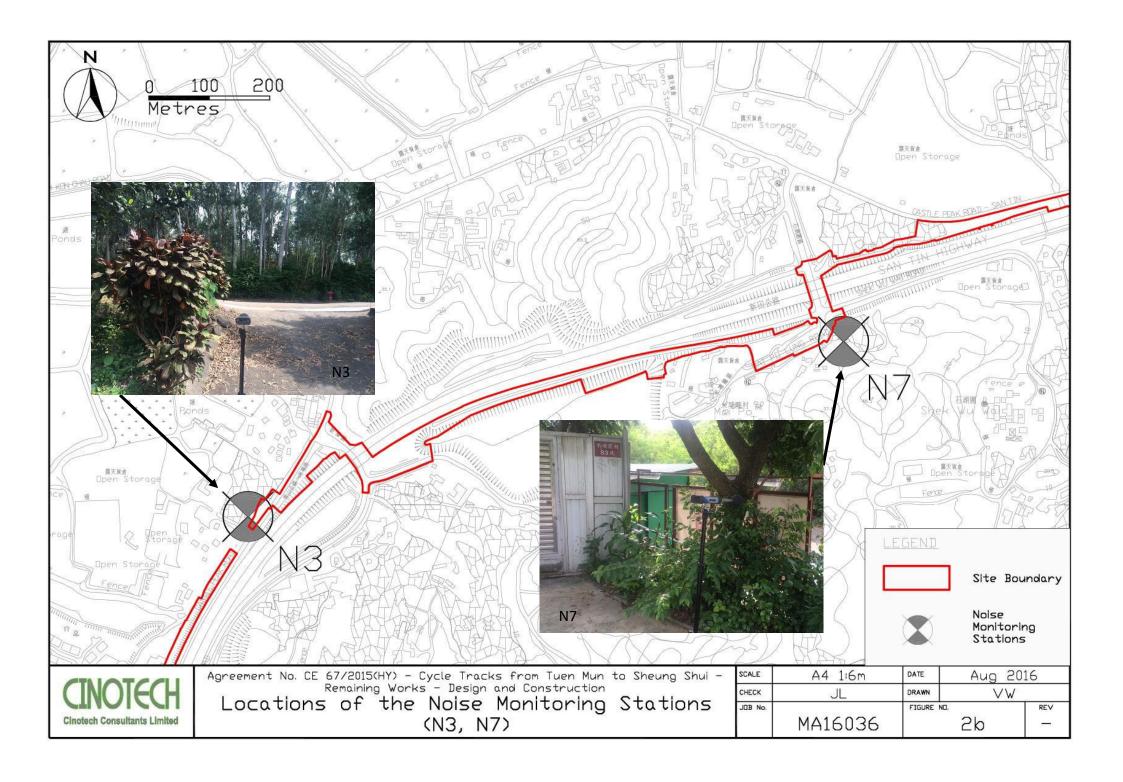


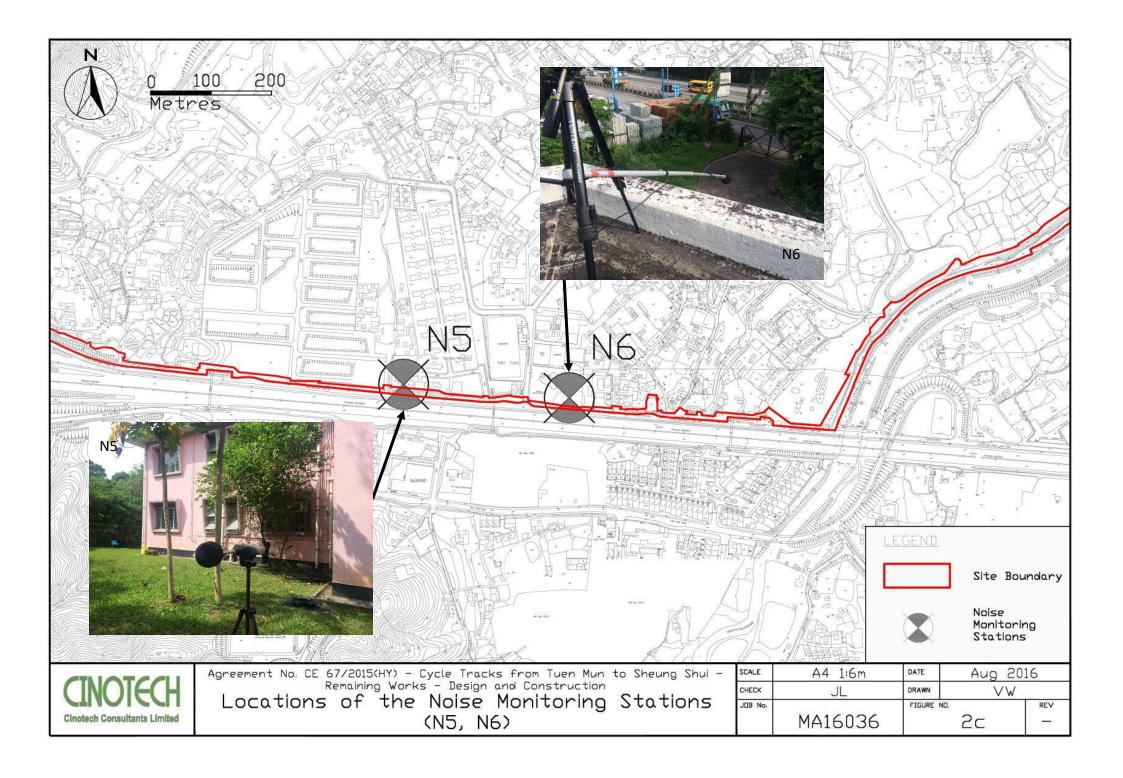
Agreement No. CE 67/2015(HY)
Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
Design and Construction
Site Layout Plan

N.T.S No. MA16036

Date Dec-16 Figure 1h







APPENDIX A WORK PROGRAMME



生 興 - 豐 利 聯 營 Sang Hing - Kuly Joint Venture

28th June 2019

Our ref.: SKJV/W52/SO/3497

Mannings (Asia) Consultants Ltd. 5/F, Winning Commercial Building, 46-48 Hillwood Road, Tsim Sha Tsui. Kowloon

By fax & post Fax no.: 3168 2022

Attn.: Mr. Mole Tam (Senior Resident Engineer)

Dear Sirs,

Contract No. YL/2015/01 Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works **Updated Programme**

Enclosed please find our updated programme for your information and acceptance. A summary is also attached herewith this letter for your easy reference.

In several meetings, we understand that CEDD and your Office would request us to complete the proposed Cycle Track by the end of this year. However, our programme are hindered by some external constraints such as Street Lighting Works by Highways Department, approval of GRP Roofing at Subway A & D, utilities diversions at Retaining Walls RW49 and RW50 and additional walls at Portions J1 to J3, etc.

In view of this requirement, we would like to arrange an ad hoc meeting to seek a better solution to accelerate the works.

Thank you for your kind attention

Yours faithfully, For and on behalf of Sang Hing - Kuly Joint Venture

Tang Wing Kal Site Agent

WKT/MKM/TL/tl

Encl.

Mail Address: P.O.Box No. 1051, Yuen Long Delivey Office

Head Office: Room 215A-B, 2/F., Central Services Bldg., Nan Fung Ind. City, No. 18 Tin Hau Road, Tuen Mun, N.T. 2452 5170

Site Tel: 2461 5100 Head Office Tel: 2403 1118

Head Office Fax: 2403 1162

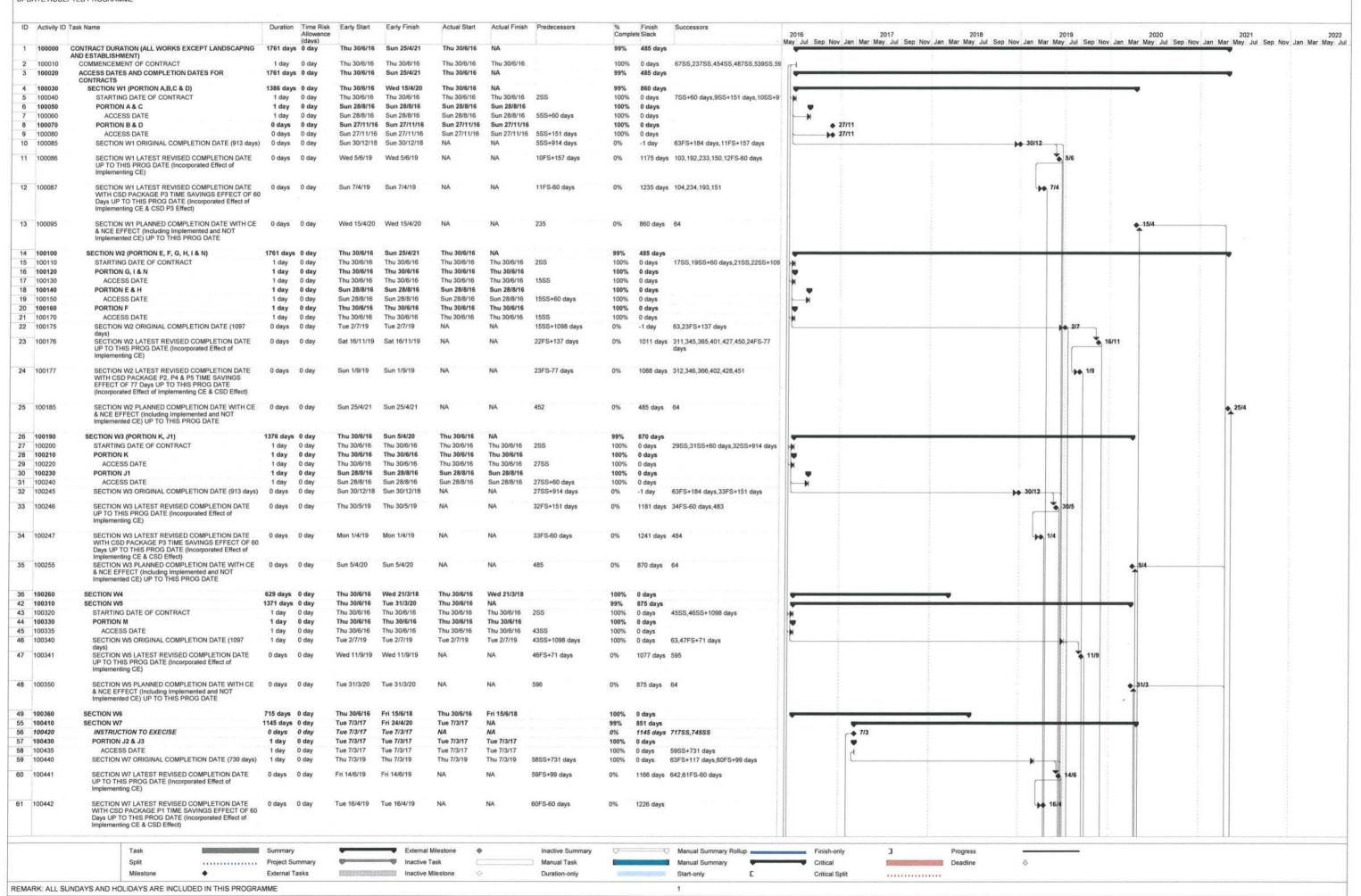
Site Fax:

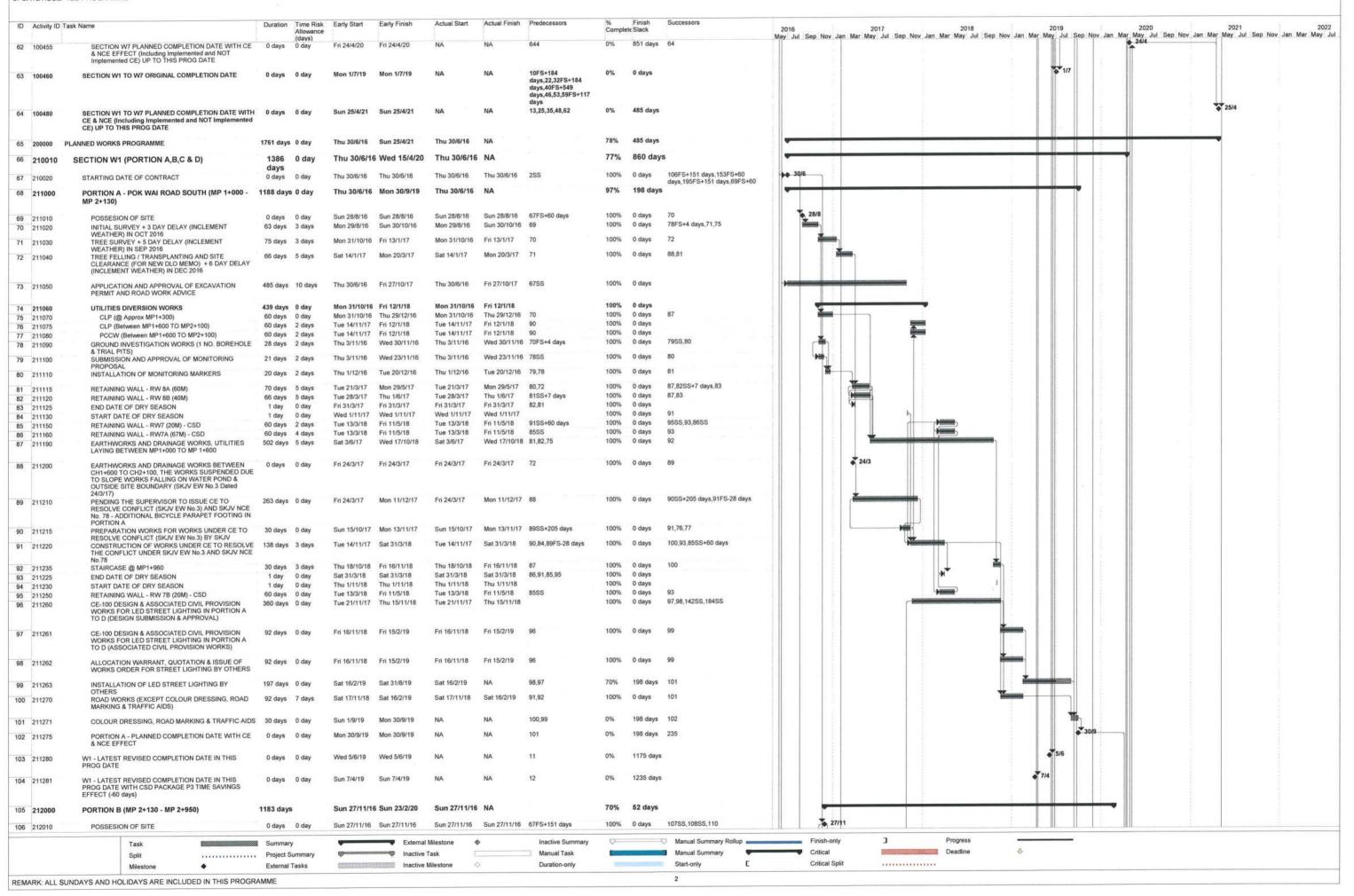
E-mail: yl201501@skjv.com.hk

	_	_	_					_		_	_	_	_	_
Remark				Assume GRP	approval obtained on 15/7/19									
Critical Priority				ć	DU7								lst	
Target Completion	30-Sep-19	16-Oct-19	15-Jul-19	15-Oct-19	13-Jan-20	23-Feb-20	30-Sep-19		7-Nov-19	16-Oct-19		30-Jun-19	6-Mar-20	15-Apr-20
Major outstanding work / critical work	1) Street Lighting works and Colour Dressing	1) Subway A Bay 12 to Bay 16	2) GRP Roofing Approval	3) GRP Roofing Order and Delivery	4) GRP installation	5) Road work inside subway	5) Street Lighting works and colour Dressing		1) Street Lighting works and Colour Dressing	2) Additional Proposed staircase, ramp at Yau Po Road		1) Approval of Street Lighting	2) Allocation Warrant and Installation of Street Lighting	3) Colour Dressing
Updated Programme Completion Date	30/9/2019			23777000					01007711				15/4/2020	
Revised Completion Date (Including with Time Saving)							7/4/2019							
Section Portion Completion Date	,						5/6/2019				,			
Portion	А			œ	1				O				Ω	
Section							M							

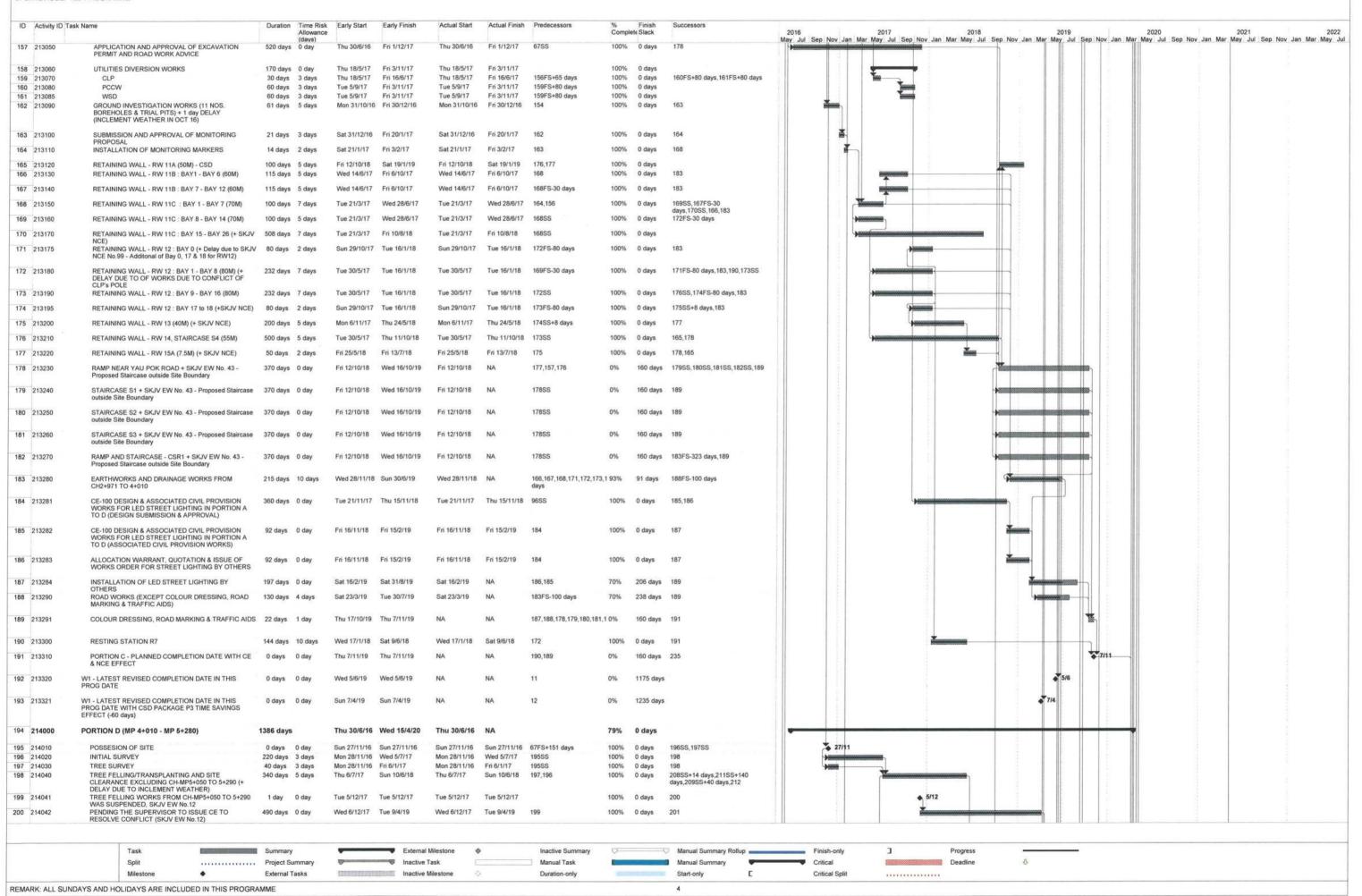
					1) Retaining Wall RW D03	26-Mar-20	3rd	
	π			000007751	2) Approval of Street Lighting	30-Jun-19		A 550000
	1			13/4/2020	3) Allocation Warrant and Installation of Street Lighting	6-Mar-20	2nd	Assume Approval given on 30 June
					4) Colour Dressing	15-Apr-20		2019
					1) RW 42 (CSD)	30-Dec-19		
					2) RW 44 and Ramp PR3	19-Dec-19	Srd	
	Ľ,			15/4/2020	3) Approval of Street Lighting	30-Jun-19		Accused Assessed
					4) Allocation Warrant and Installation of Street Lighting	6-Mar-20	2nd	given on 30 June
					5) Colour Dressing	15-Apr-20		2019
					1) Approval of Street Lighting	30-Jun-19		Assume Amusual
	Ð			31/3/2020	2) Allocation Warrant and Installation of Street Lighting	6-Mar-20	2nd	given on 30 June
					3) Colour Dressing	31-Mar-20		2019
					1) Additional RW49 & RW50	10/2/2020		
W2		16/11/2019	1/9/2019		2) Additional Diversion of utilities along RW49 & RW50	8/8/2020		
	Н			25/4/2021	3) Drainage and Gullies for re-alignment carriageway for RW49 & RW50	7/10/2020	1st	
					4) Road Works for re-alignment of DW1 and DW2 and street lighting works	25/4/2021		
					1) Subway D E&M works	1-Nov-19		
					2) GRP Roofing Approval	15-Jul-19		
	п			13/3/2020	3) GRP Roofing Order and Delivery	15-Oct-19	7	Assume GRP
					4) GRP installation	13-Jan-20	DU7	approval obtained on 15/7/19
					5) Road work inside subway	13-Mar-20		
			9		1) Bridge B - Substructure	30-Sep-19		
					2) Bridge B - Superstructure	30-Nov-19	3rd	
	Z			00000000	3) Bridge B - Site formation	20-Jan-20		
				0707	4) Approval of Street Lighting	30-Jun-19		Assume Americal
					5) Allocation Warrant and Installation of Street Lighting	6-Mar-20	2nd	given on 30 June
					6) Colour Dressing	20-Mar-20		2019

					1) Approval of Street Lighting	30-Jun-19		Torrest A contract A
W3	K&J1	30/5/2019	1/4/2019	5/4/2020	2) Allocation Warrant and Installation of Street Lighting	6-Mar-20	lst	given on 30 June
×.					3) Colour Dressing	5-Apr-20		2019
					1) Steel roofing and E&M of Bridge E	27-Dec-19		
WS	Σ	9106/6/11	9100/0/11	31/3/0/00	2) Approval of Street Lighting	30-Jun-19		Accuma Ammoual
:			(107)(11	020210110	3) Allocation Warrant and Installation of Street Lighting	6-Mar-20	lst	given on 30 June
					4) Colour Dressing	31-Mar-20		2019
					1) RW48, RW24A, RW24AA, etc	31-Dec-19		
					2) Earthwork and Drainage works	29-Feb-20	lst	
W7	11.17.13	14/6/2019	010(78/91	OCOCINOC	3) Road Work (except colour dressing)	30-Mar-20		
				07071-107	2) Approval of Street Lighting	30-Jun-19		Assume Amendal
					3) Allocation Warrant and Installation of Street Lighting	6-Mar-20	2nd	given on 30 June
					4) Colour Dressing	24-Apr-20		2019

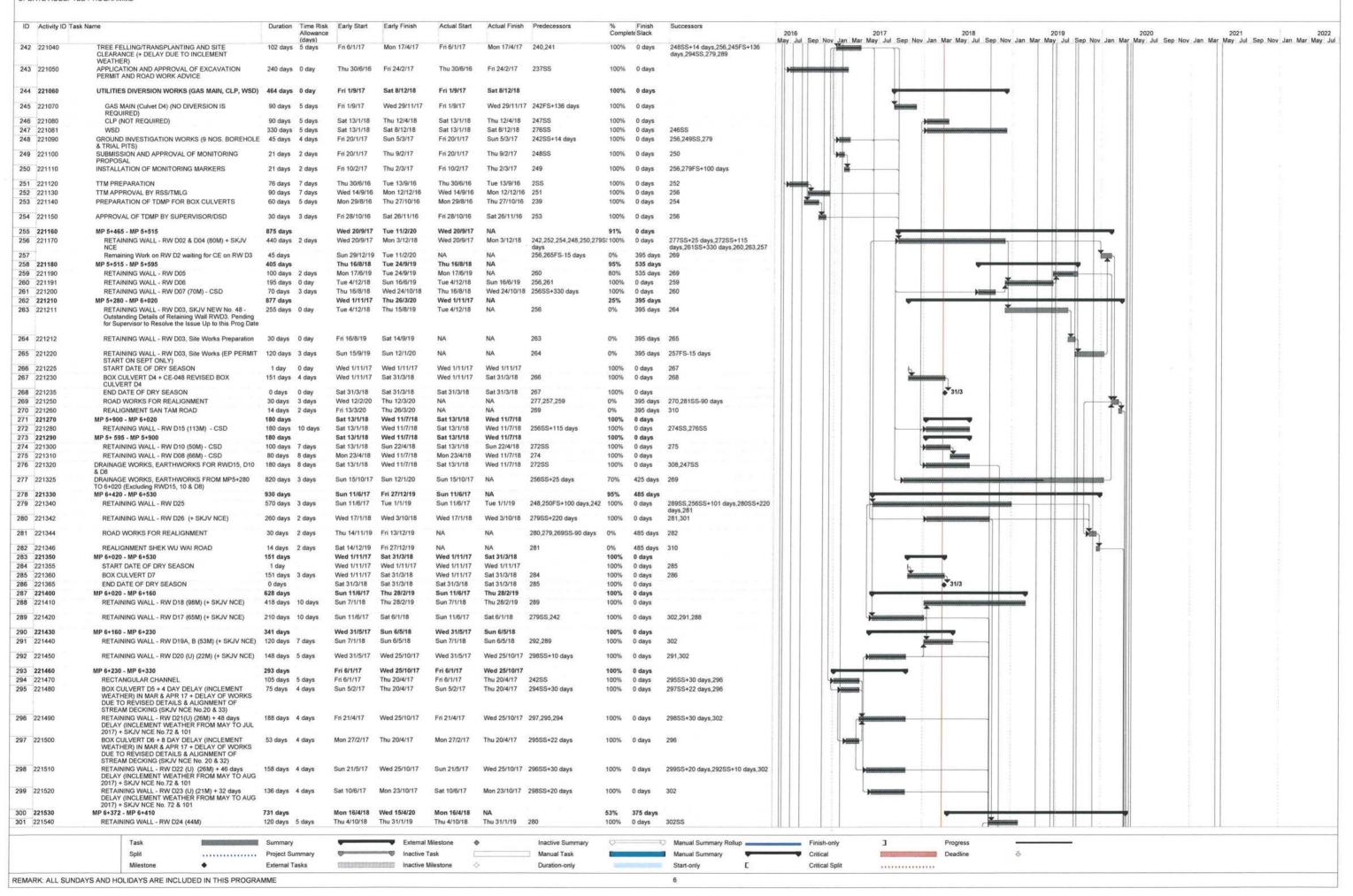


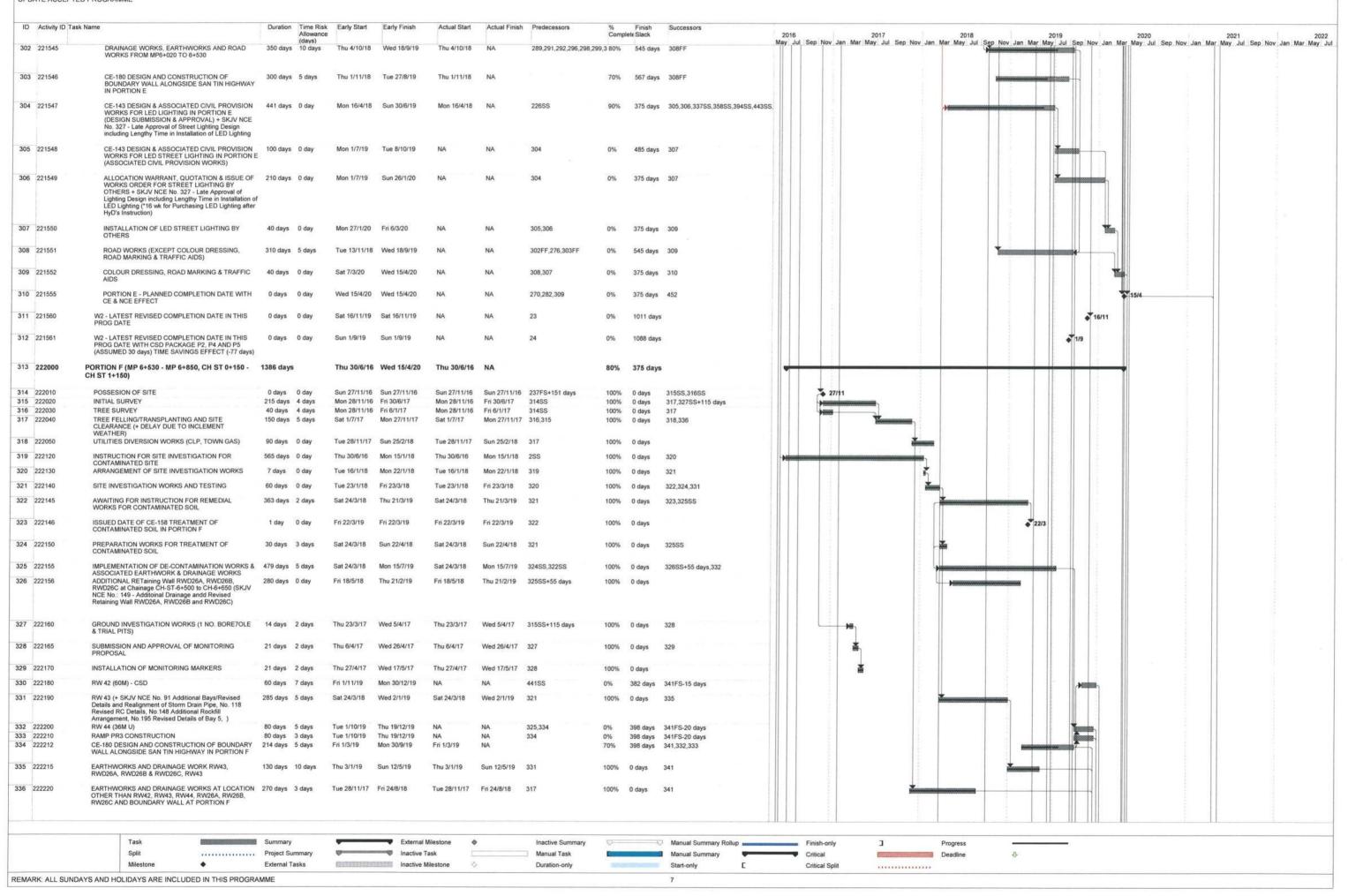


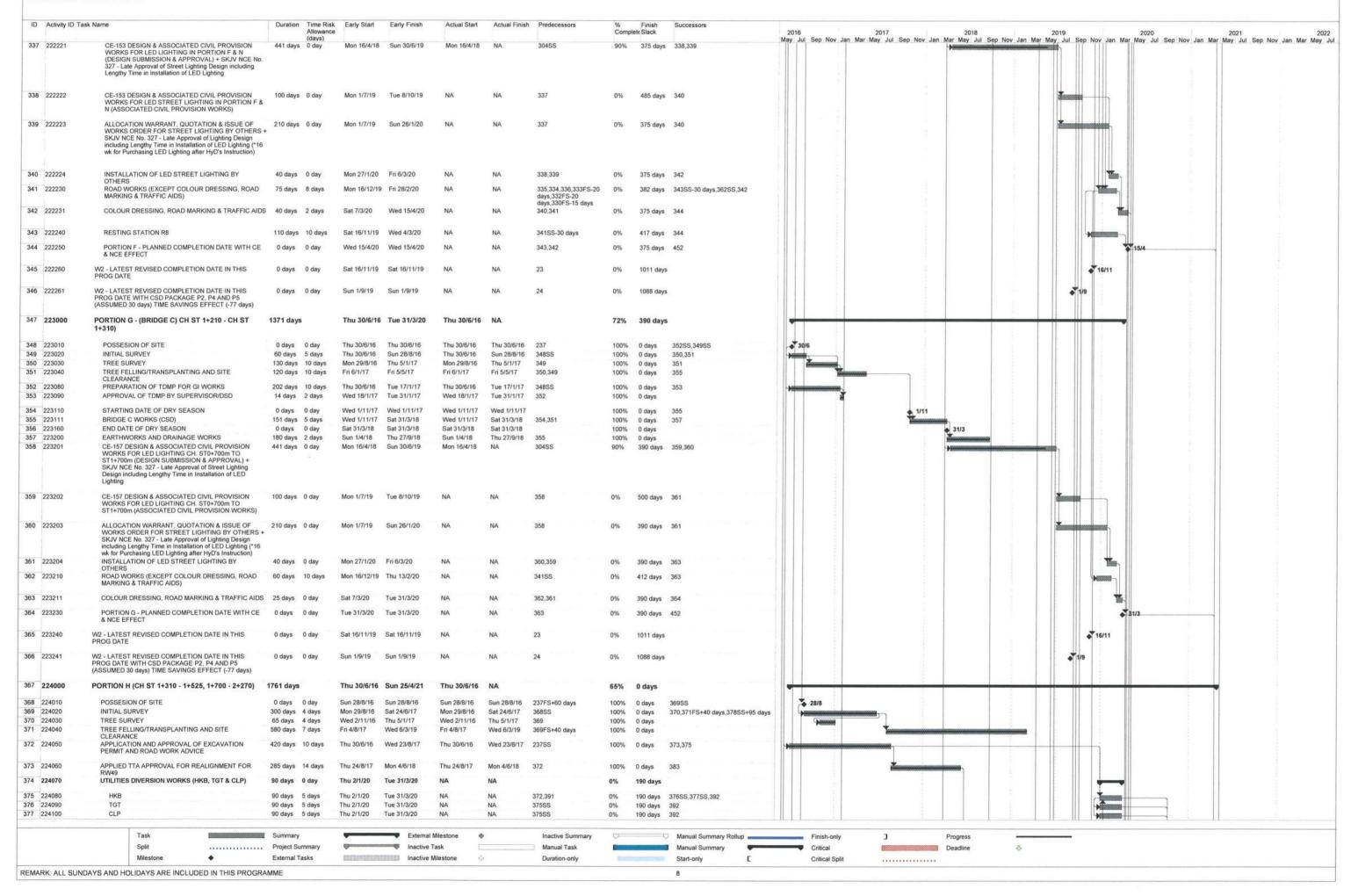
Activity ID	Task Name	Duration	Time Risk Allowance	Early Start	Early Finish	Actual Start	Actual Finish	Predecessors	% Complet	Finish & Slack	Successors	2016		2017	2018	2019		2020	2021	
212020	INITIAL SURVEY	40 days	(days)	Mon 28/11/16	Fri 6/1/17	Mon 28/11/16	Fri 6/1/17	106SS		0 days	109	May Jul	Sep Nov Jan Mar	May Jul Sep Nov	Jan Mar May Jul Sep Nov J	an Mar May Jul Sep	Nov Jan Mar M	ay Jul Sep Nov Jan I	lar May Jul Sep No	Jan Mar
212030 212040	TREE SURVEY TREE FELLING/TRANSPLANTING AND SITE	40 days 85 days	3 days	Mon 28/11/16 Sat 7/1/17	Fri 6/1/17	Mon 28/11/16 Sat 7/1/17		106SS 108,107	100%	0 days 0 days	109 137									
212070	CLEARANCE TTM PREPARATION BY SKJV & APPROVAL BY SUPREVISOR/PM/TMLG & XP ISSUE+ 36 DAYS DELAY DUE TO BELATED APPROVAL OF XP & ADDITIONAL TRIAL RUN (SKJV NCE No. 15)	162 days		Mon 28/11/16		Mon 28/11/16	Mon 8/5/17	106			112		¥							
212100	UTILITIES DIVERSION WORKS (FOR SUBWAY BAY	183 days		Tue 9/5/17	Tue 7/11/17	Tue 9/5/17	Tue 7/11/17		100%	0 days										
212110	PWS TO PW8) CLP CABLE + Anticipated 95 Days Delay of Works Due to Uncharted CLP Cable Ducts (SKJV NCE No.46) and Delay in Diversion of CLP Pole (SKJV NCE No. 50)	183 days	2 days	Tue 9/5/17	Tue 7/11/17	Tue 9/5/17	Tue 7/11/17	110	100%	0 days	113SS,121									
212140	WSD PIPE + Anticipated 95 Days Delay of Works Due to Delay in Diversion of WSD pipes (SKJV NCE No.40)	165 days	2 days	Tue 9/5/17	Fri 20/10/17	Tue 9/5/17	Fri 20/10/17	112SS	100%	0 days	121									
212200	UTILITIES DIVERSION WORKS (FOR SUBWAY BAY PW9 TO PW11)	14 days	20002015		Fri 21/9/18	Sat 8/9/18	Fri 21/9/18		100%	70					-					
212210 212230 212240	CLP WSD UTILITIES DIVERSION WORKS (FOR SUBWAY BAY 12	14 days 14 days 28 days		Sat 8/9/18 Sat 8/9/18 Sat 8/9/18	Fri 21/9/18 Fri 21/9/18 Fri 5/10/18	Sat 8/9/18 Sat 8/9/18 Sat 8/9/18	Fri 21/9/18 Fri 21/9/18 Fri 5/10/18	122 115SS	100% 100% 100%	0 days	123,116SS 130,123									
212260	TO 16) HCL	28 days	1 day	Sat 8/9/18	Fri 5/10/18	Sat 8/9/18	Fri 5/10/18	122	100%		130									
212270 212280	WSD SUBWAY A BARRELS WITH PUMP ROOM	28 days 588 days	1 day	Sat 8/9/18 Wed 8/11/17	Fri 5/10/18 Tue 18/6/19	Sat 8/9/18 Wed 8/11/17	Fri 5/10/18 Tue 18/6/19	122	100%	0 days 0 days	130				•					
212300	CONSTRUCTION BAY PW5, 6, 7, 8	300 days	5 days	Wed 8/11/17	Mon 3/9/18	Wed 8/11/17	Mon 3/9/18	112,113	100%	0 days	122,125			¥						
212310	TTA FOR BAY PW9, 10, &11	4 days	3 days	Tue 4/9/18	Fri 7/9/18 Tue 18/6/19	Tue 4/9/18	Fri 7/9/18 Tue 18/6/19	121	100%	0 days	115,118,119				ř.					
212320 212330	BAY PW9 & P10 WITH PUMP HOUSE, PW11 SOUTHERN RAMP CONSTRUCTION	270 days 497 days	3 udys	Sat 22/9/18 Tue 4/9/18	Mon 13/1/20	Sat 22/9/18 Tue 4/9/18	NA 18/6/19		100% 22%		130SS+210 days,148,128				4		 			
212340	BAY PW1 TO 4 ROOFING - MATERIAL SUBMISSION AND APPROVAL	120 days 250 days	2 days	Tue 4/9/18 Thu 8/11/18	Tue 1/1/19 Mon 15/7/19	Tue 4/9/18 NA	Tue 1/1/19 NA	121 125FS-55 days		0 days 53 days	126FS-55 days 127									
	ROOFING - ORDER, MANUFACTURING & DELIVER	92 days		Tue 16/7/19	Tue 15/10/19	NA	NA	126	0%	53 days	128,132									
212342 212380	INSTALLATION OF ROOF NORTHERN RAMP CONSTRUCTION	90 days 209 days	2 days	Wed 16/10/19 Thu 20/6/19	Mon 13/1/20 Tue 14/1/20	NA Thu 20/6/19	NA NA	123,127		53 days 52 days	135									
212390	BAY PW12 TO 13 + SKJV EW No.60 - Conflict between Bay 13 & 14 and Existing Drainage Pipe	119 days	2 days	Thu 20/6/19	Wed 16/10/19	Thu 20/6/19	NA	123SS+210 days,116,118,119	10%	52 days	133FS-50 days,132,148,131SS					, M				
212395	BAY PW14 TO 16 + SKJV EW No.60 - Conflict between Bay 13 & 14 and Existing Drainage Pipe	119 days	2 days	Thu 20/6/19	Wed 16/10/19	Thu 20/6/19	NA	130SS	10%	52 days	132,133FS-50 days					***************************************				
212392 212415	INSTALLATION OF ROOF FNISHING WORKS AND E&M WORKS	90 days 115 days	42	Thu 17/10/19 Wed 28/8/19		NA NA	NA NA	131,130,127 130FS-50 days,131FS-50			135 135									
212416	SKJV NCE No. 181 - ADDITIONAL FLOODING WARNING				Wed 2/10/19	Fri 26/10/18	NA	1001 0-00 days, 1011 0-00			135,419SS					7				
212417	SYSTEM FOR SUBYWAY A ROAD WORKS INSIDE SUBWAY	40 days	2 days	Wed 15/1/20	Sun 23/2/20	NA	NA	133,134,132,128	0%	52 days	149						1			
212420	EARTHWORKS AND DRAINAGE WORKS FROM CH	691 days		Sun 2/4/17	Thu 21/2/19	Sun 2/4/17	Thu 21/2/19		100%	0 days			-			•				
212425	2+350 TO 2+650 EARTHWORKS AND DRAINAGE WORKS FROM CH 2+350 TO 2+650, SUSPENSION OF WORKS DUE TO CONFLICT OF CYCLE TRACK WITH EXISTING	10 days	0 day	Sun 2/4/17	Tue 11/4/17	Sun 2/4/17	Tue 11/4/17	109	100%	0 days	138		1							
212430	DWARF WALL, MCAL LETTER DATED 11/4/2017) PENDING SUPERVISOR TO ISSUE CE TO RESOLVE CONFLICT (SKJV NCE No.45) & SKJV Letter Ref.: SO/2436 & Dated 20/8/2018 - Confirmation of	496 days	0 day	Wed 12/4/17	Mon 20/8/18	Wed 12/4/17	Mon 20/8/18	137	100%	0 days	139					1				
212435	Additional Bicycle Parapet Footing in Portion B SKJV NCE No. 45 - Preparation Works	15 days	0 day	Tue 21/8/18	Tue 4/9/18	Tue 21/8/18	Tue 4/9/18	138	100%	0 days	140				3					
212440 212450	SKJV NCE No.45 - Site Works EARTHWORKS AND DRAINAGE WORKS FROM CH	120 days 50 days		Wed 5/9/18 Thu 3/1/19	Wed 2/1/19 Thu 21/2/19	Wed 5/9/18 Thu 3/1/19	Wed 2/1/19 Thu 21/2/19		100%	0 days	146,141 146					2				
	2+650 TO 2+930 CE-100 DESIGN & ASSOCIATED CIVIL PROVISION	360 days			Thu 15/11/18	Tue 21/11/17	Thu 15/11/18		100%	10.14.2050-0	143,144									
212451	WORKS FOR LED STREET LIGHTING IN PORTION A TO D (DESIGN & SUBMISSION & APPROVAL) CE-100 DESIGN & ASSOCIATED CIVIL PROVISION WORKS FOR LED STREET LIGHTING IN PORTION A	92 days		Fri 16/11/18		Fri 16/11/18		142	100%		145			Z0000		•				
212453	TO D (ASSOCIATED CIVIL PROVISION WORKS) ALLOCATION WARRANT, QUOTATION & ISSUE OF	92 days	0 day	Fri 16/11/18	Fri 15/2/19	Fri 16/11/18	Fri 15/2/19	142	100%	0 days	145				1					
	WORKS ORDER FOR STREET LIGHTING BY OTHERS		5000000				NA	144,143												
212454	INSTALLATION OF LED STREET LIGHTING BY OTHERS ROAD WORKS (EXCEPT COLOUR DRESSING, ROAD	197 days			Sat 31/8/19 Tue 2/4/19	Sat 16/2/19 Fri 22/2/19	NA Tue 2/4/19	144,143		198 days	147									
	MARKING & TRÀFFIC AIDS)	40 days	50						100%											
212456	COLOUR DRESSING, ROAD MARKING & TRAFFIC AIDS				Mon 30/9/19	NA	NA	146,145		District Co.	149									
212460	RESTING STATION R6	60 days	7 days	Thu 17/10/19	Sun 15/12/19	NA	NA	123,130	0%	122 days	149									
212465	PORTION B - PLANNED COMPLETION DATE WITH CE & NCE EFFECT	0 days	0 day	Sun 23/2/20	Sun 23/2/20	NA	NA	135,148,147	0%	52 days	235						23/2			
212470	W1 - LATEST REVISED COMPLETION DATE IN THIS PROG DATE	0 days	0 day	Wed 5/6/19	Wed 5/6/19	NA	NA	11	0%	1175 days						5/6				
212471	W1 - LATEST REVISED COMPLETION DATE IN THIS PROG DATE WITH CSD PACKAGE P3 TIME SAVINGS EFFECT (-60 days)	0 days	0 day	Sun 7/4/19	Sun 7/4/19	NA	NA	12	0%	1235 days						714				
213000	PORTION C (MP 2+950 - MP 4+010)	1226 days		Thu 30/6/16	Thu 7/11/19	Thu 30/6/16	NA		69%	160 days										
213010 213020	POSSESION OF SITE INITIAL SURVEY + 9 DAY DELAY (INCLEMENT WEATHER IN SEPT TO OCT 16)	0 days 63 days		Sun 28/8/16 Mon 29/8/16	Sun 28/8/16 Sun 30/10/16	Sun 28/8/16 Mon 29/8/16	Sun 28/8/16 Sun 30/10/16		100%		154 155,162	1	28/8							
213030 213040	TREE SURVEY TREE FELLING/TRANSPLANTING AND SITE	75 days 75 days			Wed 4/1/17 Mon 20/3/17	Sat 22/10/16 Thu 5/1/17	Wed 4/1/17 Mon 20/3/17	154 155	100%		156 159FS+65 days,168									
	CLEARANCE	Summary		_	External I	Milestone •	i	Inactive Summary	U		Manual Summary Rollup	i.ll.	Finish-only	3	Progress	<u> </u>				
	Split			0	Inactive T			Manual Task			Manual Summary		Critical		Deadline .					
	Milestone	External Ta			Inactive M	filestone O		Duration-only			Start-only E		Critical Split							

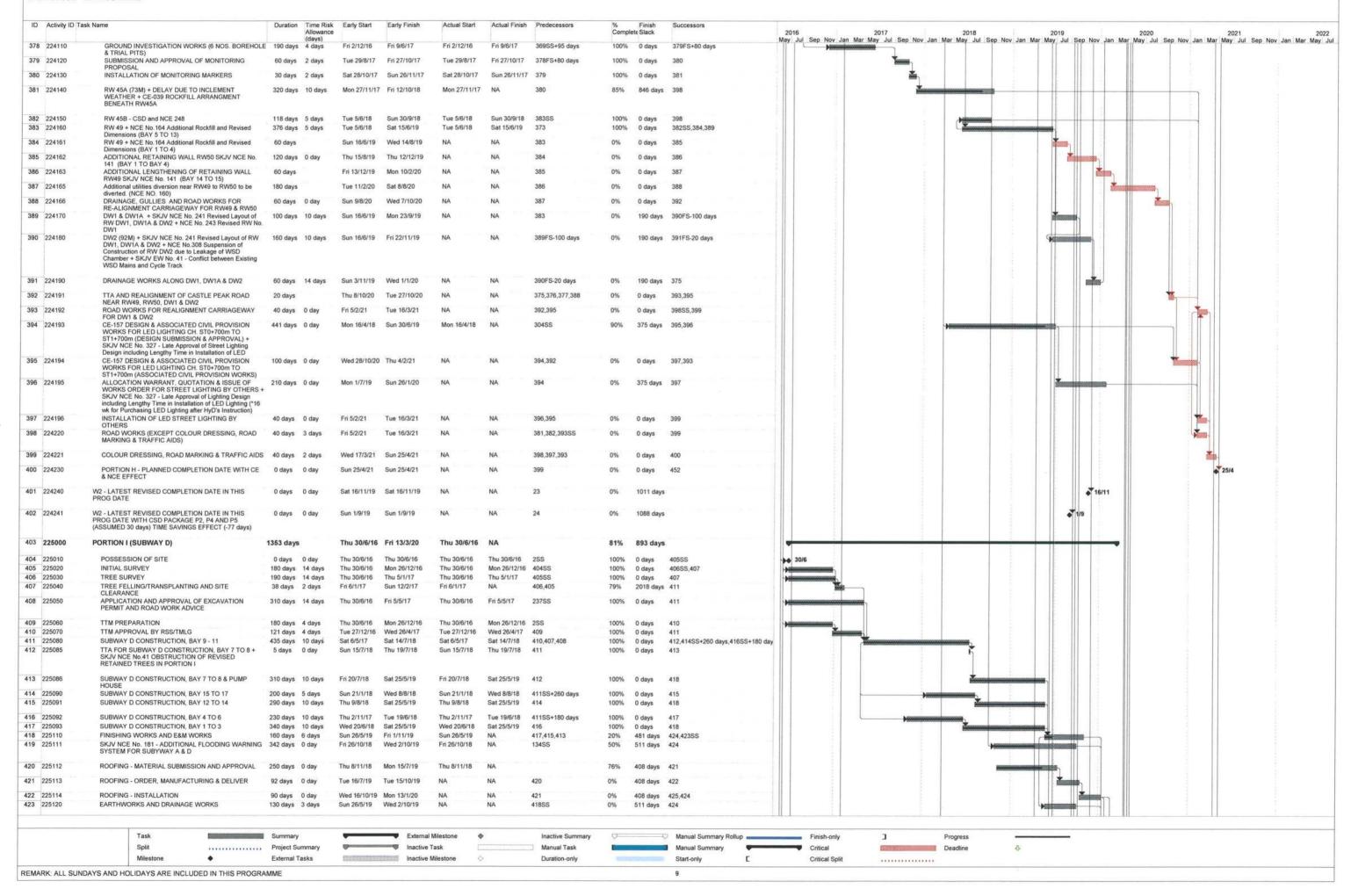


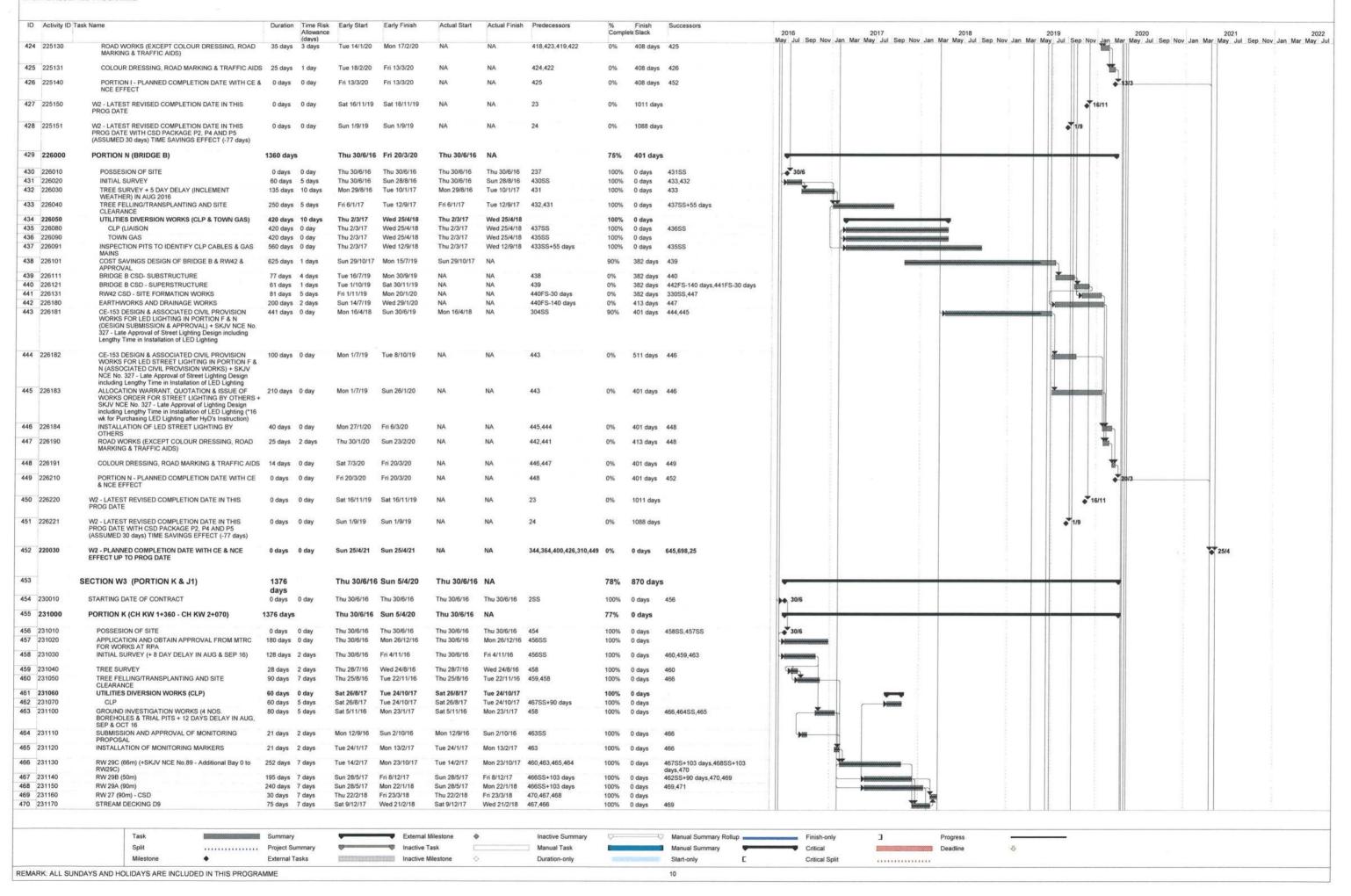
ID ACIIVI	y ID Task Name	Duration	Time Risk Allowance	Early Start	Early Finish	Actual Start	Actual Finish	Predecessors	% Comple	Finish	Successors	2005
201 21404	UNDER CE TO RESOLVE CONFLICT (SKJV EW No.12)	10 days	(days)	Wed 10/4/19	Fri 19/4/19	Wed 10/4/19	Fri 19/4/19	200		0 days	202	2016 2017 2018 2020 2021 May Jul Sep Nov Jan Mar May
202 21404	BY SKJV (ASSUMED 20 days) TREE FELLING WORKS FROM CH-MP5+050 TO 5+290	30 days	0 day	Sat 20/4/19	Sun 19/5/19	Sat 20/4/19	Sun 19/5/19	201	100%	0 days	224	
203 21405		420 days		Thu 30/6/16	Wed 23/8/17	Thu 30/6/16	Wed 23/8/17		100%	200		
204 214066	PERMIT AND ROAD WORK ADVICE UTILITIES DIVERSION WORKS	300 days		Tue 19/9/17	Sun 15/7/18	Tue 19/9/17	Sun 15/7/18		100%	0 days	212FS-40 days	
205 214070 206 214080) CLP	300 days	3 days	Tue 19/9/17	Sun 15/7/18	Tue 19/9/17	Sun 15/7/18		100%	0 days		
206 214085		120 days 300 days		Tue 19/9/17 Tue 19/9/17	Tue 16/1/18 Sun 15/7/18	Tue 19/9/17 Tue 19/9/17	Tue 16/1/18 Sun 15/7/18	205SS 205SS		0 days 0 days	212FS-40 days	
208 214090	& TRIAL PITS)	21 days	2 days	Thu 20/7/17	Wed 9/8/17	Thu 20/7/17	Wed 9/8/17	198SS+14 days	100%	0 days	209	
209 214100	SUBMISSION AND APPROVAL OF MONITORING PROPOSAL	21 days	2 days	Tue 15/8/17	Mon 4/9/17	Tue 15/8/17	Mon 4/9/17	198SS+40 days,208	100%	0 days	210,211	
210 214110	INSTALLATION OF MONITORING MARKERS	14 days	2 days	Tue 5/9/17	Mon 18/9/17	Tue 5/9/17	Mon 18/9/17	209	100%	0 days	211,205	
211 214120	RETAINING WALL - RW 15B + SKJV NCE No.81 Additional 3 Bays	380 days	7 days	Thu 23/11/17	Fri 7/12/18	Thu 23/11/17	Fri 7/12/18	198SS+140 days,209,210,203	100%	0 days	218SS,213	
212 214130	RETAINING WALL - RW 15C (45M) & STAIRCASE S6	390 days	7 days	Mon 11/6/18	Fri 5/7/19	Mon 11/6/18	Fri 5/7/19	207FS-40 days,198,204FS-40 days	100%	0 days	216,217SS+30 days	
213 214140		30 days		Sat 8/12/18	Sun 6/1/19	Sat 8/12/18	Sun 6/1/19	211		0 days	214	
214 214150 215 214160	\$2.00.00 (1.00.00 (1.00.00 J.) (1.00.00 J.)	30 days 30 days		Mon 7/1/19 Wed 6/2/19	Tue 5/2/19 Thu 7/3/19	Mon 7/1/19 Wed 6/2/19		213 214		0 days	215	
216 214170	PEDSTRIAN RAMP CONSTRUCTION & PROVIDE	90 days		Sat 6/7/19	Thu 3/10/19	NA	NA NA	212,217,215		0 days 95 days	216 230	
477	SAFETY ACCESS TO RESIDENT @ CH-MP4+500 (Compensation Event)										650	
217 214190	DEMOLITION OF EXISTING STRUCTURE @ CH-MP4+500	30 days	2 days	Wed 11/7/18	Thu 9/8/18	Wed 11/7/18	Thu 9/8/18	212SS+30 days	100%	0 days	216	
18 214200	RW16A (80M) (THE WORKS SUSPENDED, SKJV EW No.10 - Conflict of Proposed Cycle Track and Actual Site Condition CH-MP-4+660 TO 5+010)	1 day	0 day	Wed 29/11/17	Wed 29/11/17	Wed 29/11/17	Wed 29/11/17	211SS	100%	0 days	219	29/11
19 214201	PENDING THE SUPERVISOR TO ISSUE CE-181 REVISION OF RETAINING WALL NO, RW16A & ASSOCIATED DRAINAGE WORKS AT XO HANG IN PORTION D, TO RESOLVE CONFLICT (SKJV EW No.10)	475 days	0 day	Thu 30/11/17	Tue 19/3/19	Thu 30/11/17	Tue 19/3/19	218	100%	0 days	220SS+370 days	
20 214202	PREPARATION WORKS FOR WORKS UNDER CE-181	20 days	0 day	Wed 5/12/18	Mon 24/12/18	Wed 5/12/18	Mon 24/12/18	219SS+370 days	100%	0 days	221	
21 214203	CONSTRUCTION WORKS FOR CE-181	250 days	0 day	Tue 25/12/18	Sat 31/8/19	Tue 25/12/18	NA	220		37 days		
22 214204 23 214205	SKJV EW No. 57 - RW16A BAY25 TO 28 CONSTRUCTION WORKS FOR RW16A BAY 25 TO 28	120 days			Mon 15/7/19	Mon 18/3/19	NA		55%	55 days	223	
		120 days	- 20		Tue 12/11/19	NA	NA	222		55 days		
24 214208	SKJV NCE No. 388 - ADDITIONAL PLANTER WALL PWD1 & REVISED DRAINAGE BETWEEN CH MP5+053	195 days	2 days	Mon 20/5/19	Sat 30/11/19	NA	NA	202	0%	37 days	230	
25 214210	AND 5+155 EARTHWORKS AND DRAINAGE WORKS	91 days	8 days	Sun 1/9/19	Sat 30/11/19	NA	NA	221	0%	37 days	230	
26 214211		441 days	15	Mon 16/4/18		Mon 16/4/18	NA NA		2000			
	WORKS FOR LED STREET LIGHTING IN PORTION A TO D (DESIGN SUBMISSION & APPROVAL) + SKJV NCE No. 327 - Late Approval of Street Lighting Design including Lengthy Time in Installation of LED Lighting	111 days	o day	MOI 10-4/10	301 3010/19	MOII 10/4/16	NA		90%	0 days	227,228,304SS	
27 214212	CE-100 DESIGN & ASSOCIATED CIVIL PROVISION WORKS FOR LED STREET LIGHTING IN PORTION A TO D (ASSOCIATED CIVIL PROVISION WORKS)	100 days	0 day	Mon 1/7/19	Tue 8/10/19	NA	NA	226	0%	110 days	229	
28 214213	ALLOCATION WARRANT, QUOTATION & ISSUE OF WORKS ORDER FOR STREET LIGHTING BY OTHERS + SKJV NCE No. 327 - Late Approval of Lighting Design including Lengthy Time in Installation of LED Lighting (*16 w/k for Purchasing LED Lighting after HyD's Instruction)	210 days	0 day	Mon 1/7/19	Sun 26/1/20	NA	NA	226	0%	0 days	229	
9 214214	INSTALLATION OF LED STREET LIGHTING BY	40 days	0 day	Mon 27/1/20	Fri 6/3/20	NA	NA	228,227	0%	0 days	231	
0 214220	OTHERS ROAD WORKS (EXCEPT COLOUR DRESSING, ROAD	60 days		Sun 1/12/19		NA		225,224,223,216		- 50		
	MARKING & TRAFFIC AIDS)								0%	37 days	231	
1 214221	COLOUR DRESSING, ROAD MARKING & TRAFFIC AIDS	40 days	2 days	Sat 7/3/20	Wed 15/4/20	NA	NA	230,229	0%	0 days	232	
2 214222	PORTION D - PLANNED COMPLETION DATE WITH CE & NCE EFFECT	0 days	0 day	Wed 15/4/20	Wed 15/4/20	NA	NA.	231	0%	0 days	235	15/4
3 214225	WI - LATEST REVISED COMPLETION DATE IN THIS	0 days	0 day \	Wed 5/6/19	Wed 5/6/19	NA	NA	11		1175 days		5.16
4 214226	PROG DATE W1 - LATEST REVISED COMPLETION DATE IN THIS	0 days (0 day s	Sun 7/4/19	Sun 7/4/19	NA		12				
	PROG DATE WITH CSD PACKAGE P3 TIME SAVINGS EFFECT (-60 days)	and i				58.5	1463		0%	1235 days		774
5 210030	W1 - PLANNED COMPLETION DATE WITH CE & NCE EFFECT UP TO THIS PROG DATE	0 days (0 day V	Wed 15/4/20	Wed 15/4/20	NA	NA	102,149,191,232	0% (0 days	694,645,13	15/4
6	SECTION W2 (PORTION E, F, G, H, I & N)	1761 days	days 1	Thu 30/6/16	Sun 25/4/21	Thu 30/6/16	NA		77%	485 days	s	
7 220010	STARTING DATE OF CONTRACT	0 days	0 day T	Thu 30/6/16	Thu 30/6/16	Thu 30/6/16	Thu 30/6/16	2SS	100%	0 days	239FS+60 days,314FS+151	→ 30/6
221000	PORTION E (MP 5+280 - MP 6+530)	386 days o	days T	Thu 30/6/16 \	Wed 15/4/20	Thu 30/6/16	NA			860 days	days,348,368FS+60	
221010		0 days 0			Sun 28/8/16			237ES460 down				
221020		69 days 5			Sat 5/11/16			237FS+60 days 239SS	100% 0		240SS,253 242,241	28/8
221030		65 days 5	days V	Wed 2/11/16 T	Thu 5/1/17	Wed 2/11/16	Thu 5/1/17	240	100% 0	200	242	
	T					27. 37. 39						
		Summary Project Sum	nman.		External N			Inactive Summary	Q.			Finish-only Progress ———
	Split	Project Sun	milary		Inactive To	ask		Manual Task			Manual Summary	Critical Deadline 4
	Milestone	External Tas	sks		Inactive M	lilestone O		Duration-only			Start-only E	Critical Split

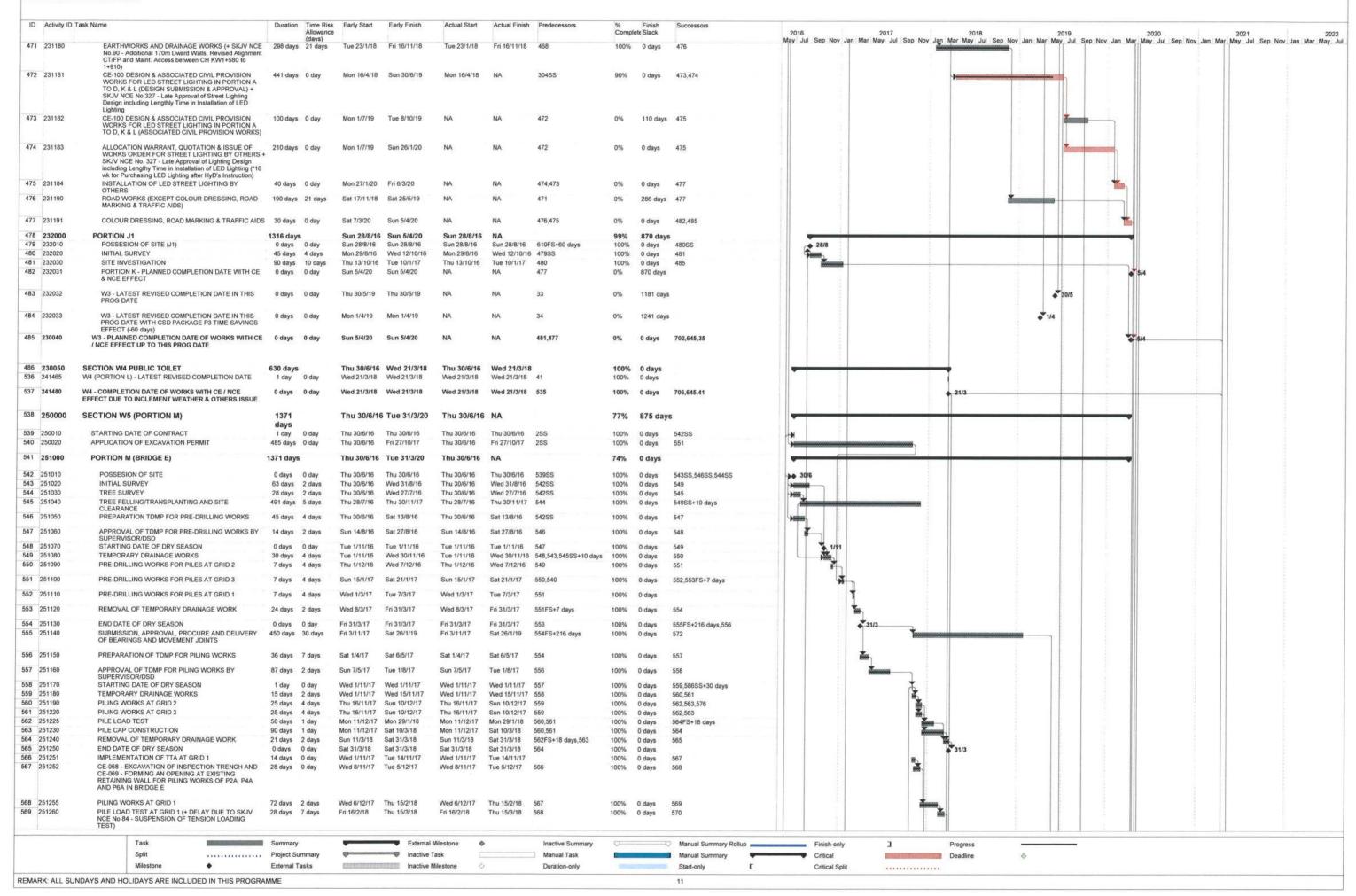


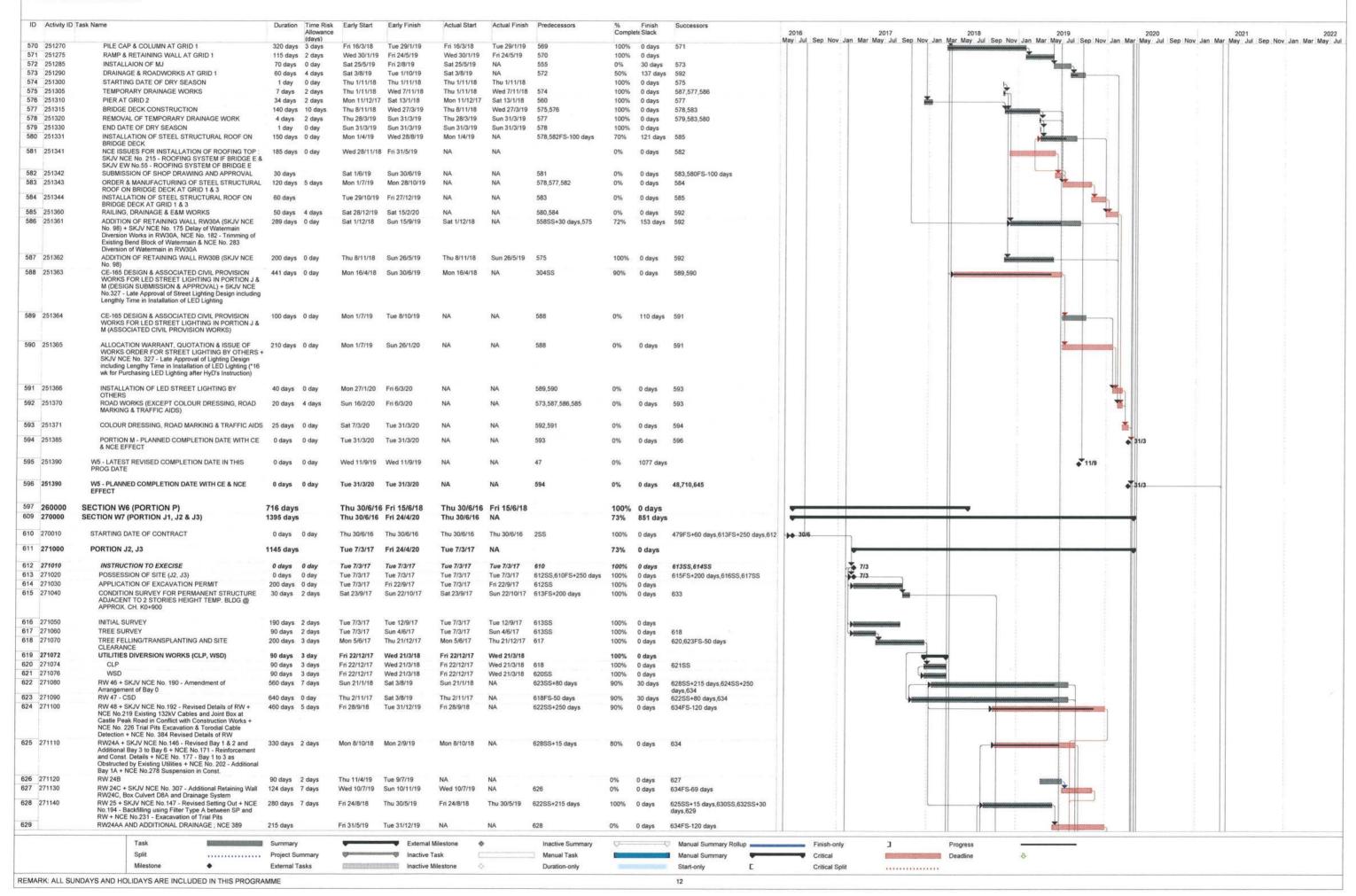




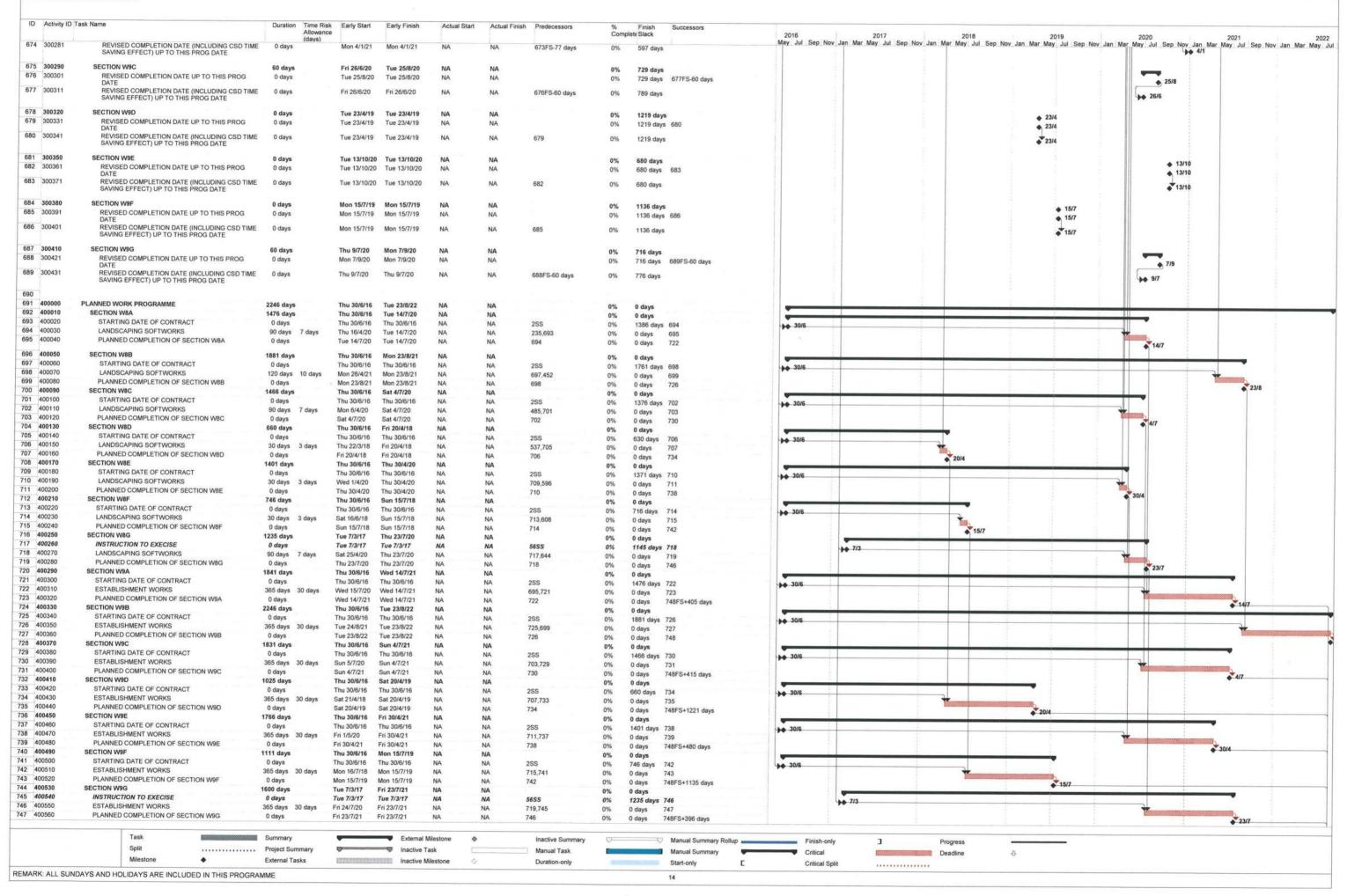








330 271150 331 271160 332 271170 333 271180 34 271190 35 271191	RW 26 + SKJV NCE No.169 - Using Granular Fill for Backfilling STREAM DECKING D8 + SKJV NCE No.307 - Additional Retaining Wall RW24C and box culvert 8A PROVIDE SAFETY ACCESS TO RESIDENT DEMOLITION OF EXISTING STRUCTURE @ APPROX. CH. KW0+900 EARTHWORKS AND DRAINAGE WORKS		ys Fri 24/8/18		Fri 24/8/18	Sat 1/12/18	628SS	Complete		631	2016 May Jul Sep Nov J	Jan Mar May Jul Sep Nov	Jan Mar May Jul Sep No	v Jan Mar May Jul Sep Nov	Jan Mar May Jul Sep Nov Jan Mar May Jul Sep Nov
2 271170 3 271180 4 271190 5 271191	STREAM DECKING D8 + SKJV NCE No.307 - Additional Retaining Wall RW24C and box culvert 8A PROVIDE SAFETY ACCESS TO RESIDENT DEMOLITION OF EXISTING STRUCTURE @ APPROX. CH.KW0+900 EARTHWORKS AND DRAINAGE WORKS		ys Sun 2/12/18	B Fri 1/2/19										to the state of th	
33 271180 34 271190 35 271191	DEMOLITION OF EXISTING STRUCTURE @ APPROX. CH.KW0+900 EARTHWORKS AND DRAINAGE WORKS			111 114/10	Sun 2/12/18	Fri 1/2/19	630	100%	0 days				1		
271191	EARTHWORKS AND DRAINAGE WORKS	21 days 2 day 21 days 3 day		3 Sat 13/10/18 18 Sat 3/11/18	Sun 23/9/18 Sun 14/10/18		628SS+30 days 632,615	100%		633					
3 271192	CE-165 DESIGN & ASSOCIATED CIVIL PROVISION WORKS FOR LED STREET LIGHTING IN PORTION J & M (DESIGN SUBMISSION & APPROVAL) + SKJV NCE No.327 - Late Approval of Street Lighting Design including Lengthly Time in Installation of LED Lighting	180 days 10 day 441 days 0 day		Sat 29/2/20 8 Sun 30/6/19	NA Mon 16/4/18	NA	629FS-120 days,624FS-1 304SS	12(0% (0 days	639 636,637			<u> </u>		
	CE-165 DESIGN & ASSOCIATED CIVIL PROVISION WORKS FOR LED STREET LIGHTING IN PORTION J & M (ASSOCIATED CIVIL PROVISION WORKS)	100 days 0 day	Sat 19/10/19	9 Sun 26/1/20	NA	NA	635,637FS-100 days	0% 2	24 days	638				*	-
7 271193	ALLOCATION WARRANT, QUOTATION & ISSUE OF WORKS ORDER FOR STREET LIGHTING BY OTHERS + SKJV NCE No. 327 - Late Approval of Lighting Design including Lengthy Time in Installation of LED Lighting (*16 wk for Purchasing LED Lighting after HyD's Instruction)	210 days 0 day	Mon 1/7/19	Sun 26/1/20	NA	NA	635	0% 2	24 days	638,636FS-100 days				+	=
271194	INSTALLATION OF LED STREET LIGHTING BY OTHERS	40 days 0 day	Mon 27/1/20	Fri 6/3/20	NA	NA	637,636	0% 2	4 days	640					*
271200	ROAD WORKS (EXCEPT COLOUR DRESSING, ROAD MARKING & TRAFFIC AIDS)	30 days 7 day	s Sun 1/3/20	Mon 30/3/20	NA	NA	634	0% 0	days	640					
271201	COLOUR DRESSING, ROAD MARKING & TRAFFIC AIDS	25 days 0 day	Tue 31/3/20	Fri 24/4/20	NA	NA	639,638	0% 0	days	641					1
271205	PORTON J2/J3 - PLANNED COMPLETION DATE WITH CE & NCE EFFECT	0 days 0 day	Fri 24/4/20	Fri 24/4/20	NA	NA	640	3220		644					24/4
271210	W7 - LATEST REVISED COMPLETION DATE IN THIS PROG DATE	0 days 0 day		Fri 14/6/19	NA	NA	60	0% 1	166 days	643FS-60 days				14/6	
271211	W7 - LATEST REVISED COMPLETION DATE IN THIS PROG DATE WITH CSD PACKAGE P1 TIME SAVINGS EFFECT (-60 days)	0 days 0 day	Tue 16/4/19	Tue 16/4/19	NA	NA	642FS-60 days	0% 12	226 days					>• 16/4	
271215	W7 - PLANNED COMPLETION DATE WITH CE & NCE EFFECT	0 days 0 day	Fri 24/4/20	Fri 24/4/20	NA	NA	641	0% 0	days	645,62,718					¥24/4
5 200010	CE & NCE EFFECT	0 days 0 day	Sun 25/4/21	Sun 25/4/21	NA	NA	608,537,485,452,235,644,5	5 0% 48	85 days						25/4
		2246 days	Thu 30/6/16	Tue 23/8/22	Thu 30/6/16	NA		0% 0	days		-				
300010	CONTRACTS	1064 days	Mon 23/4/18	Mon 22/3/21	Mon 23/4/18	NA		99% 52	20 days				-		
300020 300031	REVISED COMPLETION DATE UP TO THIS PROG	60 days 0 days	Thu 4/7/19 Mon 2/9/19	Mon 2/9/19 Mon 2/9/19	NA NA	NA NA			087 days	50FS-60 days				-	
300041	DATE REVISED COMPLETION DATE (INCLUDING CSD TIME SAVING EFFECT) UP TO THIS PROG DATE	0 days	Thu 4/7/19	Thu 4/7/19	NA				47 days	CO. COU days				4/7	
300050 300061	REVISED COMPLETION DATE UP TO THIS PROG	77 days 0 days	Fri 3/1/20 Fri 20/3/20	Fri 20/3/20 Fri 20/3/20	NA NA	NA NA			7 days	53FS-77 days	1				-
300071	DATE	0 days	Fri 3/1/20	Fri 3/1/20	NA				4 days	on on uays				Ç.	<u>♦</u> 20/3
300080 300091		60 days 0 days	Fri 28/6/19 Tue 27/8/19	Tue 27/8/19 Tue 27/8/19	NA NA	NA NA			93 days					-	
300101	DATE	0 days		Fri 28/6/19		NA (93 days 6 53 days	56FS-60 days				28/6	
300110 300121	SECTION W8D REVISED COMPLETION DATE UP TO THIS PROG DATE	1 day 1 day	Mon 23/4/18 Mon 23/4/18	Mon 23/4/18 Mon 23/4/18		Mon 23/4/18 Mon 23/4/18		100% 0 d	lays 6	59			•		
300131	REVISED COMPLETION DATE (INCLUDING CSD TIME SAVING EFFECT) UP TO THIS PROG DATE	1 day	Mon 23/4/18	Mon 23/4/18	Mon 23/4/18	Mon 23/4/18 6	558	100% 0 d					1,		
300140		0 days		Mon 14/10/19		NA		0% 104	15 days						
300151	DATE	0 days		Mon 14/10/19		NA		0% 104	15 days 66	2				◆ 14/10 ◆ 14/10	H
	SAVING EFFECT) UP TO THIS PROG DATE	0 days	mon 14/10/19	Mon 14/10/19	NA	NA 6	61 (0% 104	15 days					14/10	
300170 300181	REVISED COMPLETION DATE UP TO THIS PROG	1 day 1 day	Sun 1/7/18 Sun 1/7/18	Sun 1/7/18 Sun 1/7/18		Sun 1/7/18 Sun 1/7/18		100% 0 da		5			•		
300191	DATE REVISED COMPLETION DATE (INCLUDING CSD TIME SAVING EFFECT) UP TO THIS PROG DATE	1 day		Sun 1/7/18		Sun 1/7/18 6		100% 0 da					1		
300200 300211	REVISED COMPLETION DATE UP TO THIS PROG	60 days 0 days		Sat 7/9/19 Sat 7/9/19		NA NA			2 days					_	
300221	DATE	0 days							2 days 66 2 days	8FS-60 days				9/7	
300230 300241	DELUGED COLUMN STREET	0 days	Fri 3/7/20			NA			days						
300251	DATE	0 days 0 days				NA 67		0% 722 0% 782		1FS-60 days					1/9
300260 300271	SECTION W9B 7	7 days 0 days				NA NA			days days 67	IFS-77 days					22/3



SANG HING - KULY JOINT VENTURE 28 June 2019

| Dark |

APPENDIX B ACTION AND LIMIT LEVELS FOR NOISE

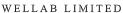
Appendix B - Action and Limit Levels

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 1214, 1502, 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.:	30293
Date of Issue:	2018-11-24
Date Received:	2018-11-23
Date Tested:	2018-11-23
Date Completed:	2018-11-24
Next Due Date:	2019-11-23

ATTN: Mr. W.K. Tang

Page: 1 of 1

Certificate of Calibration

Item for calibration:

Description : 'SVANTEK' Integrating Sound Level Meter

Manufacturer : SVANTEK
Model No. : SVAN 957
Serial No. : 23852
Microphone No. : 43690
Equipment No. : N-08-11

Test conditions:

Room Temperatre : 17-22 degree Celsius

Relative Humidity : 40-70%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE
Laboratory Manager



WELLAB LIMITED

Rms 1214, 1502, 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.:
 30294

 Date of Issue:
 2018-11-24

 Date Received:
 2018-11-23

 Date Tested:
 2018-11-23

 Date Completed:
 2018-11-24

 Next Due Date:
 2019-11-23

ATTN:

Mr. W.K. Tang

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description

: 'SVANTEK' Integrating Sound Level Meter

Manufacturer

: SVANTEK

Model No.

: SVAN 957

Serial No.

: 23851

Equipment No.

: N-08-12

Test conditions:

Room Temperatre

: 17-22 degree Celsius

Relative Humidity

: 40-70%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Laboratory Manager



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/181213/1
Date of Issue:	2018-12-13
Date Received:	2018-12-12
Date Tested:	2018-12-12
Date Completed:	2018-12-13
Next Due Date:	2019-12-12

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description : 'SVANTEK' Integrating Sound Level Meter

Manufacturer : SVANTEK
Model No. : SVAN 979
Serial No. : 27189
Microphone No. : 165399
Equipment No. : SN-01-01

Test conditions:

Room Temperatre : 22 degree Celsius

Relative Humidity : 58 %

Methodology:

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

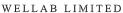
Results:

Sound Pressure Level (1KHz)	Measured SPL	Tolerance
At 94.0 SPL	94.0	94.0 ± 0.1dB
At 114.0 SPL	114.0	114.0 ± 0.1dB

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE
Laboratory Manager





Rms 1214, 1502, 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

32150
2019-09-27
2019-09-26
2019-09-26
2019-09-27
2020-09-26

ATTN: Mr. Henry Leung Page: 1 of 1

Item for calibration:

Description : Acoustical Calibrator

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

Test conditions:

Room Temperatre : 17-22 degree Celsius

Relative Humidity : 40-70%

Methodology:

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

Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE
Laboratory Manager

APPENDIX D ENVIRONMENTAL MONITORING SCHEDULES

Agreement No. CE 67/2015 (HY)

Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works - Design and Construction Impact Noise Monitoring Schedule (October 2019)

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

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

Noise Monitoring Station

N1 - HKMLC Wong Chan Sook Ying Memorial School

N2 - Bethel High School

N3 - No. 159 Mai Po San Tsuen

N5 - Dills Corner Garden Block 2

N6 - Home of Loving Faithfulness

N7 - Village House in Shek Wu Wai

Agreement No. CE 67/2015 (HY)

Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works - Design and Construction Tentative Impact Noise Monitoring Schedule (November 2019)

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

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

Noise Monitoring Station

N1 - HKMLC Wong Chan Sook Ying Memorial School

N2 - Bethel High School

N3 - No. 159 Mai Po San Tsuen

N5 - Dills Corner Garden Block 2

N6 - Home of Loving Faithfulness

N7 - Village House in Shek Wu Wai

APPENDIX E NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix E - Noise Monitoring Results

(0700-1900 hrs on Normal Weekdays)

N1 - HKMLC W	N1 - HKMLC Wong Chan Sook Ying Memorial School										
			Unit: dB (A) (30-min)								
			Measured Noise Level			Level	Construction Noise Level				
Date	Time	Weather	L eq	L10	L 90	L eq	L eq				
2019/10/3	11:25	Sunny	60.1	63.8	57.5		60.1 measured ≦ Baseline				
2019/10/8	10:00	Sunny	61.5	63.9	60.1		61.5 measured ≦ Baseline				
2019/10/15	10:00	Sunny	59.3	62.2	57.7	62.2	59.3 measured ≦ Baseline				
2019/10/22	09:30	Sunny	58.2	60.6	55.3		58.2 measured ≦ Baseline				
2019/10/29	09:30	Fine	57.4	59.8	55.3		57.4 measured ≦ Baseline				

N2 - Bethel High School										
			Unit: dB (A) (30-min)							
			Measured Noise Level			Level	Construction Noise Level			
Date	Time	Weather	L eq	L10	L 90	L eq	L eq			
2019/10/3	10:32	Sunny	54.3	56.7	52.8		54.3 measured ≦ Baseline			
2019/10/8	11:00	Sunny	55.2	57.4	53.1		55.2 measured ≦ Baseline			
2019/10/15	15:45	Sunny	56.2	59.1	54.2	55.2	49.3			
2019/10/22	10:30	Sunny	59.5	62.3	56.6		57.5			
2019/10/29	11:00	Fine	58.1	61.2	56.4	1	55.0			

N3 - No.159 Ma	N3 - No.159 Mai Po San Tsuen										
			Unit: dB (A) (30-min)								
			Measured Noise Level			Level	Construction Noise Level				
Date	Time	Weather	L eq	L10	L 90	L eq	L eq				
2019/10/3	13:25	Sunny	71.9	74.0	68.5		69.0				
2019/10/8	13:00	Sunny	72.5	74.7	70.6		70.1				
2019/10/15	14:00	Sunny	71.7	73.5	68.4	68.8	68.6				
2019/10/22	13:00	Sunny	70.5	73.2	68.1		65.6				
2019/10/29	13:00	Fine	72.5	74.7	69.6		70.1				

N5 - Block 2, D	N5 - Block 2, Dills Corner Garden									
			Unit: dB (A) (30-min)							
						Baseline				
			Measured Noise Level			Level	Construction Noise Level			
Date	Time	Weather	L eq	L10	L 90	L eq	L eq			
2019/10/3	15:40	Sunny	72.1	74.4	68.2		66.5			
2019/10/8	15:00	Sunny	72.4	74.8	71.2		67.5			
2019/10/15	15:00	Sunny	73.7	75.3	70.1	70.7	70.7			
2019/10/22	15:00	Sunny	74.2	76.7	71.3		71.6			
2019/10/29	15:00	Fine	73.5	75.8	70.4		70.3			

N6 - Home of	N6 - Home of Loving Faithfulness									
					Unit: dB (/	A) (30-min)				
						Baseline				
			Measured Noise Level			Level	Construction Noise Level			
Date	Time	Weather	L eq	L10	L 90	L eq	L eq			
2019/10/3	15:00	Sunny	71.7	73.6	69.2		71.7 measured ≦ Baseline			
2019/10/8	15:45	Sunny	72.0	74.5	70.9		72 measured ≦ Baseline			
2019/10/15	16:00	Sunny	73.8	75.6	70.3	72.0	69.1			
2019/10/22	15:45	Sunny	73.9	76.0	71.5		69.4			
2019/10/29	16:00	Fine	72.5	74.8	68.2		62.9			

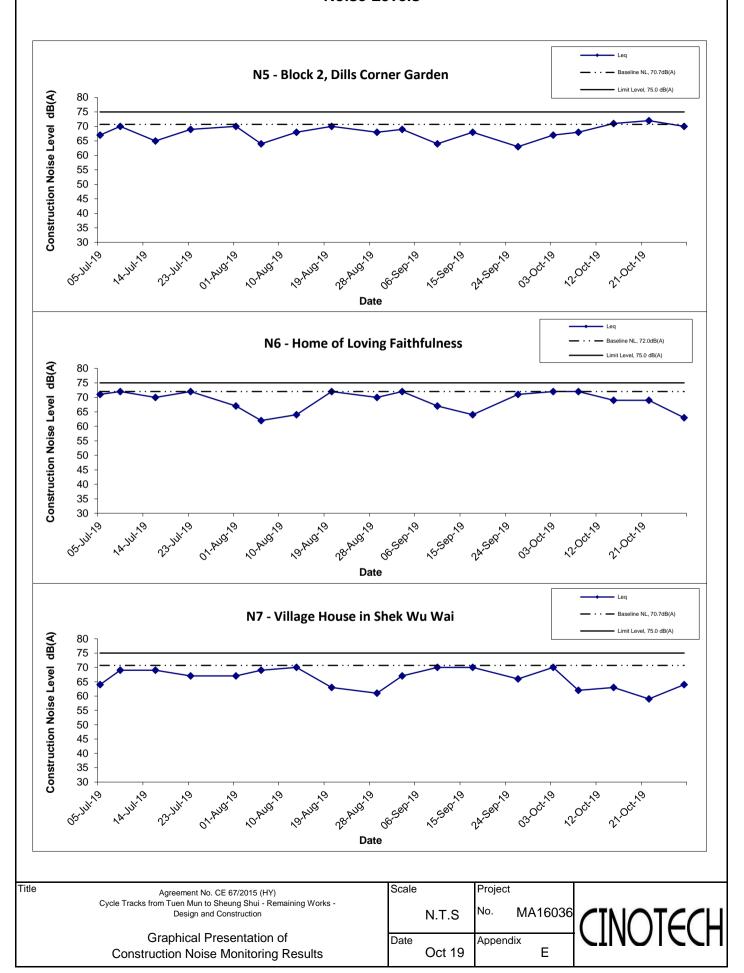
N7 - Village House in Shek Wu Wai									
					Unit: dB (A	A) (30-min)			
						Baseline			
			Measured Noise Level			Level	Construction Noise Level		
Date	Time	Weather	L eq	L10	L 90	L eq	L eq		
2019/10/3	14:05	Sunny	70.1	73.2	65.8		70.1 measured ≦ Baseline		
2019/10/8	14:00	Sunny	71.3	69.5	74.2		62.4		
2019/10/15	14:00	Sunny	71.4	73.6	69.1	70.7	63.1		
2019/10/22	14:00	Sunny	71.0	73.8	69.5		59.2		
2019/10/29	14:00	Fine	71.5	73.8	68.7		63.8		

Noise Levels



Title Agreement No. CE 67/2015 (HY) Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works - Design and Construction	Scale N.T.S	Project No. MA16036	CINOTECH
Graphical Presentation of Construction Noise Monitoring Results	Date Oct 19	Appendix E	CINOICCI

Noise Levels



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

nspection	Information
-----------	-------------

Checklist Reference Number	191003	
Date	3 October 2019 (Thursday)	
Time	09:45 – 12:00	

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
190904-R1	Ponding water should not be pumped out directly and let soak away, a sedimentation tank should be placed at Portion D.	В3,8
	C. Air Quality	
190925-R1	Stockpile of dusty materials should be covered or kept wet at Bridge B.	C7
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
190920-R2	Accumulation of general refuse should be avoided and removed at Subway A.	Ei
190925 - R2	Accumulation of construction waste and general refuse should be avoided and removed at Portion H.	E1
191003-R1	Water bottles should be removed at Subway A.	E1
	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	
	Follow up on the previous session (Ref. No: 190925), follow up actions are needed to be reviewed for item 190925-R1 & R2, 190920-R2 and 190904-R1.	
	Item 190920-R3 and 190508-O2 were rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan	r Hig	3 October 2019
Checked by	Ms. Jennifer Mok	m	4 October 2019

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

Checklist Reference Number	191009
Date	9 October 2019 (Wednesday)
	09:45 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	·
191009-R1	Groundwater should be pumped out through sediment tank at Subway A.	В3
	C. Air Quality	
190925-R1	Stockpile of dusty materials should be covered or kept wet at Bridge B.	C7
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
190920-R2	Accumulation of general refuse should be avoided and removed at Subway A.	E1
190925-R2	Accumulation of construction waste and general refuse should be avoided and removed at Portion H.	E1
191003-R1	Water bottles should be removed at Subway A.	E1
	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	
	Follow up on the previous session (Ref. No: 191003), follow up actions are needed to be reviewed for item 191003-R1, 190925-R1 & R2 and 190920-R2.	
	Item 190904-R1 was rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan	wh	9 October 2019
Checked by	Ms. Jennifer Mok	m	9 October 2019

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

Checklist Reference Number	191017
Date	17 October 2019 (Thursday)
Time	09:45 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
191009-R1 191017-R2	 Groundwater should be pumped out through sedimentation tank at Subway A. Standing water should be pumped out through sedimentation tank at Portion M. 	B3 B8
	C. Air Quality	
190925-R1 191017-R1	 Stockpile of dusty materials should be covered or kept wet at Bridge B. Stockpile of dusty materials should be covered by impervious materials at Portion M. 	C7 C7
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
190920-R2	Accumulation of general refuse should be avoided and removed at Subway A.	E1
190925-R2	Accumulation of construction waste and general refuse should be avoided and removed at Portion H.	E1
	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	
	Follow up on the previous session (Ref. No: 191009), follow up actions are needed to be reviewed for item 191009-R1, 190925-R1 & R2 and 190920-R2.	
	Item 191003-R1 was rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan	yty	17 October 2019
Checked by	Ms. Jennifer Mok	am	17 October 2019

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

Checklist Reference Number	191023
Date	23 October 2019 (Wednesday)
Time	09:45 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
190925-R1	Stockpile of dusty materials should be covered or kept wet at Bridge B.	C7
191023 - R2	Stockpile of dusty materials should be covered or kept wet at Portion D.	C7
	D. Construction Noise Impact	asamanananananananananananananananananan
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
190920-R2	 Accumulation of general refuse should be avoided and removed at Subway A. 	E1
190925-R2	Accumulation of construction waste and general refuse should be avoided and removed at Portion H.	E1
191023-R1	General refuse should be removed at Portion B.	El
	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	
	Follow up on the previous session (Ref. No: 191017), follow up actions are needed to be reviewed	
	for item 190925-R1 & R2 and 190920-R2.	
	Item 191009-R1 and 191017-R1&R2 were rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan	gtij	23 October 2019
Checked by	Ms. Jennifer Mok	gm	23 October 2019

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

Checklist Reference Number	191030
Date	30 October 2019 (Wednesday)
Time	09:45 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
191030-R1	Groundwater should be pumped out and discharged via sedimentation tank at Bridge B.	В3
	C. Air Quality	
190925-R1	Stockpile of dusty materials should be covered or kept wet at Bridge B.	C7
191023-R2	Stockpile of dusty materials should be covered or kept wet at Portion D.	C7
191030-R2	The excavated materials or stockpile should be covered by tarpaulin at Portion I.	C7
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
190925 - R2	Accumulation of construction waste and general refuse should be avoided and removed at Portion H.	E1
	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	
-	Follow up on the previous session (Ref. No: 191023), follow up actions are needed to be reviewed	
7	for item 190925-R1 & R2 and 191023-R2.	
	Item 190920-R2 and 191023-R1 were rectified.	

	Name	Signature	Date
Recorded by	Mr. Eric Yan	nty	30 October 2019
Checked by	Ms. Jennifer Mok	m	30 October 2019

APPENDIX H EVENT AND ACTION PLANS

Appendix H - Event and Action Plans

Event and Action Plan for Construction Noise

EVENT	ACTION					
	ET LEADER	IEC	ER	CONTRACTOR		
Action Level	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 and	instruct the Contractor to stop	
keep IC(E), EPD and ER informed 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
Constructio	on Air Quality		
S.3.6.2	S.3.2.3	All the dust control measures as recommended in the Air Pollution Control (Construction Dust) Regulation, where applicable, should be implemented. Typical dust control measures include:	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	۸
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	^
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	#
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	۸

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Construction	Noise Impact	'	
S5.5.11	S4.2.17 (Stage 1 only)	In order to prevent potential cumulative construction noise impacts to NSRs at Mai Po San Tsuen and Palm Springs, the works at the cycle track section (near CHMP5+100m) are recommended to be scheduled to avoid works at the areas near Castle Peak Road of the Proposed Comprehensive Development at Wo Shang Wai (CDWSW) project if the works site of the CDWSW project is less than 300 m away from Castle Peak Road.	N/A
S.5.5.14	S.4.2.2 (Stage 1 only)	The contractor shall liaise with the Yuen Long and Kam Tin Sewerage and Sewage Disposal Stage 2 (YLKTSSD2) and North West New Territories Salt Water Supply (NWNTSWS) works contractors so as to avoid undertaking works concurrently with the works when they are in the close proximity as far as practicable. As a conservative approach, works for the cycle track shall be carried out when the works from the other projects are over 300 m away. The requirements shall be included in the works contracts.	N/A
N/A	N/A (Stage 2 only)	The contractor shall liaise with Yuen Long and Kam Tin Sewerage and Sewage Disposal (YLKSSD), Construction of Cycle Tracks and the associated Supporting Facilities at Nam Sang Wai, Yuen Long (NSWCT), Drainage Improvement at Northern NT - Package A – Drainage Improvement Works in San Tin (Remaining Works) - Investigation, North East New Territories New Development Areas Planning and Engineering Study (Investigation) (NENTNDA) and the Proposed Residential cum Passive Recreational Development within "Recreation" ("REC") zone and "Residential (Group C)" Zone at Various Lots in DD 104, Yuen Long, N.T. (RCPRD) contractors so as to avoid undertaking works concurrently with their works (refer to S. 4.2.2 of the EM&A Manual for Stage 2 Works).	٨

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Table 5-7	S.4.2.19	Use of quiet plant (PME):	۸
		- 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 where	٨
Table 5-8		practicable:	
		- mini excavator	
		- mobile crane	
		- dump truck	
		- hand-held electric circular saw	
		- bar bender	
		- vibrating hammer	
		- generator	
		- concrete lorry mixer	
		- lorry	
		- vibratory poker	
		- asphalt paver	
		- compactor	
		- road roller	

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		- crane mounted auger - grout mixer - grout pump - drill - road ripper, excavator mounted	
S.5.6.2	S.4.2.19	Noise enclosure shall be used for the following PMEs where practicable: - air compressor - hand-held breaker	N/A (1)
S.5.6.2	S.4.2.19	The barrier / enclosure material's surface mass shall be in excess of 7 kg/m ² .	^
S.5.6.6	S.4.2.19	Use of alternative quieter plant such as road ripper, excavator mounted instead of handheld breaker during levelling/excavation works.	٨
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	٨
S.5.6.8	S.4.2.19	Before commencing any work, the Contractor shall submit to the project Engineer for approval the method of working, equipment and noise mitigation measures intended to be used at the site	^

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.5.6.8	S.4.2.19	The Contractor shall devise and execute working methods to minimize the noise impact on the surrounding sensitive uses, and provide experienced personnel with suitable training to ensure that those methods are implemented	۸
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	۸
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	۸
S.5.6.8	S.4.2.19	Regular maintenance of all plant and equipment	^
S.5.6.8	S.4.2.19	Material stockpiles and other structures should be effectively utilised as noise barriers, where practicable	N/A
S.5.6.8	S.4.2.19	The Contractor shall liaise with the schools that are located near the works sites regarding their examination period and schedule the noisy works to avoid the examination period as far as possible.	٨

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status			
Construction	Construction Water Quality					
S.6.6.1	S.5.2.4	Mitigation measures should be implemented to prevent the uncontrolled discharge of wastewater from the construction site in accordance with Practice Note for Professional Persons ProPECC PN1/94 - Construction Site Drainage	#			
S.6.6.1	S.5.2.4	Surface run-off from the construction sites will be directed into storm drains via adequately designed wastewater treatment facilities such as sand traps, silt traps and sediment settling basins. This is important for works immediately along the Kam Tin River, Ngau Tam Mei Main Drainage Channel, River Beas and Shek Sheung River	*			
S.6.6.1	S.5.2.4	Channels, earth bunds or sand bag barriers will be provided on-site to properly direct stormwater to the above-mentioned facilities	٨			
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	۸			
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	۸			
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	۸			
S.6.6.1	S.5.2.4	Where possible, works entailing soil excavation will be minimized during the rainy season (i.e. April to September);	^			
S.6.6.1	S.5.2.4	Where applicable, final earthworks surfaces/ slopes will be well compacted and hydro-seeded following completion to prevent erosion	N/A			

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.6.6.1	S.5.2.4	During construction works, chemical toilets will be provided for the use of site staff. These will be provided by a licensed contractor, who will be responsible for appropriate disposal and maintenance of the effluent	٨
S.6.6.1	S.5.2.4	Works adjacent to the fishponds near Mai Po San Tsuen should be avoided as far as possible during the wet season to avoid runoff into the fishponds	۸
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.	۸
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	۸
S.6.6.1	S.5.2.4	Section of the road between the wheel washing bay and the public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains	٨
S.6.6.1	S.5.2.4	The project may occasionally involve the handling of fuel and generates chemical wastes. It must be ensured that all fuel tanks and chemical storage are sited on sealed areas and provided with locks	۸
S.6.6.1	S.5.2.4	The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent accidentally spilled oil, fuel or chemicals from reaching the receiving waters	۸
S.6.6.1	S.5.2.4	Oil and grease removal facilities will be provided where appropriate, for example, in area near plant workshop/ maintenance areas	N/A
S.6.6.1	S.5.2.4	Chemical waste arising from the site should be properly stored, handled, treated and disposed of in compliance with the requirements stipulated under the Waste Disposal	۸

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		(Chemical Waste) (General) Regulation	
-	S.5.2.7 (Stage 1 only)	The construction work of cycle bridge at Shek Sheung River is not recommended to be carried out during wet seasons (April to October), and the dry weather flow will be diverted to avoid entering the works area. In order to further protect the river water quality from disturbance, the construction work especially excavation works, will be surrounded by cofferdams to ensure the works will be carried out in a dry condition to prevent water pollution to the river.	۸
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.	۸
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.	٨

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
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;	٨
S.7.4.1	S.6.2.6	Given the potential for secondary environmental impacts (dust, noise, water quality and visual impacts), mitigation measures are required to ensure proper handling, storage, transportation and disposal of materials at the outset and throughout the construction phase of the project	۸
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	٨
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 minimization	#
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

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.7.4.1	S.6.2.6	• The Contractor shall be responsible for identifying what materials can be recycled/ reused, whether on-site or off-site. In the event of the latter, the Contractor shall make arrangements for the collection of the recyclable materials. Any remaining non-inert waste shall be collected and disposed of to the Public Filling Areas whilst any inert C&D materials shall be re-used on site as far as possible. Alternatively, if no use of the inert material can be found onsite, the materials can be delivered to a Public Fill Area or Public Fill Bank after obtaining the appropriate licence	^
S.7.4.1	S.6.2.6	• In order to monitor the disposal of C&D material and solid wastes at public filling facilities and landfills, and control fly-tipping, a trip-ticket system shall be implemented by the Contractor, in accordance with the contract and the requirements of DEVB Technical Circular (Works) No. 6/2010 "Trip Ticket System for Disposal of Construction and Demolition Material".	^
S.7.4.1	S.6.2.6	• 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;	۸

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

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

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status	
Land Contamination				
S.8.7.2 – S.8.7.3	S.7.2.2	Preparation of Contamination Assessment Plan (CAP), which should be submitted to EPD for endorsement, prior to investigation. Site investigation and sampling works in accordance with the approved CAP. If contamination is identified, Contamination Assessment Report (CAR) and Remediation Action Plan (RAP) shall be prepared and submitted for EPD's approval.	۸	
S.8.7.5	S.7.3.1	 The following control measures should be implemented when handling identified contaminated materials: General site safety shall be enforced to include basic practices such as the use of safety boots, hard hats, coveralls, gloves and eye protection; Avoid skin contact, ingestion and inhalation of excavated contaminated soils. Basic personal protective equipment should be used; Site staff and workers shall be given adequate training and instructions specific to the potential hazards, their health and safety responsibilities and safe working practice including basic personal hygiene; Measures shall be implemented to prevent non-workers from approaching the identified works areas in order to avoid exposure to contaminants. 	N/A	
S.8.7.5	S.7.3.1	 Management of Contaminated Soils 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 	N/A	

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		 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 contaminated water requiring disposal and suspended solids in the wastewater stream 	

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Ecological & l	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.	۸
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.	۸
-	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

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
-	S.8.2.6 (Stage 1 only)	For the lower Shek Sheung River, construction works should be scheduled in dry season to minimize the disturbance to the foraging ardeids and the Quiet PME shall be implemented practicable to minimize the noise disturbance to the foraging ardeids.	۸
S.10.5.4	S.8.2.7 (Stage 1) S.8.2.5 (Stage 2)	To prevent any negative impact to water quality as a result of site run-off, good site practice must be employed at all times, particularly in the areas close to fishponds. Practice Note for Professional Persons ProPECC PN1/94 – Construction Site Drainage shall be implemented.	۸
S.10.5.4	S.8.2.8 (Stage 1) S.8.2.6 (Stage 2)	Along Pok Wai South Road, once the final construction sequencing is known, liaison with local residents and aquaculturists should be implemented in order to minimise temporary road blockages and to identify the best timing for works along this area.	N/A
S.10.5.3	S.8.2.9 (Stage 1) S.8.2.7 (Stage 2)	During wet seasons, surface run-off from the construction sites will need to be directed into storm drains via adequately designed wastewater treatment facilities such as sand traps, silt traps, oil interceptors and sediment settling basins. Works adjacent to the fishponds near NTMDC inside the Wetland Conservation Area (WCA) and Mai Po San Tsuen should be avoided, as far as practicable, during the wet season to avoid runoff into the fishponds.	^
-	S.8.2.10 (Stage 1 only)	The use of signage at the Resting Stations to indicate that wildlife may be present and that noise levels and activities should be kept to a minimum could be implemented. This may help to reduce any potential disturbance to wildlife from human activity. At Long Valley, to mitigate against potential indirect human disturbance to Greater Painted-snipe, planting could be undertaken as appropriate along the proposed cycle track at meander 8 to act as screening.	N/A

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
S.9.11.27	S.8.2.11	The following good work practices are recommended:	۸
	(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; Waste and refuse in appropriate receptacles;	
		■ Staff training/toolbox talks for site work near Long Valley and WCA – important	
		areas for birds therefore staff should reduce amount of noise whilst working and	
		during breaks where possible; • Regular ecological checks; and	
		■ Silt/ Sediment/ Oil traps for drainage to prevent site run-off	

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
Cultural Herit	age Impact		
S.11.5.1	S.9.2.1	Care should be taken during the construction stage to report any signs of possible discovery of artefacts.	N/A
Landscape and	l Visual		
Detailed Design	n 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	٨
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.	٨
S.12.10.1	OP1	The Design Concept Drawings and Conceptual Landscape Master Plan of cycle track and associated facilities demonstrate landscape and visual mitigation strategies and design measures including integrated design approach, amenity and compensatory planting proposals and treatment of retaining structure and slopes have been recommended in the EIA. More detailed landscape and compensatory planting proposals shall be developed by IDC consultants at later stage during detailed design and construction phase of this project following the completion of the detailed Tree	٨

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
		Survey Report and approval from relevant departments at that stage	
Construction P	Phase	1	
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.	۸
	CP1.2	Creation of precautionary area around trees to be retained equal to half of the trees canopy diameter. Precautionary area to be fenced.	۸
	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.	٨
	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.	۸
	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

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status
	CP1.8	All works affecting the trees identified for retention and transplantation will be carefully monitored. This includes the key stages in the preparation of the trees, the implementation of protection measures and health monitoring throughout the construction period.	۸
	CP1.9	Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval under the lease conditions and in accordance with ETWB TCW No. 2/2004 and WB Technical Circular No. 14/2002.	N/A
	CP2.0	The tree preservation works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree protection specification would be included within the contract documents.	۸
	CP2.1	Topsoil disturbed during the construction phase should be tested using a standard soil testing methodology and where it is found to be worthy of retention stored for re-use.	۸
	CP2.2	The soil will be stockpiled to a maximum height of 2m and will be either temporarily vegetated with hydroseeded grass during construction or covered with a waterproof covering to prevent erosion.	۸
	CP2.3	The stockpile should be turned over on a regular basis to avoid acidification and the degradation of the organic material, and reused after completion. Alternatively, if this is not practicable, it should be considered for use elsewhere, including other projects.	۸
	CP3.1	Where appropriate to the final design the landscape of these works areas should be restored following the completion of the construction phase.	N/A
	CP3.2	Construction site controls should be enforced including the storage of materials, the location and appearance of site accommodation and the careful design of site lighting to prevent light spillage.	۸

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

EIA Ref.	EM&A Ref.	Mitigation Measures	Status			
	CP3.3	Screen the works area during the construction phase through the use of decorative hoarding along the site boundary facing adjacent VSRs	^			
	CP4.1	Replanting of disturbed vegetation should be undertaken at the earliest possible stage of the construction phase	^			
	CP4.2 Use of native plant species predominantly in the planting design for the buffer areas.					
	CP4.3	The tree planting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree planting specification would be included within the contract documents	۸			
	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.	^			

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)						
	٨	Compliance of mitigation measure;	X	Non-compliance of mitigation measure;				
	N/A	Not Applicable at this stage; N/A(1) Not observed;	•	Non-compliance but rectified by the contractor;				
	*	Recommendation was made during site audit but improved/rectified by the contractor.	#	Recommendation was made during site audit but not yet improved/rectified by the contractor.				

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

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

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

Reporting Month: October 2019

Contract No. YL/2015/01

Cycle Tracks from Tuen Mun to Sheung Shui – Remaining Works

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Investigation/Mitigation Action	Status
1	Pok Wai South Road	8 th November 2018	The complaint is filed against extensive dusty stockpile being placed at the works site of Pok Wai South Road (Portion A), causing dust nuisance and affecting the passer-by and residents.	 Cover all the stockpile when stockpiling works was not being conducted; Arrange on-site personnel to wash the wheels of the vehicles immediately before they leave the site area; and Increase the frequency of water spraying on the stockpiles to dampen the dusty surface. 	CIR was submitted in December
2	Mai Po San Tsuen (Portion D)	20 th December 2018	The complaint is filed against extensive dust nuisance by construction activities generated sand and dust, and may have caused the nearby village roads to look dusty and unclean.	 Increase the frequency of water spraying on the paved roads to minimize the dust generation; and Cover the temporary cut slopes by tarpaulin before any excavation works commence. 	CIR was submitted in December
3	Mai Po San Tsuen (Portion D)	21 st December 2018	The complaint is filed against site effluent being pumped and discharge into the nearby surface channel from the same construction site.	 Cover the temporary cut slopes by tarpaulin before any excavation works commence. Clean the water in the channel and all broken covers are replaced by new decking covers 3 weirs have been installed at the downstream Use of sedimentation tank prior to discharge New cut-off plate next to the channel will be raised 200mm to prevent potential run-off A filter with aggregate is placed at the side channel 	CIR was submitted in February

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

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

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Investigation/Mitigation Action	Status
				Water and wastewater filtration system is installed to treat the site effluent.	

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

APPENDIX K SUMMARY OF WASTE GENERATION AND DISPOSAL RECORDS

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

Name of Department: CEDD Contract No.: YL/2015/01

- -

Monthly Summary Waste Flow Table for <u>2016</u> (Year)

	A	Actual Quantities of Inert C&D 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	-	-	-	-	-	-	-	-	-	-	-		
Feb	-	-	-	-	-	-	-	-	-	-	-		
Mar	-	-	-	-	-	-	-	-	-	-	-		
Apr	-	-	-	-	-	-	-	-	-	-	-		
May	-	-	1	-	ı	-	1	ı	1	-	-		
June	-	-	1	-	1	-	1	ı	1	-	-		
July	-	-	1	-	ı	-	0.01	0.01	0.01	-	0.01		
Aug	-	-	1	-	-	-	0.01	0.01	0.01	-	0.01		
Sept	0.005	-	-	-	0.005	-	0.01	0.01	0.01	-	0.06		
Oct	_	-	1	_	-	-	0.05	0.05	0.05	_	0.04		
Nov	0.35	-	-	-	0.35	-	0.05	0.05	0.05	_	0.05		
Dec	0.4	-	1	-	0.4	-	0.05	0.05	0.05	-	0.05		
Total	0.755	-	-	-	0.755	-	0.18	0.18	0.18	-	0.22		

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

Name of Department: CEDD Contract No.: YL/2015/01

Monthly Summary Waste Flow Table for <u>2017</u> (Year)

				y Summar,)		7101	(Teal)			
	A	ctual Quantities	of Inert C&D	Materials Gene	erated Monthl	у	Actu	al Quantities o	f C&D Wastes	Generated Mo	onthly
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	1	0.06
Feb	0.02	-	-	-	0.02	-	0.05	0.05	0.05	-	0.01
Mar	1.15	-	-	-	1.15	0.369	0.05	0.05	0.05	-	0.02
Apr	0.65	-	-	-	0.65	-	0.05	0.05	0.05	-	0.02
May	0.79	-	1	-	0.79	1	0.05	0.05	0.05	1	0.01
June	1.63	-	ı	1	1.63	ı	0.05	0.05	0.05	1	0.02
July	1.25	-	1	1	1.25	1	0.05	0.05	0.05		0.01
Aug	1.49				1.49	1	0.05	0.05	0.05	1	0.01
Sep	1.15	-	-	-	1.14	0.493	0.05	0.05	0.05	-	0.01
Oct	1.19	-	ı	1	1.19	ı	0.05	0.05	0.05	1	0.01
Nov	0.79	_	-	-	0.76	-	0.05	0.05	0.05	-	0.03
Dec	3.09	_	-	-	3.07	-	0.05	0.05	0.05	-	0.01
Total	13.24				13.18	0.986	0.6	0.6	0.6		0.22

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

Name of Department: CEDD Contract No.: YL/2015/01

Monthly Summary Waste Flow Table for <u>2018</u> (Year)

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

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

Name of Department: CEDD Contract No.: YL/2015/01

Monthly Summary Waste Flow Table for <u>2019</u> (Year)

	Actual Quantities of Inert C&D 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	1.13	-	-	-	1.08	-	0.05	0.05	0.05	-	0.05
Feb	0.04	-	-	-	-	-	0.05	0.05	0.05	-	0.04
Mar	0.06	-	-	-	-	-	0.05	0.05	0.05	-	0.06
Apr	0.06	-	-	-	0.03	-	0.05	0.05	0.05	-	0.03
May	0.04	-	-	-	-	-	0.05	0.05	0.05	-	0.04
June	0.03	-	-	-	-	-	0.05	0.05	0.05	-	0.03
July	0.05	-	-	-	-	-	0.05	0.05	0.05	-	0.05
Aug	0.02	-	-	-	-	-	0.05	0.05	0.05	-	0.02
Sep	0.02	-	-	-	-	-	0.05	0.05	0.05	-	0.02
Oct	0.02	-	-	-	-	-	0.05	0.05	0.05	-	0.02
Sub-total	1.47	-	-	-	1.11	-	0.50	0.50	0.50	-	0.36
Nov	_	-	-	-	-	-	-	-	-	-	-
Dec	_	-	-	-	-	-	-	-	-	-	-
	•		•			•	•	•	•	•	•
		•	•	•						•	
Total	46.455	-	-	-	45.745	0.986	1.56	1.56	1.56	-	1.02

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

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	Hard Rock and Large Broken		Reused in other	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse	
Generated	Concrete	Contract	Projects	Public Fill			packaging				
(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].